City of Banning

Community Development Department

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Date: September 11, 2020

Project Name: Sun Lakes Village North Specific Plan Amendment No. 5.

Project Description: The Project proposes amendment to the Land Use Plan from Retail Commercial to Business & Warehouse, Office and Professional, and Retail & Service. The Specific Plan text is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions. At this time there are no land use development entitlements being sought (i.e. site plan, parcel map, etc.).

Project Location: The Project site is located on approximately 47 gross acres located northerly of Sun Lakes Boulevard, southerly of Interstate 10 approximately, and easterly of Highland Springs Avenue as shown in Figure 1 – Project Location Map/Aerial Photo. The Project site is also identified as Assessor's Parcel Number 419-140-057.

Public Review Period: The 45-day public review for the Draft Environmental Impact Report will begin on **September 11, 2020**, and end on **October 26, 2020**.

Written comments regarding this Draft EIR should be addressed to:

Adam Rush, M.A., AICP
Community Development Director
99 E. Ramsey Street Banning, CA 92220
951-922-3131
arush@banningca.gov

Public Hearing: A public hearing(s) with the Planning Commission and City Council will be conducted at a future date(s). Public hearing notices will be issued at least ten (10) days in advance of any hearing (s).

Project Impacts: The Draft Environmental Impact Report evaluates the proposed project's potential individual- and cumulative-level environmental impacts on the following resource areas: aesthetics, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, transportation, tribal cultural resources, utilities and services systems, and wildfire.

As discussed in Draft EIR Section 4.0, *Environmental Analysis*, the Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of feasible mitigation measures. The unavoidable significant impacts are identified below.

Air Quality – The Project will exceed the thresholds established by the SCAQMD for VOC emissions because of painting and NOx emissions because of the amount of vehicle traffic generated.

Greenhouse Gas Emissions - The Project site will generate 11,966.30 MTCO2e per year from construction, area, energy, mobile, waste, and water usage which exceeds the Tier 3 screening thresholds both on a project and cumulative basis.

Vehicle Miles Traveled (VMT) – The Project does not achieve a 15% below in existing regional VMT per worker threshold. Mitigation measures are identified in the Draft EIR that would minimize these significant impacts but not to less than significant levels.

Availability of the Draft Environmental Impact Report: The Draft EIR and its technical appendices is available for review online at the following website:
https://banningca.gov/Archive.aspx?AMID=60&Type=&ADID=


XENIA AVE
8TH ST
ALLEGHENY AVE
6TH ST
WILSON ST
APEX ST
HIGHLAND HOME RD
WILSON ST
RAMSEY ST
10
I 10
SUN LAKES VILLAGE SHOPPING CENTER
SUN LAKES COUNTRY CLUB
SUN LAKES BLVD
2ND ST
1ST ST
CITY OF BEAUMONT
HIGHLAND SPRINGS AVE
POTRERO BLVD
SUN LAKES COUNTRY CLUB
COUNTRY CLUB DR
Banning City Boundary
0 500 1,000 1,500
Feet
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W
E
S
nd the GIS User Community

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2020029074

Project Title: Sun Lakes Village Specific Plan Amendment No. 5

Lead Agency: City of Banning — Contact Person: Adam Rush, M.P.A., AICP

Mailing Address: 99 E. Ramsey Street — Phone: 951-922-3190

City: Banning — Zip: 92220 — County: Riverside

Project Location: County: Riverside — City/Nearest Community: Banning

Cross Streets: Sun Lakes Boulevard and Highland Springs Avenue — Zip Code: 92220

Longitude/Latitude (degrees, minutes and seconds): 33 ° 55 ′ 25 ″ N / 116 ° 56 ′ 31 ″ W Total Acres: 47

Assessor's Parcel No.: 419-140-057 — Section: 12 — Twp.: 3S — Range: 1W — Base:

Within 2 Miles: State Hwy #: 79 — Waterways:

Airports: — Railways: — Schools: San Gorgonio Middle School

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☒ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☐ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other: Amendment

Development Type:

☐ Residential: Units ____ Acres ____
☒ Office: Sq.ft. 52,065 Acres ____ Employees ____
☒ Commercial: Sq.ft. 37,189 Acres ____ Employees ____
☒ Industrial: Sq.ft. 877,298 Acres ____ Employees ____
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type
☐ Mining: Mineral
☐ Power: Type ____ MW
☐ Waste Treatment: Type ____ MGD
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☐ Economic/Jobs
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☒ Minerals
☒ Noise
☒ Population/Housing Balance
☒ Public Services/Facilities
☒ Recreation/Parks
☒ Schools/Universities
☐ Septic Systems
☒ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Growth Inducement
☒ Land Use
☒ Cumulative Effects
☐ Other:

Present Land Use/Zoning/General Plan Designation:

Vacant/Retail Commercial/Business Park (Specific Plan Overlay) and General Commercial (Specific Plan Overlay)

Project Description: *(please use a separate page if necessary)*

The Project proposes a Specific Plan Amendment to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from Retail Commercial (Auto Dealer) to Business & Warehouse, Office and Professional, and Retail & Service. (See Figure 3-2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions. At this time there are no land use development entitlements being sought (i.e. site plan, parcel map, etc.).

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

____	Air Resources Board	____	Office of Historic Preservation
____	Boating & Waterways, Department of	____	Office of Public School Construction
____	California Emergency Management Agency	____	Parks & Recreation, Department of
____	California Highway Patrol	____	Pesticide Regulation, Department of
X	Caltrans District # 8	____	Public Utilities Commission
____	Caltrans Division of Aeronautics	X	Regional WQCB # 7 & 8
____	Caltrans Planning	____	Resources Agency
____	Central Valley Flood Protection Board	____	Resources Recycling and Recovery, Department of
____	Coachella Valley Mtns. Conservancy	____	S.F. Bay Conservation & Development Comm.
____	Coastal Commission	____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
____	Colorado River Board	____	San Joaquin River Conservancy
____	Conservation, Department of	____	Santa Monica Mtns. Conservancy
____	Corrections, Department of	____	State Lands Commission
____	Delta Protection Commission	____	SWRCB: Clean Water Grants
____	Education, Department of	____	SWRCB: Water Quality
____	Energy Commission	____	SWRCB: Water Rights
X	Fish & Game Region # 6	____	Tahoe Regional Planning Agency
____	Food & Agriculture, Department of	____	Toxic Substances Control, Department of
____	Forestry and Fire Protection, Department of	____	Water Resources, Department of
____	General Services, Department of		
____	Health Services, Department of	____	Other:
____	Housing & Community Development	____	Other:
____	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date September 11, 2020 Ending Date October 26, 2020

Lead Agency (Complete if applicable):

Consulting Firm: Romo Planning Group Inc.
Address: 9431 Haven Avenue, Ste. 232
City/State/Zip: Rancho Cucamonga, CA 91730
Contact: Ernest Perea
Phone: 951-729-5383

Applicant: City of Banning
Address: 99 E. Ramsey Street
City/State/Zip: Banning CA 92220
Phone: 951-922-3190

Signature of Lead Agency Representative: _____ **Date:** 9-10-20

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Sun Lakes Village North Specific Plan Amendment No. 5 Draft Environmental Impact Report

SCH No. 2020029074

Lead Agency

City of Banning
99 E. Ramsey Street
Banning, CA 92220

Environmental Consultant

Romo Planning Group, Inc.
9431 Haven Avenue, Ste. 232
Rancho Cucamonga, CA 91730

September 9, 2020

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Appendices (Separate Attachment)

Appendix A: Notice of Preparation/Initial Study.

Appendix B: Urban Crossroads Inc., *Sun Lakes North Specific Plan Amendment No. 6, Air Quality and Greenhouse Gas Evaluation*, July 9, 2020

Appendix C: Urban Crossroads Inc., *Sun Lakes North Specific Plan Amendment No. 6 Emissions from Alternatives*, July 9, 2020

Appendix D: L&L Environmental Inc*., Habitat Assessment for APN 419-140-057 Sun Lakes Boulevard, City of Banning, Riverside County, California*, March 30, 2020.

Appendix E: L&L Environmental Inc*., Cultural Resources Records Search Results and Recommendations for the Sun Lakes Boulevard Project (APN 419-140-057), City of Banning, County of Riverside, California*, February 27, 2020.

Appendix F: L&L Environmental Inc., *Phase I Cultural Resources Assessment for the Sun Lakes Boulevard Project (APN 419-140-057), City of Banning, County of Riverside, California*, August 26,2020.

Appendix G: Urban Crossroads Inc., *Sun Lakes Village North Specific Plan Noise Monitoring*, July 9, 2020.

Appendix H: Urban Crossroads Inc., *Sun Lakes Village North Specific Plan Amendment No. 5 Traffic Analysis, City of Banning*, July29,2020.

Appendix I: Urban Crossroads Inc., *Sun Lakes Village North Specific Plan Amendment No. 5 Vehicle Miles Traveled (VMT) Analysis,* September 4,2020.

Appendix J: Romo Planning Group Inc., *Water Supply Assessment for Sun Lakes Village North Specific Plan Amendment No. 5,* August 31, 2020.

1. EXECUTIVE SUMMARY

1.1 Introduction

This summary is provided in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15123. As stated in Section 15123(a), "*an EIR [environmental impact report] shall contain a brief summary of the proposed action and its consequences. The language of the summary should be as clear and simple as reasonably practical*." As required by the Guidelines, this chapter includes (1) a summary description of the Project, (2) a synopsis of environmental impacts and recommended mitigation measures (Table ES-1), (3) identification of the alternatives evaluated and of the environmentally superior alternative, and (4) a discussion of the areas of controversy associated with the Project.

1.2 Summary Description of The Project

The Sun Lakes Village Specific Plan ("Specific Plan") was originally approved by the City of Banning on February 28, 1983. The Specific Plan consisted of 4,131 dwelling units, a 150-acre golf course, 12 acres of commercial use and 144 acres of office/industrial use on approximately 963 acres. The Specific Plan has been amended four (4) times between 1984 and 2006 to accommodate various changes to the land use plan, infrastructure requirements, and the vehicle and pedestrian circulation plan. The Sun Lakes Village North Specific Plan Amendment No .5 ("Project") updates the existing Specific Plan document to amend the Specific Plan Land Use Plan from Retail Commercial (Auto Dealer) to Business Park & Warehouse (BW), Office & Professional (OP), and Retail & Service (RS). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

1.3 Project Location

The Project site is located on approximately 47 gross acres between Sun Lakes Boulevard and Interstate 10 approximately 840 feet east of Highland Springs Avenue. The Project site is also identified as Assessor's Parcel Number 419-140-057. (See Figures 3-1 and 3-2).

1.4 Project Objectives

The Project Objectives are as follows:

1) To efficiently develop an underutilized property with a complementary mix of land uses, including business park, light industrial, commercial, office and professional, and optional residential land uses.

2) Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities and expansion of the tax base.

3) Provide local employment for residents of the City to improve the jobs-housing balance within the City.

4) To provide Development Standards and Design Guidelines that establish general provisions for site design, circulation, architecture, landscape, walls, fences, screening, and buffers that would ensure that the Project is developed in a manner that is aesthetically pleasing.

1.5 Potential Approvals and Permits Required

The Project consists of amendments to the Sun Lakes Village North Specific Plan Land Use Plan Map and regulations relating to permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions to guide future development. There are plans to develop the property at present. Therefore, no other permits or approvals from other agencies are required at this time.

1.6 Summary of Alternatives

No Project/No Development Alternative

This Alternative considers no development/disturbance on the Project site beyond that which occurs under existing conditions. As such, the approximately 47-acre Project site would continue to consist of vacant land that has been subject to regular discing as part of on-going fire abatement activities. Under this Alternative, no improvements would be made to the Project site and none of the Project's roadway, drainage, utility, and other infrastructure improvements would occur. This Alternative was selected by the City to compare the environmental effects of the Project with an alternative that would leave the Project site in its existing condition.

No Project/General Plan Land Use Alternative

This Alternative considers development of the Project site in accordance with the site's existing General Plan land use designations of Business Park (with Specific Plan Overlay) and General Commercial (with Specific Plan Overlay). Under this Alternative, the site would be developed with up to 25-acres of auto dealerships and 18 acres of commercial retail uses.

This Alternative was selected by the City to compare the environmental effects of the Project with an alternative that would develop the Project site in accordance with the General Plan land use designations of Business Park (with Specific Plan Overlay) General Commercial (with Specific Plan Overlay).

Reduced Development Alternative

This Alternative considers a 20% reduction in the amount of building square footage allowed by the Project from 966,552 square feet to 773.242 square feet. This Alternative was selected by the City because a 20% reduction in building square footage would reduce air emissions of nitrogen oxides (NOx) caused by vehicle traffic to less than significant levels. However, volatile organic compound (VOC) emissions from painting and the amount of vehicle miles traveled will remain significant.

1.7 Areas of Controversy and Issues to be Resolved

To determine the scope of this EIR, the City prepared and distributed a Notice of Preparation (NOP) for the Project on February 21, 2020 to the Office of Planning and Research, each responsible and trustee agency, and filed with the Riverside County clerk. Table ES-1 summarizes the comments received regarding the NOP issued for this EIR and identifies the location in this EIR document where the comments are addressed.

Table ES 1- Summary of NOP Comments

Agency/Organization/Individual	Date	Comments	Location in this EIR where Comment is Addressed
South Coast Air Quality Management District	3/17/20	Address health risks from diesel trucks if development is reasonably foreseeable; require mitigation measures if necessary; consider alternatives if impacts are significant	Section 4.2 Air Quality
Riverside County Flood Control and Water Conservation District	3/23/20	Project would not be impacted by District master Drainage Plan facilities; identified general information with respect to permits that may be required by regulatory agencies.	Section 4.8 Hydrology and Water Quality

All NOP comment letters are included in Technical Appendix A of this Draft EIR.

In addition, as part of the EIR scoping process, a public scoping meeting was held by the City on Monday, March 2, 2020 at 5:30 pm at the Sun Lakes Village Community Center/Country Club. Verbal and written comments regarding the scope and content of the EIR were accepted during the meeting. Primary issues raised at the meeting included traffic, noise, and the types of commercial uses that are planned for the site.

Areas of controversy that fall within the scope of CEQA are addressed in this Draft EIR. Issues that fall outside the scope of CEQA are not evaluated in this Draft EIR; however, the City will continue to respond to these issues through the project planning process. All of the substantive environmental issues raised in the NOP comment letters have been addressed or otherwise considered during preparation of this EIR.

Table ES 2- Summary of Impacts and Mitigation Measures

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
NI = No Impact **LTS= Less Than Significant** **PS = Potentially Significant** **SU = Significant and Unavoidable**			
4.1- Aesthetics- Would the Project:			
Impact 4.1.5 (a) - Conflict with applicable zoning and other regulations governing scenic quality?	LTS	No mitigation is required for this impact.	LTS
4.1.5 (b) -Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	LTS	No mitigation is required for this impact.	LTS
4.2- Air Quality-Would the Project:			
4.2.5 (a) Conflict with or obstruct implementation of the applicable air quality plan.	PS	Mitigation Measures AQ-1 through AQ-7 are applicable.	SU
4.2.5 (b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	PS	**AQ 1- Use Low VOC Paint:** To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g. bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Banning's Building and Safety Division for compliance with this mitigation measure prior to issuance of a building permit. **AQ-2: Grading Limitations.** During the City's review process for applications under the Specific Plan, the applicant shall conduct or shall have conducted modeling of the regional and the localized emissions (NOx,	SU

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		CO, PM10, and PM2.5) associated with the maximum daily grading activities estimated for the proposed individual developments one acre or larger. If the modeling shows that emissions would exceed the SCAQMD's significance thresholds for those emissions, the maximum daily grading activities of the proposed development shall be limited to the extent that could occur without resulting in emissions in excess of SCAQMD's significance thresholds for those emissions. For implementing projects within the Specific Plan, the applicant shall be responsible for submitting a focused project-level air quality assessment that includes the modeling of localized on-site emissions associated with daily grading activities anticipated for the proposed development. **AQ 3-Electrical Hookups for Loading Docks:** Although the Project does not include refrigerated warehouse space, trucks accessing the Project site may have auxiliary power units (APU) and/or transport refrigeration units (TRUs). Therefore, electrical hookups shall be installed at all loading docks, and to reduce/replace APU use while trucks are parked along the docks, to allow trucks with APU and/or TRUs with electric standby capabilities to plug in when TRUs are in use to reduce diesel fuel consumption and resulting NOx emissions. The City shall verify electrical hookups have been installed prior to occupancy. **AQ 4-Idiling Limits**: All facilities shall post signs informing users of requirements limiting idling to five minutes or less pursuant to Title 13 of the California Code of Regulations, Section 2485 in order to reduce diesel fuel consumption and resulting NOx emissions. No overnight/long-term parking will be allowed. The City shall verify signage has been installed prior to occupancy. **AQ 5-Electric or Natural Gas Service Equipment:** Service equipment (i.e., yard hostlers and forklifts) used within the site	

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		shall be electric or compressed natural gas-powered to reduce diesel fuel consumption and resulting NOx emissions. **AQ-6-Electric Vehicle Charging Stations**: Prior to approval of implementing commercial plot plan(s) within the Project the City of Banning Planning Division shall ensure that the plot plan(s) include a minimum of three (3) electric-vehicle charging stations. The electric vehicle charging stations also shall be depicted on building plans for implementing development within Project site. Prior to issuance of occupancy permits for the proposed commercial land uses within the Project site, the City of Banning Building and Safety Department shall ensure that a minimum of three electric vehicle charging stations have been installed on-site.	
4.2.5(c) Expose sensitive receptors to substantial pollutant concentrations?	PS	In addition to MM AQ-1 through MMAQ-6 above, MM AQ-7 is required. **AQ-7-Health Risk Assessment:** During the City's review process for any future development applications under the Specific Plan that proposes a warehouse or distribution project, the applicant shall submit a Health Risk Assessment for that is prepared pursuant to the "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis." If the modeling shows that emissions would exceed the SCAQMD's significance thresholds for those emissions, the following performance-based measures shall be required in order reduce emissions to less than significant levels. The measures shall include the following: 1) Prior to the issuance of any grading permits, the applicant and/or building operators shall submit construction plans and a construction vehicle management plan to the City of Banning denoting	SU

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		the proposed schedule and projected equipment use. The construction vehicle management plan shall include such things as: idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all onsite equipment. The plan shall include that California state law requires equipment fleets to limit idling to no more than 5 minutes. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized or that their use was investigated and found to be infeasible for the project as determined by the City. 2) Prior to issuance of an occupancy permit, the operator of a warehouse/distribution center use shall place signs that identify CARB anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for trucks drivers to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and CARB to report violations. 3) Prior to the issuance of an occupancy permit for a warehouse/distribution center use, the City shall require operators of the proposed facilities to encourage the vendor trucks to incorporate energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling	

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		resistance tires—to reduce fuel consumption. Prior to the issuance of a building permit for a warehouse/distribution center use, the building shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other on-site equipment.	
4.2.5 (d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	LTS	No mitigation is required for this impact.	LTS
4.3- Biological Resources-Would the Project:			
4.3.5 (a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	PS	**BIO-1: Pre-Construction Burrowing Owl Survey.** Within 30 calendar days prior to the issuance of a grading permit, a qualified biologist shall conduct a survey of the proposed impact footprint and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Banning Planning Department prior to the issuance of a grading permit and subject to the following provisions: a. In the event that the pre-construction survey identifies no burrowing owls in the impact area, a grading permit may be issued without restriction. b. In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing	LTS

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow California Department of Fish and Wildlife relocation protocol. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow California Department of Fish and Wildlife relocation protocol. The biologist shall confirm in writing to the Planning Department that the species has fledged or been relocated prior to the issuance of a grading permit. **BIO-2- Nesting Bird Survey.** Prior to the issuance of a grading permit, the City of Banning Planning Department shall ensure vegetation clearing and ground disturbance shall be prohibited during the migratory bird nesting season (February 1 through August 31), unless a migratory bird nesting survey is completed in accordance with the following requirements: a. A migratory nesting bird survey of the Project's impact footprint shall be conducted by a qualified biologist within three business (3) days prior to initiating vegetation clearing or ground disturbance. b. A copy of the migratory nesting bird survey results report shall be provided to the City of Banning Planning Department. If the survey identifies the presence of active nests, then the qualified biologist shall provide the Planning Department with a copy of maps showing the location of all active nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones as determined by a qualified biologist,	

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		shall be subject to review and approval by the Planning Department. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and Planning Department verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.	
4.3.5 (b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Ser**vice?**	NI	No mitigation is required for this impact.	NI
4.3.5(c) 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?	NI	No mitigation is required for this impact.	NI
4.3.5 (d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	NI	No mitigation is required for this impact.	NI
4.3.5 (e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	PS	**BIO-3- Native Tree Removal.** Native trees to be impacted by development of projects pursuant to the Specific Plan shall be assessed by a certified arborist as to the viability and value of the trees to determine if mitigation and replacement are required. Removal of healthy, shade-providing, and	LTS

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		aesthetically valuable trees shall be strongly discouraged and shall conform with the policies and programs of the City of Banning General Plan. A tree removal and replacement plan shall be required for the removal and replacement of all trees more than 50 years of age unless their removal is required to protect the public health and safety. Each identified tree removed shall be replaced with at least one 36-inch box specimen tree, in addition to any other required landscaping.	
4.3.5 (f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	PS	MM BIO-1 and BIO-2 are applicable.	LTS
4.4 -Cultural Resources-Would the Project:			
4.4.5 (a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	LTS	No mitigation is required for this impact.	LTS
4.4.5 (b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	LTS	No mitigation is required for this impact.	LTS
4.4.5(c) Disturb any human remains, including those interred outside of formal cemeteries?	LTS	No mitigation is required for this impact.	LTS
4.5- Energy-Would the Project:			
4.5.5 (a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	LTS	No mitigation is required for this impact.	LTS
4.5.5 (b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	LTS	No mitigation is required for this impact.	LTS

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
4.6- Geology and Soils-Would the Project:			
4.6.5 (a) Directly or indirectly destroy a unique paleontological resource?	PS	**GEO - 1**: Paleontological Resource Impact Mitigation Program. Prior to the issuance of a grading permit, the Project Proponent shall prepare a paleontological resource impact mitigation program (PRIMP) for the grading and excavation phase of the Project, including both on- and off -site activities. The PRIMP shall be submitted for review and approval to the City of Banning Community Development Department and shall conform to the guidelines of the Society of Vertebrate Paleontology; including the following: a) A trained paleontological monitor shall be present during initial mass grading or deep trenching activities within the Project in sediment areas determined likely to contain paleontological resources. If paleontological resources are located within excavation, the monitoring program will change to full-time. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. The monitor shall be equipped to rapidly remove any large fossil specimens encountered during excavation. During monitoring, samples shall be collected and processed to recover microvertebrate fossils. Processing shall include wet screen washing and microscopic examination of the residual materials to identify small vertebrate remains. b) Upon encountering a large deposit of bone, salvage of all bone in the area shall be conducted in accordance with modern paleontological techniques.	LTS

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		c) All fossils collected during the Project shall be prepared to a reasonable point of identification. Excess sediment or matrix shall be removed from the specimens to reduce the bulk and cost of storage. Itemized catalogs of all material collected and identified shall be provided to the museum repository along with the specimens. d) A report documenting the results of the monitoring and salvage activities and the significance of the fossils will be prepared. All fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a museum repository for permanent curation and storage. e) All fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a museum repository for permanent curation and storage.	
4.7- Greenhouse Gas Emissions-Would the Project:			
4.7.5 (a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	PS	**GHG-1: GHG Reduction Documentation**. Prior to the issuance of a building permit, documentation that the following GHG reduction measures shall be implemented by future development projects is required. Documentation may consist of a letter stating how the project will comply and identify the verification mechanism for each measure required below (e.g. shown on building plans, landscaping plans, etc.) 1. The project shall devise a comprehensive water conservation strategy to reduce water use during project operation. The strategy will include the following: • Install drought-tolerant plants for landscaping. • Install water-efficient irrigation systems, such as weather-based and soil-moisture- based irrigation	SU

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		controllers and sensors, for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance. • Ensure that all landscape and irrigation measures follow the City of Banning's Landscaping and Water Conservation requirements. **GHG-2: Building Design.** The project will design building shells, building components, such as windows, roof systems and electrical systems to meet 2016 Title 24 Standards (or applicable requirements in effect at the time a building permit is applied for). **GHG-3: LEED Features**. Buildings will be designed to provide CALGreen Standards with Leadership in Energy and Environmental Design (LEED) features for potential certification and will employ energy and water conservation measures in accordance with such standards. This includes design considerations related to the building envelope, HVAC, lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy. **GHG-4. Energy Efficient Lighting**. Prior to the issuance of a building permit, building plans shall require that high-efficiency lighting (such as LED lighting that is 34 percent more efficient than fluorescent lighting) be installed within buildings on-site. **GHG-5. Efficient Building Materials/Equipment.** The project will utilize building materials/methods and heating equipment that are efficient and reduce emissions that may include, but not limited to, high-efficiency heat pumps; thin insulating materials; windows and building surfaces with tunable optical properties; high efficiency lighting devices; improved software for optimizing building design and	

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		operation; low cost, easy to install, energy harvesting sensors and controls; interoperable building communication systems; and optimized control strategies. **GHG-6. Reduce Indoor Water Demand.** Prior to the issuance of a building permit, building plans shall require that all faucets, toilets, and showers installed in the proposed structures utilize low-flow fixtures that would reduce indoor water demand by 20% per CalGreen Standards.	
4.7.5 (b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	PS	MM GHG-1 through MM-GHG-6 above are applicable.	SU
4.8- Hydrology and Water Quality-Would the Project:			
4.8.5 (a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	LTS	No mitigation is required for this impact.	LTS
4.8.5 (b) 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 that 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 offsite? (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems	LTS	No mitigation is required for this impact.	LTS

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
or provide substantial additional sources of polluted runoff? (iv) Impede or redirect flood flows?			
4.8.5 (c) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	LTS	No mitigation is required for this impact.	LTS
4.8.5 (d) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	LTS	No mitigation is required for this impact.	LTS
4.9- Land Use and Planning-Would the Project:			
4.9 (a) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	PS	MM AQ-1 through AQ-7 and MM GEO-1 are applicable.	SU
4.10- Noise-Would the Project:			
4.10.5 (a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project more than standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	PS	**NOI-1-Construction Noise Mitigation Plan.** Prior to issuance of grading and/or building permits, a note shall be provided on grading and building plans indicating that ongoing during grading and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise: 1. The project applicant shall limit construction activities to the daytime hours between 7 AM to 6 PM, as prescribed in Section 8.44.090(E) of the City's Municipal Code. 2. For all project construction zones, all internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers	LTS

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		consistent with manufacturer's standards. 3. For all project construction zones, stationary equipment such as generators, air compressors shall be located as far as feasible from nearby noise-sensitive uses. If such stationary equipment produces noise emissions that are directional, said equipment shall be oriented to direct noise emissions away from sensitive receptors. 4. For all project construction zones, stockpiling and staging should be located as far as feasible from nearby noise-sensitive receptors. 5. For construction activity within 50 feet of any noise-sensitive receptors, a temporary noise barrier shall be installed by the applicant/developer. This temporary noise barrier shall be installed prior to the onset of construction and be located between the single-family residences, senior apartments/assisted living/memory care residential facility and the construction zone and all sensitive receptors. The temporary sound barrier shall provide a reduction in noise that will meet the City's construction noise threshold of 55 dBA. The noise barrier shall be a minimum height of 8 feet and be free of gaps and holes and must achieve a Sound Transmission Class (STC) of 35 or greater. The barrier can be either (a) a ¾-inch-thick plywood wall OR (b) a hanging blanket/curtain with a surface density or at least 2 pounds per square foot. For either configuration, the construction side of the barrier shall have an exterior lining of sound absorption material with a Noise Reduction Coefficient (NRC) rating of 0.7 or higher.	

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
4.10.5 (b) Generate excessive ground borne vibration or ground borne noise levels?	PS	**NOI-2-Final Acoustical Report:** Prior to issuance of the first building permit for any project, the property owner/developer shall submit a final acoustical report prepared to the satisfaction of the Planning Director to address potential noise impacts to nearby residences. The report shall demonstrate that the project incorporates sufficient noise-attenuation features if needed so that the City's exterior and interior standards in Municipal Code Sections 8.44.070 and 8.44.090(E) and in the City's Noise Element are maintained at nearby residences. Compliance can be achieved with (a) sufficient buffering distances so that nearby sensitive receptors are not significantly impacted by future commercial development OR (b) sufficiently high and long sound barrier wall(s) that are placed between commercial noise sources and receptors (for example, in the case of garbage compactor equipment) OR (c) other adequate noise reduction methods that are approved by the Planning Director or their designee. In all cases, the noise reduction measures shall be technically demonstrated to achieve the appropriate target noise level(s) for both exterior and interior environments for nearby residences, as appropriate (e.g., sufficient wall or berm height, sufficient buffering distance, appropriate sound encapsulation/insulation methods, etc.). The individual project owner/developer shall submit the noise mitigation report to the Planning Director for review and approval. Upon approval by the City, the project acoustical design features shall be incorporated into the future development.	LTS
4.10-5 (c) 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 miles of a public airport or public use airport, would the project expose people residing	NI	No mitigation is required for this impact.	NI

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
or working in the project area to excessive noise levels?			
4.11- Transportation-Would the Project:			
4.11.5 (a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, considering all modes of transportation including transit, roadway, bicycle, and pedestrian facilities?	LTS	No mitigation is required for this impact.	LTS
4.11.5 (b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	PS	**VMT-1: Pedestrian Network Improvements.** Prior to the issuance of a building permit, site plans for future development shall provide a pedestrian access network to link areas of the Project site internally and to Sun Lakes Boulevard.	SU
4.11.5 (c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	LTS	No mitigation is required for this impact.	LTS
4.11.5 (d) Result in inadequate emergency access?	LTS	No mitigation is required for this impact.	LTS
4.12- Tribal Cultural Resources-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:			
4.12.5 (a) 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)?	LTS	No mitigation is required for this impact.	LTS
4.12-5 (b) 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	PS	**TCR-1-Retain Qualified Professional Archaeological Monitor:** Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeological monitor who meets U.S. Secretary of the Interior Standards (SOI). The monitor shall be present during all ground disturbing activities to identify any known or	LTS

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		suspected archaeological and/or cultural resources. The monitor will conduct an Archaeological Sensitivity Training, in conjunction with the Tribes Tribal Historic Preservation Officer (THPO). The training session will focus on what the archaeological and tribal cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event. **TCR-2- Archaeological Monitoring and Treatment Plan:** Prior to the issuance of a grading permit, the qualified archaeologist shall develop an Archaeological Monitoring and Treatment Plan to address the details, timing and responsibility of all archaeological and cultural resource activities that occur on the project site, in coordination with Tribe. **TCR-3- Tribal Monitoring Agreement:** Prior to the issuance of grading permits, the applicant shall enter into a Tribal monitoring agreement with the Morongo Band of Mission Indians for the project. The Tribal Monitor shall be on-site during all ground disturbing activities including clearing, grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all water supply, electrical, and irrigation lines, and landscaping phases of any kind. The Tribal Monitor shall have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. **TCR-4-Specific Conditions:** The Morongo Band of Mission Indians requests the following specific conditions to be imposed in order to protect Tribal cultural, and/or archaeological resources within the project area. This includes cultural materials both on the surface and buried. Should human remains be encountered on the surface or during any and all ground-disturbing activity (i.e. grubbing, tree and bush removal,	

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		grading, trenching, fence post placement and removal, construction excavation, excavation for all water supply, electrical, and irrigation lines, and landscaping phases, excavation of any kind), work in the immediate vicinity of the discovery shall immediately stop (within 100-foot buffer of the discovery), the area shall be protected, project personnel/observers restricted, and the County Coroner to be contacted pursuant to State and Safety Code §7050.5. and Public Resources Code (PRC) § 5097.98. In the event human remains are found and identified as Native American, the landowner shall also notify the City Planning Department so that the City can ensure PRC § 5097.98 is followed. No photographs are to be taken except by the Coroner. A. In the event that Tribal Cultural Resources or other cultural resources are discovered during project development and construction, all work in the immediate vicinity of the discovery shall stop (within 60-foot buffer of the discovery) and the area protected by fencing and guarding until a qualified archaeologist (i.e. meeting Secretary of the Interior standards) assesses the discovery. Overall project work may continue during this period of assessment. B. If archaeological assessment indicates that significant Native American cultural resources or other cultural resources are present, a Treatment Plan must be prepared in consultation with the Tribe. The developer will notify the Lead Agency and contract with qualified Cultural Resources Management (CRM) firm to develop the Treatment Plan. C. If requested by the Tribe, the developer or the project archaeologist shall, in good faith, immediately initiate consultation with the Morongo Band of Mission Indians regarding further actions to be taken including, but not limited to, avoidance, preservation in place, removal, and disposition. **TCR-5-Imadvert Discovery During Grading:** In the event that archaeological or tribal cultural resources are unearthed during	

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		ground-disturbing activities, ground-disturbing activities shall stop (within 60-foot buffer of the discovery) or shall be diverted away from the vicinity of the find, so that the find can be evaluated by the qualified Archaeologist. A treatment plan shall be developed by a qualified Archaeologist (meeting SOI standards) in consultation with the Tribe and the City Planning Department to include relinquishment of all artifacts through one of the following methods: A. This reburial area of cultural resource items shall be away from any future impacts and reside in perpetuity. Reburial shall not occur until all cataloguing; analysis and any necessary special studies have been completed on the cultural resources. Details of contents and location of the reburial shall be documented in a Final Report and shall remain as confidential. B. The Tribes Most Likely Descendant (MLD) may wish to rebury the human remains and/or associated funerary objects, as close to the place of their discovery, in an area that will not be subject to future disturbances and reside in perpetuity. The place(s) of reburial will not be disclosed by any party and is exempt from the California Public Records Act (California Government Code § 6254[r]). Reburial location of human remains will be determined by the landowner, City Planning Department, in consultation with the Tribes Most Likely Descendant (MLD). C. Curation at a Riverside County Curation facility that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers and tribal members for further study. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence shall be provided in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.	

Threshold	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		TCR-6-Documents: Any and all cultural documents created as a part of the project (Archaeological Monitoring and Treatment Plans, isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to consulting Tribe.	
4.13- Utilities and Service Systems			
4.13.5 (a) 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?	PS	Mitigation Measures AQ-2, BIO-1 through BIO-3, GEO-1, NOI-1 and NOI-2, TCR-1 through TCR-6 are applicable.	LTS
4.13.5 (b). Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple years?	LTS	No mitigation is required for this impact.	LTS
4.13.5 (c) 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?	LTS	No mitigation is required for this impact.	
4.13.5 (d). Generate solid waste more than State or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	LTS	No mitigation is required for this impact.	

2. INTRODUCTION

2.1 Purpose and Intent

According to Section 15121 of the State CEQA Guidelines, an Environmental Impact Report ("EIR") is an informational document that is written to inform public agency decision-makers and the public of the significant environmental effects of a proposed Project. The purpose of an EIR is to:

- Analyze the environmental effects of a proposed project.
- Indicate mitigation measures to avoid or minimize the potentially significant environmental effects of a project; and
- Identify alternatives to a project that would avoid or substantially lessen the significant effects.

The purpose of this Draft EIR for the Sun Lakes Village North Specific Plan Amendment No. 6 ("Project") is to review the existing conditions of the Project site; identify and analyze the potential environmental impacts, and then suggest feasible mitigation measures to reduce significant adverse environmental effects, as described in Section 4.0, Environmental Analysis. The environmental impacts of the Project are analyzed in the EIR to the degree of specificity appropriate in accordance with Section 15146 of the State CEQA Guidelines.

It is the intent of this Draft EIR to enable the City of Banning and other responsible agencies and interested parties to evaluate the environmental impacts of the Project. This Draft EIR will provide the City of Banning with the information required to consider approval of the Project.

Pursuant to CEQA § 21067 and CEQA Guidelines Article 4 and § 15367, the City of Banning is the Lead Agency under whose authority this Draft EIR has been prepared. "Lead Agency" refers to the public agency that has the principal responsibility for carrying out or approving a project. Serving as the Lead Agency and before taking action to approve the Project, the City of Banning has the obligations to: (1) ensure that this Draft EIR has been completed in accordance with CEQA; (2) review and consider the information contained in this Draft EIR as part of its decision making process; (3) make a statement that this Draft EIR reflects the City of Banning's independent judgment; (4) ensure that all significant effects on the environment are eliminated or substantially lessened where feasible; and, if necessary (5) make written findings for each unavoidable significant environmental effect stating the reasons why mitigation measures or project alternatives identified in this Draft EIR are infeasible and citing the specific benefits of the Project that outweigh its unavoidable adverse effects (CEQA Guidelines §§ 15090 through 15093).

Pursuant to CEQA Guidelines § 15040 through § 15043, and upon completion of the CEQA review process, the City of Banning will have the legal authority to do any of the following:

- Approve the Project.
- Require feasible changes in any or all activities involved in the Project to substantially lessen or avoid significant effects on the environment.
- Disapprove the Project, if necessary, to avoid one or more significant effects on the environment that would occur if the Project were approved as proposed; or
- Approve the Project even though the Project would cause a significant effect on the environment if the City makes a fully informed and publicly disclosed decision that: 1) there is no feasible way to lessen the effect or avoid the significant effect; and 2) expected benefits from the Project will outweigh significant environmental impacts of the Project.

This EIR has been prepared in accordance with all criteria, standards, and procedures of CEQA (California Public Resource Code § 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, § 15000 et seq.) in order to address the environmental impacts of the Project.

2.2 Project Overview

The Sun Lakes Village Specific Plan ("Specific Plan") was originally approved by the City of Banning on February 28, 1983. The Specific Plan consisted of 4,131 dwelling units, a 150-acre golf course, 12 acres of commercial use and 144 acres of office/industrial use on approximately 963 acres. The Project site is located on approximately 47 gross acres between Sun Lakes Boulevard and Interstate 10 approximately 840 feet east of Highland Springs Avenue as shown in Figure 3-2 – Project Location Map/Aerial Photo. The Project site is also identified as APN 419-140-057.

The Specific Plan has been amended five (5) times between 1984 and 2006 to accommodate various changes to the land use plan, infrastructure requirements, and the vehicle and pedestrian circulation plan. The Sun Lakes Village North Specific Plan Amendment No .6 ("Project") updates the existing Specific Plan document to amend the Specific Plan Land Use Plan from Retail Commercial (Auto Dealer) to Business Park & Warehouse (BW), Office & Professional (OP), and Retail & Service (RS). (See Figure 3-3 - Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

2.3 Scope of the Draft EIR

As part of the Notice of Preparation (NOP), pursuant to Section 15063 (c) of the State CEQA Guidelines, an Initial Study was prepared for the purpose of assisting in the preparation of an EIR per Section 15063 (c) (3), by:

- Focusing the EIR on the effects determined to be significant,
- Identifying the effects determined not to be significant,
- Explaining the reasons for determining that potentially significant effects would not be significant, and
- Identifying whether a program EIR, tiering, or another appropriate process can be used for analysis of the project's environmental effects.

Pursuant to Section 15143 of the State CEQA Guidelines, *"The EIR shall focus on the significant effects on the environment. The significant effects should be discussed with emphasis in proportion to their severity and probability of occurrence. Effects dismissed in an Initial Study as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the Lead Agency subsequently receives information inconsistent with the finding in the Initial Study. A copy of the Initial Study may be attached to the EIR to provide the basis for limiting the impacts discussed."* The Initial Study for this project is included in Appendix A of this Draft EIR.

2.3.1 Topics Not Addressed in Detail in this Draft EIR

The information and analysis presented in the Initial Study (Appendix A) of this Draft EIR provides substantial evidence for the conclusion that certain issues identified in each environmental topic section of this EIR that are not addressed were not analyzed further for the following reasons:

1) CEQA standards triggering preparation of further environmental review do not exist for those issues; and
2) Impacts under these topics would be less than significant, in compliance with mandatory regulatory requirements or the incorporation of feasible mitigation measures.

2.3.2 Focus of the Draft EIR

As a first step in the CEQA compliance process, the City of Banning completed an Initial Study (Draft EIR *Technical Appendix A*) pursuant to CEQA Guidelines § 15063 to determine if the Project could have a significant effect on the environment. The following list identifies the environmental issues that, pursuant to the findings of the Initial Study, have been determined to have a potentially significant or a significant impact that will be evaluated in the EIR.

Table 2. 1- Summary of Environmental Impacts to be Addressed in the EIR

Environmental Topic Section	Threshold
4.1 Aesthetics	4.1 (c) Conflict with applicable zoning and other regulations governing scenic quality.
4.2 Air Quality	4.2 (a-c) Conflict with or obstruct implementation of the applicable air quality plan; violate any air quality standard or contribute substantially to an existing or projected air quality violation; result in a cumulatively considerable net increase of any criteria.
4.3 Biological Resources	4.3 (a-c) Adversely affect candidate, sensitive, or special status species, riparian habitat, wetlands; and consistency with habitat conservation plan.
4.4 Cultural Resources	4.4 (a-b) Adversely affect historic and archaeological resources.
4.5 Energy	4.5 (a-b) Wasteful, inefficient, or unnecessary consumption of energy resources and consistency with energy plans.
4.6 Geology and Soils	4.6 (a) Directly or indirectly destroy a unique paleontological resource.
4.7 Greenhouse Gas Emissions (GHG)	4.8 (a-b) Generate GHG emission in excess of screening threshold and conflict with GHG reduction plan(s)
4.8 Hydrology and Water Quality	4.8 (a-b) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality or substantially alter the existing drainage pattern of the site or area.
4.9 Land Use and Planning	4.9 (a) Conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.
4.10 Noise	4.10 (a-b) Generation of a substantial temporary or permanent increase in ambient noise levels or groundborne vibration.
4. 11 Transportation	4.11 (a-d) Conflict with a program, plan, ordinance, or policy addressing the circulation system, conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), increase hazards, inadequate emergency vehicle access.
4.12 Tribal Cultural Resources	4.18 (a-b) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources; and/or a resource determined to be significant to a California Native American tribe.
4.13 Utilities and Service Systems	4.13 (a-d) 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 effect, have sufficient water supplies, wastewater treatment capacity, solid waste capacity.

2.4 Document Format

This Draft EIR contains all the information required to be included in an EIR as specified by the CEQA Statutes and Guidelines (California Public Resources Code, § 21000 et. seq. and California Code of Regulations, Title 14, Division 6, Chapter 3). CEQA requires that an EIR contain, at a

minimum, certain specified content. In summary, the content and format of this Draft EIR is as follows:

Section 1.0, Executive Summary, includes a Project introduction, a brief description of the proposed Project, a summary of areas of controversy/issues to be resolved, a description of the Notice of Preparation NOP) comments received, as well as a description of the Project alternatives and a summary of impacts, mitigation measures, and level of impacts following mitigation.

Section 2.0, Introduction and Purpose, provides introductory information about the CEQA process and the responsibilities of the City of Banning, serving as the Lead Agency of this EIR. This section also includes a description of the document format as well as the purpose of CEQA and this EIR.

Section 3.0, Project Description, serves as the EIR's Project Description for purposes of CEQA and contains a level of specificity commensurate with the level of detail proposed by the Project, including the summary requirements pursuant to CEQA Guidelines § 15123.

Section 4.0, Environmental Analysis, provides an analysis of potential direct, indirect, and cumulative impacts that may occur with implementation of the Project. A conclusion concerning significance is reached for each discussion; mitigation measures are presented as warranted. The environmental topics in Section 4.0 are evaluated under the following framework:

Section 5.0, Additional Topics Required by CEQA, includes specific topics that are required by CEQA. These include a summary of the Project's significant and unavoidable environmental effects, a discussion of the significant environmental effects which cannot be avoided if the Project is implemented, significant environmental changes, potential growth-inducing impacts of the proposed Project.

Section 6.0, Project Alternatives, describes and evaluates alternatives to the proposed Project that could reduce or avoid the Project's adverse environmental effects. A range of three (3) alternatives in addition to the No Project Alternative are presented in Section 6.0, *Alternatives*.

Section 7.0, List of Preparers, lists the persons who authored or participated in preparing this Draft EIR, including agencies and persons consulted.

Technical Appendices. CEQA Guidelines § 15147 states that the "information contained in an EIR shall include summarized…information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public," and that the "[p]placement of highly technical and specialized analysis and data in the body of an EIR shall be avoided." Therefore, the detailed technical studies, reports, and supporting documentation that were used in preparing this Draft EIR are bound separately as Technical Appendices.

The Technical Appendices are available for review at the City of Banning Planning Department, 909 E. Ramsey Street, Banning, California 92220, during the City's regular business hours or can be accessed at the following link:

http://banning.ca.us/64/Planning

2.5 Incorporated Documents

CEQA Guidelines § 15150 permits the incorporation by reference of all or portions of other documents that are generally available to the public. Any document incorporated by reference shall be made available to the public for inspection at a public place or public building and requires that the Initial Study state where the incorporated documents will be made available for public inspection.

The following documents have been incorporated by reference and cited as appropriate:

- *The City of Banning General Plan,* various elements, adopted by the City Council on January 3 1, 2006 and as currently amended.
- *City of Banning General Plan with Zoning Overlay Map*, January 1, 2016 and as currently amended.
- *City of Banning Municipal Code* (various chapters), approved through November 15, 2019.

The above described documents are on file with the City of Banning Community Development Department, 99 E. Ramsey Street Banning, CA 92220 and are hereby incorporated by reference.

2.6 Public Review of the EIR

This Draft EIR was distributed to responsible and trustee agencies, other affected agencies, and interested parties. Additionally, in accordance with Public Resources Code § 21092(b) (3), the Draft EIR was provided to all parties who previously requested copies. The Notice of Completion (NOC) and Notice of Availability (NOA) of the Draft EIR were distributed as required by CEQA.

During the 45-day public review period, the Draft EIR and technical appendices were made available for review.

Written comments regarding this Draft EIR should be addressed to:

Adam Rush, M.A., AICP
Community Development Director
99 E. Ramsey Street Banning, CA 92220
951-922-3190
arush@banningca.gov

The City of Banning Planning Commission has the authority to recommend, conditionally recommend, or not recommend the Project for approval. The City of Banning City Council has exclusive authority to approve, conditionally approve, or deny the Project.

Following the close of the 45-day public review period, a Final EIR will be prepared to respond to all substantive comments related to environmental issues surrounding the proposed Project. The Final EIR will be available prior to Planning Commission and City Council public hearings to consider the Final EIR and the proposed Project.

If the proposed Project is approved, the City Council may impose mitigation measures specified in the Final EIR as conditions of Project approval. Alternatively, the City Council could require other mitigation measures deemed to be effective mitigations for the identified impacts, or it could find that the mitigation measures cannot be feasibly implemented. For any identified significant impacts for which no mitigation measure is feasible, or where mitigation would not reduce the impact to a less than significant level, the City Council will be required to adopt a Statement of Overriding Considerations finding that the impacts are considered acceptable because specific overriding considerations indicate that the proposed Project's benefits outweigh the impacts in question.

2.7 Notice of Preparation

To determine the scope of this EIR, the City prepared and distributed a Notice of Preparation (NOP) for the Project on February 21, 2020 to the Office of Planning and Research, each responsible and trustee agency, and filed with the Riverside County clerk. Table 2-1 summarizes the comments received regarding the NOP issued for this EIR and identifies the location in this EIR document where the comments are addressed.

Table 2. 2 - Summary of NOP Comments

Agency/ Organization/ Individual	Date	Comments	Location in this EIR where Comment is Addressed
South Coast Air Quality Management District	3/17/20	Address health risks from diesel trucks if development is reasonably foreseeable; require mitigation measures if necessary; consider alternatives if impacts are significant.	Section 4.2 Air Quality

Riverside County Flood Control and Water Conservation District	3/23/20	Project would not be impacted by District master Drainage Plan facilities; identified general information with respect to permits that may be required by regulatory agencies.	Section 4.8 Hydrology and Water Quality

All NOP comment letters are included in Technical Appendix A of this Draft EIR.

In addition, as part of the EIR scoping process, a public scoping meeting was held by the City on Monday, March 2, 2020 at 5:30 pm at the Sun Lakes Village Community Center/Country Club. Verbal and written comments regarding the scope and content of the EIR were accepted during the meeting. Primary issues raised at the meeting included traffic, noise, and the types of commercial uses that are planned for the site.

3. PROJECT DESCRIPTION

3.1 Background

The Sun Lakes Village Specific Plan ("Specific Plan") was originally approved by the City of Banning on February 28, 1983. The Specific Plan consisted of 4,131 dwelling units, a 150-acre golf course, 12 acres of commercial use and 144 acres of office/industrial use on approximately 963 acres. The Specific Plan has been amended five (5) times between 1984 and 2006 to accommodate various changes to the land use plan, infrastructure requirements, and the vehicle and pedestrian circulation plan.

3.2 Proposed Project

The Project proposes a Specific Plan Amendment to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from Retail Commercial (Auto Dealer) to Business & Warehouse, Office and Professional, and Retail & Service. (See Figure 3-2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions. At this time there are no land use development entitlements being sought (i.e. site plan, parcel map, etc.).

3.3 Project Location

3.3.1 Regional Location

The City of Banning covers approximately 23 square miles within the County of Riverside. The City of Banning is within Riverside County and the San Gorgonio Pass area, an east-west trending valley situated between the San Bernardino and San Jacinto Mountains. The City is bordered by the unincorporated areas in the County of Riverside to the north, south, and east, and the City of Beaumont to the west. (Refer to *Figure 3-1 Regional Location Map*).

3.3.2 Project Site Location

The Project site is located on approximately 47 gross acres between Sun Lakes Boulevard and Interstate 10 approximately 840 feet east of Highland Springs Avenue as shown in Figures 3-1, *Project Location Map/Aerial Photo*. The Project site is also identified as Assessor's Parcel Number 419-140-057.

Figure 3.1 -Regional Location



Figure 3.2-Project Location Map/ Aerial Photo

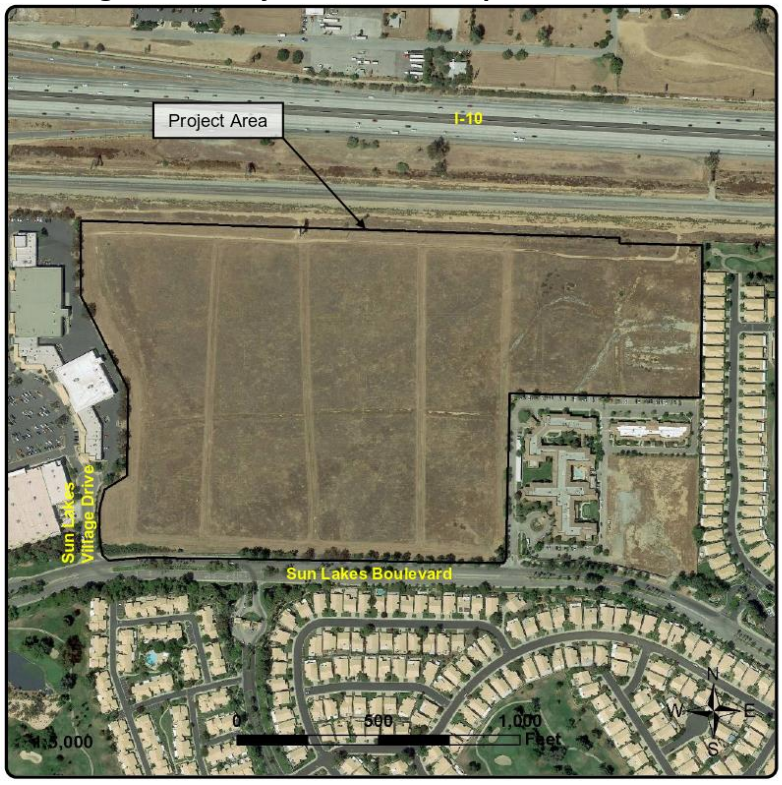


Figure 1-3 - Land Use Plan



Figure 3.3 Circulation Plan



3.4 Environmental Setting/Existing Conditions

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as "…*the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or if no Notice of Preparation is published, at the time the environmental analysis is comm*enced…" (CEQA Guidelines §15125[a](1)). In the case of the proposed Project, a Notice of Preparation (NOP) was issued on February 21, 2020. Thus, the baseline environmental setting for the Project is February 21, 2020.

3.4.1 Existing Conditions

As of February 21, 2020, the site is a disturbed vacant lot and appears to be regularly disked or mown. Most of the site is non-native grassland. A small area of riparian vegetation is present in the southwest corner of the site. Ornamental trees are present along the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard. Two sets of active railroad tracks run east-west just north of the site, with the I-10 freeway beyond. A large advertising sign is present along the north-central boundary of the site.

Topographically, the site is generally flat with elevation increasing gradually from southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet above mean sea level. Soils onsite are mapped as Greenfield sandy loam (2-8% slopes, eroded), Hanford coarse sandy loam (28% slopes), and Ramona sandy loam (2-5% slopes, eroded) (NRCS 2020) (Figure 4). A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site.

There are no USGS mapped blue-line streams onsite. A shallow trench is present along the site's southern boundary along Sun Lakes Boulevard and trends from west to east. A double culvert is present at the southeast corner of the site. Another shallow trench is present within the central portion of the site and trends from west to east. The trenches appear to be remnants of past disturbance and do not have connectivity with any natural waterway. A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, remnants of which are still visible.

3.4.2 Surrounding Land Uses

Existing and surrounding land uses are shown in Table 3-1.

Table 3.1 - Existing and Surrounding Land Uses

Location	Existing Use
Site	Vacant land
North	Railroad tracks Interstate 10
South	Sun Lakes Boulevard followed by single-family residential homes
East	Senior apartments Assisted living/memory care residential facility single-family residential homes
West	Shopping center

Source: Field Inspection, December 2019.

3.4.3 Existing General Plan Land Use Designations and Zoning Classifications

A summary of the existing General Plan land use designations and zoning classifications for the Project site and surrounding properties are shown on Table 3-2.

Table 3. 2 - Existing General Plan Designations and Zoning Classifications

Location	General Plan Designation	Specific Plan Designation
Site	Business Park (with Specific Plan Overlay) General Commercial (with Specific Plan Overlay)	Retail Commercial (Auto Dealer)
North	Public Facilities - Railroad/Interstate	N/A
South	Medium Density Residential (0-10 du/ac) (with Specific Plan Overlay)	Sun Lakes Specific Plan
East	Medium Density Residential (0-10 du/ac) High Density Residential (11-18 du/ac) High Density Residential-20/Affordable Housing Opportunity (20-24 du/ac) (all with Specific Plan Overlay)	N/A
West	General Commercial (with Specific Plan Overlay)	Retail Commercial

Source: Banning General Plan/Zoning Map.

3.5 Project Objectives

Per Section 15124 (b) of the CEQA Guidelines, an EIR needs to include a statement of the objectives of a project which help the City develop a reasonable range of alternatives. The Objectives need to outline the general purpose of the Project. The purpose of the proposed Project is the adoption of Specific Plan Amendment No. 6 to the Specific Plan Land Use Plan from Retail Commercial (Auto Dealer) to Business Park & Warehouse (BW), Office & Professional (OP), and Retail & Service (RS). (See Figure 3-2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

The Project Objectives are as follows:

1) To efficiently develop an underutilized property with a complementary mix of land uses, including business park, light industrial, commercial, office and professional, and optional residential land uses.

2) Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities and expansion of the tax base.

3) Provide local employment for residents of the City to improve the jobs-housing balance within the City.

4) To provide Development Standards and Design Guidelines that establish general provisions for site design, circulation, architecture, landscape, walls, fences, screening, and buffers that would ensure that the Project is developed in a manner that is aesthetically pleasing.

4. ENVIRONMENTAL ANALYSIS

The Project proposes a Specific Plan Amendment to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from Retail Commercial (Auto Dealer) to Business & Warehouse, Office and Professional, and Retail & Service. (See Figure 3-2 – Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

At this time there are no land use development entitlements being sought (i.e. site plan, parcel map, etc.). In order to provide a more robust analysis of those environmental topics that more level of detail than is shown on a land use plan level, the impacts for Air Quality, Greenhouse Gas Emissions, Noise, Transportation, and some Utility and Service Systems components, the following building square footage assumptions are made. These assumptions are provided for analytical purposes only and do not imply that the Project must be developed to these precise square footages.

- 877,298 square feet (sf) of Industrial Park;
- 52,065 sf of Medical Office, and
- 37,189 sf of Retail Use.

Serving as the CEQA Lead Agency for this Draft EIR, the City of Banning is responsible for determining whether an adverse environmental effect identified in this EIR should be classified as significant or less than significant. The standards of significance used in this EIR are based on the independent judgment of the City of Banning, taking into consideration CEQA Guidelines Appendix G, the City of Banning's General Plan and Municipal Code, the judgment of the technical experts that prepared this Draft EIR's Technical Appendices, performance standards adopted, implemented, and monitored by regulatory agencies, significance standards recommended by regulatory agencies, and the standards in CEQA that trigger the preparation of an EIR.

As required by CEQA Guidelines § 15126.2(a), this Draft EIR identifies direct, indirect, cumulative, short-term, long-term, on-site, and/or off-site impacts of the Project. A summarized "impact statement" is provided in each subsection following the analysis. The following terms are used in this Draft EIR to describe the level of significance related to the physical conditions within the area affected by the proposed Project:

- **No Impact:** An adverse change in the physical environment would not occur.

- **Less than Significant Impact:** An adverse change in the physical environment would occur but the change would not be substantial or potentially substantial and would not exceed the threshold(s) of significance presented in this Draft EIR.

- **Less than Significant Impact with Mitigation:** A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this Draft EIR; however, the impact can be avoided or reduced to a less than significant level through the application of feasible mitigation measures.

- **Significant and Unavoidable Impact:** A substantial or potentially substantial adverse change in the physical environment would occur that would exceed the threshold(s) of significance presented in this Draft EIR. Feasible and enforceable mitigation measures that have a proportional nexus to the Project's impact are either not available or would not be fully effective in avoiding or reducing the impact to below a level of significance. For any impact identified as significant and unavoidable, the City of Banning would be required to adopt a statement of overriding considerations pursuant to CEQA Guidelines § 15093 to approve the Project despite its significant impact(s) to the environment. The statement of overriding considerations would list the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposal project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable."

Baseline and Environmental Setting

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as "…*the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or if no Notice of Preparation is published, at the time the environmental analysis is commenced*…" (CEQA Guidelines §15125[a][1]). The environmental analysis provided in Subsections 4.1 through 4.13 focuses on changes in the existing physical environment at the approximate time the Notice of Preparation was issued on February 21, 2020.

Basis for the Cumulative Impacts Analysis

CEQA requires that an EIR contain an assessment of the cumulative impacts that may be associated with a proposed project. As noted in CEQA Guidelines § 15130(a), "a Draft EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable." A cumulative impact consists of an impact which is created because of the combination of the project evaluated in the Draft EIR together with other projects creating related impacts" (CEQA Guidelines § 15130(a)(1)).

CEQA Guidelines § 15130(b) describes two acceptable methods for identifying a study area for purposes of conducting a cumulative impact analysis. These two approaches include:

1) a list of past, present, and probable future projects producing related or cumulative impacts, including if necessary, those projects outside the control of the agency (commonly referred to as the 'the list of projects approach'), or

2) a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact (commonly referred to as the 'summary of projections approach').

The summary of projections approach is used in this EIR, except for the evaluation of near-term traffic and vehicular-related air quality, greenhouse gas, and noise impacts. The prior environmental documents which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact and are used in the cumulative impact analysis for this EIR are described below. All of the CEQA compliance documents listed below are herein incorporated by reference pursuant to CEQA Guidelines § 15150 are available at the City of Banning Community Development Department, 99 E. Ramsey Street, Banning, CA 92110 or on the internet at the links below.

- Butterfield Ranch Specific Plan, Final Environmental Impact Report, December 2011. (Available at: https://banningca.gov/399/Butterfield-Specific-Plan-Documentation**).**

- Rancho San Gorgonio Specific Plan, Environmental Impact Report. June 2016. (Available at: file:///C:/Users/ernes/Desktop/Banning%20Sun%20Lakes/Banning%20Distribution%20Center%20DEIR%201.pdf

- Banning Distribution Center, Environmental Impact Report, June 2018. (Available at: http://banning.ca.us/archive.aspx

4.1 AESTHETICS

This section describes the aesthetic qualities and visual resources present on the Project site and in the site's vicinity and evaluates the potential effects that the Project may have on these resources. Descriptions of existing visual characteristics, both on-site and in the vicinity of the Project site, and the analysis of potential impacts to aesthetic resources are based, in part, on field observations and analysis of aerial photography (Google Earth Pro, 2020).

The following questions in the Initial Study related to Aesthetics were screened out or removed from more detailed analysis in this EIR (i.e., they were determined to have "no impact", a "less than significant impact", or be "less than significant with mitigation incorporated" in the Initial Study and are not addressed further in the EIR). These questions are described below:

Would the Project:

- *Have a substantial adverse effect on a scenic vista?*

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

This section examines the potential environmental impacts of the proposed Project relative to Aesthetics for the following questions:

Would the Project:

- *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?*

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

4.1.1 Environmental Setting

The site is a disturbed vacant lot and appears to be regularly disked or mown. Most of the site is non-native grassland. A small area of riparian vegetation is present in the southwest corner of the site. Ornamental trees are present along the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard. Two sets of active railroad tracks run east-west just north of the site, with the I-10 freeway beyond. A large advertising sign is present along the north-central boundary of the site.

Topographically, the site is generally flat with elevation increasing gradually from southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet above mean sea level. Soils onsite are mapped as Greenfield sandy loam (2-8% slopes, eroded), Hanford coarse sandy loam (28% slopes), and Ramona sandy loam (2-5% slopes, eroded) (NRCS 2020) (Figure 4). A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site.

There are no USGS mapped blue-line streams onsite. A shallow trench is present along the site's southern boundary along Sun Lakes Boulevard and trends from west to east. A double culvert is present at the southeast corner of the site. Another shallow trench is present within the central portion of the site and trends from west to east. The trenches appear to be remnants of past disturbance and do not have connectivity with any natural waterway. A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, remnants of which are still visible.

Figure 4.1.1 - Looking North from Sun Lakes Boulevard

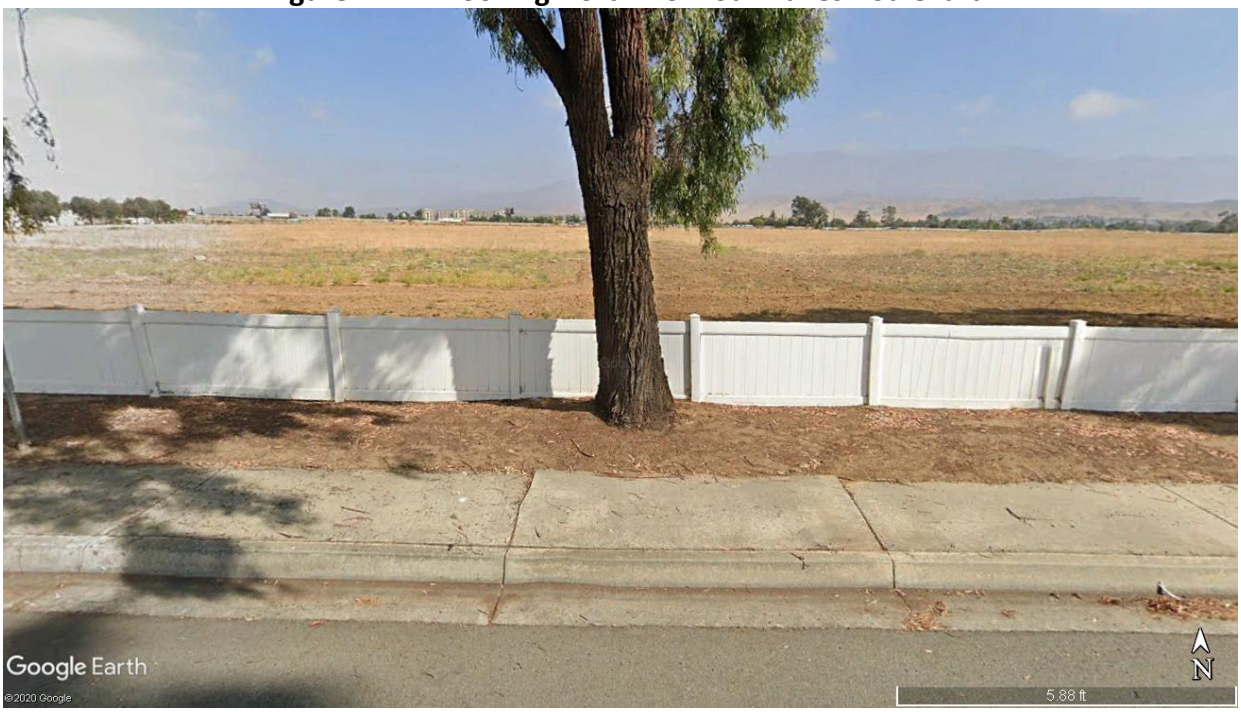


Figure 4.1.2- Looking South from I-10



Figure 4.1.3- Looking East from Shopping Center



Figure 4.1.4 - Looking West from Assisted Living Facility



4.1.2 NOP/ Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21.2020. No comments were received during the NOP comment period that pertain to the topic of Aesthetics.

4.1.3 Regulatory Framework

The applicable regulatory requirements addressing this issue are summarized below:

Local Regulations

City of Banning General Plan:

- Policy 3 Development in all land use categories shall be of the highest quality.
- Program 3.A The Zoning Ordinance shall include design standards and guidelines which assist the development community in developing high quality projects.

City of Banning Municipal Code

17.04.030(B) - Authority and General Plan Consistency.

No land shall be subdivided and/or developed for any purpose which is not in conformity with the General Plan, and any applicable Specific Plan, Development Agreement, and permitted by this Zoning Ordinance, or other applicable provisions of the Banning Municipal Code.

17.24.100 - Lighting

Lighting shall not be permitted which blinks, flashes, or is of unusually high intensity or brightness. Exterior lighting shall be shielded or recessed so that light is contained within the boundaries of the parcel on which the lighting is located. All lighting shall be directed downward and away from adjoining properties and public rights-of-way.

4.1.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on visual character if it would:

"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."

4.1.5 Impact Analysis

4.1.5 (a) - If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

According to the Census 2010 Urbanized Area Outline Maps, the Project site is in the Riverside-San Bernardino, CA Urbanized Area. As such, the threshold applicable to the Project is to determine if the Project is in conflict with the General Plan and zoning regulations governing scenic quality.

The Project site is located within the boundaries of the Sun Lakes Village North Specific Plan ("Specific Plan."). The Specific Plan was adopted pursuant to California Government Code Article 8, Sections 65450-65457, Specific Plans and serves as the zoning requirements applicable to the Project site and serves to implement the goals and policies of the General Plan. The Specific Plan contains detailed development standards, distribution of land uses, infrastructure requirements, and implementation measures for the development of a specific geographic area.

The Project proposes an amendment to the Sun Lakes Village North Specific Plan that will allow development of business park, industrial, office, commercial, and residential uses on a vacant site. As such, the construction and operation of future development allowed by the Specific Plan has the potential to result in impacts to the existing visual character or quality of public views of the site and its surroundings. The Specific Plan Development Standards and Design Guidelines chapter specifies the Development Standards and Design Guidelines for the Specific Plan area consistent with the intent for the Specific Plan area consistent with the intent and purpose discussed.

The proposed amendments to the Development Standards and Design Guidelines section of the Specific Plan establish general provisions for site design, circulation, architecture, landscape, walls, fences, screening, and buffers. They also contain detailed provisions for design within the three Specific Plan Land Use Districts: Business & Warehouse, Office & Professional, and Retail & Service, which reflect the distinct characteristics of the development concepts and allowable uses for these districts. Future development allowed by the Specific Plan will be reviewed to ensure consistency with the Development Standards and Design Guidelines section of the Specific Plan.

Level of Significance: Less Than Significant Impact.

4.1.5 (b) - Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Under existing conditions, the Project site consists of undeveloped land and does not contain any sources of artificial lighting, although streetlights do occur along Sun Lakes Boulevard adjacent to the southern boundary of the site. With implementation of the Project, the site would be developed with land uses that would generate sources of artificial light. Implementation of the Project would result in new sources of light in the Project area as compared to existing conditions.

Lighting

All outdoor lighting is required to be designed and installed to comply with California Green Building Standards Code Section 5.106 or with a local ordinance lawfully enacted pursuant to California Green Building Standards Code Section 101.7, whichever is more stringent.

Mandatory compliance with the California Green Building Code will ensure that impacts relating to lighting will be less than significant.

Glare

The type of development proposed on the Project site includes business park, commercial, and residential (optional use). The Specific Plan includes the following architectural design guidelines which will minimize reflective surfaces that create glare:

- Avoid blank walls, especially on tilt-up buildings, by providing articulation on all building elevations through elements such as cornices, parapets, expression lines, openings, and/or changes in materials/colors.

- Employ a minimum of four different colors, materials, and/or textures on each building.

- Locate and design windows to complement the building architecture, mass, and proportions.

Level of Significance: With implementation of the Development Standards and Design Guidelines chapter of the Specific Plan, Design Guidelines chapter, impacts associated with glare would be less than significant.

4.1.6 Cumulative Impacts

The incremental amount of light and glare generated from the Project site would make a minimal contribution to the cumulative light and glare impacts of other development projects in the area. All new development projects in the City are required to be designed and installed to comply with California Green Building Standards Code Section 5.106 or with a local ordinance lawfully enacted pursuant to California Green Building Standards Code Section 101.7, whichever is more stringent.

In addition, as required by Municipal Code, Title 17 (Zoning), all development in the City (not within a specific plan that has its own regulations regulating glare) buildings should not include reflective surfaces.

Level of Significance: Less than significant.

4.1.7 References

United States Census Bureau, *2010 Census Urban Area Reference Maps*. Available at: **https://www.census.gov/geographies/reference-maps/2010/geo/2010-census-urban-areas.html**, accessed August 12, 2020.

Building Standards Commission*, 2019 California Green Building Standards Code, Effective January 1, 2020. Available at:* https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen, accessed August 12, 2020.

City of Banning, *Municipal Code, Title 17 , Zoning. Available at:* **https://library.municode.com/ca/banning/codes/code_of_ordinances?nodeId=TIT17ZO,** accessed August 12, 2020.

4.2 AIR QUALITY

This section evaluates the potential for the Project to impact air quality in a local and regional context. The analysis in this section is based in part on the following technical information:

- *Sun Lakes North Specific Plan Amendment No. 5 Air Quality and Greenhouse Gas Evaluation,* Urban Crossroads Inc., June 3, 2020. (Appendix B).

- *Sun Lakes North Specific Plan Amendment No. 5 Emissions from Alternatives, Air Quality and Greenhouse Gas Evaluation,* Urban Crossroads Inc., July 90, 2020. (Appendix C).

4.2.1 Environmental Setting

The City of Banning is located within the South Coast Air Basin (Basin), a geographic area regulated by the South Coast Air Quality Management District (SCAQMD). The South Coast Air Basin includes Orange County, and portions of Los Angeles, San Bernardino, and Riverside Counties. The Basin is bordered on the west by the Pacific Ocean, and on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains.

Air Pollutants

Air Pollutants are the amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects to humans, animals, vegetation and/or materials. The Air Pollutants regulated by the SCAQMD are described below.

- **Carbon Monoxide (CO).** A colorless, odorless gas resulting from the incomplete combustion of hydrocarbon fuels. Over 80 percent of the CO emitted in urban areas is contributed by motor vehicles.

- **Nitrogen Dioxide.** Nitrogen dioxide (NO2) is a byproduct of fuel combustion. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO2, creating the mixture of NO and NO2 commonly called NOx.

- **Particulate Matter (PM 2.5 and PM10):** One type of particulate matter is the soot seen in vehicle exhaust. Fine particles — less than one-tenth the diameter of a human hair — pose a serious threat to human health, as they can penetrate deep into the lungs. PM can be a primary pollutant or a secondary pollutant from hydrocarbons, nitrogen oxides, and sulfur dioxides. Diesel exhaust is a major contributor to PM pollution.

- **Sulfur Dioxide (SO2).** A strong smelling, colorless gas that is formed by the combustion of fossil fuels. Power plants, which may use coal or oil high in sulfur content, can be major sources of SO2.

- **Ozone:** Ozone is formed when several gaseous pollutants react in the presence of sunlight. Most of these gases are emitted from vehicle tailpipe emissions.
- **Volatile Organic Compounds (VOCs):** VOCs contribute to the formation of smog and/or may themselves be toxic. VOCs often have an odor and some examples include gasoline, alcohol and the solvents used in paints.

- **Toxic Air Contaminants (TACs):** Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as diesel particulate matter (DPM). More than 90% of DPM is less than 1 µm in diameter (about 1/70th the diameter of a human hair) and thus is a subset of particulate matter less than 2.5 microns in diameter (PM2.5). Most PM2.5 derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.

Attainment Status

The EPA has established national ambient air quality standards NAAQS for the six criteria pollutants described above to protect human health, with an adequate margin of safety. Likewise, the California EPA (CalEPA) has developed statewide standards for each of the criteria pollutants. If the concentration of one or more criteria pollutants within a geographic area is found to exceed the established statewide or NAAQS threshold level for one of the criteria pollutants, the area is in nonattainment for that pollutant. Table 4.2-1 summarizes the attainment status of these criteria Pollutants in the Basin.

Table 4.2.1- Attainment Status of Criteria Pollutants in the South Coast Air Basin

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1-hour standard	Nonattainment	No Standard
Ozone – 8-hour standard	Nonattainment	Nonattainment
Suspended Particulate Matter (PM_{10})	Nonattainment	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (N0x)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment

Source: California Air Resources Board

Project Site Conditions

The air quality on site is primarily affected by adjacent sources of pollution which include, exhaust from I-10 freeway traffic and diesel from train engines traveling on the railroad tracks to the north of the site.

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by the SCAQMD, may include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors may include residences, schools, playgrounds, athletic facilities, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors in the Project vicinity primarily include existing residences to the east and south of the Project site and the senior apartments/assisted living/memory care residential facility located to the east of the Project site.

Monitored Air Quality

The Project site is located within SCAQMD Source Receptor Area (SRA) 29. The most recent published data for SRA 29 is summarized in Table 4.2-2, 2019 Air Quality. This data indicates that the baseline air quality conditions in the Project area include occasional events of very unhealthful air. However, the frequency of smog alerts has dropped significantly in the last decade. Atmospheric concentrations of ozone and particulate matter are the two most significant air quality concerns in the Project area.

Table 4.2.2- 2019 Air Quality

Pollutant	Highest Number of Days Exceeded
Carbon Monoxide	0
Ozone	59
Nitrogen Dioxide	56
Sulphur Dioxide	0
Suspended Particulate Matter (PM10)	63
Fine Particulate Matter (PM2.5)	0

Source: http://www.aqmd.gov/docs/default-source/air-quality/historical-data-by-year/2019-air-quality-data-tables.pdf?sfvrsn=8

4.2.2 NOP/ Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21, 2020. The South Coast Air Quality Management District submitted a letter dated March 17, 2020 requesting that the EIR address health risks from diesel trucks if development is reasonably foreseeable; require mitigation

measures if necessary; and consider alternatives if impacts are significant. This issue is addressed in Section 4.2.7 below.

4.2.3 Regulatory Framework

The primary regulations applicable to the Project are described as follows:

Federal Regulations

Federal Clean Air Act

The U.S. EPA enforces the federal Clean Air Act (CAA), which was last amended in 1990, and is intended to ensure that all Americans have the same basic health and environmental protections regarding air quality. The CAA establishes minimum air pollution standards that must be met; however, it allows states to enact and enforce more stringent standards, and delegates much of the responsibility for carrying out the CAA to state air pollution control agencies. For areas in non-compliance with federal standards, State Implementation Plans (SIPs) are developed that are designed to meet ambient air quality standards and deadlines specified in the Clean Air Act, as well as emission reduction targets set forth in the California Clean Air Act (CCCA), both further discussed below. The severity of the region's air pollution determines required emission reductions and attainment deadlines.

State Regulations

California Clean Air Act

The State Legislature enacted Assembly Bill 2595, which became known as the California Clean Air Act, in 1988, and amended it in 1992. The CCAA was intended to protect the future health and welfare of the citizens of California; it was also aimed at protecting the State's environment and economy, independent of federal government actions or policy directions. Ambient air quality standards established in the CCAA, as well as deadlines for achieving those standards, are generally more stringent than those established by the federal CAA. The California Air Resources Board (CARB) has been assigned oversight of the CCAA. The CARB advises and evaluates regional air pollution control agencies' and districts' efforts regarding compliance with the CCAA requirements.

Regional Regulations

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is responsible for development of the regional Air Quality Management Plan (AQMP), which is a multi-tier effort to regulate pollutant emissions from a variety of sources. SCAQMD prepared the 2016 Revision to the AQMP for the

South Coast Air Basin to provide a comprehensive program for compliance with all federal and state air quality planning requirements. Once approved by the SCAQMD Board and CARB, the 2003 AQMD will be submitted to U.S. EPA as a revision to the SIP. Banning is also involved in regional management of air quality through various actions taken by the Southern California Association of Governments.

Local Regulations

City of Banning General Plan

The Air Quality Element of the General Plan is intended to identify goals, policies, and programs meant to balance the City's actions regarding land use, circulation and other regulatory actions and their associated potential effects on local and regional air quality. The Element, along with local and regional air quality planning efforts, is intended to address ambient air quality standards set forth by the Federal Environmental Protection Agency (EPA) and the California Air Resources Board (CARB).

The relevant policies and programs applicable to the Project are:

- Policy 4- Development proposals brought before the City shall be reviewed for their potential to adversely impact local and regional air quality and shall be required to mitigate any significant impacts.
    - *Program- 4.A Projects that may generate significant levels of air pollution shall be required to conduct detailed impact analyses and incorporate mitigation measures into their designs using the most advanced technological methods feasible. All proposed mitigation measures shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.*
- Policy 6 The City shall support the development of facilities and projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle paths and lanes, and community-wide multi-use trails.
    - *Program 6.A The City shall pursue a balance of employment and housing opportunities that encourage pedestrian and other non-motorized transportation and minimize vehicle miles traveled.*

4.2.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on air quality if it would:

(a) Conflict with or obstruct implementation of the applicable air quality plan.

(b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

(c) Expose sensitive receptors to substantial pollutant concentrations.

(d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

4.2.5 Impact Analysis

Threshold 4.2.5 (a)- Conflict with or obstruct implementation of the applicable air quality plan (South Coast Air Quality Management District)?

Federal Air Quality Standards

Under the Federal Clean Air Act, the Federal Environmental Protection Agency establishes health-based air quality standards that California must achieve. These are called "national (or federal) ambient air quality standards" and they apply to what are called "criteria pollutants." Ambient (i.e. surrounding) air quality standard establish a concentration above which a criteria pollutant is known to cause adverse health effects to people. The national ambient air quality standards apply to the following criteria pollutants:

- Ozone (8-hour standard)
- Respirable Particulate Matter (PM10)
- Fine Particulate Matter (PM2.5)
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NOx)
- Sulphur Dioxide (SO2), and
- Lead.

State Air Quality Standards

Under the California Clean Air Act, the California Air Resources Board also establishes health-based air quality standards that cities and counties must meet. These are called "state ambient air quality standards" and they apply to the following criteria pollutants:

- Ozone (1-hour standard)
- Ozone (8-hour standard)
- Respirable Particulate Matter (PM10)
- Fine Particulate Matter (PM2.5)
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NOx)
- Sulphur Dioxide (SO2), and
- Lead

Regional Air Quality Standards

The City of Banning is located within the South Coast Air Basin which is under the jurisdiction of the South Coast Air Quality Management District. The District develops plans and regulations designed to achieve these both the national and state ambient air quality standards described above.

Attainment Designation

An "attainment" designation for an area signifies that criteria pollutant concentrations did not exceed the established standard. In contrast to attainment, a "nonattainment" designation indicates that a criteria pollutant concentration has exceeded the established standard.

Table 4.2-3 shows the attainment status of criteria pollutants in the South Coast Air Basin.

Table 4.2.3- Attainment Status of Criteria Pollutants in the South Coast Air Basin

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1-hour standard	Nonattainment	No Standard
Ozone – 8-hour standard	Nonattainment	Nonattainment
Respirable Particulate Matter (PM_{10})	Nonattainment	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (N0x)	Attainment	Attainment

Criteria Pollutant	State Designation	Federal Designation
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead	Attainment	Attainment

Source: California Air Resources Board, 2015

Air Quality Management Plan

The South Coast Air Quality Management District is required to produce air quality management plans directing how the South Coast Air Basin's air quality will be brought into attainment with the national and state ambient air quality standards. The most recent air quality management plan is the 2016 Air Quality Management Plan (AQMP) and it is applicable to City of Banning. The purpose of the AQMP is to achieve and maintain both the national and state ambient air quality standards described above.

In order to determine if a project is consistent with the AQMP, the South Coast Air Quality Management District has established consistency criterion which are defined in Chapter 12, Sections 12.2 and 12.3 of the South Coast Air Quality Management District's *CEQA Air Quality Handbook* and are discussed below.

Consistency Criterion No. 1: *The proposed project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the 2016 Air Quality Management Plan.*

Consistency Criterion No. 1 refers to violations of the California Ambient Air Quality Standards and National Ambient Air Quality Standards. As evaluated under Issues 4.2.6 (b), (c), and (d) below, the air emissions from construction or operation would not exceed regional or localized significance thresholds for any criteria pollutant. Accordingly, the Project's regional and localized emissions would not contribute substantially to an existing or potential future air quality violation or delay the attainment of air quality standards.

Consistency Criterion No. 2: *The proposed project will not exceed the assumptions in the 2016 Air Quality Management Plan.*

Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP.

The future emission forecasts contained in the AQMP are primarily based on demographic and economic growth projections provided by the Southern California Association of Governments.

The General Plan Land Use Designations currently assigned to the Project site are Business Park (Specific Plan Overlay) and General Commercial (Specific Plan Overlay) and was planned for business park and commercial development at the time the AQMP was adopted.

The Project is not proposing to amend the existing General Plan Land Use Designations. However, the Project is proposing Specific Plan Amendment No. 6 to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan designations from Retail Commercial to Business & Warehouse, Office and Professional, and Retail & Service. The amendment to the Specific Plan Land Use designations are in effect an amendment to the zoning classifications as they do not change the underlying General Plan Land Use designations used to prepare the 2016 AQMP.

The General Plan EIR concluded that impacts to air quality were significant and unavoidable. The Project will result in exceedances of VOC during construction and NOx emissions during construction and operation. There is no feasible mitigation to reduce these significant impacts. Since the Project does not change the underlying General Plan Land Use designations, impacts remain significant and unavoidable as determined in the General Plan EIR.

Level of Significance: Significant and Unavoidable.

Threshold 4.2.5 (b) *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

As shown in Table 4.2-1 above, the South Coast Air Basin, in which the Project site is located, is in "non-attainment" status for several criteria pollutants. The South Coast Air Quality Management District has developed regional and localized significance thresholds for regulated pollutants. Any project in the South Coast Air Basin with daily emissions that exceed any of the indicated regional or localized significance thresholds would be considered to contribute to a projected air quality violation. The Project's regional and localized air quality impacts are discussed below.

Regional Impact Analysis

The Project has the potential to generate pollutant concentrations during both construction activities and long-term operation. The following provides an analysis based on the applicable regional significance thresholds established by the South Coast Air Quality Management District (SCAQMD) to meet national and state air quality standards which are shown in Table 5.2 below.

Table 4.2.4- SCAQMD Air Quality Regional Significance Thresholds

Pollutant	Emissions (Construction) (pounds/day)	Emissions (Operational) (pounds/day)
NOx	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SOx	150	150
CO	550	550

Source: South Coast Air Quality Management District CEQA Air Quality Significance Thresholds (April 2019).

Both construction and operational emissions for the Project were estimated by using the California Emissions Estimator Model (CalEEMod) which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as California Environmental Quality Act (CEQA) documents and is authorized for use by the South Coast Air Quality Management District.

Construction-Related Impacts

Short-term criteria pollutant emissions will occur during site grading, building construction, paving, and architectural coating activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of onsite soils (fugitive dust). At this time, there is no site plan proposed that identifies the duration of construction, potential for overlap between various construction phases and operational activities or the construction equipment used.

The following assumptions relevant to construction were used to model short-term construction emissions:

1) Construction is anticipated to occur over a 15-month period once construction commences (anticipated June 2021).

2) The equipment to be used for each activity is shown below based on CalEEMod defaults. Each piece of equipment is assumed to operate 8 hours per day.

It is a mandatory requirement for all construction activities to comply with several South Coast Air Quality Management District Rules, including Rule 403 for controlling fugitive dust, PM_{10}, and

$PM_{2.5}$ emissions from construction activities. Rule 403 requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the Project site, covering all trucks hauling soil with a fabric cover and maintaining a freeboard height of 12 inches, and maintaining effective cover over exposed areas.

Implementation of South Coast Air Quality Management District Rule 1113 governing the content in architectural coating, paint, thinners, and solvents, was accounted for in the construction emissions modeling. Implementation of South Coast Air Quality Management District Rule 1186 to reduce the amount of particulate matter entrained in the ambient air because of vehicular travel on paved and unpaved public roads was also accounted for in the construction emissions modeling.

Table 4.2.5 identifies the typical construction equipment that is expected to be used by the Project

Table 4.2.5- Construction Equipment

Construction Activity	Off-Road Equipment	Unit Amount
Grading	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Scrapers	2
	Tractors/Loaders/Backhoes	2
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Architectural Coatings	Air Compressors	2

Source: Banning Distribution Center Draft EIR, June 2018.

The estimated maximum daily construction emissions are summarized in Table 4.2.6 below.

Table 4.2.6 - Proposed Project Construction Emissions

Construction Activities	Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Summer						
2020	4.55	50.26	32.76	0.06	9.45	5.9
2021	4.29	46.45	33.86	0.11	6.46	3.2
2022	3.81	30.38	32.33	0.11	6.31	2.2
2023	3.49	25.63	30.88	0.11	6.18	2.1
2024	163.40	24.55	29.95	0.10	6.10	2.0
Total Maximum Daily Emissions	**163.40**	**50.26**	**33.86**	**0.11**	**9.45**	**5.9**
Exceeds Regional Threshold?	**YES**	**NO**	**NO**	**NO**	**NO**	**NO**
Winter						
2020	4.55	50.26	32.61	0.06	9.45	5.9
2021	4.28	46.46	31.51	0.10	6.46	3.2
2022	3.80	30.27	30.16	0.10	6.31	2.2
2023	3.48	25.52	28.77	0.10	6.18	2.1
2024	163.40	24.44	27.96	0.10	6.10	2.0
Total Maximum Daily Emissions	163.40	50.26	32.61	0.10	9.45	5.9
Regional Threshold	75	100	550	150	150	55
Exceeds Regional Threshold?	**YES**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: Sun Lakes Village North Specific Plan Amendment No. 6, Air Quality and Greenhouse Gas Evaluation (Appendix B).

As shown in Table 4.2.6, VOC emissions from architectural coatings would exceed numerical thresholds established by the SCAQMD so the following mitigation measure is required:

AQ 1- Use Low VOC Paint: *To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g. bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Banning's Building and Safety Division for compliance with this mitigation measure prior to issuance of a building permit.*

Although implementation of mitigation measures MM AQ 1 will reduce construction emissions of NOx, however, does not have quantitative reductions associated with them available in CalEEMod. Consequently, construction emissions of NOx will still exceed the SCAQMD threshold.

The following Mitigation Measure is required to reduce potential impacts to less than significant.

AQ-2: Grading Limitations. *During the City's review process for applications under the Specific Plan, the applicant shall conduct or shall have conducted modeling of the regional and the localized emissions (NOx, CO, PM10, and PM2.5) associated with the maximum daily grading activities estimated for the proposed individual developments one acre or larger. If the modeling shows that emissions would exceed the SCAQMD's significance thresholds for those emissions, the maximum daily grading activities of the proposed development shall be limited to the extent that could occur without resulting in emissions in excess of SCAQMD's significance thresholds for those emissions. For implementing projects within the Specific Plan, the applicant shall be responsible for submitting a focused project-level air quality assessment that includes the modeling of localized on-site emissions associated with daily grading activities anticipated for the proposed development.*

Long-Term Regional Operation Related Impacts

Long-term criteria air pollutant emissions will result from daily vehicle trips to and from the Project site, use of outdoor landscape maintenance equipment, and energy demand emissions result from use of electricity and natural gas.

The results of the CalEEMod model for operation of the Project site are summarized in Table 4.2-7 below (Maximum Operational Daily Emissions). Based on the results of the model, operational emissions associated with operation of the commercial facility portion of the Project site will not exceed the thresholds established by SCAQMD.

Table 4.2.7 - Operational Emissions

Maximum Daily Emissions	Emissions (pounds per day)					
	NOx	VOC	CO	SOx	PM10	PM2.5
Summer						
Project Emissions	63.28	17.03	164.41	0.54	42.94	12.15
Winter						
Project Emissions	65.76	38.93	153.62	0.52	42.93	12.15
Regional Threshold	55	55	550	150	150	55
Exceeds Regional Threshold?	YES	NO	NO	NO	NO	NO

Source: Sun Lakes Village North Specific Plan Amendment No. 6, Air Quality and Greenhouse Gas Evaluation (Appendix B).

As shown in Table 4.2-7, long-term operational emissions will only exceed the daily regional threshold set by SCAQMD for NOx because of the amount of vehicle traffic generated by the Project. The following mitigation measures are recommended to reduce NOx emissions from Project operation:

AQ 3-Electrical Hookups for Loading Docks: *Although the Project does not include refrigerated warehouse space, trucks accessing the Project site may have auxiliary power units (APU) and/or transport refrigeration units (TRUs). Therefore, electrical hookups shall be installed at all loading*

docks, and to reduce/replace APU use while trucks are parked along the docks, to allow trucks with APU and/or TRUs with electric standby capabilities to plug in when TRUs are in use to reduce diesel fuel consumption and resulting NOx emissions. The City shall verify electrical hookups have been installed prior to occupancy.

AQ 4-Idiling Limits: *All facilities shall post signs informing users of requirements limiting idling to five minutes or less pursuant to Title 13 of the California Code of Regulations, Section 2485 in order to reduce diesel fuel consumption and resulting NOx emissions. No overnight/long-term parking will be allowed. The City shall verify signage has been installed prior to occupancy.*

AQ 5-Electric or Natural Gas Service Equipment: *Service equipment (i.e., yard hostlers and forklifts) used within the site shall be electric or compressed natural gas-powered to reduce diesel fuel consumption and resulting NOx emissions.*

AQ-6-Electric Vehicle Charging Stations*: Prior to approval of implementing commercial plot plan(s) within the Project the City of Banning Planning Division shall ensure that the plot plan(s) include a minimum of three (3) electric-vehicle charging stations. The electric vehicle charging stations also shall be depicted on building plans for implementing development within Project site. Prior to issuance of occupancy permits for the proposed commercial land uses within the Project site, the City of Banning Building and Safety Department shall ensure that a minimum of three electric vehicle charging stations have been installed on-site.*

Implementation of mitigation measures AQ 2 through AQ 5 will reduce operational emissions of NOx from vehicle emissions to some extent; however, they do not have quantitative reductions associated with them available in CalEEMod. Consequently, operational emissions of NOx will exceed the SCAQMD threshold, even after implementation of mitigation measures.

Additionally, a majority of the Project's NOx emissions are derived from vehicle usage. Since the Project does not have regulatory authority to control tailpipe emissions, no feasible mitigation measures exist that would reduce NOx emissions to levels that are less than significant.

Localized Impact Analysis

The SCAQMD established Localized Significance Thresholds in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4. These thresholds represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. However, consistent with SCAQMD guidance an LST analysis can only be conducted at a *project level*, and quantification of LSTs is not applicable for this specific plan-level environmental analysis.

Level of Significance: Even with implementation of Mitigation Measures AQ-1 through AQ-6, Project emissions of NOx during operation and VOC during construction exceed thresholds. Impacts are **significant and unavoidable.**

Threshold 4.2.5 (c)- Expose Sensitive Receptors to Pollutant Concentrations?

CO Hot Spots

CO Hot Spots are typically associated with idling vehicles at extremely busy intersections (i.e., intersections with an excess of 100,000 vehicle trips per day). There are no intersections in the vicinity of the Project site which exceed the 100,000 vehicle per day threshold typically associated with CO Hot Spots. In addition, the South Coast Air Basin has been designated as an attainment area for CO since 2007. Therefore, Project-related vehicular emissions would not create a Hot Spot and would not substantially contribute to an existing or projected CO Hot Spot.

Toxic Air Contaminants

On-Site Impacts

The Project site is located adjacent to I-10 and will be subjected to toxic air contaminants (TACs) from vehicle traffic. TACs are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health.

In *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369 (CBIA), the California Supreme Court determined that CEQA does not generally require an environmental document to analyze impacts of the existing environmental conditions on the future residents of a proposed project and generally only requires an analysis of the proposed project's impact on the environment. However, the CBIA case also stated that when a proposed project brings development and people into an area already subject to specific hazards and the new development/people exacerbate the existing hazards, then CEQA requires an analysis of the hazards and the proposed project's effect in terms of increasing the risks related to those hazards. Therefore, if a proposed project would not exacerbate pre-existing hazards (e.g., TAC health risks) then an analysis of those hazards and the proposed Project's effect on increasing those hazards is not required. *Note: Since CEQA is not the mechanism to evaluate TAC impacts from I-10, this issue is addressed separately in the Staff report and Conditions of Approval for the Project.*

Construction Emissions

During construction, diesel particulate matter emissions would be emitted from heavy equipment use Heavy-duty construction equipment is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions.

The nearest sensitive receptors to the Project site are residences located adjacent to the eastern boundary of the Project site. According to OEHHA, health risks should be based on a 70-year exposure period for the maximally exposed individual resident; however, such assessments should be limited to the period/duration of activities associated with the project. Given the size of the site (47 acres), grading activities will be staggered over time. Typically, a maximum of 5 acres of grading per day may occur per day. Because of this staggered grading, the exposure of any proximate individual sensitive receptor to TACs would be limited. Due to the relatively temporary nature of construction activities, exposure at any individual sensitive receptor and minimal particulate emissions generated on-site, TACs generated during construction would not be expected to result in concentrations causing significant health risks.

Operational Emissions

Operation of the proposed project would not result in any non-permitted direct emissions (e.g., those from a point source such as diesel generators). However, the proposed Project could result in exposure of sensitive receptors in the vicinity of the Project site (i.e., the residences to the east of the Project site) to potential TAC emissions from diesel trucks from (a) future warehouse project(s).

If the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, the City will require the Project proponent to perform a mobile source health risk assessment per Mitigation Measure AQ-7 below. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis"). This document provides technical guidance for analyzing cancer risks from potential diesel particulate emissions impacts from truck idling and movement (such as warehouse and distribution centers).

Because the Project consists of a specific plan amendment (which in essence is a zoning level document), there is not sufficient detailed information available such as a site plan, the number of trucks visiting the facility per day, on-site travel distance (in miles), composite DPM emission factor (in grams per mile) based on project year and vehicle speed, average idling time per truck, composite idling emission factor (grams per minute) based on project year, in order to prepare a Health Risk Assessment.

The following measure is required to reduce potential impacts to the extent feasible.

AQ-7-Health Risk Assessment: *During the City's review process for any future development applications under the Specific Plan that proposes a warehouse or distribution project, the applicant shall submit a Health Risk Assessment for that is prepared pursuant to the "Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis." If the modeling shows that emissions would exceed the SCAQMD's*

significance thresholds for those emissions, the following performance-based measures shall be required in order reduce emissions to less than significant levels.

The measures shall include the following:

1) *Prior to the issuance of any grading permits, the applicant and/or building operators shall submit construction plans and a construction vehicle management plan to the City of Banning denoting the proposed schedule and projected equipment use. The construction vehicle management plan shall include such things as: idling time requirements; requiring hour meters on equipment; and documenting the serial number, horsepower, age, and fuel of all onsite equipment. The plan shall include that California state law requires equipment fleets to limit idling to no more than 5 minutes. Construction contractors shall provide evidence that low emission mobile construction equipment will be utilized or that their use was investigated and found to be infeasible for the project as determined by the City.*

2) *Prior to issuance of an occupancy permit, the operator of a warehouse/distribution center use shall place signs that identify CARB anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for trucks drivers to restrict idling to no more than 5 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and CARB to report violations.*

3) *Prior to the issuance of an occupancy permit for a warehouse/distribution center use, the City shall require operators of the proposed facilities to encourage the vendor trucks to incorporate energy efficiency improvement features through the Carl Moyer Program—including truck modernization, retrofits, and/or aerodynamic kits and low rolling resistance tires—to reduce fuel consumption.*

4) *Prior to the issuance of a building permit for a warehouse/distribution center use, the building shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other on-site equipment.*

Level of Significance: Even with the implementation of Mitigation Measure AQ-1 through AQ-5, construction and operation emissions of VOC exceed SCAQMD thresholds and impacts are considered significant and unavoidable.

Threshold 4.2.5 (c) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

According to the South Coast Air Quality Management District CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project does not propose any of the above described uses.

Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction. 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.

The uses allowed by the Specific Plan do not include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding or any manufacturing uses that could create objectionable odors. Therefore, the Project has a less than significant impact with respect to creating objectionable odors affecting a substantial number of people.

Level of Significance: Less than significant.

4.2.6 Cumulative Impacts

Air Quality Plan Consistency

As indicated under the analysis of Threshold 4.2.5 (a), the Project's construction and operational related emissions would exceed the SCAQMD regional thresholds for VOC. As such, the Project would conflict with AQMP Consistency Criterion No. 1, and would, therefore, conflict with the SCAQMD 2016 AQMP. Other projects within the SCAB also have the potential to conflict with the AQMP; therefore, the Project's impacts due to a conflict with the AQMP would be cumulatively considerable.

Construction Emissions and Operational Emissions

For operational activities, emissions resulting from Project operations would exceed the numerical thresholds established by the SCAQMD for NOx. Thus, Project operational emissions would result in a significant impact due to a violation of the applicable air quality standards for NOx. Additionally, the Project's emissions of NO, which is a precursor to ozone, would contribute to the region's non-attainment status under both state and federal designations for ozone and would result in a cumulatively considerable net increase of this pollutant.

Sensitive Receptors

The Project could result in exposure of sensitive receptors in the vicinity of the Project site (i.e., the residences to the east of the Project site) to potential TAC emissions from diesel trucks from a future warehouse project(s) exceeding a cancer risk of 10 per million and a hazard risk factor greater than 1.0. In addition, emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at a project site (offsite mobile-source emissions are not included in the LST analysis) could potentially expose sensitive receptors to substantial concentrations of criteria air pollutants. However, as noted above, consistent with SCAQMD guidance a localized significance threshold applied at a *project level*, and identification of the applicable threshold is not applicable for this specific plan-level environmental analysis.

In any event, with implementation of Mitigation Measures AQ-1 through AQ-6, impacts would be less than significant.

Odors

As discussed in Threshold 4.2.5 (c), potential odor sources associated with the Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities; however, 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. Although it is possible other construction activities could occur in proximity concurrent with Project construction, due to the short duration and intermittent nature of construction-related odors, impacts would be less-than-cumulatively considerable.

For long-term operation, the Project does not contain land uses typically associated with emitting objectionable odors. The Project and other cumulative developments would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances and would be required to store refuse within covered containers. Therefore, odors associated with the Project operations would be less-than-cumulatively considerable.

Level of Significance:

- Air Quality Plan Consistency: **Significant and unavoidable**.
- Construction and Operational Emissions: **Significant and unavoidable** for NOx emissions.
- Sensitive Receptors- Less than significant.
- Odors: Less than significant.

4.2.7 References

Urban Crossroads, *Sun Lakes North Specific Plan Amendment No. 5 Air Quality and Greenhouse Gas Evaluation* June 3, 2020. (AQ-GHG Study, included as Appendix B.)

California Air Resources Board, Air Quality and Land Use Handbook: A Community Perspective, April 2005. Available at www.arb.ca.gov/ch/landuse.htm, accessed June 12, 2017.

City of Banning, City of Banning General Plan, January 2006.Available at: http://www.ci.banning.ca.us/54/Community-Development, accessed February 2, 2020.

City of Banning, City of Banning Municipal Code, Title 17 Zoning Division III Development Standards, January 2006 Available at: **https://library.municode.com/ca/banning/codes/code_of_ordinances?nodeId=TIT17ZO_DIVIIIDEST_CH17.24GEST**, accessed on January 25, 2020.

South Coast Air Quality Management District, Final 2016 AQMP, March 3, 2017. Available at: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp. Accessed on February 2, 2020.

South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, Revised July 2008. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf, accessed on February 2, 2020.

U.S. Environmental Protection Agency, Criteria Air Pollutants. Available at: https://www.epa.gov/criteria-air-pollutants, accessed February 2, 2020.

4.3 BIOLOGICAL RESOURCES

This section evaluates the potential for the Project to impact biological resources in a local and regional context. The analysis in this section is based in part on the following technical information:

- *Habitat Assessment for APN 419-140-057 Sun Lakes Boulevard, City of Banning, Riverside County, California*, L&L Environmental Inc., March 30, 2020.(Appendix D).

4.3.1 Environmental Setting

The site is a disturbed vacant lot and appears to be regularly disked or mown. Most of the site is non-native grassland. A small area of riparian vegetation is present in the southwest corner of the site. Ornamental trees are present along the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard. Two sets of active railroad tracks run east-west just north of the site, with the I-10 freeway beyond. A large advertising sign is present along the north-central boundary of the site.

Topographically, the site is generally flat with elevation increasing gradually from southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet above mean sea level. Soils onsite are mapped as Greenfield sandy loam (2-8% slopes, eroded), Hanford coarse sandy loam (28% slopes), and Ramona sandy loam (2-5% slopes, eroded) (NRCS 2020) (Figure 4). A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site.

There are no USGS mapped blue-line streams onsite. A shallow trench is present along the site's southern boundary along Sun Lakes Boulevard and trends from west to east. A double culvert is present at the southeast corner of the site. Another shallow trench is present within the central portion of the site and trends from west to east. The trenches appear to be remnants of past disturbance and do not have connectivity with any natural waterway. A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, the remnants of which are still visible.

4.3.2 NOP/SCOPING COMMENTS

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21.2020. No comments were received during the NOP comment period that pertain to the topic of cultural resources.

4.3.3 Regulatory Framework

The primary regulations applicable to the Project are described as follows:

Federal Regulations

Federal Endangered Species Act

Administered by the United States Fish and Wildlife Services (USFWS), the Federal Endangered Species Act (ESA) provides the legal framework for the listing and protection of species (and their habitats) that are identified as being endangered or threatened with extinction. Actions that jeopardize endangered or threatened species and the habitats upon which they rely are considered a "take" under the ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in Federal regulations and case law to include actions that adversely impair or disrupt a listed species' behavioral patterns.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) provides authority to the Department of the Interior to regulate the pursuit, taking, or killing of any migratory bird, or any part, nest, or egg of any such bird. Migratory birds are protected from both direct and indirect acts. However, harassment and habitat modification are not included in the protections, unless those actions result in direct loss of birds, nests, or eggs. The MBTA includes several hundred species and nearly all native birds on its list of protected species. The take of non-game birds may be permitted for specific uses, such as rehabilitation, propagation, scientific collecting, education, taxidermy, and protection of human health and safety and personal property.

State Regulations

California Endangered Species Act

The California Endangered Species Act (CESA) is a California environmental law that conserves and protects plant and animal species at risk of extinction. Plant and animal species may designated threatened or endangered under CESA after a formal listing process by the California Fish and Game Commission. Approximately 250 species are currently listed under CESA. A CESA-listed species, or any part or product of the plant or animal, may not be imported into the state,

exported out of the state, "taken" (i.e., killed), possessed, purchased, or sold without proper authorization.

Local Regulations

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The Project site is located within the Pass Area Plan portion of the Western Riverside County MSHCP, which is a comprehensive habitat conservation/planning program for Western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to special-status species and associated native habitats.

City of Banning General Plan

- Policy 2 As part of the development review process, the City shall evaluate projects based on their impact on existing habitat and wildlife, and for the land's value as viable open space.

City of Banning Municipal Code

The City of Banning Municipal Code identifies land use categories, development standards, and other general provisions that ensure consistency between the City's general plan and proposed development projects. The following provisions address biological resources:

- Section 15.72.080 (MSHCP Mitigation Fees). Requires payment of MSHCP mitigation fees by development projects in the City before the City issues grading permits.

- Section 17.32.020 (Application). Concept landscaping plans shall be submitted as part of a planning permit application. The plan is required to have a clear landscaping program and must consider the preservation of natural features (e.g., hills, topography, trees, shrubs, wildlife habitat, etc.). Landscaping plans should also rely on indigenous plant and tree species suitable to the local climate and soil types.

- Section 17.32.060 (Removal or destruction of trees). A tree removal and replacement plan must be prepared for the removal and replacement of all trees more than 50 years of age unless their removal is required to protect the public health and safety. Each tree removed in a new subdivision shall be replaced with at least one 36-inch box specimen tree, in addition to any other required landscaping.

4.3.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on Biological Resources if it would:

a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.*

c) *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.*

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

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

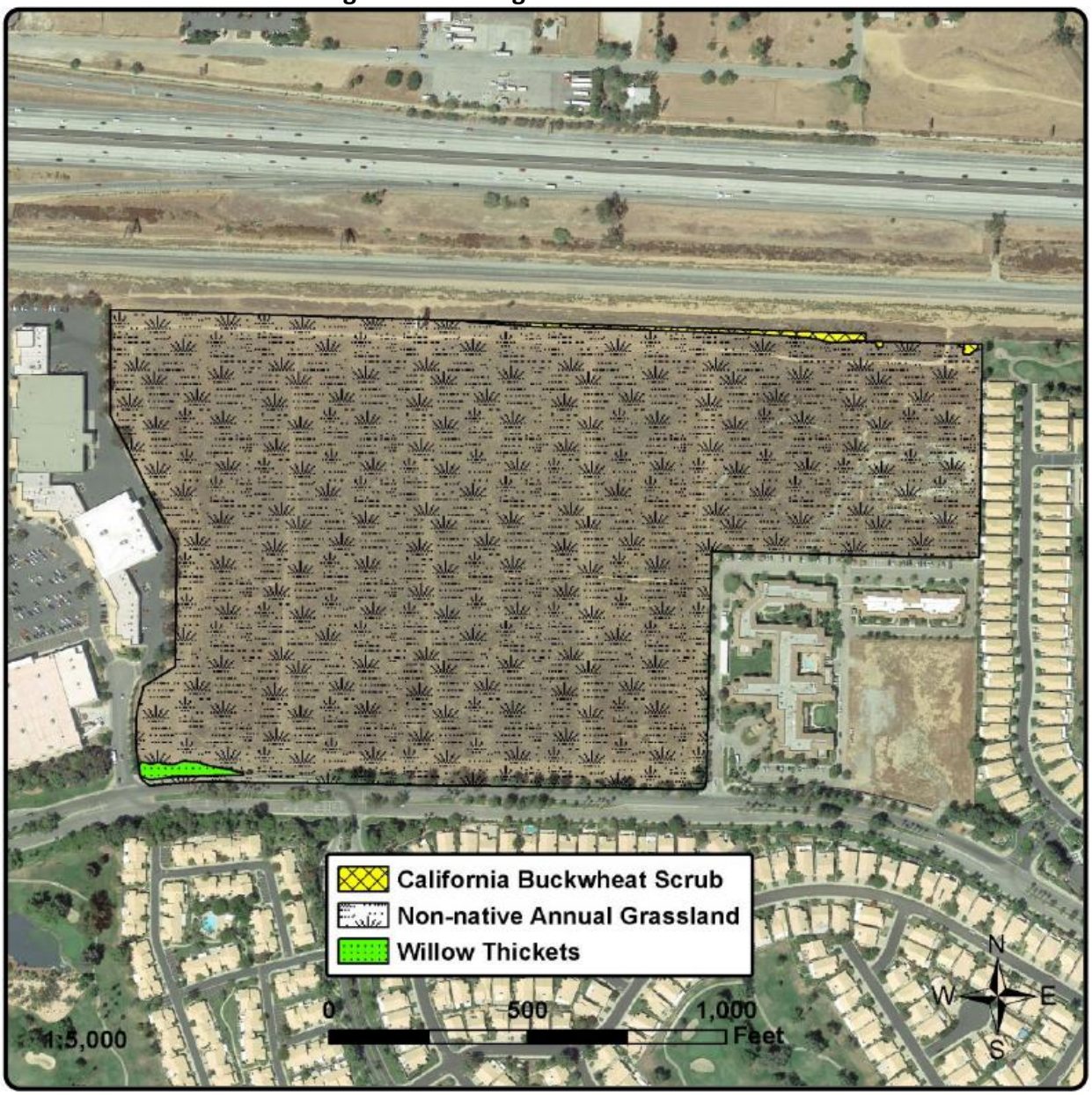
4.3.5 Impact Analysis

Threshold 4.3.5 (a)-Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Vegetation Communities

Most of the site is non-native annual grassland, with a small patch of southern willow scrub at the southwest corner and a narrow strip of California buckwheat scrub along the northeastern site boundary. Ornamental trees line the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard.

Figure 4.3.1 - Vegetation Communities



Sensitive Plant Species

A total of 36 plant species were identified during the survey. Of the 36 species, 19 (53 percent) are non-native. Additional annual plant species may occur but were not detected due to timing of the survey. No federal or state-listed plants or special status plants were observed. The site is not within U. S. Fish and Wildlife Service (USFWS) designated critical habitat for any listed plant species. Listed and special status plants known from the region are either absent, not expected to occur, or have low potential for occurrence onsite.

Special Status Plants

No special status plant species were identified during the survey, but the survey was not conducted during the flowering season for most species. The site has long-term and ongoing anthropogenic disturbance and undisturbed natural habitat capable of supporting special status plants is not present. Most special status plants known from the region are either absent or not expected to occur onsite. A few have low potential for occurrence. No special status plants have moderate or high potential to occur onsite.

Sensitive Wildlife Species

A total of 15 wildlife species (mostly birds) were detected during the survey. No federal or state-listed endangered or threatened species were observed. The site is not within USFWS designated critical habitat for any listed wildlife species. No special status wildlife species were observed. Most listed or special status species are not expected to occur or have low potential for occurrence except as described below.

Burrowing Owl

Burrowing owl (Athene cunicularia) is protected under the federal Migratory Bird Treaty Act and California Fish and Game Code and is a CDFW Species of Special Concern. It is a small, ground-dwelling owl found in open dry grassland, desert, or shrubland areas and in uncultivated agricultural areas, rangelands, and other open areas with low-growing vegetation.

Potentially suitable habitat and small mammal burrows are present onsite and within the buffer area to the north, between the site and the I-10 freeway. No burrowing owls, occupied burrows, or owl sign was observed during the survey. However, because burrowing owls can occupy the site in the future, Mitigation Measure BIO-1 is required:

BIO-1: Pre-Construction Burrowing Owl Survey. *Within 30 calendar days prior to the issuance of a grading permit, a qualified biologist shall conduct a survey of the proposed impact footprint and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted*

by the City of Banning Planning Department prior to the issuance of a grading permit and subject to the following provisions:

a) In the event that the pre-construction survey identifies no burrowing owls in the impact area, a grading permit may be issued without restriction.

b) In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow California Department of Fish and Wildlife relocation protocol. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow California Department of Fish and Wildlife relocation protocol. The biologist shall confirm in writing to the Planning Department that the species has fledged or been relocated prior to the issuance of a grading permit.

Nesting Birds

There is suitable habitat for nesting birds on and adjacent to the site. Nesting birds may utilize trees and other vegetation, structures, idle vehicles/equipment, and open ground. However, given the level of ongoing disturbance on and adjacent to the site, nesting is likely to be limited to more common species that are tolerant of human presence. Ornamental trees are present along the western, southern, and parts of the eastern boundaries of the parcel and surrounding areas and provide potential raptor nesting sites. Although some of the trees are of adequate height for nesting raptors, no raptor nests were observed.

A large advertising sign is present along the north-central border of the site. The upper portion of the sign has either been removed or fallen into disrepair and the interior structure, as well as the exterior surfaces, of the sign are accessible to nesting birds. The sign was inspected from the ground with binoculars and no evidence of raptor nesting was observed. Although no raptor nesting was observed during the period of time the surveys were conducted, there is suitable habitat for nesting birds on and adjacent to the site that can be occupied in the future, Therefore, Mitigation Measure BIO-2 is required.

BIO-2- Nesting Bird Survey. *Prior to the issuance of a grading permit, the City of Banning Planning Department shall ensure vegetation clearing and ground disturbance shall be prohibited during the migratory bird nesting season (February 1 through August 31), unless a migratory bird nesting survey is completed in accordance with the following requirements:*

a) *A migratory nesting bird survey of the Project's impact footprint shall be conducted by a qualified biologist within three business (3) days prior to initiating vegetation clearing or ground disturbance.*

b) *A copy of the migratory nesting bird survey results report shall be provided to the City of Banning Planning Department. If the survey identifies the presence of active nests, then the qualified biologist shall provide the Planning Department with a copy of maps showing the location of all active nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones as determined by a qualified biologist, shall be subject to review and approval by the Planning Department. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and Planning Department verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.*

Other Special Status Wildlife

No federal or state-listed endangered or threatened wildlife species or special status wildlife species were observed during the survey. Due to long-term and ongoing anthropogenic disturbance, undisturbed natural habitat capable of supporting most special status wildlife is generally lacking onsite. Most special status wildlife known from the region are either absent, not expected to occur, or have low potential for occurrence onsite, except as described below.

Cooper's hawk (Accipiter cooperii)

(CDFW Watch List Species) This species forages in various habitats including open areas and scrublands. It has one (1) CNDDB documented occurrence of nesting about 3.7 miles west of the site. According to the Cornell Lab of Ornithology, there are multiple records of this species in the region, including one (1) in the golf course just south of the site[1]. There is potentially suitable foraging habitat onsite. Based on available evidence, Cooper's hawk has low to moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Ferruginous hawk (Buteo regalis)

(CDFW Watch List Species) This species forages in various habitats including open grasslands. It has one (1) CNDDB documented occurrence about 4.3 miles south of the site. There are some eBird records in the vicinity, including one (1) within a residential development along Potrero Creek about 0.8 mile southwest. Based on available evidence, ferruginous hawk has low to moderate potential to forage onsite.

[1] Cornell Lab of Ornithology, eBird, available at: https://ebird.org/home

Costa's hummingbird (Calypte costae)

(USFWS Bird of Conservation Concern) This species is found in desert scrub, coastal scrub, chaparral, and adjacent meadows and gardens. There are no CNDDB documented occurrences of nesting within five (5) miles. There are multiple eBird records in the vicinity, including two (2) immediately adjacent to the site. There is limited potentially suitable native habitat on the Project site, but this species may also utilize ornamental plants for foraging and nesting. Based on available evidence, Costa's hummingbird has low to moderate potential to forage and nest onsite.

California horned lark (Eremophila alpestris actia)

(CDFW Watch List Species) This species forages and nests in open grassland habitats. There is one (1) CNDDB documented occurrence of nesting about four (4) miles west of the site and several eBird records in the area. There is potentially suitable foraging habitat onsite, but ongoing disturbance reduces the potential for nesting. Based on available evidence, California horned lark has moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Loggerhead shrike (Lanius ludovicianus)

(USFWS Bird of Conservation Concern) This species forages in open areas with fences or shrubs for perching. There are several eBird records from the Project vicinity and two (2) CNDDB documented occurrences of nesting in the Badlands to the south and southwest. The closest is about 2.5 miles from the site. There is potentially suitable foraging habitat and this species has low to moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Dulzura pocket mouse (Chaetodipus californicus femoralis)

(CDFW Species of Special Concern) This species is found in a variety of habitats, including coastal scrub and grassland. There is one (1) CNDDB documented occurrence about 2.9 miles to the southeast. Data on this species from the trapping survey in 2005 is not available. Based on available evidence, it has low to moderate potential for occurrence on the Project site.

Northwestern San Diego pocket mouse (Chaetodipus fallax fallax)

(CDFW Species of Special Concern) This species is found in coastal scrub, chaparral, and grasslands in sandy, herbaceous areas, usually in association with rocks or coarse gravel. It has multiple CNDDB documented occurrences within five (5) miles of the Project site. There is potentially suitable habitat on the Project site. Data on this species from the trapping survey in

2005 is not available. Based on available evidence, this species has moderate potential for occurrence. It is a covered species under the MSHCP and considered adequately conserved.

Los Angeles pocket mouse (Perognathus longimembris brevinasus)

(CDFW Species of Special Concern) This species is found in grassland, sage scrub, and alluvial sage scrub habitats. It has multiple CNDDB documented occurrences within five (5) miles of the Project site; the closest is 2.3 miles to the east. There is potentially marginal habitat on the Project site. Data on this species from the trapping survey in 2005 is not available. Based on available evidence, this species has moderate potential for occurrence. It is a covered species under the MSHCP and considered adequately conserved.

Level of Significance: Less than significant with implementation of Mitigation Measures BIO-1 and BIO-2.

Threshold 4.3.5 (b)- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

Under MSHCP Volume 1 Section 6.1.2 areas associated with wetland and streambed systems must be evaluated for consideration as riparian/riverine or vernal pool habitat. Riparian/riverine areas are defined within the MSHCP as:

". . . lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." MSHCP Vol. 1, Section 6.1.2.
Vernal pools are defined within the MSHCP as:

". . . seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. . ." MSHCP Vol. 1, Section 6.1.2.

There is no vernal pool habitat onsite. Soil types mapped (and observed) onsite are not consistent with an alkali playa or vernal pool complex. Pools or depressions characteristic of vernal pool habitat were not observed onsite. No MSHCP species listed for protection associated with riparian/riverine areas or vernal pools were observed. No evidence of ponding was observed onsite. Tire ruts are present on an access road along the northern site boundary, but the ruts

were dry at the time of the survey and soils onsite are sandy to coarse sandy loam (i.e., well drained).

Level of Significance: No impact.

Threshold 4.3.5 (c) - 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?

There are no USGS mapped blue-line streams onsite. A shallow trench is present along the site's southern boundary (along Sun Lakes Boulevard) and trends from west to east. A double culvert is present at the southeast corner of the site. A small area of willow thicket is present in the southwest corner of the site in association with a trench. Another shallow trench is present within the central portion of the site and trends from west to east. No water or evidence of flow was observed in these trenches during the survey. The trenches appear to be remnants of past disturbance involving water quality or flood control measures and do not have connectivity with any natural waterway.

Level of Significance: No impact.

Threshold 4.3.5 (d) - Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas, because movement barriers prohibit the infusion of new individuals and genetic information.

Wildlife movement activities usually fall into one of three movement categories: dispersal (e.g., juvenile animals dispersing from natal areas or individuals extending their range), seasonal migration, and movements related to home range activities (e.g., foraging for food or water, defending territories, or searching for mates, breeding areas, or cover). The site is surrounded by major roadways and residential developments and does not function as part of a wildlife corridor.

Level of Significance: No impact.

Threshold 4.3.5 (e) - Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Tree removals are strongly discouraged and require replacement under City of Banning Municipal Code Section 17.32.060. Ornamental trees are present along the western, southern, and parts of the eastern boundaries of the parcel. At this time, it is unknown if these trees will be removed as part of future development. However, the following Mitigation Measure is required in the event the trees are removed.

BIO-3- Native Tree Removal. *Native trees to be impacted by development of projects pursuant to the Specific Plan shall be assessed by a certified arborist as to the viability and value of the trees to determine if mitigation and replacement are required. Removal of healthy, shade-providing, and aesthetically valuable trees shall be strongly discouraged and shall conform with the policies and programs of the City of Banning General Plan. A tree removal and replacement plan shall be required for the removal and replacement of all trees more than 50 years of age unless their removal is required to protect the public health and safety. Each identified tree removed shall be replaced with at least one 36-inch box specimen tree, in addition to any other required landscaping.*

Level of Significance*:* Less than significant with implementation of Mitigation Measure BIO-3.

Threshold 4.3.5 (f) - Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP, a regional Habitat Conservation Plan was adopted on June 17, 2003. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species. Based on the Habitat Assessment (Appendix C):

1) The site is not mapped within any MSHCP Criteria Cell or subunit.

2) The site is not mapped within an area where additional surveys are required for any Amphibian, Mammal, or other Criteria Area Species.

3) The project will not impact any Riparian/Riverine or Vernal Pool areas.

4) The site is not within or adjacent to any MSHCP Conservation Areas and therefore does not require mitigation measures pursuant Section 6.1.4 (pertaining to Urban/ Wildlands Interface) of the MSHCP, which presents guidelines to minimize indirect effects of Projects in proximity to the MSCHP Conservation Areas.

5) The site is mapped within a Burrowing Owl (BUOW) required habitat suitability assessment survey area. Therefore, to be thorough, a habitat suitability assessment for BUOW was conducted during site visit. The result of the assessment was that no BUOW habitat or BUOW sign was detected on site, and this species is currently considered absent from the Project area. However, because BUOW have been known to occupy disturbed sites, Mitigation Measure BIO-1 is required.\

6) The site is mapped within a Narrow Endemic Plant Species required habitat suitability assessment survey area. Therefore, to be thorough, a habitat suitability assessment for the three listed Narrow Endemic Plant Species was conducted during site visit. Based on habitat requirements for specific species, availability and quality of habitats needed by the three Narrow Endemic Plant Species, it was determined that the project site does not provide suitable habitat for Narrow Endemic Plant species San Diego ambrosia, Brand's phacelia, and San Miguel Savory.

Level of Significance: Less than significant with implementation of Mitigation Measure BIO-1 and BIO-2.

4.3.6 Cumulative Impacts

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that substantially diminish or result in the loss of an important biological resource, or those that would conflict with local, state, and/or federal resource conservation plans, goals, or regulations. Impacts can be locally adverse but not significant because, although they would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population- or region-wide basis.

The Project and other projects in the vicinity are located within the jurisdictional boundaries of the MSHCP. As described in the Regulatory Framework of this section, the MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan that addresses biological impacts for the "take" of covered species through establishment and implementation of a regional conservation strategy and other measures, such as mitigation fees.

The MSHCP provides programs and policies for the review of projects in areas where habitat must be conserved and for the collection and development of mitigation fees. All discretionary development projects are to be reviewed for compliance with the MSHCP. Additionally, the

Project has undergone a habitat assessment which determined that the Project would have a less than significant impact with the implementation of Mitigations Measures BIO-1 and BIO-2.

Because cumulative projects in the Project vicinity are also subject to the MSHCP and would also have to complete habitat assessments and surveys as part of the environmental review process, the cumulative impacts to biological resources are determined to be less than significant.

Level of Significance*:* Less than significant with implementation of Mitigation Measures BIO-1 through BIO-3.

4.3.7 References

L&L Environmental, Inc., *Habitat Assessment for APN 419-140-057 Sun Lakes Boulevard, City of Banning, County of Riverside, California*, February 27, 2020. (Included herein as Appendix D).

City of Banning, *City of Banning General Plan, Chapter IV. Environmental Resources,* January 31, 2006. Available at http://www.ci.banning.ca.us/DocumentCenter/View/664, accessed May 13, 2020.

4.4 CULTURAL RESOURCES

Cultural resources include places, objects, and settlements that reflect group or individual religious, archaeological, architectural, or paleontological activities. Such resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. This section of the EIR evaluates the potential for implementation of the Project to impact cultural resources. The analysis in this section is based, in part, upon the following information:

- *Cultural Resources Records Search Results and Recommendations for the Sun Lakes Boulevard Project (APN 419-140-057), City of Banning, County of Riverside, California, L&L Environmental Inc., February 27, 2020.* (Appendix E).

- *Phase I Cultural Resources Assessment for the Sun Lakes Boulevard Project (APN 419-140-057), City of Banning, County of Riverside, California*, L&L Environmental Inc., August 30, 2020.(Appendix F).

4.4.1 Environmental Setting

Existing Conditions

The Project area is in the San Gorgonio Pass, or Banning Pass, which lies along the border between the Peninsular Ranges and Transverse Ranges Geomorphic Provinces. The pass was formed by the San Andreas Fault, which runs along the pass between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. Land surrounding the Project area is generally characterized as mixed residential and commercial, with a few vacant lots as well as major transportation corridors (i.e., Interstate 10 and the Union Pacific Railroad). Topographically, much of the Project area is flat, but gradually increases in elevation as it trends southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet above mean sea level (AMSL). The Project area is within a disturbed vacant lot and appears to be regularly disked or mown. A large advertising sign is present along the north-central boundary of the site. A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site. A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, remnants of which are still visible.

Records Search

The California Historical Resources Information System (CHRIS) records search was completed at the EIC on February 5, 2020 by L&L Archaeologist William R. Gillean, B.S., working under the supervision of L&L Principal Investigator Jennifer M. Sanka, M.A., RPA. The records search included a review of previously recorded cultural resource sites and isolates, recorded built-environment resources, and previous cultural resources studies on or within a one-mile radius of the project area. In addition, the records search included a review of the National Register of Historic Places (NRHP), Archaeological Determinations of Eligibility (ADOE), and the Built Environment Resources Directory (BERD) for the City of Banning. The results indicate that no previously recorded cultural resources are in the project area while three (3) cultural resources were recorded in the one-mile search radius. Of these previously recorded resources, one (1) is within 0.25 mile, one (1) is within 0.50 mile, and one (1) is between 0.50 and one mile of the project area. All the previously recorded resources are historic age and they consist of the Union Pacific Railroad (UPRR)/Southern Pacific Railroad (SPR) and two (2) sites comprised of water conveyance systems. These previously recorded resources and their locations relative to the project area are outlined below in Table 4.4-1.

Table 4.4.1 - Previously Recorded Cultural Resources

Resource Number	Recorder Name and Date	Resource Description	Within ~One to 0.50 Mile Radius	Within ~0.50 to 0.25 Mile Radius	Within ~0.25 Mile Radius	Within Project Area?
33-9498/ CA-RIV-6381H/CA-IMP-3424H	Originally recorded by S. Ashkar of Jones & Stokes, 1999 **Segments of this** linear resource were updated by C. Chasteen of Myra L. Frank & Associates, 2003; C. Taniguchi of Galvin and Associates, 2005; S. Wilson and K. Chimel of ICF Jones & Stokes, 2009; S. Kremkau, 2012; T. Baurley and J. Sanka of L&L, 2015; D. Leonard of HDR, 2016; and P. Moloney, R. Elder, and W. Blodgett of	Historic: The UPRR/SPR. This resource consists of a segment of the UPRR (historically the SPR) that extends across California. The alignment includes several smaller railroad lines that were acquired and consolidated into the SPR in 1884. The lines were later acquired by the UPRR in the 1990s.	●	●	●	No; however, this resource is located to the north of the project area.

Resource Number	Recorder Name and Date	Resource Description	Within ~One to 0.50 Mile Radius	Within ~0.50 to 0.25 Mile Radius	Within ~0.25 Mile Radius	Within Project Area?
	Applied Earth Works, 2017					
33-13779/CA-RIV-7544	P. Messick and M. Dice of Michael Brandman Associates (MBA), 2004	Historic: A series of water conveyance features. The site was recommended not eligible for inclusion in the NRHP or the California Register of Historical Resources (CRHR).	●			**No**
33-15033/CA-RIV-7997	Originally recorded by D. Brunzell of LSA Associates, Inc. (LSA), 2006 Updated by J. Miller, C. Morgan, R. Goodwin, and J. Hall, 2013; S. Justus, B. Wilson, A. Giacinto of ASM Affiliates (ASM), 2010; A. Williams of Southern California Edison (SCE), 2014; and M. DeCarlo of ASM and Doug Mengers of PanGIS, 2018	Historic: A water conveyance system consisting of a channelized ditch created from Smith Creek. This resource was recommended not eligible for inclusion in the NRHP and the CRHR in 2014 and the State Historic Preservation Officer (SHPO) concurred with this recommendation in 2016.	●	●		**No**

Source: Cultural Resources Records Search Results and Recommendations (Appendix D.)

The EIC records search also indicated that 27 area-specific cultural resource reports are on file for the project area and the one-mile search radius. Two (2) of these studies addressed the project area in 1981 and 2004 (RI-1434/SRS 1981; RI-8449/CRM Tech 2004). The 1981 survey encompassed a total of 900 acres and reported no known cultural resources within current project area. However, information regarding field survey transect spacing or the percentage of land covered during the survey was not provided in the report so the level of survey coverage within the current project area is unknown. Cultural resources were identified about 0.15 mile to the southwest of the project area. Specifically, the survey detected numerous buildings, structures, and features, including a residence, agricultural outbuildings, barns, a well, and a

refuse dump associated with the Old Stewart Ranch. While these resources were not recorded as a site, they do reflect patters of historic age land use in the immediate vicinity of the project area (RI-1434/SRS 1981).

The 2004 study was conducted in support of the City of Banning General Plan. This study included an inventory of cultural resources located in the City and the sphere of influence, as well as a reconnaissance style survey that visited previously recorded sites and addressed areas with a high potential for containing resources. This work resulted in the assessment of a project area that measured approximately 37 square miles. While this study addressed the current project area and the surrounding acreage via research and a records search, it did not include an intensive pedestrian survey for the subject property (RI-8449/CRM Tech 2004). As such, the EIC results indicate that the project area has been previously surveyed once for the presence or absence of cultural resources in 1981 (RI-1434/SRS 1981).

Collectively, the 27 previous studies cover approximately 90 percent of total surface area within the records search radius via research and field surveys. The report coverage is generally similar throughout the search radius with the lands within 0.25 mile, between 0.25 and 0.50 mile, and between 0.50 and one mile exhibiting about 90 percent coverage. The details of these reports are summarized below in Table 4.4-2.

Table 4.4.2- Previous Cultural Resources Studies Within One Mile of the Project Area

Report #	Date	Rsrcs	Report	Author
RI-1432	1986	No	Archaeological Report on Grading Monitoring Activities at Stewart Ranch, Riverside County, California	Scientific Resource Surveys, Inc. (SRS)
RI-1433	1985	No	An Historical Study of Stewart Ranch in Riverside County, California	SRS
RI-1434	1981	Yes	Cultural Resources Report on 900 +/- Acre Parcel (Portion of the Old Stewart Ranch), Located in the Banning-Beaumont Area, Riverside County, California	SRS
RI-1830	1984	No	An Archaeological Assessment of Parcel 18132, Beaumont Area of Riverside County, California	Archaeological Research Unit
RI-2203	1987	No	An Archaeological Assessment of the Hovchild Property, Riverside County, California	C. E. Drover
RI-2350	1988	Yes	MCI Rialto to El Paso Fiber Optics Project - Intensive Cultural Resource Survey - San Bernardino and Riverside Counties, California	Dames & Moore
RI-3039	1990	No	An Archaeological Assessment of the “Sunset Crossing” Project, a 294.8 Acre Parcel as shown on TPM 25541, Located Immediately South of the I-10 Freeway at Sunset Avenue in Banning, Riverside County, California	Archaeological Associates

Report #	Date	Rsrcs	Report	Author
RI-4720	2004	Yes	Phase I Cultural Resource Survey and Historic Site Significance Evaluations for the Sunset Crossing Project Footprint, South Banning Area, County of Riverside, California	MBA
RI-4840	2002	No	Report of Phase I Archaeological Assessment of a 23-Acre Parcel in Beaumont, Riverside County	Archaeological Resource Management Corporation (ARMC)
RI-4841	2002	No	Addendum: Report of Phase I Archaeological Assessment of a 23-Acre Parcel in Beaumont, Riverside County	ARMC
RI-5136	2003	No	Cultural Resource Inventory and Paleontologic Assessment, Hovchild Property, City of Beaumont, County of Riverside, California	The Keith Companies
RI-6722	2006	Yes	Cultural Resources Assessment and Historic Evaluations: Deutsch Property Specific Plan, City of Banning, Riverside County, California	LSA
RI-7052	2006	No	A Cultural Resources Investigation of the Proposed San Gorgonio Village Project Area, Approximately 23 Acres of Land in the City of Beaumont, Riverside County, California	McKenna, et al.
RI-7055	2007	No	Historical/Archaeological Resources Survey Report: Assessor's Parcel Number 419-170-031, in the City of Beaumont, Riverside County, California	CRM Tech
RI-7339	2007	Yes	Identification and Evaluation of Historic Properties: Wastewater Treatment Plant Expansion and Recycled Water System, City of Banning, Riverside, California	CRM Tech
RI-7364	2007	No	Archaeological and Paleontologic Monitoring of a 29.7-Acre Project Area at the Northwest Corner of First Street and Commerce Way, Beaumont, Riverside County, California	Chambers Group
RI-7970	2006	Yes	A Study of the Past in San Timoteo Canyon and San Gorgonio Pass: Cultural Resource Assessment, Oak Valley Substation Project, Riverside County	LSA
RI-8011	2008	No	Final Cultural Resources Assessment, Study of the Past in San Timoteo Canyon and San Gorgonio Pass: Oak Valley Substation Project, Riverside County	LSA
RI-8027	2009	No	Letter Report: Proposed Cellular Tower Project(s) in Riverside County, California, Site Number(s)/Name(s): IE-04965A/Beaumont Health Center TCNS# 47154	Earth Touch
RI-8449	2004	No	Cultural Resources Technical Report: City of Banning General Plan	CRM Tech
RI-9167	2013	Yes	Cultural Resources Assessment and Class III Inventory: Volume I West of Devers Project, San Bernardino and Riverside Counties, California	LSA

Report #	Date	Rsrcs	Report	Author
RI-10157	2014	Yes	Archival Research Evaluation Results of 33 Cultural Resources for Southern California Edison Company's West of Devers Upgrade Project, Riverside and San Bernardino Counties, California, Volume 1	SCE
RI-10219	2015	No	Letter Report: Cultural Resources Summary for the Proposed Verizon Wireless, Inc. Property at the Potrero Site, 81 Highland Springs Avenue, Beaumont, Riverside County, California 92223	Tetra Tech
RI-10461	2015	Yes	Archaeological Investigations and Monitoring for the Construction of the Devers-Palo Verde No. 2 Transmission Line Project, Riverside County, California	ASM
RI-10478	2018	Yes	A Phase I CEQA/Class III NEPA (NHPA Section 106) Investigation for the 6th/Maple Septic Conversion Project in the City of Beaumont, Riverside Co., California	McKenna, et al.
RI-10754	2019	Yes	A Class III Historic Resource Study for Phase 3 of the Atwell Project for Section 106 Compliance, SPL-Banning, California	Brian F. Smith and Associates (BFSA)
RI-10766	2018	Yes	A Class III Historic Resource Study for Phase 2 of the Atwell Project for Section 106 Compliance, SPL-Banning, California	BFSA

Source: Cultural Resources Records Search Results and Recommendations (Appendix D.)

The Native American Heritage Commission was requested to provide a records search of the Sacred Lands File on June 29, 2020. The commission staff responded in writing on June 29, 2020 with a list of local Native American tribes, organizations, and individuals to contact regarding the Project. Tribes, organizations, and individuals were provided a letter which included a description of the Project, identified its location, and requested information regarding Native American resources within or near the Project area.

As a result of the information scoping process, five (5) tribes responded by email and in letters including the Agua Caliente Band of Cahuilla Indians the Cabazon Band of Mission Indians, the Quechan Tribe of the Fort Yuma Reservation, the Rincon Band of Luiseno Indians, and the Santa Rosa Band of Cahuilla Indians. The only request was from the Agua Caliente Band of Cahuilla Indians who asked for a copy of the Phase I Cultural Resources Assessment once it was finalized (August 30, 2020).

(Please see Section 4.12, *Tribal Cultural Resources* for a comprehensive analysis of this issue).

4.4.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21.2020. No comments were received during the NOP comment period that pertain to the topic of cultural resources.

4.4.3 Regulatory Framework

The primary regulations applicable to the Project are described as follows:

Federal Regulations

National Register of Historic Places

The National Register of Historic Places is the official list of the Nation's historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service's National Register of Historic Places is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect America's historic and archeological resources.

State of California Regulations

California Environmental Quality Act

State historic preservation regulations affecting the proposed Project include the statutes and guidelines contained in the California Environmental Quality Act (CEQA) (Cal. Pub. Res. Code §§ 21083.2 and 21084.1) and State CEQA Guidelines (Cal. Code Regs. tit. 14, § 21000 et seq.). CEQA requires lead agencies to carefully consider the potential effects of a project on historical resources. A "historical resource" "includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (Cal. Pub. Res. Code § 5020.1).

California Health and Safety Code §§ 7050.5, 7051 and 7054

California Health and Safety Code 7050.5, 7051 and 7054 collectively address the illegality of interference with human burial remains as well as the disposition of Native American burials in archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation, and reburial procedures.

Local Regulations

City of Banning General Plan

- Policy 1 The City shall exercise its responsibility to identify, document and evaluate archaeological, historical, and cultural resources that may be affected by proposed development projects and other activities.

- Program 1.A All new development proposals, except single family dwelling on existing lots of record, shall submit a records search for historic and cultural resources as part of the planning process.

- Program 1.B Development or land use proposals which have the potential to disturb or destroy sensitive cultural resources shall be evaluated by a qualified professional and, if necessary, comprehensive Phase I studies and appropriate mitigation measures shall be incorporated into project approvals.

- Program 1.C The City shall implement the requirements of state law relating to cultural resources, including Government Code 65352.3, and any subsequent amendments or additions.

4.4.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on Cultural Resources if it would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.

c) Disturb any human remains, including those interred outside of formal cemeteries.

4.4.5 Impact Analysis

Threshold 4.4.5 (a) - Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5.

The Project area was once part of Stewart Ranch, owned and operated by Reznor P. Stewart between 1883 and 1933 and by his daughters Laura May and Clara between 1933 and 1967. L&L identified a linear resource (RPGX-1H) in the Project area consisting of an earthen bermed ditch constructed by bulldozer sometime before 1953 and associated with water control/conveyance efforts instituted on the ranch along Portereo Creek and Smith Creek. RPGX-1H was evaluated and recommended not eligible for the CRHR and does not qualify as a historic resource under CEQA.

Level of Significance: No impact.

Threshold 4.4.5 (b) - Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5.

The Project area appears to have low sensitivity for prehistoric archaeological resources, and it is unlikely that intact, subsurface prehistoric archaeological deposits would be uncovered during Project construction. Sensitivity for encountering historic-age archaeological resources is considered low-to-moderate. The Project area lies within Stewart Ranch; however, the land within the Project area was utilized for grazing, agricultural, and water control/conveyance purposes. This suggests that any historic artifacts and/or deposits that may be present in subsurface context would most likely reflect those activities (e.g., horse shoes, tacks, barbed wire, sparse occurrences of tin cans and glass bottles, other water conveyance/control features, etc.) and would most likely not be considered historically significant. Thus, no mitigation measures are required.

Level of Significance: No impact.

Threshold 4.4.5 (c) - Disturb any human remains, including those interred outside of formal cemeteries.

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. If human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner.

If the Coroner determines the remains to be Native American, the California Native American Heritage Commission (NAHC) must be contacted and the NAHC must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

Level of Significance*:* Less than significant.

4.4.6 Cumulative Impacts

The cumulative area for cultural resources and human remains is the City of Banning sphere of influence, consistent with the analysis contained in the City's General Plan EIR. All cumulative development projects within the City will be required to comply with the following resource protection requirements, as applicable.

- Banning GP Policy 1 states that the City will identify, document, and evaluate archeological, historical, and cultural resources that may be affected by proposed development projects and other activities.

- Program 1.A and Program 1.B describe how the City will require all new developments to complete the following: submit a records search for historic resources that may be affected by proposed development projects and activities; submit a records search for historic and cultural resources as part of the planning process; submit a comprehensive Phase I studies; and appropriate mitigation measures be incorporated into project approvals for projects which have the potential to disturb or destroy sensitive cultural resources (Banning GP,[2]).

Thus, cultural resource reports will be required for each individual cumulative development project to assess the potential for significant impacts to these resources and to identify mitigation measures if necessary.

Level of Significance: Less than significant.

4.4.7 References

L&L Environmental Inc., *Cultural Resource* Records Search Results and Recommendations, Sun Lakes Boulevard Project *Assessment of 108 Acres for the Banning Industrial Project (APN 419-140-057), City of Banning, Riverside County, California*, February 27, 2020. (Included herein as Appendix D).

City of Banning, *City of Banning General Plan,* adopted January 31, 2006 (Available at: https://www.ci.banning.ca.us/468/General-Plan-Amendments, accessed on January 2, 2020.

[2] City of Banning General Plan, pp. IV-68–IV-69.

4.5 ENERGY

Energy conservation generally refers to efforts made to reduce energy consumption to preserve resources for the future and reduce environmental pollution. To the extent relevant and applicable to the proposed Project, energy expenditure (use) and conservation are considered herein and in other applicable Draft EIR sections.

4.5.1 Environmental Setting

The California Energy Commission (CEC) provides new forecasts for electricity and natural gas demand every two years as part of the Integrated Energy Policy Report (IEPR) process.

Electricity

California is beginning a transition away from fossil natural gas as a primary fuel source for electric generation. To meet air quality, climate, and other environmental goals, fossil generation is being replaced by resources including renewables, transmission upgrades, energy storage, energy efficiency, and demand response.

Over the last decade, the portfolio of resources in California's electric system has significantly changed. The amount of generation from fossil natural gas plants has decreased by roughly 22 percent, from 117 gigawatt-hours (GWh) in 2009 to 91 GWh in 2018. Large amounts of renewable generation have been added to the system, driven primarily by California's Renewables Portfolio Standard and the California Solar Initiative. Installed renewable capacity in the state increased from 9,313 megawatts (MW) in 2009 to 23,313 MW in 2018. Table 4.5-1 shows the amount of electricity consumed by Riverside County in 2018.

Table 4.5.1- Electricity Use by Riverside County in 2018

Sector	Usage Expressed in Millions of kWh (GWh)
Non-Residential	8295.965387
Residential	7960.740053
Total	**16256.705441**

Source: California Energy Commission Consumption Database, 2020.

Natural Gas

While natural gas demand is growing in most of the United States, California expects a decline because of policies such as Senate Bill 350 (De León, Chapter 547, Statutes of 2015) and SB 100. Decarbonization strategies such as building electrification will reduce retail demand for fossil natural gas. Yet, in 2017 and 2018, natural gas was still the most consumed fuel or energy source

in California. California's five end-use sectors—residential, commercial, industrial, transportation, and electric generation— consumed 1,799,292 MMcf (4,930 MMcfd average) of natural gas in 2018.

However, California's in-state natural gas production, much of which comes from geologic basins in the Central Valley, will continue to decline because of less favorable economics and reservoirs that are less susceptible to increased production via hydraulic fracturing. In 2017, in-state sources provided about 548 MMcfd, or 10 percent, of the natural gas consumed in California, while interstate pipeline shipments satisfied the remaining 90 percent. Table 4.5-2 shows the natural gas use by Riverside County in 2018.

Table 4.5.2 - Electricity Use by Riverside County in 2018

Sector	Usage Expressed in Millions of Therms
Non-Residential	139.193875
Residential	259.344553
Total	**398.538428**

Source: California Energy Commission Consumption Database, 2020.

Transportation

California is home to roughly 30 million registered cars, trucks, buses, and other motorized on road vehicles. Over the last 60 years, an increase in vehicle ownership and the number of miles driven has made the transportation sector the largest contributor of greenhouse gas (GHG) emissions in the state, as well as a leading cause of air pollution and ozone-forming gas emissions.

The Public Resources Code, Section 25304, requires the California Energy Commission (CEC) to conduct transportation forecasting and assessment, including a forecast of "statewide and regional transportation energy demand" and assessment of "the factors leading to projected demand growth. Forecasting California's transportation sector is challenging given the rapid evolution toward a clean transportation system, and because transportation fuels and vehicles are influenced by developments in the global market.

Gasoline is the dominant fuel within the transportation sector, with diesel and aviation fuels following. Table 4.5-3 shows gasoline and diesel fuel consumption during the peak year vs. current year for the period 2003-2018.

Table 4.5.3 - Fuel Consumption- Peak Year vs. Current Year for 2003-2018

Fuel Type	Billions of Gallons/ Peak Consumption Year	Billions of Gallons/ Current Consumption Year
Gasoline	Year 2005 (15 billion)	Year 2018 (14 billion)
Diesel	Year 2007 (3.75 billion)	Year 2018 (3.25 billion)

Source: *California Energy Commission, Final 2019 Integrated Energy Policy Report, Appendix C, 2019.*

Petroleum-based fuels continue to represent the largest shares of transportation energy demand, at present and through the forecasted period (2030). The decline in gasoline demand forecast is primarily due to improvements in fuel efficiency and increased electrification.

4.5.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21, 2020. No comments were received during the NOP comment period that pertain to the topic of Energy resources.

4.5.3 Regulatory Framework

The proposed Project would be required to directly and indirectly comply with all mandatory regulatory requirements aimed at energy conservation and fuel use that would lessen the energy demands of the proposed Project. There are many such regulatory requirements, with the primary ones discussed briefly below.

State Regulations

Title 24, Part 6, Energy Efficiency Standards

Title 24 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, which were adopted on May 9, 2018, went into effect starting January 1, 2020.

Title 24, Part 11, Green Building Standards

The California Green Building Standards Code (24 CCR Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. It includes mandatory requirements for new residential and nonresidential buildings throughout California. CALGreen is intended to (1) reduce GHG emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the governor. The code also requires building commissioning, which

is a process for verifying that all building systems (e.g., heating, and cooling equipment and lighting systems) are functioning at their maximum efficiency.

Local Regulations

City of Banning General Plan

- Policy 1 Promote energy conservation throughout all areas of the community and sectors of the local economy, including the planning and construction of urban uses and in City and regional transportation systems.
    - Program 1.A The City shall strictly and consistently enforce all state mandated energy-conserving development and building codes/regulations and shall investigate and report on the appropriateness of developing more stringent local energy performance standards.
    - Program 1.C The City shall strive for efficient community land use and transportation planning and design, and shall assure the provision of convenient neighborhood shopping, medical and other services located to minimize travel and facilitate the use of alternative means of transportation.
- Policy 2 Promote the integration of alternative energy systems, including but not limited to solar thermal, photovoltaics and other clean energy systems, directly into building design and construction.
    - Program 2.A The City shall make available to residents, businesses, and the building industry information on commercially available conservation technologies, solar thermal and photovoltaic energy systems, fuel cell and other alternative energy technology. Building regulations and guidelines that provide for the safe and efficient installation of these systems shall also be provided.

City of Banning Municipal Code

Chapter 15.08 - Construction Codes implements the California Building Standards Code which has the authority to propose CALGreen standards for nonresidential structures that include, but are not limited to, new buildings or portions of new buildings, additions and alterations, and all occupancies where no other state agency has the authority to adopt green building standards applicable to those occupancies.

4.5.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on Energy if it would:

a) *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.*

b) *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

4.5.5 Impact Analysis

Threshold 4.5.5 (a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Short-Term Construction

Construction of the proposed Project would result in short-term energy demand generated using construction equipment and from worker and vendor vehicle trips to and from the Project site. There is no aspect of the proposed short-term construction process that would result in the inefficient, wasteful, and unnecessary consumption of energy because all construction equipment operating on the Project would be required to meet applicable regulatory requirements for fuel efficiency.

Long-Term Operations

Fuel Consumption

Energy demand would result from delivery, employee, and visitor vehicle/truck trips to and from the Project site. Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. Table 4.5-4 shows projected fuel consumption.

Table 4.5.4 - Projected Fuel Consumption

Annual Vehicle Miles Traveled	Average Vehicle Fuel Economy	Estimated Annual Fuel Consumption (Gallons)
12,632,720	26.0	485,837

Source: California Air Resources Board.

Natural Gas and Electricity

Operational use of energy would include heating, cooling, and ventilation of buildings; operation of electrical systems, security functions, use of on-site equipment and appliances; and indoor, outdoor, perimeter, and parking lot lighting. Table 4.5-5 shows the projected energy demand by the Project for natural gas and electricity.

Table 4.5.5- Projected Annual Operational Energy Demand

Energy Source	Metric	Total Demand
Natural Gas	KBTU/year	248,201
Electricity	kWh/year	1,679,221

Source: Sun Lakes Village North Specific Plan Amendment No. 6, Air Quality and Greenhouse Gas Evaluation (Appendix B).

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building such as in plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use or "plug-in" energy use can be further subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

Operational Energy Efficiency/Conservation Measures

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code).

As shown in Table 4.5-5, the Project would create a net increase in electricity demand of approximately 1,679,221 kWh per year. This net increase is well within SCE's systemwide net increase in electricity supplies of approximately 15,273 GWh annually over the 2012-2024 period (CEC, Electricity Consumption by County, 2020). Therefore, there are sufficient planned electricity supplies in the region for the estimated net increase in electricity demands, and buildout under the proposed Project would not require expanded electricity supplies.

As shown in Table 4.5-5, the Project would generate a net increase in natural gas demand of approximately 248,201 KBTU/yr. This net increase is well within the Southern California Gas Company's systemwide natural gas supplies of approximately 923 million therms during the 2017 period. (CEC, 2020a). Therefore, there are sufficient planned natural gas supplies in the region for the estimated net increase in natural gas demands, and buildout under the proposed Project would not require expanded natural gas supplies.

Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems for natural gas and electricity. The Project would therefore not cause or result in the need for additional energy producing or transmission facilities.

Additionally, plans submitted for building permits of development projects in the Project area would be required to include verification demonstrating compliance with the 2016 Building and Energy Efficiency Standards and are also required to be reviewed. The project would also be required adhere to the provisions of CALGreen, which established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.
Even though the project would increase the consumption of electricity and natural gas resources, the project would not increase demand such that SoCalGas and SCE would need to plan for new regional electricity or natural gas facilities, the construction of which could cause significant environmental effects.

Based on the above analysis, the proposed Project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Level of Significance: Less than significant.

Threshold 4.5.5 (b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Applicable regulations and requirements, including plans for renewable energy and energy efficiency, are discussed above in subsection 4.5.6 (a). As noted above, plans submitted for building permits of development projects in the Specific Plan would be required to include verification demonstrating compliance with the 2016 Building and Energy Efficiency Standards and are also required to be reviewed. The project would also be required adhere to the provisions of CALGreen, which established planning and design standards for sustainable site development, energy efficiency, water conservation, material conservation, and internal air contaminants. As such, impacts are less than significant.

Level of Significance*:* Less than significant.

4.5.6 Cumulative Impacts

Construction Energy Demand

Based on the preceding analysis, the Project's construction activities would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary

consumption of energy resources. Construction activities associated with the Project would not be more energy-intensive than other similar construction operations throughout the region, and the Project would be subject to applicable regulations designed to reduce energy consumption. Accordingly, the Project's impacts due to construction-related energy consumption would be less than significant.

Operational Energy Demand

Mandatory compliance with the applicable provisions of CALGreen would ensure that the Project uses energy efficiently. Moreover, energy consumed by the Project is calculated to be comparable to, or less than, energy consumed by other individual residential or commercial uses of similar scale and intensity than are currently constructed and operating in California. On this basis, the Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Furthermore, the Project would not cause or result in the need for additional energy facilities or energy delivery systems outside of connection to the existing utilities located in the adjacent roadways.

As indicated under the analysis for Threshold 4.5.6 (b), the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As such, the Project has no potential to result in cumulatively considerable impacts due to a conflict with or obstruction of such plans.

Level of Significance: Less than significant.

4.5.7 References

City of Banning, City of Banning General Plan, adopted January 1, 2020. Available a:t http://www.ci.banning.ca.us/468/General-Plan-Amendments, accessed April 1, 2020.

State of California, *California Building Standards Code Title*, adopted January 31, 2006. Available at: https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreens, accessed April 1, 2020.) (CalGreen).

State of California, *Energy Commission, Electricity Consumption by County, 2018*. Available at: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data). Accessed April 1, 2020.

State of California, *Energy Commission, Gas Consumption by County, 2018*. Available at: http://www.ecdms.energy.ca.gov/gasbycounty.aspx). Accessed April 1, 2020.

4.6 GEOLOGY AND SOILS

The following questions in the Initial Study related to Geology and Soils were screened out or removed from more detailed analysis in this EIR (i.e., they were determined to have "no impact", a "less than significant impact", or be "less than significant with mitigation incorporated" in the Initial Study and are not addressed further in the EIR). These questions are described below:

Would the Project:

a) 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?

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

b) Result in substantial soil erosion or the loss of topsoil?

c) Be located on a geologic unit or soil that is unstable, or that would become unstable because of the Project, and potentially result in on-site or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

d) 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?

e) 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?

This section examines the potential environmental impacts of the proposed Project relative to Geology and Soils for the following question:

Would the Project:

a) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

4.6.1 Environmental Setting

Paleontological resources are fossilized remnants of prehistoric plants or animals preserved in soil or rock layers over time. Fossils and trace fossils are typically preserved in sedimentary rock units, typically in fine-to-medium-grained marine lake and stream deposits such as limestone, sandstone, or shale, and in ancient soils. Fossils are also typically found in coarse-grained sediments including coarse alluvium or conglomerates.

The primary geologic units underlying the Project site are shown in Figure 4.6-1, Geologic Map. As shown in Figure 4.6-1, geologic units underlying the Project site include Quaternary old alluvial fan deposits, Quaternary incredibly old alluvial fan deposits, Cretaceous gabbro metasedimentary rock, and Mesozoic metasedimentary rock (undifferentiated rock formations).

4.6.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21.2020. No comments were received during the NOP comment period that pertain to the topic of Paleontological resources.

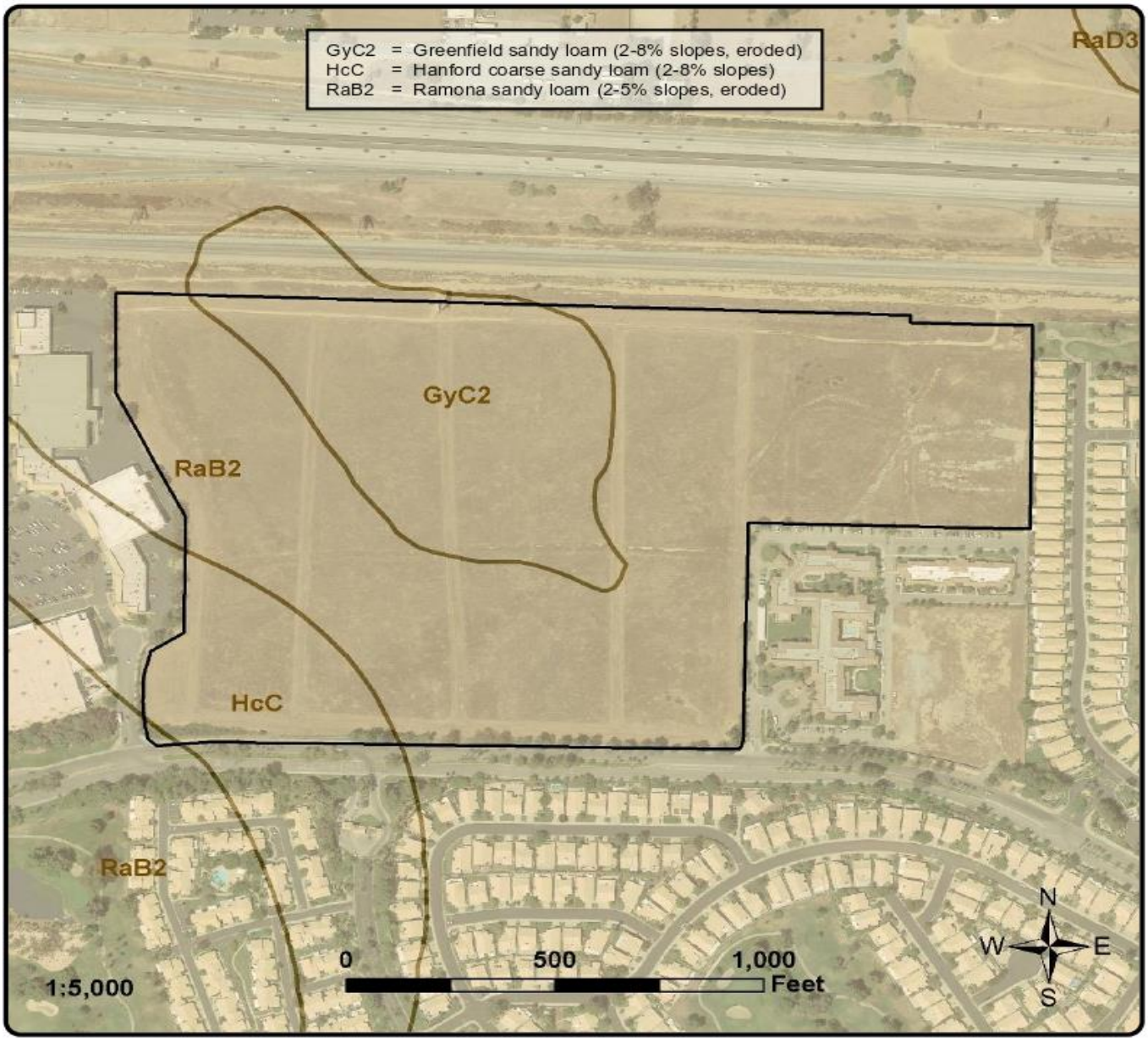
4.6.3 Regulatory Framework

Federal Regulations

Paleontological Resources Preservation Act

The Paleontological Resources Preservation Act was signed into law on March 30, 2009 (Public Law 111-11, Title VI, Subtitle D; 16 U.S.C. §§ 470aaa - 470aaa-11). The act directs the Department of Agriculture (U.S. Forest Service) and the Department of the Interior (National Park Service, Bureau of Land Management, Bureau of Reclamation, and Fish and Wildlife Service) to implement comprehensive paleontological resource management programs.

Figure 4.6.1- Soils Map



State

Public Resources Code (PRC) Section 5097.5. PRC Section 5097.5 provides for the protection of cultural and paleontological resources and prohibits the removal, destruction, injury, or defacement of archaeological and paleontological features on any lands under the jurisdiction of State or local authorities.

4.6.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on Paleontological Resources if it would:

(a) Directly or indirectly destroy a unique paleontological resource?

4.6.5 Impact Analysis

Threshold 4.6.5 (a) - Directly or indirectly destroy a unique paleontological resource?

Guidelines developed by the County of Riverside to determine the likelihood of the presence of paleontological resources at a given site. Following the County's established process, baseline information is used to assign the paleontological sensitivity of a geologic unit(s) (or members thereof) to one of four categories—Low, Undetermined, High A (Ha), and High B (Hb) potential.

The Paleontological Resources Sensitivity Map of Riverside County (MMC, 2020), indicates that paleontological sensitivity for sediments north of the fault where it traverses the Project site is classified as "Undetermined Potential (U)" which is defined as follows:

> *"Undetermined Potential (U): Areas underlain by sedimentary rocks for which literature and unpublished studies are not available have undermined potential for containing significant paleontological resources. These areas must be inspected by a field survey conducted by a qualified vertebrate paleontologist."*

The Project has a possibility of encountering paleontological resources underlying the Pleistocene deposits located on the site during grading activities. Mitigation Measures MM GEO 1 through MM GEO 3. Implementation of MM GEO 1 through MM GEO 3 will ensure impacts to paleontological resources are less than significant with mitigation incorporated.

***GEO - 1**: Paleontological Resource Impact Mitigation Program. Prior to the issuance of a grading permit, the Project Proponent shall prepare a paleontological resource impact mitigation program (PRIMP) for the grading and excavation phase of the Project, including both on- and off -site activities. The PRIMP shall be submitted for review and approval to the City of Banning*

Community Development Department and shall conform to the guidelines of the Society of Vertebrate Paleontology; including the following:

a) A trained paleontological monitor shall be present during initial mass grading or deep trenching activities within the Project in sediment areas determined likely to contain paleontological resources. If paleontological resources are located within excavation, the monitoring program will change to full-time. The monitor shall be empowered to temporarily halt or redirect construction activities to ensure avoidance of adverse impacts to paleontological resources. The monitor shall be equipped to rapidly remove any large fossil specimens encountered during excavation. During monitoring, samples shall be collected and processed to recover microvertebrate fossils. Processing shall include wet screen washing and microscopic examination of the residual materials to identify small vertebrate remains. Upon encountering a large deposit of bone, salvage of all bone in the area shall be conducted in accordance with modern paleontological techniques. All fossils collected during the Project shall be prepared to a reasonable point of identification. Excess sediment or matrix shall be removed from the specimens to reduce the bulk and cost of storage. Itemized catalogs of all material collected and identified shall be provided to the museum repository along with the specimens. A report documenting the results of the monitoring and salvage activities and the significance of the fossils will be prepared. All fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a museum repository for permanent curation and storage. All fossils collected during this work, along with the itemized inventory of these specimens, shall be deposited in a museum repository for permanent curation and storage.

Level of Significance: With implementation of Mitigation Measure GEO-1, impacts on paleontological resources would be less than significant.

4.6.6 Cumulative Impacts

The geographic setting for the analysis of cumulative impacts is the San Gorgonio Pass region of Riverside County. All subsurface Pleistocene sediments in the San Gorgonio Pass area have potential to contain significant, nonrenewable paleontological resources. Individual development projects undertaken in the region could, depending upon site conditions, constitute an incremental adverse impact on the region's paleontological resources in the absence of mitigation measures.

Implementation of the proposed Project in conjunction with other planned projects in the region could result in cumulative impacts to paleontological resources. However, other development projects would be required to undergo discretionary review and be subject to the same resource protection requirements and CEQA review as the proposed Project. For example, other development projects may require some degree of ground disturbing monitoring, which would minimize the potential to disturb significant paleontological resources. If paleontological

resources were found, they would be addressed through the necessary testing, archiving, and recovery prior to development of a site.

Level of Significance*:* With implementation of Mitigation Measure GEO-1, which requires the preparation of a paleontological resource impact mitigation program (PRIMP) for the grading and excavation phase of the Project, the Project would not make a cumulatively considerable contribution to regional paleontological resources and would therefore be cumulatively less than-significant.

4.6.7 References

County of Riverside, Map My County. (Available at: https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public.Accessed April 21, 2020.

4.7 GREEN HOUSE GAS EMISSIONS

This section of the EIR evaluates the potential for Project to cumulatively contribute to greenhouse gas (GHG) emissions. Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a Project are considered on a cumulative basis. The analysis in this section is based in part on the following technical information:

Sun Lakes North Specific Plan Amendment No.6 Air Quality and Greenhouse Evaluation, Urban Crossroads, July 3, 2020. A complete copy of this report is included in the Technical Appendices to this EIR (Appendix C).

4.7.1 Environmental Setting

Global climate change is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. Historical changes to the earth's climate have occurred naturally without human influence, as in the case of an ice age. However, scientific evidence suggests that climate shift since the Industrial Revolution is happening because of greenhouse gases resulting from human activity and industrialization over the past 200 years.

Greenhouse Gases

Gases that trap heat in the atmosphere are called greenhouse gases GHG). The primary components of GHG are described below.

- **Carbon Dioxide CO2**: Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees, and other biological materials, and because of certain chemical reactions (e.g., manufacture of cement). Carbon dioxide is removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH4)**: Methane is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and by the decay of organic waste in municipal solid waste landfills.

- **Nitrous Oxide (N2O)**: Nitrous oxide is emitted during agricultural and industrial activities, combustion of fossil fuels and solid waste, as well as during treatment of wastewater.

Each of these gases can remain in the atmosphere for different amounts of time, ranging from a few years to thousands of years. All these gases remain in the atmosphere long enough to

become well mixed, meaning that the amount that is measured in the atmosphere is roughly the same all over the world, regardless of the source of the emissions.

Effects of Climate Change in California

Public Health

Higher temperatures caused by GHG emissions may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. Higher temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

The state's water supplies are also at risk from rising sea levels. An influx of salt water could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta, a major fresh water supply.

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry, reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25 percent of the water supply, they need. California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone (O3) pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Forests and Landscapes

Global climate change has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. The risk of large wildfires in California could increase by as much as 55 percent, which is almost twice the increase expected if temperatures stay in the lower warming range.

In addition, continued global climate change has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80 percent by the end of the century because of increasing temperatures. The productivity of the state's forests has the potential to decrease because of global climate change.

Rising Sea Levels

Rising sea levels can contribute to more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Rising sea levels could inundate low-lying coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.

4.7.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21.2020. No comments were received during the NOP comment period that pertain to the topic of Greenhouse Gas Emissions.

4.7.3 Regulatory Framework

Climate change and the impact of GHG emissions is a global issue. In California, a series of executive orders and laws have generated policies and actions across State government, among local and regional governments, and within industry. These policies also have encouraged collaboration with federal agencies and spurred partnerships with many jurisdictions beyond California's borders to achieve the goal of reducing GHG emissions.

Emissions reductions are achieved through the efforts of federal, State, and regional programs, in addition to local measures that jurisdictions will implement in their community. State and federal emissions reductions are primarily achieved through regulations, such as efficiency standards for passenger vehicles (e.g., the Corporate Average Fuel Economy standards), reduction in carbon content of transportation fuels (e.g., the Low Carbon Fuel Standard), and minimum renewable energy supply requirements for utilities (e.g., the Renewables Portfolio Standard). Measures regulated and implemented by the State and federal government achieve reductions without additional action by local communities.

Some State and federal programs also require local action within communities. The California Green Building Standards Code (CALGreen) requires, at a minimum, that new buildings and renovations in California meet certain design standards. New residential and commercial buildings must meet certain baseline efficiency and sustainability standards. These baselines are established through locally adopted building codes and will result in GHG reductions.

The regulatory framework described below is targeted to the State of California, County of Riverside, and the City of Banning. Implementation of this regulatory framework will serve to reduce GHG emissions of a national and international level.

State Regulations

California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)]

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)], which created a comprehensive, multi-year program to reduce greenhouse gas emissions in California. The *2017 Scoping Plan* identifies how the State can reach the 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, and substantially advance toward the 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

From its inception, AB 32 recognized the importance of California's climate leadership and engagement with other jurisdictions,and directed the California Air Resources Board (CARB) to consultwith the federal government and other nations to identify the most effective strategies and methods to reduce GHGs, manage GHG control programs, and facilitate the development of integrated and cost-effective regional, national, and international GHG reduction programs.

The 2017 Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals.

SB 375 – Sustainable Communities and Climate Protection Act of 2008

SB 375 builds from AB 32 and aims to reduce GHG emissions by linking transportation funding to land use planning. It requires the state's metropolitan planning organizations (MPO) to create a sustainable communities strategy (SCS) in their regional transportation plans (RTP) for the purpose of reducing urban sprawl. Under SB 375, CARB established regional targets for GHG emissions reductions from passenger vehicle use for each MPO. The regional reduction targets for the Southern California Association of Governments (SCAG) region, which is the MPO with jurisdiction over the WRCOG subregion, are 8% per capita by 2020, and a conditional target of 13% per capita by 2035 from 2005 levels. In April 2012, SCAG adopted its first SCS, which demonstrates how the region will achieve the GHG emissions reduction targets set by CARB.

Regional Regulations

Southern California Association of Governments Regional Transportation Plan and Sustainable Communities Strategy

The Southern California Association of Governments (SCAG) is the regional planning agency for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties, and serves as a

forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the federally designated MPO for the Southern California region

The *Regional Transportation Plan and Sustainable Communities Strategy* (RTP/SCS) serves as a long-range transportation plan that is developed and updated by SCAG every four years. The RTP provides a vision for the development of transportation facilities throughout the region based on growth forecasts and economic trends that project over a 20-year period. The SCS expands upon transportation strategies in the RTP to analyze growth patterns and establish future land use strategies that aid the region in meeting its GHG reduction targets. The SCS does not mandate future land use policies for local jurisdictions, but rather provides a foundation of regional policy upon which local governments can build. WRCOG and its member jurisdictions partner with SCAG and are active members in the development and implementation of the RTP/SCS.

Western Riverside Council of Governments Subregional Climate Action Plan (2014)

AB 32 directed public agencies in California to support the statewide goal of reducing GHG emissions to 1990 levels by 2020. The Western Riverside Council of Governments (WRCOG) Subregional Climate Action Plan (CAP) Climate Action Plan supports AB 32 at the local level. The CAP provides a policy framework for how the subregion can do its part to reduce emissions. While compliance with AB 32 is not a requirement for local jurisdictions, demonstrating consistency with statewide reduction goals can significantly assist WRCOG jurisdictions in qualifying for incentives such as grant funding.

Local Regulations

City of Banning General Plan

The City of Banning General Plan policies that support the reduction of GHG emissions include the following:

- Water Resources Element Policy 2: The City shall require the use of drought-tolerant, low water consuming landscaping as a means of reducing water demand for new development.

- Energy and Mineral Resources Element Goal: Efficient, sustainable, and environmentally appropriate use and management of energy and mineral resources, assuring their long-term availability and affordability.

- Energy and Mineral Resources Policy 2: Promote the integration of alternative energy systems, including but not limited to solar thermal, photovoltaics and other clean energy systems, directly into building design and construction.

City of Banning Municipal Code

The City of Banning Municipal Code regulations that support the reduction of GHG emissions include, but are not limited, to the following:

- The California Building Standards Code, also known as Title 24, is a set of regulations that govern how new (and in some cases significantly remodeled) buildings in the state must be constructed. One section of Title 24 is Part 11, the California Green Building Standards Code (CALGreen), which includes standards for water use, air quality, recycling and waste reduction, and other green building-related items. A related section, Part 6 (the California Energy Code), includes building energy efficiency standards.

- Municipal Code Chapter 8.52 is intended to eliminate barriers to recycling in the City in order to enable the City to reach waste reduction goals mandated by Assembly Bill 939 and space allocation requirements mandated by the California Solid Waste Reuse and Recycling Access Act of 1991 (AB1327).

- Municipal Code Chapter 8.60 is intended to reduce congestion and air pollution caused by vehicle trips and vehicle miles traveled.

- Municipal Code Chapter 17.28 requires that a minimum of 15 percent of the net area of all parking areas shall be landscaped.

- Municipal Code Chapter 13.16 establishes a water conservation plan to reduce water consumption in the landscape environment using xeriscape principles.

- Municipal Code Chapter 17.32 establishes landscaping regulations that are intended to protect and preserve the natural environment in the City of Banning, and to incorporate green space, vegetation, and shade into the urban landscape.

- Municipal Code Chapter 17.32 implements the California State Model Water Efficient Landscape Ordinance.

4.7.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. Appendix G of the State CEQA Guidelines recognizes the following significance threshold related to greenhouse gas emissions. The Project would have a significant impact on greenhouse gas emissions if it would:

a) *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.*

b) *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) in September 2010, SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency. A proposed project would be evaluated against the tiers and a determination made as to which tier would be the most appropriate for the individual project.

- **Tier 1.** Tier 1 consists of evaluating whether the project qualifies for any applicable exemption under CEQA. If the project qualifies for an exemption, no further action is required.

- **Tier 2.** Tier 2 consists of determining whether the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing consistency determination requirements in CEQA Guidelines Sections 15064(h)(3), 15125(d), or 15152(a). The GHG reduction plan must, at a minimum, comply with AB 32 GHG reduction goals; include an emissions inventory agreed upon by either the ARB or the SCAQMD, have been analyzed under CEQA and have a certified Final CEQA document, and have monitoring and enforcement components. If the proposed project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions.

- **Tier 3.** Does the project exceed the applicable GHG screening thresholds?

  - Industrial (when SCAQMD is the Lead Agency): 10,000 MTCO2e/yr
  - Residential: 3,500 MTCO2e/yr
  - Commercial: 1,400 MTCO2e/yr
  - Mixed-use: 3,000 MTCO2e/yr If a project's GHG emissions exceed the GHG screening threshold, the project would be analyzed under Tier 4.

- **Tier 4.** Tier 4 establishes a decision tree approach that includes compliance options for projects that have incorporated design features into the project and/or implement GHG mitigation measures.

  - Efficiency Target (2020 Targets)

        - 4.8 MTCO2e per Service Population (SP) for project level threshold (land use emissions only) and total residual emissions not to exceed 25,000 MMTCO2e per year

        - 6.6 MT CO2e per SP for plan level threshold (all sectors)

    - Efficiency Target (2035 Targets)
        - 3.0 MT CO2e per SP for project level threshold .

        - 4.1 MT CO2e per SP for plan level threshold If the lead agency or project proponent cannot achieve the performance standards on any of the compliance options in Tier 4, the project related GHG emissions would be considered significant.

- **Tier 5.** Tier 5 would require projects to implement on-site and off-site GHG mitigation to include financially supporting net GHG-reducing projects sufficient to reduce GHG emission impacts for the life of the project (30 years) to less than the applicable GHG screening threshold level.

4.7.5 Impact Analysis

Threshold 4.7.5 (a) - Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Both construction and operational emissions for the Project were estimated by using the California Emissions Estimator Model (CalEEMod) which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential greenhouse gas emissions from a variety of land use projects. The model can be used for a variety of situations where a greenhouse gas emissions analysis is necessary or desirable such as California Environmental Quality Act (CEQA) documents and is authorized for use by the South Coast Air Quality Management District.

Construction Emissions

Construction activities associated with the project would result in emissions of CO2 and CH4 from construction activities. For construction phase Project emissions, GHGs are quantified and amortized over the life of the project. To amortize the emissions over the life of the project, the SCAQMD recommends calculating the total greenhouse gas emissions for the construction activities, dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions.

Operational Emissions

Operational activities associated with the Project would result in emissions of CO2, CH4, and N2O from the following primary sources: Area Source Emissions; Energy Source Emissions (combustion emissions associated with natural gas and electricity); Mobile Source Emissions; Water Supply, Treatment, and Distribution; and Solid Waste. Each is discussed below.

- **Area Source Emissions:** Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the project.

- **Energy Source Emissions Combustion Emissions Associated with Natural Gas and Electricity:** GHGs are emitted from buildings because of activities for which electricity and natural gas are typically used as energy sources.

- **Mobile Source Emissions:** Vehicles GHG emissions also would result from mobile sources associated with the project. Project mobile source emissions are dependent on both overall daily vehicle trip generation and the effect of the project on peak hour traffic volumes and traffic operations in the vicinity of the project.

- **Water Supply, Treatment and Distribution:** Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water.

Table 4.7-1 below summarizes the total amount of GHG emissions that will be generated at buildout of the Project.

Table 4.7.1 - Total Greenhouse Gas Emissions

Emission Source	Emissions (MT/yr)			
	CO2	CH4	N20	Total CO2e
Construction (amortized over 30 years)	128.61	2.00E-05	0	6.58E-03
Area	0.024	6.00E-05	0	0.0256
Energy	2,457.91	0.0987	0.0222	2,467.00
Mobile	7,330.65	0.3031	0	7,338.23
Waste	342.8822	20.2638	0	849,4761
Water Usage	957,9059	6.9501	0.1709	1,182.57
Total C02e (All Sources)	**11,966.27**			

Source: Sun Lakes North Specific Plan Amendment No. 6 Air Quality and Greenhouse Gas Evaluation (Appendix B).

For this Project, the Tier 3 screening threshold is applied for screening purposes. As shown in Table 4.7-1 above, the Project site will generate 11,966.30 MTCO2e per year from construction, area, energy, mobile, waste, and water usage which exceeds the Tier 3 screening threshold of 3,000 MTCO2e per year. As such, impacts are potentially significant.

In order to reduce impacts to the maximum extent feasible, the City of Banning regulations that support the reduction of GHG emissions identified under Local Regulations on page 4.2-5 and 4.2-6 are required of the Project and will be imposed on future development projects. In addition, the following Mitigation Measures are required:

GHG-1: GHG Reduction Documentation. *Prior to the issuance of a building permit, documentation that the following GHG reduction measures shall be implemented by future development projects is required. Documentation may consist of a letter stating how the project will comply and identify the verification mechanism for each measure required below (e.g. shown on building plans, landscaping plans, etc.)*

The project shall devise a comprehensive water conservation strategy to reduce water use during project operation. The strategy will include the following:

1) *Install drought-tolerant plants for landscaping.*

2) *Install water-efficient irrigation systems, such as weather-based and soil-moisture- based irrigation controllers and sensors, for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance.*

3) *Ensure that all landscape and irrigation measures follow the City of Banning's Landscaping and Water Conservation requirements.*

GHG-2: Building Design. *The project will design building shells, building components, such as windows, roof systems and electrical systems to meet 2016 Title 24 Standards (or applicable requirements in effect at the time a building permit is applied for).*

GHG-3: LEED Features*. Buildings will be designed to provide CALGreen Standards with Leadership in Energy and Environmental Design (LEED) features for potential certification and will employ energy and water conservation measures in accordance with such standards. This includes design considerations related to the building envelope, HVAC, lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.*

GHG-4. Energy Efficient Lighting*. Prior to the issuance of a building permit, building plans shall require that high-efficiency lighting (such as LED lighting that is 34 percent more efficient than fluorescent lighting) be installed within buildings on-site.*

GHG-5. Efficient Building Materials/Equipment. *The project will utilize building materials/methods and heating equipment that are efficient and reduce emissions that may include, but not limited to, high-efficiency heat pumps; thin insulating materials; windows and building surfaces with tunable optical properties; high efficiency lighting devices; improved software for optimizing building design and operation; low cost, easy to install, energy harvesting sensors and controls; interoperable building communication systems; and optimized control strategies.*

GHG-6. Reduce Indoor Water Demand. *Prior to the issuance of a building permit, building plans shall require that all faucets, toilets, and showers installed in the proposed structures utilize low-flow fixtures that would reduce indoor water demand by 20% per CalGreen Standards.*

Level of Significance: Even with implementation of mandatory Municipal Code requirements and Mitigation Measures GHG-1 through GHG-6, impacts are **significant and unavoidable.**

Threshold 4.7.5 (b)-Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The City does not currently have an adopted plan, policy, or regulation for the purpose of reducing GHG emissions; however, there are regional and State plans as described on pages 4.7-

3 through 4.7-6 that apply to the Project. No other applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions apply to the project, other than those noted above.

The Project is evaluated relative to the goals SCAG's 2016-2040 RTP/SCS and the City's adopted General Plan policies that pertain to GHG emissions.

California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)]

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)], which created a comprehensive, multi-year program to reduce greenhouse gas emissions in California. The *2017 Scoping Plan* identifies how the State can reach the 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, and substantially advance toward the 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

Achieving the statewide AB 32 target reduction of 40 percent from 1990 and 80 percent below 1990 levels as identified in the 2017 Scoping Plan is generally not applicable to the project in many instances as this target is statewide, and the majority of GHG emissions are generated from industrial sources (such as electrical generating plants) and mobile vehicle emissions, both of which are regulated by other state and federal agencies and are outside the control of the City of Banning.

Notwithstanding, the following demonstrates the Project's consistency with the 2017 Scoping Plan.

Table 4.7-2 provides a summary of the Climate Change Policies and Measures discussed in the Scoping Plan, including, but not limited to, those identified specifically to achieve the 2030 target. The project's consistency with the major elements of the *2017 Scoping Plan* to achieve the GHG reductions are described in Table 4.7-2.

Table 4.7.2 - Scoping Plan Consistency Analysis

2017 Scoping Plan Measures to Reduce GHG Emissions	Responsibility for Implementation
<u>Implement SB 350 by 2030</u>: • Increase the Renewables Portfolio Standard to 50 percent of retail sales by 2030 and ensure grid reliability. • Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030. • Reduce GHG emissions in the electricity sector through the implementation of the above	**Not Applicable.** The agencies responsible for implementing these measures are the California Public Utilities Commission, California Energy Commission, and the California Air Resources Board.

2017 Scoping Plan Measures to Reduce GHG Emissions	Responsibility for Implementation
measures and other actions as modeled in IRPs to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.	
<u>Implement Mobile Source Strategy (Cleaner Technology and Fuels)</u>: • At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025. • At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030 • Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Cars regulations. • Medium- and heavy-duty GHG Phase 2. • Transition to a suite of to-be-determined innovative clean transit options. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NOX standard. • Last Mile Delivery: New regulation that would result in the use of low NOX or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. • Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies.	**Not in Conflict.** The agencies responsible for implementing these measures are the California Air Resources Board, California State Transportation Agency, Strategic Growth Council, CalTrans California Energy Commission, and the Governor's Office of Planning & Research. Customers, employees of, and deliveries to the proposed Project will utilize these vehicles as they become available. As it applies to the project, the project follows the measures to reduce vehicles miles traveled and the policies contained in the SCAG 2016-2040 RTP/SCS Goals. (See Section 4.9- Land Use and Planning).
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	**Not in Conflict**. The agencies responsible for implementing this measure is the California Air Resources Board. As it applies to the project, the project follows the measures contained in the SCAG 2016-2040 RTP/SCS Goals. (See Section 4.9- Land Use and Planning).
<u>Adjust performance measures used to select and design transportation facilities:</u> • Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g. via guideline documents, funding programs, project selection, etc.).	**Not Applicable.** The agencies responsible for implementing these measures are the California State Transportation Agency, Strategic Growth Council, Office of Planning and Research, California Air Resources Board, Governor's Office of Business and Economic Development, California Infrastructure Economic Development Bank, Department of Finance, California Transportation Commission, and Caltrans

2017 Scoping Plan Measures to Reduce GHG Emissions	Responsibility for Implementation
Develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	**Not Applicable.** The agencies responsible for implementing these measures are the California State Transportation Agency, Caltrans, Governor's Office of Planning & Research, Strategic Growth Council, the California Air Resources Board.
Implement California Sustainable Freight Action Plan: • Improve freight system efficiency. • Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Not Applicable.** The agencies responsible for implementing these measures are the California State Transportation Agency, California Transportation Commission, California Environmental Protection Agency, California Natural Resources Agency, California Air Resources Board, CalTrans, California Energy Commission, and the Governor's Office of Business and Economic Development,
Adopt a Low Carbon Fuel Standard with a CI reduction of 18 percent	**Not Applicable.** The agency responsible for implementing this measure is the California Air Resources Board.
Implement the Short-Lived Climate Pollutant Strategy by 2030: • 40 percent reduction in methane and hydrofluorocarbon emissions below 2013 levels. • 50 percent reduction in black carbon emissions below 2013 levels.	**Not Applicable**. The agency responsible for implementing these measures are the California State Transportation Agency, California Environmental Protection Agency, California Natural Resources Agency, California Air Resources Board, CalTrans, California Energy Commission, and the California Infrastructure Economic Development Bank,
Develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	**Not Applicable.** The agencies responsible for implementing these measures are the California Air Resources Board, CalRecycle, California Department of Food and Agriculture, and the State Water Resources Control Board,
Develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink: • Protect land from conversion through conservation easements and other incentives. • Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity. • Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments. • Establish scenario projections to serve as the foundation for the Implementation Plan.	**Not Applicable.** The agencies responsible for implementing these measures are the California Natural Resources Agency, California Department of Food and Agriculture, California Environmental Protection Agency, and California Air Resources Board.
Establish a carbon accounting framework for natural and working lands as described in SB 859.	**Not Applicable.** The agency responsible for implementing this measure is the California Air Resources Board.
Implement Forest Carbon Plan	**Not Applicable.** The agencies responsible for implementing this measure are the California Natural

2017 Scoping Plan Measures to Reduce GHG Emissions	Responsibility for Implementation
	Resources Agency, CAL FIRE, and the California Environmental Protection Agency.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	**Not Applicable.** These measures involve State sources, such as the Greenhouse Gas Reduction Fund (cap-and-trade auction proceeds), the Alternative and Renewable Fuel and Vehicle Technology Program (AB 118), Electric Program Investment Charge (EPIC) Program, Carl Moyer Program, Air Quality Improvement Program, and Proposition 39 to expand clean energy investments in California and further reduce GHG and criteria emissions.

Source: California's 2017 Climate Change Scoping Plan.

Western Riverside Council of Governments

Until the City formally adopts a climate action plan, local development is not required to be consistent on a project-by- project evaluation of GHG emissions identified in the Western Riverside Council of Governments Subregional Climate Action Plan, so the Project was evaluated relative to the goals of AB 32, SB 32, the City's adopted General Plan policies that pertain to GHG emissions, and the Southern California Association of Governments' *2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy* (2016 RTP/SCS or Plan) as shown in Table 4.7-2 above.

4.7.6 Cumulative Impacts

No single land use project could generate enough greenhouse gas (GHG) emissions to noticeably change the global average temperature. Cumulative GHG emissions, however, contribute to global climate change and its significant adverse environmental impacts. The proposed project would generate a net increase in GHG emissions and would exceed the SCAQMD Working Group's bright-line threshold of 3,000 MTCO2e for all land use types.

Level of Significance: Even with implementation of Mitigation Measures GHG-1 through GHG-6, impacts are cumulatively considerable.

4.7.7 References

City of Banning, City of Banning General Plan, adopted January 18, 2006. Available at http://www.ci.banning.ca.us/468/General-Plan-Amendments, accessed April 1, 2020.

City of Banning, City of Banning Municipal Code, Title 17, Zoning, April 29, 2020. (Available at https://library.municode.com/ca/banning/codes/code_of_ordinances?nodeId=TIT17ZO. Accessed on May 5, 2020.

California Air Resource Board, California's 2017 Climate Change Scoping Plan, November 2017. (Available at https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf, accessed May 16, 2020. (CARB 2017)

South Coast Air Quality Management District, Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15, September 28, 2010.(Available at: http://www.aqmd.gov/docs/defaultsource/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significancethresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-mainpresentation.pdf?sfvrsn=2, accessed June 1, 2020.

Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, adopted April 7, 2016. Available at http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf, accessed June 19, 2020.

Western Riverside Council of Governments, Subregional Climate Action Plan, September 2014. Available at: http://www.wrcog.cog.ca.us/DocumentCenter/View/188, accessed June 2, 2020).

4.8 HYDROLOGY AND WATER QUALITY

This section of the EIR evaluates the potential impacts to hydrology and water quality conditions in the City of Banning from implementation of the proposed Project. Hydrology deals with the distribution and circulation of water, both on land and underground. Water quality deals with the quality of surface and groundwater.

The following questions in the Initial Study related to Hydrology and Water Quality were screened out or removed from more detailed analysis in this EIR (i.e., they were determined to have "no impact", a "less than significant impact", or be "less than significant with mitigation incorporated" in the Initial Study and are not addressed further in the EIR). These questions are described below:

Would the Project:

- *In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

- *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

Section 4.8.6 *Impact Analysis* examines the potential environmental impacts of the proposed Project relative to Hydrology and Water Quality for the following questions:

Would the Project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

b) 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 that 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 offsite?

(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?

(V) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

4.8.1 Environmental Setting

Hydrology

The Project site is covered by the *Master Drainage Plan for the City of Banning* ("Drainage Plan") prepared by the Riverside County Flood Control and Water Conservation District ("District") in 1975. The Drainage Plan addresses the current and future drainage needs of a given community. The boundary of the Drainage Plan usually follows regional watershed limits. The proposed facilities may include channels, storm drains, levees, basins, dams, wetlands, or any other conveyance capable of economically relieving flooding problems within the plan area. The Drainage Plan includes an estimate of facility capacity, sizes, and costs.

The area covered by the Drainage Plan is approximately 19 square miles in size. It covers the bulk of the territory within the City of Banning. The Drainage Plan area is bounded roughly by the San Gorgonio River on the north, Smith Creek on the South, Hathaway Street on the east, and Highland Springs Road on the west.

The Drainage Plan involves the construction of several debris basins, major open channels, and a network of underground storm drains. The drainage system will collect flows emanating from the Project site and transport the flows to natural washes leading south to Smith Creek.

Water Quality

The Project site is located within the Whitewater River Region which includes the urbanized areas that lie approximately between Banning and the San Gorgonio Pass area to the northwest and the Salton Sea to the southeast. The area of Riverside County in the Whitewater River Region is under the jurisdiction of the Colorado River Regional Water Quality Control Board ("Regional Water Board"). The Whitewater River Region is approximately 367 square miles, which is approximately 5 percent of the 7,300 square miles within Riverside County

The Project site is subject to the provisions contained in the Whitewater River Region Stormwater Management Plan (SWMP) The SWMP describes those activities and programs implemented by the Permittees to manage urban runoff to comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) permit (MS4 Permit) for the Whitewater River Region.

The Permittees have revised the SWMP to address 2013 MS4 Permit requirements related to the planning and permitting of New Development and Redevelopment Projects within their jurisdictions. The objective of the New Development/Redevelopment Program is to ensure that

controls are in place to prevent or minimize water quality impacts from New Development and Redevelopment Projects to the maximum extent practical (MEP). The development approval and permitting processes carries forth project-specific requirements in the form of conditions of approval, design criteria, tracking, inspection, and enforcement actions.

Potential Pollutants of Concerns that the Project may emit because of construction, vehicle parking, material loading and unloading, landscape maintenance may include the following:

- Green Wastes
- Herbicides
- Oil and Grease Spills
- Paint Products
- Pesticides
- Solvents
- Trash and Debris

4.8.2 NOP/Scoping Comments

The Riverside County Flood Control and Water Conservation District submitted a letter dated March 3, 2020 stating that the Project would not be impacted by District Master Drainage Plan facilities and identified general information with respect to permits that may be required by regulatory agencies.

4.8.3 Regulatory Framework

Federal Regulations

Federal Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, the US Environmental Protection Agency (EPA) has implemented pollution control programs such as setting wastewater standards for industry. EPA has also developed national water quality criteria recommendations for pollutants in surface waters.

On April 15, 2019, the EPA issued an Interpretative Statement clarifying the application of Clean Water Act (CWA or the Act) permitting requirements to groundwater. EPA concluded that releases of pollutants to groundwater are categorically excluded from the Act's permitting requirements because Congress explicitly left regulation of discharges to groundwater to the states and to EPA under other statutory authorities.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, created in 1972 by the Clean Water Act (CWA), helps address water pollution by regulating point sources that discharge pollutants to waters of the United States. Under the CWA, EPA authorizes the NPDES permit program to state, tribal, and territorial governments, enabling them to perform many of the permitting, administrative, and enforcement aspects of the NPDES program. California is authorized to implement CWA programs, but EPA retains oversight responsibilities.

The CWA prohibits anybody from discharging "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. The permit will contain limits on what can be discharged, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality or people's health. The permit translates general requirements of the Clean Water Act into specific provisions tailored to the operations of each project discharging pollutants.

National Flood Insurance Program

The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to new construction in floodplains, the Federal Government will make flood insurance available within the community as a financial protection against flood losses.

This insurance is designed to provide an insurance alternative to disaster assistance to reduce the escalating costs of repairing damage to buildings and their contents caused by floods. The Federal Insurance and Mitigation Administration (FIMA) within the Federal Emergency Management Agency (FEMA) is responsible for administering the NFIP and administering programs that provide assistance for mitigating future damages from natural hazards. Chapter 15.64 - *Floodplain Management* of the Municipal Code provides the mechanism for the Federal Government to make flood insurance available in Banning.

Local Regulations

City of Banning General Plan

The General Plan contains the following policies and programs with respect to hydrology and water quality.

- Water Resources Element Policy 5: The City shall provide guidelines for the development of on-site storm water retention facilities consistent with local and regional drainage plans and community design standards.

    - Program 5.A: Enforce regulations and guidelines for the development and maintenance of project-specific on-site retention/detention basins which implement the NPDES program, enhance groundwater recharge, complement regional flood control facilities, and address applicable community design policies.

- Flooding and Hydrology Element Policy 6: All new development shall be required to incorporate adequate flood mitigation measures, such as grading that prevents adverse drainage impacts to adjacent properties, on-site retention of runoff, and the adequate siting of structures located within flood plains.
    - Program 6.A: Stormwater retention shall be enforced through the development review process and routine site inspection.

City of Banning Municipal Code

The following provision from the City's Municipal Code help minimize stormwater impacts associated with new development projects and are relevant to the proposed Project.

Chapter 13.24 - Stormwater Management System

The intent of this chapter is to protect and enhance the water quality of city watercourses, water bodies, groundwater, and wetlands in a manner pursuant to and consistent with the Clean Water Act.

4.8.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on Hydrology and Water Quality if it would:

(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

(b) 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 that 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 offsite?
(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?

(c) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

4.8.5 Impact Analysis

4.8.5 (a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Waste Discharge Requirements

Waste Discharge Requirements (WDRs) are issued by the Colorado River Regional Water Quality Control Board under the provisions of the California Water Code, Division 7 "Water Quality," Article 4 "Waste Discharge Requirements." These requirements regulate the discharge of wastes which are not made to surface waters, but which may impact the region's water quality by affecting underlying groundwater basins. Such WDRs are issued for Publicly Owned Treatment Works' wastewater reclamation operations, discharges of wastes from industries, subsurface waste discharges such as septic systems, sanitary landfills, dairies, and a variety of other activities which can affect water quality. The Project will connect to the sanitary sewer system operated by the City of Banning. As such, the Project will not violate Waste Discharge Requirements.

Water Quality Requirements

The Porter-Cologne Water Quality Control Act defines water quality objectives (i.e. standards) as "…the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area" (Water Code, § 13050(h).).

Construction Impacts

Construction of the Project would involve clearing, grading, paving, utility installation, building construction, and the installation of landscaping, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction activities in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Colorado River Regional Water Quality Control Board and the City of Banning, the Project proponent will be required to obtain a National Pollutant Discharge Elimination System Municipal Stormwater Permit for construction activities. The National Pollutant Discharge Elimination System permit is required for all Projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of total land area.

Compliance with the National Pollutant Discharge Elimination System permit and the Colorado River Basin Water Quality Control Program involves the preparation and implementation of a Storm Water Pollution Prevention Plan for construction-related activities, including grading. The Storm Water Pollution Prevention Plan would specify the Best Management Practices that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the site.

In addition, Chapter 13.24.110 - *Construction sites and onsite storage and infiltration of* stormwater of the Municipal Code states:

"Any person performing construction work in the city shall comply with the provisions of this chapter and the Uniform Building Code, latest edition, for erosion and sediment control, as well as City of Banning Ordinance 1388 which is incorporated by reference hereto. In addition, except as waived by or agreed to by the director or the director's designee consistent with NPDES permit provisions and requirements, development of all land within the city must include provisions for the management of stormwater runoff from the property which is to be developed, including volumetric or flow based treatment control BMP design criteria, and/or exceptions to these requirements, and methodologies used to ensure proper management of stormwater runoff post-construction. This management shall consist of constructing storage and/or infiltration facilities, which includes basins. At a minimum, all development will make provisions to store runoff from rainfall events up to and including the one-hundred-year, three-hour duration event. Post-development peak urban runoff discharge rates shall not exceed pre-development peak urban runoff discharge rates."

Operational Impacts

With implementation of the mandatory construction storm water management requirements as described above, impacts are less than significant.

Operational Impacts

Storm water pollutants commonly associated with the type of land uses that could occupy the proposed buildings include sediment/turbidity, nutrients, trash and debris, oxygen-demanding substances, organic compounds, bacteria and viruses, oil and grease, and pesticides.

Pursuant to the requirements of the City's National Pollutant Discharge Elimination System permit, a Water Quality Management Plan is required for managing the quality of storm water or urban runoff that flows from a developed site after construction is completed and the facilities or structures are occupied and/or operational. A Water Quality Management Plan describes the Best Management Practices that will be implemented and maintained throughout the life of a project to prevent and minimize water pollution that can be caused by storm water or urban runoff. The Project is proposing a water quality basin in the southwest corner of the site that will meet the requirements of the City's National Pollutant Discharge Elimination System permit.

The Project site currently drains southerly to Sun Lakes Boulevard. The portion of the site which drains to Sun Lakes Boulevard, sheet flows to existing storm drain system which conveys the flows to Smith Creek to the east. Given the size of the Project site and the type of development allowed, the proposed on-site storm drain system would like to consist of landscaping / retention areas and underground or above ground detention basins.

In addition, Chapter 13.24.120 (New development and redevelopment) of the Municipal Code states*:*

(d) Acceptable methods and standards for controlling stormwater runoff volumes, rates, and pollutant load may include, but are not limited to, the following:

1) Increase Permeable Areas. Avoid placing impervious surfaces in highly porous soil areas; incorporate landscaping and open space into the project design; use porous materials for or near driveways and walkways; incorporate detention ponds and infiltration pits into the project's design; avoid placing pavement and other impervious surfaces in low-lying areas.

2) Direct Runoff to Permeable Areas. Direct stormwater runoff away from impermeable areas to swales, berms, green strip filters, gravel beds, and French drains. Install rain gutters and orient them toward permeable areas. Modify the grade of the property to divert flow to permeable areas and minimize the amount of stormwater runoff leaving the property. When designing curbs, berms, or other structures, avoid designs which isolate permeable or landscaped areas.

3) *Maximize Stormwater Storage for Reuse. Use retention structures, subsurface areas, cisterns, or other structures to store stormwater runoff for reuse or slow release.*

4) *Any new development shall comply with the provisions of this chapter, City of Banning Ordinance 1388 and the municipal NPDES permit, all of which are incorporated by reference hereto.*

Level of Significance: With implementation of the mandatory storm water management requirements as described above, impacts are less than significant.

4.8.5 (b) 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 that would:

i) Result in substantial erosion or siltation on- or off-site?

Construction Impacts

The Project site is relatively flat. The Project will be designed to generally maintain the existing topography of the site, with minor modifications as necessary to accommodate site development and proposed drainage conditions. Nonetheless, construction of the Project would involve substantial ground disturbance during clearing and grading of the site. In addition, on-site erosion could occur if graded slopes are not stabilized prior to ultimate development or landscaping. The proposed grading activities would generate fair amounts of silt which could be carried off-site during a heavy rainfall event. Should such an event occur in the absence of any preventative measures to contain silt and other soils on-site, erosion and/or siltation downstream would result.

However, pursuant to requirements of the Colorado River Regional Water Quality Control Board, the Project Proponent would be required to obtain a NPDES permit for construction activities on-site. The NPDES permit is required for all projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one (1) acre of total land area. Compliance with the NPDES permit involves the preparation and implementation of a SWPPP for construction related activities. The SWPPP would specify BMPs to minimize the potential for erosion and siltation to occur and would include specific Project site measures to address the potential for the caving in of temporary excavations. Typical BMPs that are implemented at construction sites to protect water quality include the implementation of straw bale barriers, plastic sheeting/erosion control blankets, and outlet protection measures. With mandatory adherence to the SWPPP requirements during construction activities, effects associated with erosion, siltation, water quality, and flooding on downstream water sources and flood control systems would be maintained at a level below significance.

In addition, Chapter 18.15 - *Erosion and Sediment Control* of the Municipal Code states:

All individual construction and grading projects shall implement measures to ensure that pollutants are not discharged from the site, will be reduced to the maximum extent practicable (MEP), and will not cause or contribute to an exceedance of water quality objectives in the local natural watercourses. All construction and grading activities will follow applicable ordinances, permits and other federal, state, and local requirements.

Operational Impacts

With buildout of the Project, the site would generally be converted from vacant land to developed land consisting of urban land uses and ornamental landscaping. As compared to existing conditions, development would reduce the site's potential for generating substantial amounts of erosion or siltation because previously undeveloped areas that contribute to erosion and siltation would be replaced by buildings, paving, and landscaped areas. Moreover, with incorporation of water quality/detention basins that would address water quality and would reduce the amount of siltation in site runoff.

Level of Significance: Less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

The Project site currently drains southerly to Sun Lakes Boulevard. The portion of the site which drains to Sun Lakes Boulevard, sheet flows to existing storm drain system which conveys the flows to Smith Creek to the east. Given the size of the Project site and the type of development allowed, the proposed on-site storm drain system will likely consist of landscaping / retention areas and underground or above ground detention basins.

Section 13.24.110 of the Municipal Code requires land development activities to include provisions for the management of stormwater runoff from the property, which is to include volumetric or flow based treatment control BMP design criteria, which shall consist of constructing storage and/or infiltration facilities including basins, and make provision to store runoff from rainfall events up to and including the 100-year, 3-hour duration event. Post development peak urban runoff discharge rates may not exceed pre-development peak urban runoff discharge rates.

Level of Significance: With mandatory compliance of the requirements contained in Section 13.24.110 of the Municipal Code, impacts 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?

As discussed previously, future development facilitated by implementation of the proposed Project, including both on-site and off-site infrastructure, would result in changes to the absorption rates, drainage patterns, and the corresponding rate and amount of surface runoff of the existing Project area. The proposed land uses would be in previously undisturbed areas and would result in new impervious surfaces that would generate additional stormwater flows. However, site development resulting from the implementation of the Project would include upgrades to drainage and stormwater facilities that would either prevent site development from causing an exceedance of existing downstream drainage system capacity.

While the development of the site would introduce urban uses into a currently undeveloped area with corresponding increases in potential pollutants that could impact storm water runoff from the site, water quality BMPs implemented pursuant to existing regulations, previously described in Impact Analysis 4.8.6 (b) (ii) would reduce these impacts to a less than significant level in the construction phase, interim development phase, and final build out phase of the Project. Accordingly, Project impacts relative to flood control system capacity and water quality would be less than significant.

On January 12, 2010, the City of Banning adopted Ordinance No. 1415, amending Title 13, Chapter 13.24, of the Municipal Code (now entitled "Stormwater Code") to bring it into compliance with the requirements of its Municipal NPDES Permit No. CAS617002 (R7-20080001). Among other things, the amended Stormwater Code addresses water quality on construction sites (Section 13.24.110 (Construction Sites)), which was amended in its entirety, and new development (Section 13.24.120 (New Development and Redevelopment)), which was also amended in its entirety. Section 13.24.120 requires new development to control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of water and further requires new development to implement BMPs designed to control the rate and volume of stormwater runoff from new developments so as to minimize the discharge and transport of pollutants.

Level of Significance*:* Less than significant.

iv) Impede or redirect flood flows?

FEMA is responsible for determining flood elevations and floodplain boundaries based on studies performed by the U.S. Army Corps of Engineers (USACE). FEMA is also responsible for distributing the Flood Insurance Rate Maps (FIRMs), which are used in the NFIP. These maps identify the locations of special flood hazard areas, including the 100-year flood plain. According to FEMA FIRM Panel No. 060246, the Project site is not located within an Area of Minimal Flood Hazard.

In addition, future development will be subject to Chapter 15.64 of the Municipal Code which authorizes the City to restrict or prohibit uses that could be dangerous to health safety, and property due to water or erosion hazards, to control the alteration of natural floodplains, stream channels, and natural protective barriers, to control filling, grading, dredging and other development that may increase flood damage, to prevent or regulate the construction of flood

barriers which could divert flood waters or increase flood hazards in other areas, and to require measures to protect uses against flood damage at the time of construction.

Level of Significance: No impact.

4.8.5 (c) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Water Quality Control Plan

The Colorado River Regional Water Quality Control Board regulates waste discharges to minimize and control their effects on the quality of the region's ground and surface water. As it affects the Project, the primary regulatory tool is the National Pollutant Discharge Elimination System (NPDES). The Clean Water Act prohibits anybody from discharging "pollutants" through a "point source" into a "water of the United States" unless they have an NPDES permit. The permit will contain limits on what you can discharge, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality or people's health.

As previously stated, on January 12, 2010, the City of Banning adopted Ordinance No. 1415, amending Title 13, Chapter 13.24, of the Municipal Code (now entitled "Stormwater Code") to bring it into compliance with the requirements of its Municipal NPDES Permit No. CAS617002 (R7-20080001. Among other things, the amended Stormwater Code addresses water quality on construction sites (Section 13.24.110 (Construction Sites), which was amended in its entirety, and new development (Section 13.24.120 (New Development and Redevelopment), which was also amended in its entirety Section 13.24.120 requires new development to control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of water and further requires new development to implement BMPs designed to control the rate and volume of stormwater runoff from new developments so as to minimize the discharge and transport of pollutants.

With implementation of the drainage system improvements described above, the Project will not conflict with or obstruct implementation of a Water Quality Control Plan. Impacts are less than significant.

Sustainable Groundwater Management Plan

The Sustainable Groundwater Management Act (SGMA) classifies California's 515 groundwater basins into one of four categories high, medium, low, or very low-priority. According to the SGMA Basin Prioritization Dashboard accessed on June 25, 2020, the Project site is located within the Coachella Valley- San Gorgonio Pass Basin and is classified as "medium" priority. The SGMA requires medium- and high-priority basins to develop groundwater sustainability agencies

(GSAs), develop groundwater sustainability plans (GSPs) and manage groundwater for long-term sustainability.

The City of Banning in conjunction with the San Gorgonio Pass Water Agency, Banning Heights Municipal Water Agency, Cabazon Water District, Desert Water Agency, and the Mission Springs Water District is currently developing the *Groundwater Sustainability Plan for the San Gorgonio Pass Subbasin of the Coachella Basin.* At this time, the Plan is not adopted. However, it is anticipated that the plan will be in effect to manage and monitor groundwater affecting the Project area.,

Level of Significance*:* Less than significant.

4.8.6 Cumulative Impacts

Cumulative impacts to hydrology and water quality are impacts that would result from incremental changes that degrade water quality or contribute to drainage and flooding problems within the Banning area. The City of Banning's General Plan EIR notes that the construction of development resulting from implementation of the City's General Plan would eventually contribute to increased runoff generated in the entire General Plan Study Area, in which the proposed Project is included, and proposed Mitigation Measures to reduce these impacts to a less than significant level.

Although the proposed Project in combination with other cumulative projects in the Banning area represents an incremental change in regional drainage patterns and additional developed surfaces, the proposed Project as well as other cumulative projects are required to construct a number of on- and off -site facilities that would mitigate cumulative drainage and flooding conditions, as well as mitigate potential water quality impacts, as discussed throughout this section. With the Project Design Features proposed to mitigate potential impacts to hydrology and water quality and the regulatory requirements applicable to all development within the Banning area, the proposed Project would not significantly contribute to cumulative or regional drainage or water quality impacts.

Level of Significance: Less than significant.

4.8.7 References

Plan Colorado River Basin-Region 7 (aka "Basin Plan"). Includes amendments adopted by the Regional Board through August 2017. Available at http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/, accessed August 21, 2020. California Regional Water Quality Control Board, Colorado River Basin. *Water Quality Control*

City of Banning. *General Plan,* Adopted January 31, 2006. Available at http://ci.banning.ca.us/468/General-Plan-Amendments , accessed May 21, 2020.)

City of Banning, City of Banning Municipal Code Title 13, Chapter 13.24, April 29, 2020. (Available at: https://library.municode.com/ca/banning/codes/code_of_ordinances?nodeId=TIT17ZO. Accessed on May 5, 2020.)

City of Banning, City of Banning Municipal Code, Chapter 15.64, April 29, 2020. Available at https://library.municode.com/ca/banning/codes/code_of_ordinances?nodeId=TIT17ZO. Accessed on May 5, 2020.

Krieger & Stewart Engineering Consultants. *City of Banning 2015 Urban Water Management Plan*. May 2016. (Available a:t https://www.ci.banning.ca.us/DocumentCenter/View/4543, accessed June 19, 2020. (UWMP).

State Water Resources Control Board. *Order No. 2009-0009-DWQ, NPDES No. CAS000002, National Pollutant Discharge Elimination System General Permit (and Waste Discharge Requirements) for Storm Water Discharges Associated with Construction and Land Disturbance Activities.* Adopted September 2, 2009. (Available at http://www.swrcb.ca.gov/water_issues/programs/stormwater/constpermits. shtml. Accessed May 16, 2020).

State of California, Regional Water Quality Control Board, Colorado River Basin Region. *Order No. R7-2013-0011, NPDES No. CAS617002, Waste Discharge Requirement for Discharges from the Municipal Separate Storm Sewer System (MS4) within the Whitewater River Watershed Riverside County Flood Control and Water Conservation District, Owner/Operator, County of Riverside, Owner/Operator, Coachella Valley Water District, Owner/Operator, and Incorporated Cities of Riverside County within the Whitewater River Basin, Owners/Operators.* Adopted June 20, 2013. (Available at http://rcflood.org/downloads/NPDES/Documents/WW_Other/Final%20Adopted%20Order%20No.R7-2013-0011.pdf, accessed August 25, 2020.

4.9 LAND USE AND PLANNING

This Section discusses consistency of the Project with applicable land use and planning policies adopted by the City of Banning and other governing agencies for the purpose of reducing adverse effects on the physical environment. Information used to support the analysis in this Subsection was obtained from the City of Banning General Plan, Zoning Ordinance; the Southern California Association of Governments' (SCAG's) *Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (SCAG, 2016)*; and the Regional Conservation Authority (RCA).

The following question in the Initial Study related to Land Use and Planning was screened out or removed from more detailed analysis in this EIR because it was determined to have no impact based on the analysis contained in the Initial Study (Appendix A).

Would the Project:

Physically divide an established community.

Section 4.9.6 *Impact Analysis* examines the potential environmental impacts of the proposed Project relative to Land Use and Planning for the following question:

Would the Project:

(a) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

4.9.1 Environmental Setting

The site is a disturbed vacant lot. Existing and surrounding land uses include railroad tracks and Interstate 10 to the north; Sun Lakes Boulevard followed by single-family residential homes to the south; senior apartments/assisted living/memory care residential facility and single-family residential homes to the east; and a shopping center to the west.

The Project site is located within the boundaries of the Sun Lakes Village North Specific Plan ("Specific Plan"). The Specific Plan was adopted pursuant to *California Government Code Sections 65450-65457, Article 8 (Specific Plans)* and serves as the zoning requirements applicable to the Project site and implements the goals and policies of the General Plan. The Specific Plan contains detailed development standards, distribution of land uses, infrastructure requirements, and implementation measures for the development of a specific geographic area.

The Project proposes Specific Plan Amendment No. 6 to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary I-10 Freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage. (See Figure 2- Land

Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

4.9.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21.2020. No comments were received during the NOP comment period that pertain to the topic of Land Use and Planning.

4.9.3 Regulatory Framework

Land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect that are applicable to the proposed Project are summarized below.

Southern California of Association of Governments (SCAG)

The Southern California Association of Governments (SCAG) is a regional agency established pursuant to CA Gov. Code § 6500, Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). SCAG serves as an area-wide clearinghouse for regionally significant projects. SCAG reviews the consistency of local plans, projects, and programs with regional plans. Guidance provided by this review process is intended to assist local agencies and project sponsors to take actions that contribute to the attainment of regional goals and policies.

The Project site is located within the Western Riverside Council of Governments (WRCOG) sub-region of SCAG. The applicable SCAG policy documents include the Regional Comprehensive Plan and Guide (2016), the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), and Compass Growth Vision. Because the Project meets the CEQA definition of having a statewide, regional, or area-wide significance, the Project is subject to an individual consistency evaluation with regional plans such as those published by SCAG.

South Coast Air Quality Management District Air Quality Management Plan (SCAQMD AQMP)

The California Clean Air Act (California Health & Safety Code section 39000 et seq.) requires that an Air Quality Management Plan be developed and then updated every three years for air basins with non-attainment status. The plan strives for the regional improvement of air quality. If a Project is consistent with these growth forecasts, and if all available emissions reduction strategies are implemented as effectively as possible on a project-specific basis, then the project is consistent with the plan.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) adopted by Riverside County. The MSHCP promotes conservation of species and their associated habitats in Riverside County through implementation of several HCPs that affect lands within the County. The Western Riverside County MSHCP and the Coachella Valley MSHCP are the two dominant plans that impact the largest portions of the county. These plans coordinate multi-jurisdictional habitat planning and conservation efforts in the region to promote biological and ecological diversity while accommodating the appropriate construction of new development and infrastructure projects. Riverside County catalogs acquisitions and conservation of lands with respect to the HCPs, and periodically updates the General Plan Land Use maps accordingly. The Project site is located within the Western Riverside County MSHCP and is not designated as part of the MSHCP Reserve System, although individual MSHCP policies would apply to the Project.

4.9.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on Land Use and Planning if it would:

(a) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

4.9.5 Impact Analysis

Threshold 4.9.5 (a) - Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The Project's consistency with policies and regulations adopted for the purpose of avoiding of regulating an environmental effect are discussed under the various environmental topics throughout Section 4.0 of this EIR. The following analysis focuses on the Project's consistency with *land use plans* adopted for the purpose of avoiding or mitigating an environmental effect that are not addressed elsewhere in this EIR**.** Under CEQA, only physical impacts to the environment are to be evaluated.

The Project entails a Specific Plan Amendment to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary I-10 Freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage. (See Figure 2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping,

parking, and signage); design guidelines for development; and administration and implementation provisions.

South Coast Air Quality Management District Air Quality Management Plan

The South Coast Air Quality Management District is required to produce air quality management plans directing how the South Coast Air Basin's air quality will be brought into attainment with the national and state ambient air quality standards. The most recent air quality management plan is the 2016 Air Quality Management Plan (AQMP) and it is applicable to City of Banning. The purpose of the AQMP is to achieve and maintain both the national and state ambient air quality standards.

Refer to Section 4.2- *Air Quality* for a complete analysis.

Level of Significance*:* Less than significant.

Western Riverside County Multiple Species Habitat Conservation Plan

The Project site is located within the Pass Area Plan portion of the Western Riverside County MSHCP, which is a comprehensive habitat conservation/planning program for Western Riverside County. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to special-status species and associated native habitats.

Refer to Section 4.3- *Biological Resources* for a complete analysis.

Level of Significance*:* Less than significant.

Water Quality Control Plan for the Colorado River Basin Region

The Water Quality Control Plan for the Colorado River Basin (Basin Plan) is designed to preserve and enhance water quality in the Region and to protect the beneficial uses of all regional waters for the benefit of present and future generations. The Basin Plan contains the Region's beneficial uses for ground and surface waters, water quality objectives to protect beneficial uses, and implementation programs to achieve water quality objectives. The Basin Plan fulfills state and federal statutory requirements for water quality planning, thereby preserving and protecting ground and surface waters of the Colorado River Basin Region.

Refer to Section 4.8- *Hydrology and Water Quality* for a complete analysis.

Level of Significance*:* Less than significant.

Southern California Association of Governments 2016-2040 the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.

The Southern California Association of Governments (SCAG) Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development, and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health. An analysis of the Project's consistency with the relevant goals of the 2016 RTP/SCS are presented below in Table 4.9-1, *Analysis of Consistency with SCAG 2016-2040 RTP/SCS Goals.* As indicated the Project would not conflict with any of the RTP/SCS goals and impacts due to a conflict would be less than significant.

Table 4.9.1 - Analysis of Consistency with SCAG 2016-2040 RTP/SCS Goals

RTP/SCS Goal	Goal Statement	Project Consistency Analysis
G1	Align the plan investments and policies with improving regional economic development and competitiveness.	**Consistent.** This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive local and regional planning
G2	Maximize mobility and accessibility for all people and goods in the region.	**Not Consistent.** As discussed in EIR Subsection 4.11, *Transportation*, the Project would exceed the 15% below existing regional HBW VMT per worker by 19.12%.
G3	Ensure travel safety and reliability for all people and goods in the region.	**Consistent**. As disclosed in Section 4.11, *Transportation*, there is no component of the Project that would result in a substantial safety hazard to motorists and pedestrians.
G4	Preserve and ensure a sustainable regional transportation system.	**Consistent.** This policy would be implemented by cities and the counties within the SCAG region as part of the overall planning and maintenance of the regional transportation system. The Project would have no adverse effect on such planning or maintenance efforts
G5	Maximize the productivity of our transportation system.	**Consistent.** This policy would be implemented by cities and the counties within the SCAG region as part of comprehensive transportation planning efforts. The Project is consistent with the City of Banning General Plan Circulation Element, which meets this goal to maximize productivity
G6	Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-	**Consistent.** An analysis of the Project's environmental impacts is provided throughout this EIR, and mitigation measures are specified where warranted. Air quality is addressed in

RTP/SCS Goal	Goal Statement	Project Consistency Analysis
	motorized transportation, such as bicycling and walking).	EIR Subsection 4.2, Air Quality, and mitigation measures are specified to reduce the Project's air quality impacts to the extent feasible. Additionally, and as discussed in EIR Subsection 4.7, Greenhouse Gas Emissions, the Project proposes to incorporate various measures related to building design, landscaping, and energy systems to promote the efficient use of energy. Additionally, the Project proposes to implement sidewalk and bike lane improvements along public roadway rights-of-way in a manner that is consistent with the City of Banning General Plan. The Project study area is within the service area of the Pass Transit Agency and the Riverside Transit Authority (RTA). Bus service is available on Sun Lakes Boulevard near the Project site. As described in EIR Section 4.11, Transportation the Project would not conflict with any existing or planned transit routes.
G7	Actively encourage and create incentives for energy efficiency, where possible.	**Consistent**. As discussed in Section 4.5, *Energy*, the Project is consistent with the *Energy and Mineral Resources Element* of the General Plan that contains polices to ensure increasing energy efficiency and developing and using alternative and renewable energy resources.
G8	Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	**Consistent**. The land uses proposed by the Project are consistent with the City of Banning General Plan. Additionally, the Project is not proposing any uses or improvements that would conflict with facilitating transit and non-motorized transportation.
G9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	**Consistent.** This policy would be implemented by the Pass Transit Agency, and other transportation agencies as part of the operation of the transit system

Sources: 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, General Plan, Project Application Materials.

Level of Significance: Less than significant.

City of Banning General Plan

A discussion of the Project's consistency with each element of the City of Banning General Plan is provided below.

Land Use Element

The Land Use Element defines land use designations, provides statistics regarding vacant and developed lands within these designations, and discusses strategies for the future development of the City.

The current General Plan Land Use Plan designations for the Project site are Business Park (with Specific Plan Overlay) and General Commercial (with Specific Plan Overlay). The Business Park designation allows light industrial manufacturing and office/warehouse buildings, restaurants and retail use ancillary to a primary use, and professional offices. Commercial development, such as large-scale retail (club stores, home improvement, etc.) and mixed-use project may also be permitted, subject to a conditional use permit. The General Commercial designation allows food and drug stores; home improvement; auto sales, leasing, service and repair; department and general retail outlets; merchandise leasing; neighborhood serving retail and services; restaurants; entertainment uses; gas stations; general offices (secondary to retail); mixed uses; and financial institutions.

The Project proposes a Specific Plan Amendment No. 6 to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from Retail Commercial to Business & Warehouse, Office and Professional, and Retail & Service. (See Figure 3-2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

In order to implement the Project, an amendment to the General Plan Land Use Element is not required as a Specific Plan is a zoning document and the land uses proposed by the Project are consistent with the current General Plan Land Use designations of Business Park (with Specific Plan Overlay) and General Commercial (with Specific Plan Overlay). There are no adverse environmental effects associated with the Project that have not already been evaluated and addressed throughout this EIR. The Project would be consistent with all the policies contained within the Land Use Element. Accordingly, the Project would not conflict with the General Plan Land Use Element exhibits or policies, and impacts would be less than significant.

Level of Significance*:* Less than significant.

Economic Development Element

The Economic Development Element examines the City's potential economic opportunities and constraints, and sets forth a series of goals, policies, and programs that will help create a viable, well-balanced economy.

The Project provides for zoning that will facilitate a broad range of commercial and business development opportunities that will serve to attract new businesses, particularly those that generate and broaden employment opportunities, increase discretionary incomes, and contribute to City General Fund revenues. Accordingly, the Project would not conflict with the Economic Development Element policies.

Level of Significance*:* Less than significant.

Circulation Element

The purpose of the Circulation Element is to provide goals, policies, programs, and standards that correlate the City's transportation system with the types, intensities and locations of land uses within the City.

The Project site is located on the north side of Sun Lakes Boulevard, which is a Major Highway with four travel lanes, left turn lanes, parking lanes on each side, center median, and a parkway with sidewalk on each side. Sun Lakes Boulevard is designed to accommodate both vehicle, bicycle, and pedestrian travel to accommodate the land uses proposed by the Project.

Accordingly, the Project would be consistent with or otherwise would not conflict with the goals and policies set forth in the Circulation Element.

Level of Significance*:* Less than significant.

Parks and Recreation Element

The Parks and Recreation Element is intended to plan and provide for a diverse and integrated parks and recreation system, which creates important and passive recreational amenities that reflect and are responsive to the needs and standards of the City. It includes an inventory of existing parks, trails, and recreational amenities, as well as an assessment of other suitable lands to be incorporated into the system.

The Project is primarily intended for development of commercial and business park uses. However, multi-family residential development may be developed within the 10-acre portion of the site identified as "Office/Professional" upon supporting justification approved by the City. In any event, the payment of development impact fees will be required to offset any impacts.

Level of Significance*:* Less than significant.

Housing Element

The Housing Element is a comprehensive statement by the City of Banning of its current and future housing needs and proposed actions to facilitate the provision of housing to meet those needs at all income levels. The Housing Element has identified sites within the City that meet the City's affordable housing sites under the Regional Housing Needs Assessment (RHNA). The RHNA is mandated by State Housing Law and prepared by the Southern California Association of Governments (SCAG) as part of the periodic process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. In addition, recently adopted Senate Bill 166 prohibits cities from allowing their inventory of available sites to be insufficient to meet their remaining unmet RHNA share for lower and moderate-income housing. California Government Code Section 65863 requires cities to make certain findings that the remaining housing element sites can accommodate the RHNA requirements by income level.

The Project site has a General Plan Land Use designation of Business Park (with Specific Plan Overlay) and General Commercial (with Specific Plan Overlay). As such, it is not identified by the Housing Element as a potential site for housing to meet the City's RHNA obligations.

Although, the Project is primarily intended for development of commercial and business park uses, multi-family residential development may be developed within the 10-acre portion of the site identified as "Office/Professional" upon supporting justification approved by the City. If residential development were developed on the site, it would serve to provide additional housing opportunities in the City and would not conflict with the City meeting its RHNA obligations.

Level of Significance: Less than significant.

Water Resources Element

The Water Resources Element addresses water quality, availability, and conservation for the City's current and future water needs.

The City has five sources of groundwater storage supply: Banning Storage Unit; Banning Bench Storage Unit; Banning Canyon Storage Unit; Beaumont Storage Unit; and Cabazon Storage Unit. Because the City's water supply is primarily groundwater, the City is not subject to short-term water shortages resulting from temporary dry weather conditions. Further, as part of the Beaumont Basin adjudication, the City has the option of storing up to 80,000-acre feet of water in the Beaumont Basin. At the end of calendar year 2014, City of Banning had 46,774 AF of water available in Beaumont Basin storage.

The City also purchases State Water Project (SWP) water from the San Gorgonio Pass Water Agency (SGPWA), who is one of 29 state water contractors. Quantities of SWP water purchased

are recharged to the Beaumont Basin at Beaumont-Cherry Valley Water Districts' Noble Creek spreading facility, which is in the vicinity of Beaumont Avenue and Cherry Valley Boulevard.

On May 22, 2020, the SGPWA announced that the State Water Project (SWP) now expects to deliver 20 percent of requested supplies in 2020 because of above-average precipitation in May. An initial allocation of 10 percent was announced in December and increased to 15 percent in January. This will likely be the final allocation update of 2020. Although the City may expect variable reliability in availability of SWP water, such water is not its primary source of water, and short-term declines in SWP water availability would be offset by the City's substantial reserves of stored groundwater and would not result in a substantial impact to the City's water supply

There are no adverse environmental effects associated with the Project that have not already been evaluated and addressed throughout this EIR. The Project would be consistent with all the policies contained within the Water Resources Element. Accordingly, the Project would not conflict with the General Plan Land Use Element exhibits or policies, and impacts would be less than significant.

Open Space and Conservation Element

The Open Space and Conservation Element addresses protection and conservation of natural resources, including water, mineral and scenic resources. The General Plan Land Use Map identifies land that is suitable for preservation as public or private, passive, or active open space through the following Land Use Designations.

- Open Space-Resources (OS-R). Lands for the preservation of water, biological, visual, ridgelines, or other resources, and for flooding, geotechnical or other hazards are included in this category. Electrical transmission line easements, natural gas or fuel transmission line easements preserved as open space through the development process are also included. Non-motorized vehicle trails, roads and passive parks may be appropriate within this designation.

- Open Space- Parks (OS-Pa). Allows public and private parks and recreational facilities, including golf courses, tot lots, dog parks, neighborhood, community and regional parks, sports fields, and passive parks.

- Open Space- Public (OS-Pu). Lands owned by the County, the state of California, United States or Tribal entities, which are preserved as natural open space are included in this land use category.

- Open Space- Hillside Preservation. Lands, whether in private or public ownership, which are preserved as open space, including ridgelines. Uses such as trails, wildlife viewing areas, ranger stations, roads and passive parks may be appropriate.

The Project site has a General Plan Land Use designation of Business Park (with Specific Plan Overlay) and General Commercial (with Specific Plan Overlay). As such, it is not identified as a site for conservation or open space as described above.

Level of Significance: No impact.

Biological Resources Element

The Biological Resource Element is intended to identify the variety of biological resources in the City and to provide for the preservation and protection of the integrity of the natural environment and its many biological resources. Biological resources represent the plants and wildlife species and ecosystems and habitats that contribute to an area's natural setting.

The Project has undergone a habitat assessment which determined that the Project would have a less than significant impact with the implementation of Mitigations Measures BIO-1(30-day preconstruction burrowing owl survey) and BIO-2 (Pre-construction nesting bird survey).

There are no adverse environmental effects associated with the Project that have not already been evaluated and addressed in Section 4.3- Biological Resources of this EIR.

Level of Significance: Less than significant with mitigation incorporated.

Archaeological and Cultural Resources Element

The Archaeological and Cultural Resources Element describes the documented pre-history and history of the City of Banning, including its 20th century development. It sets forth goals, policies and programs which preserve the City's cultural heritage and help perpetuate it for future generations.

Based on the analysis in Section 4.3, Cultural Resources, the Project area appears to have low sensitivity for prehistoric archaeological resources, and it is unlikely that intact, subsurface prehistoric archaeological deposits would be uncovered during Project construction. Sensitivity for encountering historic-age archaeological resources is considered low-to-moderate.

Level of Significance: No impact.

Air Quality Element

The purpose of the Air Quality Element is to provide background information on the physical and regulatory environment affecting air quality in the City and the region. It is also intended to identify goals, policies, and programs meant to balance the City's actions regarding land use, circulation and other regulatory actions and their associated potential effects on local and regional air quality. This Element, along with local and regional air quality planning efforts, is intended to address ambient air quality standards set forth by the federal Environmental Protection Agency and the California Air Resources Board.

As required by the General Plan, projects that may generate significant levels of air pollution shall be required to conduct detailed impact analyses and incorporate mitigation measures into their designs using the most advanced technological methods feasible.

Based on the analysis in Section 4.3, Air Quality, the Project would generate construction and operational pollutants in exceedance of the South Coast Air Quality Management District's significance thresholds. However, all feasible technological mitigation measures are required to reduce these impacts to the maximum extent feasible.

Level of Significance*:* Mitigated to the maximum technologically feasible extent.

Energy and Mineral Resources Element

The purpose of the Energy and Mineral Resources Element is to guide the City in the long-term management and thoughtful use of energy and mineral resources. Based on the analysis in Section 4.6, *Energy*, the Project's will not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources.

Level of Significance*:* Less than significant.

Geotechnical Element

The Geotechnical Element intends to provide information regarding the geological and seismic conditions and hazards affecting the City of Banning. A series of goals, policies, and programs are set forth in the Geotechnical Element focused at providing protection for the general health and welfare of the community and reducing potential impacts, such as loss of life and property damage, associated with seismic and geologic hazards.

Based on the analysis in Section 4.7, *Geology and Soils*, the Project is required to prepare a Paleontological Resource Impact Mitigation Program (PRIMP) for the grading and excavation phase of the Project.

Level of Significance: Less than significant with mitigation incorporated.

Flooding and Hydrology Element

The Flooding and Hydrology Element addresses potential drainage and flooding hazards within the City. The foremost goal of this Element is to protect the general health, safety, and welfare of the community from potential flood and associated hazards

The Project is required to construct a number of on- site facilities (e.g. water quality detention basin) that would mitigate drainage and flooding conditions, as well as mitigate potential water quality impacts, as discussed in Section 4.8- Hydrology and Water Quality of this EIR. As such, there are no adverse environmental effects associated with the Project that have not already been evaluated and addressed in Section 4.8 Hydrology and Water Quality of this EIR.

Level of Significance*:* Less than significant.

Noise Element

The Noise Element provides for design measures that are intended to minimize or avoid community exposure to excessive noise levels.

With implementation of Mitigation Measure NOI-1, construction noise impacts are less than significant.

Land uses within the Business & Warehouse (BW) District and the Office & Professional (OP) District have the potential to exceed noise standards affecting the single-family homes located approximately 15 feet from the eastern property line and the senior apartments, assisted living/memory care residential facility located approximately 50 feet from the southern property of the site. Mitigation Measure NOI-2 would require noise from proposed commercial and retail uses to be analyzed in further detail once site specific plans have been submitted for approval. Implementation of Mitigation Measure NOI-2 would reduce impacts to a less than significant impact level.

Project generated trips would need to result in a doubling of the traffic volumes on a road segment to result in an audible increase in ambient noise levels. An increase the noise level by 3 dBA (consistent with the California Department of Transportation's Technical Noise Supplement to the Traffic Noise Analysis Protocol) would be considered a significant noise impact. As shown in Table 4.10-1, the addition of Project traffic to the roadway system in the immediate vicinity of the Project site will not result in a doubling (100%) of the existing Average Daily Trips (ADT). Impacts are less than significant.

Wildland Fire Element

The foremost goal of this Element is to protect the general health, safety, and welfare of the City from potential fires and associated hazards.

As discussed in Section 3.20-Wildfire of the Initial Study (Appendix A), according to Fire Hazard Severity Maps prepared by Cal Fire, the Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones and no impact would occur. Accordingly, the Project would be consistent with all the policies contained within the Wildland Fire Element

Level of Significance: No impact.

Hazardous and Toxic Materials Element

The purpose of the Hazardous and Toxic Materials Element is to present methods of safe management for hazardous and toxic materials in the City.

As discussed in Section 3.9-Hazards and Hazardous Materials of the Initial Study (Appendix A), the Project is required to manage potential hazardous materials impacts associated with construction and long-term operation of the Project in compliance with all federal, State and local laws regulating hazardous and toxic materials management and use. In addition, the Project site is not located within one-quarter mile of an existing or proposed school (the nearest school is the San Gorgonio Middle School is located approximately 2 miles northwest of the Project site) nor is the Project included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

Level of Significance: Less than significant.

Water, Wastewater, and Utilities Element

The Water, Wastewater and Utilities Element establishes City policies and programs directed at the adequate provision of domestic water, sewage treatment, and utility services to the City.

The Project's expected water demand is within the City's total projected water supplies available during normal, single dry, and multiple dry water years for the next 20 years. Therefore, there will be adequate supplies to meet the projected water demand associated with the Project in addition to the existing and other planned future uses of the City's water system.

The City's Wastewater Treatment Plant (WWTP) has capacity to treat up to 3.6 million gallons per day (MGD). The Plant treated an average of 2.07 MGD in 2016. According to the City of Banning, *Integrated Master Plan*, 2018, the Project is estimated to generate approximately

53,580 gpd (0.5 MGD). The Project's estimated wastewater flows represent 1.78% of the WWTP capacity in 2025 and 1.16% in 2040 and will not result in the WWTP exceeding its capacity.

Public Building and Facilities Element

The Public Buildings and Facilities Element provides background information on the various structures and facilities owned by public and quasi-public agencies in the City. It reflects the state of available technological and organizational resources. The element reviews these buildings and facilities considering issues of land use compatibility, aesthetic impacts, and functionality.

The Project proposes a Specific Plan Amendment No. 6 to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from Retail Commercial to Business & Warehouse, Office and Professional, and Retail & Service. (See Figure 3-2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

At this time, there are no tenants identified that would occupy any of the proposed structures for use as a public building or facility. However, if the use of a structure were to be used as a public building or facility, mandatory compliance with the Development Standards and Design Guidelines requirements of the Specific Plan to ensure the issues of land use compatibility, aesthetic impacts, and functionality are adequately addressed.

Level of Significance*:* Less than significant

Schools and Libraries Element

The Schools and Libraries Element describes the educational and library facilities in the City, sphere-of-influence, and planning area. It discusses the services, resources, and opportunities available through the local school and library systems.

As discussed in Section 3.15-*Public Services* of the Initial Study (Appendix A), the Project would be required to contribute fees to the Banning Unified School District in accordance with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50). Pursuant to Senate Bill 50, payment of school impact fees constitutes complete mitigation under CEQA for Project-related impacts to school services.

In addition, the Project would be required to comply with the provisions of the City's Development Impact Fee Ordinance, which requires a fee payment to assist the City in providing public facilities. Payment of the Development Impact Fee would ensure that the Project provides fair share of funds for library facilities.

Level of Significance*:* Less than significant.

Police and Fire Protection Element

The Police and Fire Protection Element addresses the provision of adequate police and fire protection services in the City.

Police Protection

As discussed in Section 3.15-*Public Services* of the Initial Study (Appendix A), the Project Site is currently serviced by the City of Banning Police Department which is located approximately 4.5 miles east of the Project site at 125 E Ramsey Street in Banning. Development of the Project would impact fire protection services by placing an additional demand on existing Riverside County Fire Department resources should its resources not be augmented. The Project would be required to comply with the provisions of the City's Development Impact Fee Ordinance, which requires a fee payment to assist the City in providing for police protection facilities to offset impacts created by new development. Payment of the Development Impact Fee would ensure that the Project provides fair share funds for the provision of additional police protection facilities. In addition, the Project site is in a developed area of the City which is routinely patrolled. It is not anticipated that new police facilities will need to be constructed to serve the Project to maintain acceptable service ratios, response times or other performance objectives for any of the public services

Fire Protection

As discussed in Section 3.15-*Public Services* of the Initial Study (Appendix A), the Project site is served by Fire Station #20 located approximately 0.6 roadway miles west of the site at 1550 E. 6th Street, Beaumont, CA. Development of the Project would impact fire protection services by placing an additional demand on existing Riverside County Fire Department resources should its resources not be augmented. To offset the increased demand for fire protection services, the Project would be conditioned by the City to provide a minimum of fire safety and support fire suppression activities, including compliance with State and local fire codes, fire sprinklers, a fire hydrant system, paved access, and secondary access routes.

Furthermore, the Project would be required to comply with the provisions of the City's Development Impact Fee Ordinance, which requires a fee payment to assist the City in providing for fire protection facilities. Payment of the Development Impact Fee would ensure that the Project provides fair share funds for the provision of additional fire protection facilities.

Level of Significance*:* Less than significant.

Emergency Preparedness Element

The Emergency Preparedness Element outlines the potential for natural and man-made disasters that could affect the City of Banning and its Sphere of Influence and Planning Area. It also discusses the plans and facilities currently in place to deal with such emergencies and assess the additional critical facilities and services necessary for the City to respond quickly and efficiently to protect its citizens from injury and loss

As discussed in Section 3.9-Hazards and Hazardous Materials of the Initial Study (Appendix A), the City has incorporated the Local Hazard Mitigation Plan by adoption into the Safety Element of the City's General Plan. The Safety Element of the General Plan includes a discussion of fire, earthquake, flooding, and landslide hazards. The Plan was adopted as an implementation appendix to the Safety Element. In addition, the City enforces the requirements of the California Environmental Quality Act (CEQA), which requires mitigation for identified natural hazards. The City has used these pre-existing programs as a basis for identifying gaps that may lead to disaster vulnerabilities to work on ways to address these risks through mitigation. Development of the Project will not impair implementation Plan as evidenced in the analysis in this Initial Study as it relates to emergencies because of hazards and natural disasters.

The City does not have an established evacuation route; however, depending on the location and extent of an emergency, major surface streets could be utilized to route traffic through the City. The I-10 Freeway and State Highway 243 to State Route 79 are also major regional access routes serving the City which could be used during disaster events. Emergency access to the Project site is available from Sun Lakes Boulevard. During construction and long-term operation, the Project would be required to maintain adequate emergency access for emergency vehicles to Sun Lakes Boulevard as required by the City. Therefore, the Project would not result in a substantial alteration to the design or capacity of any public road that would impair or interfere with the implementation of evacuation procedures. Because the Project would not interfere with an adopted emergency response or evacuation plan, impacts are less than significant.

Level of Significance*:* Less than significant.

4.9.6 Cumulative Impacts

As discussed in the analysis discussion under Threshold 4.9.5 (a) above, the Project would be consistent with SCAG's RTP/SCS, MARB Airport Land Use Compatibility Plan, and the policies of the City of Menifee General Plan. The Project would conflict with the 2016 AQMP, however impacts are fully addressed in EIR Subsection 4.2.

Level of Significance*:* Less than significant with mitigation incorporated.

4.9.7 References

California Regional Water Quality Control Board, Colorado River Basin. *Water Quality Control Plan Colorado River Basin-Region 7* (aka "Basin Plan"). Includes amendments adopted by the Regional Board through August 2017. (Available at http://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/. Accessed August 21, 2020.

City of Banning. *General Plan*, Adopted January 31, 2006. Available at http://ci.banning.ca.us/468/General-Plan-Amendments , accessed May 21, 2020.

County of Riverside, Western Riverside County Multiple Species Habitat Conservation Plan,2004. Available at: https://www.wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/. (MSHCP).

Southern California Association of Governments (SCAG). 2016. 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. Available at http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx, accessed on May 25, 2020.

South Coast Air Quality Management District, Final 2016 AQMP, March 3, 2017. Available at http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp. Accessed on February 2, 2020.

4.10 NOISE

This Section discusses consistency of the Project identifies noise levels for existing conditions and evaluates the potential noise and vibration impacts associated with buildout of the Project. The analysis in this section is based in part of the following technical report:

- *Sun Lakes Village North Specific Plan Noise Monitoring*, Urban Crossroads, July 9, 2020. A complete copy of this report is included in the technical appendices to this EIR (Appendix G).

4.10.1 Environmental Setting

Existing Ambient Noise Levels

The background ambient noise levels in the Project study area are dominated by the transportation related noise associated with Sunset Lakes Boulevard and parking lot vehicle movements. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations. To describe the existing ambient noise conditions, 24-hour noise level measurements were taken at three locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit A provides the boundaries of the Project study area and the noise level measurement locations

Noise Measurement Results

The noise measurements presented below focus on the average or equivalent sound levels (Leq). The equivalent sound level (Leq) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Figure 4.10-2 shows the noise level measurement location which are described below.

- Location L1 represents the noise southeast of the Project site by Sun Lakes Boulevard adjacent to existing vacant lot. The noise levels at this location consist primarily of traffic noise from Sun Lakes Boulevard. The noise level measurements collected show an overall 24-hour exterior noise level of 60.4 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 59.0 dBA Leq with an average nighttime noise level of 51.3 dBA Leq.

- Location L2 represents the noise levels Located south of the Project site on Sun Lakes Boulevard near existing single-family residential homes at 5871 Oakmont Drive. The ambient noise levels at this location account for traffic on Sun Lakes Boulevard. The noise level measurements collected show an overall 24-hour exterior noise level of

66.3 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 64.2 dBA Leq with an average nighttime noise level of 57.6 dBA Leq.

- Location L3 represents the noise levels Located west of the Project site Behind Rite Aid at 300 South Highland Springs Avenue. The 24-hour CNEL indicates that the overall exterior noise level is 63.7 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 59.9 dBA Leq with an average nighttime noise level of 56.4. dBA Leq. Parking lot vehicle movements and truck activity represent the primary source of noise at this location.

Table 4.10-1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location.

4.10.1 - 24-Hour Ambient Noise Level Measurement

Location	Description	Energy Average Noise Level (dBA Leq)			CNEL
		Daytime	Nighttime		
L1	Located southeast of the Project site by Sun Lakes Boulevard adjacent to existing vacant lot.	59.0	51.3		60.4
L2	Located south of the Project site on Sun Lakes Boulevard near existing single-family residential homes at 5871 Oakmont Drive.	64.2	57.6		66.3
L3	Located west of the Project site Behind Rite Aid at 300 South Highland Springs Avenue.	59.9	56.4		63.7

Source: Sun Lakes Village North Specific Plan Noise Monitoring (Appendix G).

4.10.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21, 2020. No comments were received during the NOP comment period that pertain to the topic of Noise.

Figure 4.10.1 - Noise Measurement Locations



4.10.3 Regulatory Framework

State Regulations

State of California Noise Requirements

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels.

Local Regulations

City of Banning General Plan Noise Element

The Noise Element is intended to coordinate the community's land uses with the existing and future noise environment. Further, this element provides for design measures that are intended to minimize or avoid community exposure to excessive noise levels. The implementation of policies and programs set forth in this Element can greatly reduce or even avoid current and future noise impacts and land use conflicts. The Noise Element policies applicable to the Project are:

Policy 1 - The City shall protect noise sensitive land uses, including residential neighborhoods, schools, hospitals, libraries, churches, resorts, and community open space, from potentially significant sources of community noise.

Policy 8 - The City shall impose and integrate special design features into proposed development that minimize impacts associated with the operation of air conditioning and heating equipment, onsite traffic, and use of parking, loading and trash storage facilities.

City of Banning Municipal Code Chapter 8.44-Noise

The purpose of this chapter is to establish criteria and standards for the regulation of noise levels within the city and to implement the noise provisions contained in the City's General Plan.

Section 8.44.090(E) of the City's Municipal Code restricts noise levels related to landscape maintenance and construction, including erection, excavation, demolition, alteration, or repair of any structure or improvement, to the hours between 7:00 a.m. to 6:00 p.m. provided that noise levels do not exceed 55 dBA for intervals of more than 15 minutes per hour at any time as measured in the interior of the nearest occupied residence or school. Since the City's Municipal Code does not specify the day of the week for these hours, it is assumed they apply to weekdays,

weekends, and holidays. Construction activities that occur outside of the hours of 7:00 a.m. to 6:00 p.m. are subject to the noise standards in Section 8.44.070 of the City's Municipal Code.

Section 8.44.070 of the City's municipal code limits maximum noise levels. The duration periods above the base ambient noise levels for residential properties are listed below. The base ambient noise level is 45 dBA from 10:00 p.m. to 7:00 a.m. and 55 dBA from 7:00 a.m. to 10:00 p.m. for residential properties. The maximum noise level for commercial properties (nonresidential properties) is 75 dBA at any time. Since the City's municipal code does not specify the day of the week for these hours, it is assumed they apply to weekdays, weekends, and holidays.

4.10.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on Noise if it would result in:

a) *Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project more than standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

b) *Generation of excessive ground borne vibration or ground borne noise levels?*

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 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

4.10.5 Impact Analysis

Threshold 4.10.5 (a) - Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project more than standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Base Ambient Noise Level

The base ambient noise level applicable to the Project pursuant to Municipal Code Section 8.44.050 is 75 dB(A). As shown in Table 4.10-2 below, the existing ambient noise levels range from 60.4 to 66.2 dB(A). According to Municipal Code Section 8.44.100, in applying the City's noise regulations, each source of noise shall be subject only to such regulation as shall apply to the zone, including any designated truck route, within which it is located. A use lying adjacent to a zone with a more restrictive noise requirement under the City's noise regulations shall not be required to conform to that more restrictive requirement.

Existing Noise Environment

The background ambient noise levels in the Project study area are dominated by the transportation related noise associated with Sun Lakes Boulevard and parking lot vehicle movements from the adjacent shopping center. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations. The 24-hour existing noise level measurement results are shown on Table 4.10-2.

4.10.2 - 24-Hour Ambient Noise Levels

Location	Description	Energy Average Noise Level (dBA Leq)[1]		CNEL
		Daytime	Nighttime	
L1	Located southeast of the Project site by Sun Lakes Boulevard adjacent to existing vacant lot.	59.0	51.3	60.4
L2	Located south of the Project site on Sun Lakes Boulevard near existing single-family residential homes at 5871 Oakmont Drive.	64.2	57.6	66.3
L3	Located west of the Project site Behind Rite Aid at 300 South Highland Springs Avenue.	59.9	56.4	63.7

Source: Sun Lakes Village North Specific Plan Noise Monitoring (Appendix G).
(1) Energy (logarithmic) average levels.

As shown in Table 4.10-2, the noise level measurements collected show an overall 24-hour exterior noise level ranging from 60.4 to 66.3 dBA CNEL. Daytime noise levels range from 59.0 to 64.0 dBA Leq and nighttime noise levels range from 51.3 to 57.6 dBA Leq.

Construction Noise Impact Analysis

Project construction would include site preparation, grading, building construction, architectural coating, and paving of the commercial development and associated parking lot. As shown on Table 4.10-2, noise levels generated by heavy construction equipment can range from approximately 75 dBA to 90 dBA when measured at 50 feet.

4.10.3 - Typical Construction Equipment Noise Levels

Type of Equipment	Actual maximum Sound Levels at 50 feet (dBA)
Backhoe	78
Crane	81
Dozer	82
Dump Truck	76
Excavator	81
Flat Bed Truck	74
Front End Loader	79
Generator	81
Impact Pile Driver	101
Jackhammer	89
Pickup Truck	75
Pneumatic Tools	85
Pumps	81
Roller	80
Scraper	84

Source: Roadway Construction Noise Model (FHWA 2006).

Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels will be loudest during the grading phase. A likely worst-case construction noise scenario during grading assumes the use of graders, dozers, excavators, scrapers, backhoes operating at 50 feet from the nearest sensitive receptors located at the assisted living facility to the east of the Project site. As such, unmitigated noise levels at 50 feet have the potential to reach up to 84 dBA at the nearest sensitive receptors during grading and up to 89 dBA during building construction.

Construction noise is considered a temporary and short-term impact because once construction is completed, this noise source ceases. Construction noise is considered significant with respect to established standards if construction activities are undertaken outside the allowable times as described by the City's Municipal Code Chapter 8.44.090 (7:00 AM and 6:00 PM), or if sound levels generated by Project construction at any time exceed 55 dB(A) for intervals of more than 15 minutes per hour as measured in the interior of the nearest occupied residence or school.

The closest noise sensitive uses are the single-family homes located approximately 15-feet from the property line and the senior apartments/assisted living/memory care residential facility located approximately 60 feet from the property line.

At this time there are no detailed plans showing the specific locations and distances between the construction areas and the potentially affected sensitive receptors. Construction activities between the hours of 7:00 a.m. and 6:00 p.m. would generate a noise level of 84 dBA at the nearest sensitive receptors during grading and up to 89 dBA during building construction. Standard building construction in California would provide 24 dBA or more in noise reduction from exterior to interior with windows and doors closed. With the exterior-to-interior noise attenuation of 24 dBA, the interior noise levels as measured at 50-feet from the sensitive receptors would be between 60-65 dBA which is still above the City's threshold of 55bBA. To meet the City's threshold, a noise reduction of at least 10 dBA is required.

Therefore, the following mitigation measure is required to reduce construction noise impacts to the maximum extent feasible:

NOI-1-Construction Noise Mitigation Plan*. Prior to issuance of grading and/or building permits, a note shall be provided on grading and building plans indicating that ongoing during grading and construction, the property owner/developer shall be responsible for requiring contractors to implement the following measures to limit construction-related noise:*

1) *The project applicant shall limit construction activities to the daytime hours between 7 AM to 6 PM, as prescribed in Section 8.44.090(E) of the City's Municipal Code.*

2) *For all project construction zones, all internal combustion engines on construction equipment and trucks are fitted with properly maintained mufflers consistent with manufacturer's standards.*

3) *For all project construction zones, stationary equipment such as generators, air compressors shall be located as far as feasible from nearby noise-sensitive uses. If such stationary equipment produces noise emissions that are directional, said equipment shall be oriented to direct noise emissions away from sensitive receptors.*

4) *For all project construction zones, stockpiling and staging should be located as far as feasible from nearby noise-sensitive receptors.*

5) *For construction activity within 50 feet of any noise-sensitive receptors, a temporary noise barrier shall be installed by the applicant/developer. This temporary noise barrier shall be installed prior to the onset of construction and be located between the single-family residences, senior apartments/assisted living/memory care residential facility and the construction zone and all sensitive receptors. The temporary sound barrier shall provide a*

reduction in noise that will meet the City's construction noise threshold of 55 dBA. The noise barrier shall be a minimum height of 8 feet and be free of gaps and holes and must achieve a Sound Transmission Class (STC) of 35 or greater. The barrier can be either (a) a ¾-inch-thick plywood wall OR (b) a hanging blanket/curtain with a surface density or at least 2 pounds per square foot. For either configuration, the construction side of the barrier shall have an exterior lining of sound absorption material with a Noise Reduction Coefficient (NRC) rating of 0.7 or higher.

Level of Significance: With implementation of Mitigation Measure NOI-1, construction noise impacts are less than significant.

Operational Noise Impact Analysis (Stationary Sources)

The Project's operational noise levels generated by heating, ventilation, and air conditioning, parking lot vehicle movement, truck unloading/docking activity, and truck delivery are shown in Table 4.10-3 below.

4.10.4 - Project Operational Noise Level Impacts to Sensitive Receptors

Noise Source	Hourly (dBA/Lmax)	Daytime and Nighttime Maximum Noise Level Standards	Potentially Exceeds Threshold?
Business & Warehouse (BW)District			
Heating, Ventilation, and Air Conditioning (HVAC)	60 dBA Lmax @25 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**No**
Parking Lot Vehicle Movement	60 to 70 dBA Lmax @ 50 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**Yes**
Truck Unloading/Docking Activity	67 dBA Lmax @ 50 feet.	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**Yes**
Truck Delivery	75 dBA Lmax @ 50 feet.	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**Yes**
Office & Professional (OP) District			
Heating, Ventilating, and Air Conditioning (HVAC)	60 dBA Lmax @ 25 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**No**

Noise Source	Hourly (dBA/Lmax)	Daytime and Nighttime Maximum Noise Level Standards	Potentially Exceeds Threshold?
Parking Lot Vehicle Movement	60 to 70 dBA Lmax @ 50 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**Yes**
Parking Lot Vehicle Movement	60 to 70 dBA Lmax @ 50 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**Yes**
Retail & Service (RS) District			
Heating, Ventilating, and Air Conditioning (HVAC)	60 dBA Lmax @ 25 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**No**
Truck Delivery	75 dBA Lmax @ 50 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**Yes**
Parking Lot Vehicle Movement	60 to 70 dBA Lmax @ 50 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**No**
Truck Delivery	75 dBA Lmax @ 50 feet	75 dBA Lmax (daytime) 65 dBA Lmax (nighttime)	**No**

Source: Rancho San Gorgonio Specific Plan Draft EIR.

As shown in Table 4.10-2, uses within the Business & Warehouse (BW) District and the Office & Professional (OP) District have the potential to exceed noise standards affecting the single-family homes located approximately 15 feet from the eastern property line and the senior apartments, assisted living/memory care residential facility located approximately 50 feet from the southern property of the site. Mitigation Measure NOI-2 would require noise from proposed commercial and retail uses to be analyzed in further detail once site specific plans have been submitted for approval. Implementation of Mitigation Measure NOI-2 would reduce impacts to a less than significant impact level.

NOI-2- Final Acoustical Report: *Prior to issuance of the first building permit for any project, the property owner/developer shall submit a final acoustical report prepared to the satisfaction of the Planning Director to address potential noise impacts to nearby residences. The report shall demonstrate that the project incorporates sufficient noise-attenuation features if needed so that the City's exterior and interior standards in Municipal Code Sections 8.44.070 and 8.44.090(E) and*

in the City's Noise Element are maintained at nearby residences. Compliance can be achieved with (a) sufficient buffering distances so that nearby sensitive receptors are not significantly impacted by future commercial development OR (b) sufficiently high and long sound barrier wall(s) that are placed between commercial noise sources and receptors (for example, in the case of garbage compactor equipment) OR (c) other adequate noise reduction methods that are approved by the Planning Director or their designee. In all cases, the noise reduction measures shall be technically demonstrated to achieve the appropriate target noise level(s) for both exterior and interior environments for nearby residences, as appropriate (e.g., sufficient wall or berm height, sufficient buffering distance, appropriate sound encapsulation/insulation methods, etc.). The individual project owner/developer shall submit the noise mitigation report to the Planning Director for review and approval. Upon approval by the City, the project acoustical design features shall be incorporated into the future development.

Level of Significance: With implementation of Mitigation Measure NOI-2, operational noise impacts are less than significant.

Operational Noise (Traffic)

To determine if traffic noise under the Existing and Existing Plus Project scenarios would be considered significant, the roadway volumes in terms of average daily trips (ADT) generated from the project's traffic study were used to determine whether the Project's ADT would double (+100%) the existing ADT. A doubling of the energy of a noise source, such as a doubled ADT, would increase the noise level by 3 dBA. Consequently, Project generated trips would need to result in a doubling of the traffic volumes on a road segment to result in an audible increase in ambient noise levels. An increase the noise level by 3 dBA (consistent with the California Department of Transportation's Technical Noise Supplement to the Traffic Noise Analysis Protocol) would be considered a significant noise impact.

4.10.5 - Average Daily Trips (ADT) By Roadway Location

Roadway Location	ADT Existing Without Project	ADT Existing with Project	Percentage Increase	Significant?
Sun Lakes Blvd. between S. Highland Homes Road & 1st Street	7,400	13,000	75%	No
Highland Springs Av. & Sun Lakes Blvd. /1st St.	12,600	17,400	38%	No

Source: Traffic Analysis (Appendix H).

As shown in Table 4.10-4, the addition of Project traffic to the roadway system in the immediate vicinity of the Project site will not result in a doubling (100%) of the existing Average Daily Trips.

Level of Significance*:* Less than significant.

Threshold 4.10-5 (b) - Generation of excessive ground borne vibration or ground borne noise levels?

Construction Vibration Impacts

Vibration generated by construction equipment can result in varying degrees of ground vibration, depending on the equipment. The operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings situated on soil near the active construction area respond to these vibrations, which range from imperceptible to low rumbling sounds, with perceptible vibrations and slight damage at the highest vibration levels. Typically, construction-related vibrations do not reach vibration levels that would result in damage to nearby structures.

Table 4.10-5 shows the vibration damage threshold for continuous/frequent intermittent sources. As shown, potential vibration damage would occur at 0.3 PPV in/sec for old residential structures, 0.5 PPV in/sec for new residential structures, and 0.5 PPV in/sec for modern industrial/commercial buildings.

4.10.6 - Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. in/sec = inches per second PPV = peak particle velocity

The use of bulldozers and trucks for the construction of the proposed project would generate the highest ground borne vibration levels. Based on the Caltrans "*Transportation and Construction Vibration Guidance Manual*", a large bulldozer and loaded trucks would generate vibration levels of 0.089 PPV in/sec and 0.076 PPV in/sec, respectively, when measured at 25 feet.

The closest residential structures to the project site are approximately 15 feet away. At this distance, the closest residential structures would experience vibration levels of up to 0.04 PPV. This vibration level would be below the damage threshold of 0.3 PPV for old residential structures. This vibration level would be well below the damage threshold of 0.5 PPV for new on-site residential structures. Therefore, vibration levels generated during construction of the proposed project would be considered less than significant and no mitigation measures are required.

Ongoing Operations Vibration Impacts

The residential neighborhoods, school, park/open/recreational uses, public facilities, and commercial developments would not include any substantial sources of long-term vibration. Thus, ongoing operations would not generate significant levels of vibration, and such impacts would be less than significant, requiring no mitigation.

Level of Significance*:* Less than significant.

4.10-5 (c) - 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 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The Banning Municipal Airport is located approximately 4.5 miles east of the Project site. According to the *Banning Municipal Airport Compatibility Plan*, the Project site is not located within the area of influence of the plan.

Level of Significance: No impact.

4.10.6 Cumulative Impacts

The geographic context for the analysis of cumulative noise impacts is the location of the roadway intersections listed in the Project's Traffic Impact Analysis (Appendix H). Noise sources would be from noise from vehicles traveling on the City's roadways surrounding the Project area, noise from the surrounding land uses, and noise from overhead aircraft. A project's cumulative effects may be considered significant if the incremental effects of a project are considerable when viewed in connection with the effects of similar projects in the area in the past, present, and future.

The Project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect A doubling of the energy of a noise source, such as a doubled average daily trip, would increase the noise level by 3 dBA. Consequently, Project generated trips would

need to result in a doubling of the traffic volumes on a road segment to result in an audible increase in ambient noise levels.

4.10.7 References

City of Banning, *City of Banning General Plan* January 31, 2006. Available at http://www.ci.banning.ca.us/54/Community-Development, accessed May 9, 2020).

City of Banning, *Banning Municipal Code, Section 8, Health and Safety,* 1992. Available at https://www.municode.com/library/ca/banning/codes/code_of_ordinances?nodeId=TIT8HESA, accessed May 9, 2020).

Riverside County Airport Land Use Commission, *Banning Municipal Airport Compatibility Plan*, October 2004. Accessed August 1, 2020. Available at: http://www.rcaluc.org/Portals/13/06-%20Vol.%201%20Banning%20Municipal.pdf?ver=2016-09-19-114352-640

4.11 TRANSPORTATION

This Section of the EIR evaluates the potential transportation impacts associated with implementation of the Project on transit, roadway, bicycle, and pedestrian facilities, the analysis in this section is based in part of the following technical reports:

- *Sun Lakes Village North Specific Plan Amendment No. 5 Traffic Analysis*, Urban Crossroads, July 29, 2020. (Appendix H).

- *Sun Lakes Village North Specific Plan Amendment No. 5 Vehicle Miles Traveled (VMT) Analysis*, Urban Crossroads, July 6, 2020. (Appendix I).

4.11.1 Environmental Setting

Roadway Facilities

The Project is located adjacent to Sun Lakes Boulevard which is a fully improved roadway that meets City standards. Sun Lakes Boulevard is classified as a Major Highway in the General Plan Circulation Element. A Major Highway has 100 feet of right of way, with a 76-foot street section from curb to curb. This represents four travel lanes, with parking lanes on each side, a center median, and a parkway on each side

Bicycle & Pedestrian Facilities

The City of Banning General Plan does not include a bike facility exhibit. As shown in Figure 4.11-2, there are existing pedestrian facilities, including sidewalks and crosswalks in the vicinity of the Project site that are available to serve the Project.

Transit Facilities

The study area is currently served by Beaumont Transit with bus services along Highland Springs Avenue, 2nd Street, and 1st Street via Route, Route 4, and Community Link 120/125. The study area is also served by the Pass Transit with bus service along Highland Springs Avenue, 2nd Street, and 1st Street via Route 1, Route 5, and Route 6. The transit services are illustrated on Exhibit X. These existing transit routes could potentially serve the Project. Transit service is reviewed and updated by Beaumont Transit and Pass Transit periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

Figure 4.11.1Figure – Sun Lakes Boulevard Cross Section



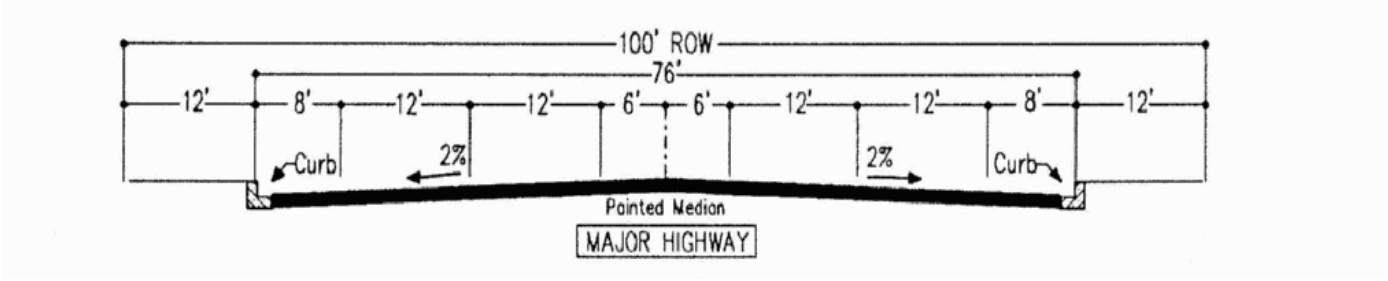


Figure 4.11.2- Existing Pedestrian Facilities

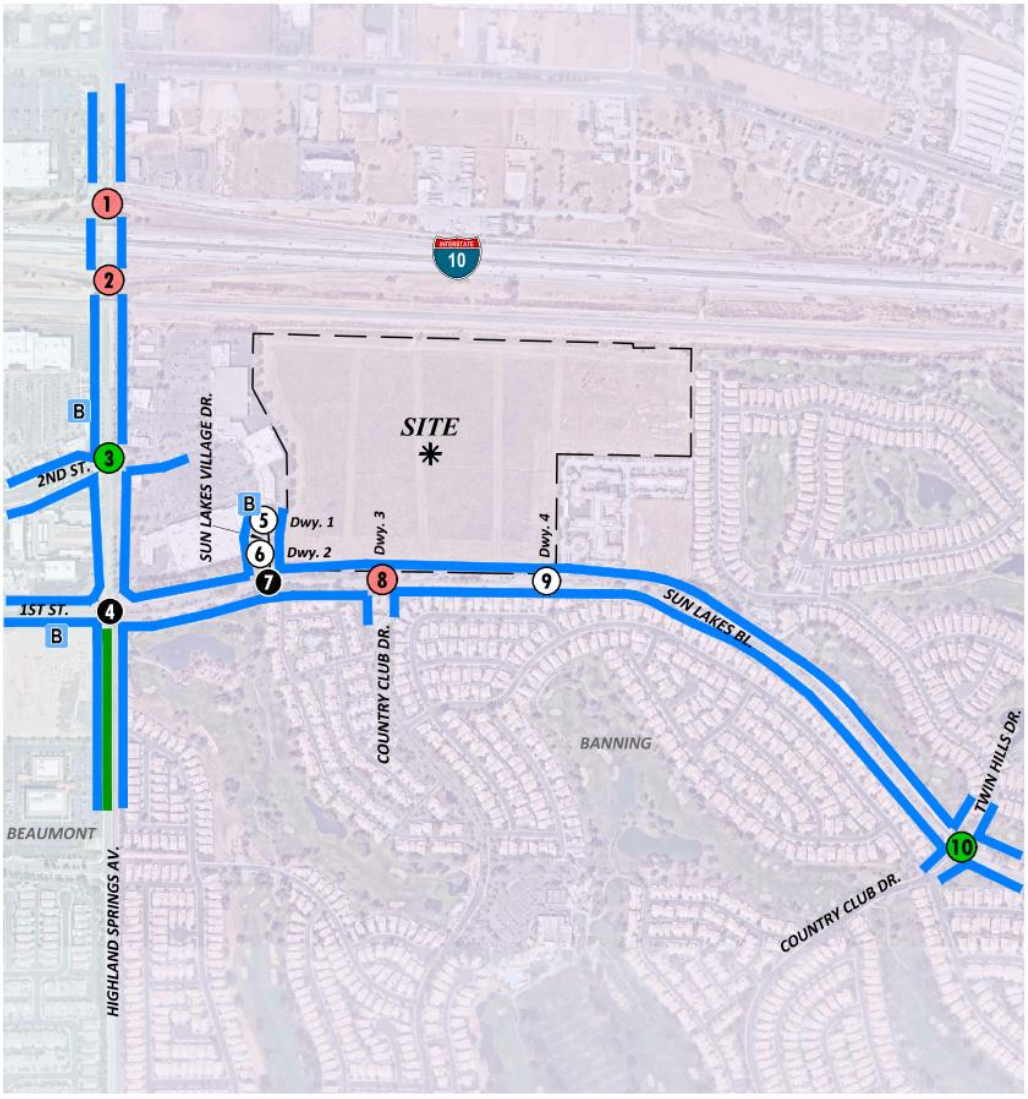
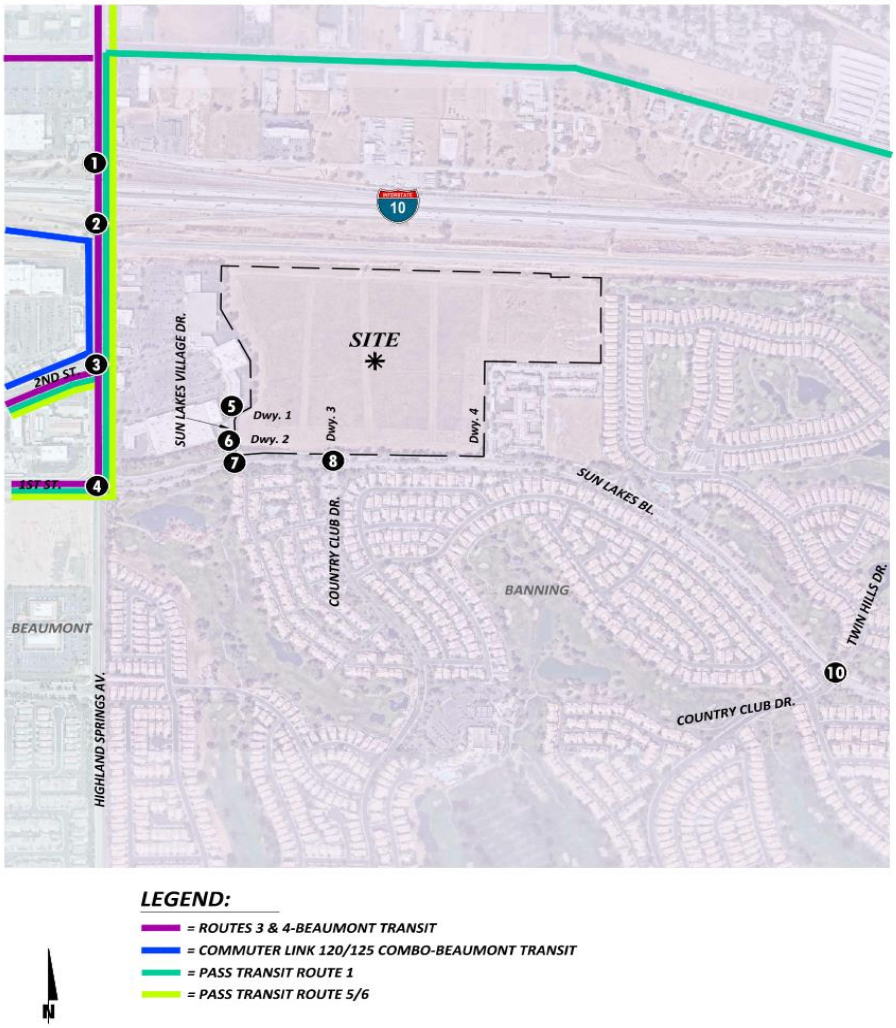


Figure 4.11.3- Existing Transit Routes



4.11.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21, 2020. No comments were received during the NOP comment period that pertain to the topic of Transportation.

4.11.3 Regulatory Framework

State

Senate Bill 73

SB 743, which was signed into law in 2013, initiated an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA, with the goal of better measuring the actual transportation-related environmental impacts of any given project.

Under CEQA, cities, counties, and other public agencies must analyze real estate and transportation projects to determine whether they may have a significant impact on the environment. One key determination under CEQA is the transportation impact of these projects. Traditionally, transportation impacts have been evaluated by examining whether the project is likely to cause automobile delay at intersections and congestion on nearby individual highway segments, and whether this delay will exceed a certain amount (this is known as Level of Service or LOS analysis).

Automobile delay, as described solely by LOS or similar measure of traffic congestion, is no longer considered a significant impact under CEQA, except in locations specifically identified in the Guidelines. (Pub. Resources Code, § 21099(b)(2).) This provision took effect when the update to the CEQA Guidelines was certified in late 2018. (CEQA Guidelines, § 15064.3.) CEQA Guidelines section 15064.3 specifies that VMT analyses are voluntary until July 1, 2020. A recent appellate court decision (*Citizens for Positive Growth and Preservation v. City of Sacramento* (2019) 43 Cal.App.5th 609) confirmed that traffic congestion is no longer an environmental impact under CEQA, and VMT is not a required element of transportation analyses until July 1, 2020.

Regional

SCAG Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS)

Every four years, the Southern California Association of Governments (SCAG) updates the Regional Transportation Plan (RTP) for the six-county region that includes Los Angeles, San Bernardino, Riverside, Orange, Ventura, and Imperial counties. On April 7, 2016, the SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS). The SCS outlines a development pattern for the region, which, when

integrated with the transportation network and other transportation measures and policies, would reduce greenhouse gas emissions from transportation (excluding goods movement). Current and recent transportation plan goals generally focus on balanced transportation and land use planning that:

- Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of our transportation system.
- Protect the environment and health of residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).

Local

City of Banning – General Plan Circulation Element

The Circulation Element of the City of Banning General Plan contains policies and objectives that are considered applicable to the proposed Project as identified below.

- Policy 7 - New development proposals shall pay their fair share for the improvement of street within and surrounding their projects on which they have an impact, including roadways, bridges, grade separations and traffic signals.
- Policy 10 - Sidewalks shall be provided on all roadways 66 feet wide or wider. In Rural Residential land use designation pathways shall be provided.

Transportation Uniform Mitigation Fee

The Transportation Uniform Mitigation Fee (TUMF) program is administered by Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study completed in early 2003 and updated in 2016 to address major changes in right of way acquisition and improvement cost factors. TUMF identifies a network of backbone and local roadways that are needed to accommodate growth through 2035. This regional program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region.

TUMF fees are imposed on new residential, industrial, and commercial development through application of the TUMF fee ordinance and fees are collected at the building or occupancy permit stage. Several the facilities within the Project's study area are programmed for improvements

through the TUMF program. The Project Applicant will be subject to the TUMF fee program and will pay the requisite TUMF fees at the rates then in effect pursuant to the City's TUMF Ordinance.

Development Impact Fees

The City of Banning has adopted a Development Impact Fee (DIF) program to impose and collect fees from new residential, commercial, and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's currently adopted General Plan Circulation Element. The City's DIF program includes facilities that are not part of, or which may exceed improvements identified and covered by the TUMF program.

4.11.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact on Transportation if it would result in:

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, considering all modes of transportation including transit, roadway, bicycle, and pedestrian facilities?

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

d) Result in inadequate emergency access?

4.11.5 Impact Analysis

Threshold 4.11.5 (a) - Conflict with a program, plan, ordinance, or policy addressing the circulation system, considering all modes of transportation including transit, roadway, bicycle, and pedestrian facilities?

Transit Facilities

The Pass Transit System, which consists of two independent transit systems, the Banning Municipal Transit System and the Beaumont Municipal Transit System, provides for a coordinated bus service to the cities of Banning and Beaumont, the unincorporated areas of Cabazon and Cherry Valley, and the commercial area of the Morongo Band of Mission Indians Reservation. The Plan provides fixed route and dial-a-ride services.

The nearest bus stop is within the Sun Lakes Village residential community located across Sun Lakes Drive just south of the Project site. There are no bus stops located on Sun Lakes Boulevard adjacent to the Project site. In addition, Sun Lakes Boulevard is a fully improved with curb, gutter, sidewalk, and a landscaped parkway adjacent to the Project site. The Project is proposing to construct to construct two (2) access driveways on Sun Lakes Boulevard which will be constructed to meet City standards. The driveways do not have the potential to preclude the availability of bus service to the Project site and impacts are less than significant.

Roadway Facilities

The Project is located adjacent to Sun Lakes Boulevard which is a fully improved roadway that meets City standards. Sun Lakes Boulevard is classified as a Major Highway in the General Plan Circulation Element. A Major Highway has 100 feet of right of way, with a 76-foot street section from curb to curb. This represents four travel lanes, with parking lanes on each side, a center median, and a parkway on each side. The Project is proposing to construct two (2) access driveways on Sun Lakes Boulevard which will be constructed to meet City standards. The primary driveway (to be aligned with the existing entrance to Sun Lakes Village) will be signalized. The driveways do not have the potential to change the geometric design of Sun Lakes Boulevard in a manner that would negatively impact Sun Lakes Boulevard function as a Major Highway. Impacts are less than significant.

Bicycle Facilities

Section 5.106.4.1.2 of the CalGreen Code requires that the Project provide secure bicycle parking that meets one of the following:

a) Covered, lockable enclosures with permanently anchored racks for bicycles;

b) Lockable bicycle rooms with permanently anchored racks or lockable, permanently anchored bicycle lockers.

With mandatory compliance to the CalGreen Code, impacts are less than significant.

Pedestrian Facilities

The Project is located adjacent to Sun Lakes Boulevard which is improved with a sidewalk running the entire length of the Project site and connects to existing sidewalk network in the Project area. The Project is proposing to construct two (2) access driveways on Sun Lakes Boulevard which will be constructed to meet City standards which includes pedestrian access across the driveways. In

addition, the primary driveway (to be aligned with the existing entrance to Sun Lakes Village) will be signalized and include pedestrian access to Sun Lakes Villages to the south.

Level of Significance*:* Less than significant.

Threshold 4.11-5 (b) - Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt Vehicle Miles Traveled (VMT) as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate took effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December of 2018) (Technical Advisory).

Based on OPR's Technical Advisory, the Western Riverside Council of Governments (WRCOG) prepared a *WRCOG SB 743 Implementation Pathway Document Package* (March 2019) to assist its member agencies with implementation tools necessary to adopt analysis methodology, impact thresholds and mitigation approaches for VMT. To add to the previous work effort, WRCOG in February 2020 released its *Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (WRCOG Guidelines), which provides specific procedures for complying with the new CEQA requirements for VMT analysis.

VMT Analysis Methodology

At the time of the preparation of this EIR, the City has not formally adopted its own VMT analysis guidelines and thresholds. Therefore, for the purposes of this analysis the recommended VMT analysis methodology and thresholds recommended by the Technical Advisory and supported by the WRCOG Guidelines have been used.

As outlined in the Technical Advisory, mixed-use projects such as the proposed Project need to evaluate each component of the project independently and apply the relevant significance threshold for each project type (i.e., office, retail, etc.). For the purposes of this VMT analysis, the evaluation of VMT will focus on the employment uses (i.e., industrial park and medical office uses) only. Consistent with Technical Advisory recommendations, local serving retail that is typically less than 50,000 sf will tend to improve retail destination proximity and short trips, which in turn reduces VMT. The Technical Advisory notes that local agencies can presume that such development creates a less-than-significant impact.

The Technical Advisory provides for the following recommended threshold for office/industrial land use projects which used for the Project:

"A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact."

Project Screening Analysis

The Technical Advisory provides details on appropriate "screening thresholds" that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed analysis. Screening thresholds are broken into three types:

- Project Type Screening
- Map Based Screening based on Low VMT Area
- Transit Priority Area (TPA) Screening

For the purposes of this analysis, the initial VMT screening process has been conducted with using the WRCOG VMT Screening Tool (Screening Tool), which uses screening criteria consistent with the screening thresholds recommended in the Technical Advisory.

Project Type Screening

Projects that are consistent with the current Sustainable Communities Strategy (SCS) or general plan, and that generate fewer than 110 daily vehicle trips be presumed to have a less-than-significant impact on VMT. Based on the Project's trip generation (see Attachment A), the Project is not consistent with the City's general plan and would generate more than 110 daily vehicle trips, therefore, the Project would not be eligible to screen out based on project type screening. **The Project Type screening threshold is not met.**

Low VMT Area Screening

The Screening Tool uses the sub-regional Riverside County Transportation Analysis Model (RIVTAM) to measure VMT performance within individual traffic analysis zones within the region. The Project's physical location based on parcel number was selected within the Screening Tool to determine the relevant traffic analysis zones VMT as compared to the jurisdictional average. The Project boundary is located in TAZ 4344, and would not appear to be within a low VMT generating zone based on daily total VMT per service population, but is in a low generating zone based on daily home-based work VMT per employee.

Based on a review of the land use information contained within TAZ 4344 for the RIVTAM base year (2012) model, the zone includes exceptionally low levels of employment and low amounts of population and household data. The proposed Project would significantly increase the number and type of employment uses in the zone and would therefore not be entirely consistent with the underlying land use assumptions**. The Low VMT Area screening threshold is not met.**

Transit Priority Area Screening

Projects located within a Transit Priority Area (i.e., within ½ mile of an existing "major transit stop" or an existing stop along a "high-quality transit corridor") may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The Project site does is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor. **The Transit Priority Area screening threshold is not met.**

Conclusion

Since none of the project level screening criteria were met, a Project VMT Assessment was prepared.

Project VMT Assessment

Project VMT has been calculated using the most current version of RIVTAM. As noted previously, the Project's local serving retail component is less than 50,000 sf and meets the screening threshold recommended in the Technical Advisory for local serving retail projects that can be presumed to result in a less than significant impact.

Table 4.11-1 summarizes the employment estimates for the Project. It should be noted that the employment estimates are consistent with the land use to employment generation factors from the Riverside County General Plan.

4.11.1 - Employment Estimates

Land Use	Building Area	Building Area per Employee	Estimated Employees[3]
Industrial Park	877,298 sf	1,030 sf	852
Medical Office	52,065 sf	300 s.f.	174
Total:	**929,363 sf**	**--**	**1,026**

Source: Riverside County General Plan.

Project VMT Calculations

Consistent with recommendations contained in the Technical Advisory, calculation of VMT for employment uses such as the industrial and medical office uses proposed by the Project are evaluated using home-based work trips. As shown in Table 4.11-2, the Project baseline (2020) home-based worker VMT per worker is 13.33.

4.11.2- Project Home Based Worker VMT per Worker

Category	Project 2012	Project 2040	Project 2020 (interpolated)
Employment	1,026	1,026	1,026
Home Based Worker VMT	14,707	11,115	13,681
Home Based Worker VMT / Worker	14.33	10.83	13.33

Source: RIVTAM.

As noted previously, the City of Banning is still in development of their VMT guidelines and thresholds. To provide a comparison of the Project's VMT per worker to the existing regional VMT per worker, VMT values previously calculated and published by WRCOG as part of their WRCOG Guidelines has been utilized. Table 4.11-3 shows the WRCOG home based worker trips.

4.11.3 - WRCOG Unincorporated Region Home Based Worker VMT per Worker

Category	Project 2012	Project 2040	Project 2020 (interpolated)
Home Based Worker VMT / Worker	12.83	14.02	13.17

Source: WRCOG.

Table 4.11-4 on page 4.11-13 illustrates the comparison between Project-generated home-based worker VMT per worker to the existing (2020) WRCOG region trips.

[3] Riverside County General Plan Employment Factors

4.11.4 - Project VMT per Worker Comparison

Category	Project	Existing Regional Average (2020)	OPR 15% below Existing Regional Average
Home Based VMT/Worker	13.33	13.17	11.19
Difference w/ Project		+0.16	+2.14
Percent Change		**+1.22%**	**+19.12%**

As shown, the Project would exceed the 15% below existing regional home-based worker VMT per worker by 19.12%. As such, the Project's impact based on VMT for the light industrial and business park components is potentially significant. The following mitigation measure is recommended to reduce vehicle miles traveled to the maximum extent feasible.

VMT-1: Pedestrian Network Improvements. *Prior to the issuance of a building permit, site plans for future development shall provide a pedestrian access network to link areas of the Project site internally and to Sun Lakes Boulevard.*

The Project's vehicle miles traveled per worker exceeds the threshold of 15% below the existing regional vehicle miles traveled per worker. Even with implementation of the limited feasible mitigation measures discussed above, Project's vehicle miles traveled cannot be reduced to levels that would be less-than-significant. Additionally, the efficacy of transportation demand measures and reduction of impacts below thresholds cannot be assured.

Level of Significance*:* Significant and unavoidable.

Threshold 4.11.5 (c). Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The Project is located adjacent to Sun Lakes Boulevard which is a fully improved roadway that meets City standards. Sun Lakes Boulevard is classified as a Major Highway in the General Plan Circulation Element. A Major Highway has 100 feet of right of way, with a 76-foot street section from curb to curb. This represents four travel lanes, with parking lanes on each side, a center median, and a parkway on each side. The Project is proposing to construct two (2) access driveways on Sun Lakes Boulevard which will be constructed to meet City standards. The primary driveway (to be aligned with the existing entrance to Sun Lakes Village) will be signalized. The driveways do not have the potential to change the geometric design of Sun Lakes Boulevard in a manner that would substantially increase hazards due geometric design feature (e.g., sharp curves or dangerous intersections). Impacts are less than significant.

Additionally, the Project site occurs in an area that has largely been developed with residential and commercial land uses, and there are no disparate uses, such as agricultural uses, that could potentially create safety hazards due to incompatible uses.

Level of Significance: Less than significant.

Threshold 4.11.6 (d) - Result in inadequate emergency access?

The Project is located adjacent to Sun Lakes Boulevard which is a fully improved roadway that meets City standards. Sun Lakes Boulevard is classified as a Major Highway in the General Plan Circulation Element. A Major Highway has 100 feet of right of way, with a 76-foot street section from curb to curb. This represents four travel lanes, with parking lanes on each side, a center median, and a parkway on each side. The Project is proposing to construct two (2) access driveways on Sun Lakes Boulevard which will be constructed to meet City standards. The primary driveway (to be aligned with the existing entrance to Sun Lakes Village) will be signalized. These improvements will provide adequate emergency vehicle access.

Level of Significance*:* Less than significant.

4.11.6 CUMULATIVE IMPACTS

As discussed in the preceding analysis, the Project has less than significant impacts relating to conflicts with the circulation system, roadway design hazards, and emergency access. Other projects in the area are also required to meet standard requirements to provide transportation facilities that accommodate both pedestrian, bicycle, and vehicle travel. Therefore, the Project would not result in impacts that are cumulatively considerable

The Project's vehicle miles traveled per worker exceeds the threshold of 15% below the existing regional vehicle miles traveled per worker. Even with implementation of the limited feasible mitigation measures discussed above, Project's vehicle miles traveled cannot be reduced to levels that would be less-than-significant.

Level of Significance*:* Significant and unavoidable.

4.11.7 References

Urban Crossroads, *Sun Lakes Village North Specific Plan Amendment No.6 Vehicle Miles Traveled (VMT) Analysis*, July 8, 2020. (VMT Analysis, Included as Appendix G

4.12 TRIBAL CULTURAL RESOURCES

Tribal Cultural Resources consist of the following:

- A tribal cultural resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

(a) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
(b) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

This section of the EIR evaluates the potential for implementation of the Project to impact Tribal Cultural Resources. The analysis in this section is based, in part, upon the following:

- *Cultural Resources Records Search Results and Recommendations for the Sun Lakes Boulevard Project* (APN 419-140-057), City of Banning, County of Riverside, California, L&L Environmental Inc., February 20, 2020. (Appendix D).

- *Phase I Cultural Resources Assessment for the Sun Lakes Boulevard Project* (APN 419-140-057), City of Banning, County of Riverside, California, L&L Environmental Inc., February 20, 2020. (Appendix E).

- Consultation with the Morongo Band of Mission Indians.

4.12.1 Environmental Setting

The Project area is in the San Gorgonio Pass, or Banning Pass, which lies along the border between the Peninsular Ranges and Transverse Ranges Geomorphic Provinces. The pass was formed by the San Andreas Fault, which runs along the pass between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. Land surrounding the Project area is generally characterized as mixed residential and commercial, with a few vacant lots as well as major transportation corridors (i.e., Interstate 10 and the Union Pacific Railroad). Topographically, much of the Project area is flat, but gradually increases in elevation as it trends southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet above mean sea level

(AMSL). The Project area is within a disturbed vacant lot and appears to be regularly disked or mown. A large advertising sign is present along the north-central boundary of the site. A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site. A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, remnants of which are still visible.

4.12.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21, 2020. No comments were received during the NOP comment period that pertain to the topic of Tribal Cultural Resources.

4.12.3 Regulatory Framework

Senate Bill 18

In order to aid in the protection of traditional tribal cultural places ("cultural places") through local land use planning, Senate Bill (SB) 18, effective September 2004, requires local government to notify and consult with California Native American tribes when the local government is considering adoption or amendment of a general or specific plan.

Assembly Bill 52

The legislature added new requirements regarding tribal cultural resources in Assembly Bill 52 (AB 52). By including tribal cultural resources early in the CEQA process, the legislature intended to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to tribal cultural resources. By taking this proactive approach, the legislature also intended to reduce the potential for delay and conflicts in the environmental review process.

The Public Resources Code now establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment." (Pub. Resources Code, § 21084.2.) To help determine whether a project may have such an effect, the Public Resources Code requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project. (Pub. Resources Code, § 21080.3.1.)

California Health and Safety Code § 7050.5, 7051 and 7054

California Health and Safety Code 7050.5, 7051 and 7054 collectively address the illegality of interference with human burial remains as well as the disposition of Native American burials in

archaeological sites. The law protects such remains from disturbance, vandalism, or inadvertent destruction, and establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, including the treatment of remains prior to, during, and after evaluation, and reburial procedures.

4.12.4 Thresholds of Significance

The City of Banning relies upon the Environmental Checklist Form included in Appendix G of the State CEQA Guidelines to determine the significance of environmental impacts. As it applies to the Project, the Project would have a significant impact Tribal Cultural Resources if it would:

(a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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

(II) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth is subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

4.12.5 Impact Analysis

4.12.5 (a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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)?

The Project area appears to have low sensitivity for prehistoric archaeological resources, and it is unlikely that intact, subsurface prehistoric archaeological deposits would be uncovered during Project construction. Sensitivity for encountering historic-age archaeological resources is considered low-to-moderate. The Project area lies within Stewart Ranch; however, the land within the Project area was utilized for grazing, agricultural, and water control/conveyance purposes. This suggests that any historic artifacts and/or deposits that may be present in subsurface context would most likely reflect those activities (e.g., horse shoes, tacks, barbed wire, sparse occurrences of tin cans and glass bottles, other water conveyance/control features,

etc.) and would most likely not be considered historically significant. Thus, no mitigation measures are required.

Level of Significance: No impact.

4.12.5 (a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code 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 is subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

The Planning Department notified the following California Native American Tribes per the requirements of both AB 52 and SB 18 on February 21, 2020. Under AB 52, tribes have 30-days to notify the City if consultation is requested. Under SB 18, tribes have 90-days to notify the City if consultation is requested. The AB 52 response period ended on March 21, 2020 and the SB 18 response period ended on May 21, 2020. Table 4.12-1 provides a summary of the AB 52 and SB 18 responses.

4.12.1 - Summary of AB 52 and SB 18 Responses

Tribe	Date/Response
Agua Caliente Band of Cahuilla Indians	**March 9, 2020**. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. Since this action does not have the potential to impact cultural resources, we have no concerns currently. This letter shall conclude our consultation efforts.
Augustine Band of Cahuilla Mission Indians	No response.
Cabazon Band of Mission Indians	**February 26, 2020**. Thank you for the formal invitation to request consultation necessary for assembly Bill (AB) 52 and (SB) 18 notice, at Sun Lakes Village North Amendment No. 6. Currently Cabazon Band of Mission Indians has no comment to this matter.
Los Coyotes Band of Cahuilla and Cupeno Indians	No response.

Tribe	Date/Response
Morongo Band of Mission Indians	**March 19, 2020 (follow up on June 26, 2020).** The proposed project is within the ancestral territory and traditional use area of the Cahuilla and Serrano people of the Morongo Band of Mission Indians. Projects within this area are potentially sensitive for buried deposits regardless of the presence of remaining surface artifacts and features. Our office wants to initiate government-to-government consultation and requests the following from the lead agency to begin meaningful consultation.
Ramona Band of Cahuilla Indians	No response.
San Fernando Band of Mission Indians	No response.
San Manuel Band of Mission Indians	No response.
Santa Rosa Band of Cahuilla	No response.
Serrano Nation of Mission Indians	No response.
Soboba Band of Luiseno Indians	No response.
Torres-Martinez Desert Cahuilla Indians	No response.

As a result of the consultation with the Morongo Band of Mission Indians, it was determined that tribal cultural resources may be encountered during grading activities and the following mitigation measures are required:

TCR-1-Retain Qualified Professional Archaeological Monitor: *Prior to the issuance of a grading permit, the Applicant shall retain a qualified professional archaeological monitor who meets U.S. Secretary of the Interior Standards (SOI). The monitor shall be present during all ground disturbing activities to identify any known or suspected archaeological and/or cultural resources. The monitor will conduct an Archaeological Sensitivity Training, in conjunction with the Tribes Tribal Historic Preservation Officer (THPO). The training session will focus on what the archaeological and tribal cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event.*

TCR-2- Archaeological Monitoring and Treatment Plan: *Prior to the issuance of a grading permit, the qualified archaeologist shall develop an Archaeological Monitoring and Treatment Plan to address the details, timing and responsibility of all archaeological and cultural resource activities that occur on the project site, in coordination with Tribe.*

TCR-3- Tribal Monitoring Agreement: *Prior to the issuance of grading permits, the applicant shall enter into a Tribal monitoring agreement with the Morongo Band of Mission Indians for the project. The Tribal Monitor shall be on-site during all ground disturbing activities including clearing, grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all water supply, electrical, and irrigation lines, and landscaping phases of any kind. The Tribal Monitor shall have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources.*

TCR-4-Specific Conditions: *The Morongo Band of Mission Indians requests the following specific conditions to be imposed in order to protect Tribal cultural, and/or archaeological resources within the project area. This includes cultural materials both on the surface and buried. Should human remains be encountered on the surface or during any and all ground-disturbing activity (i.e. grubbing, tree and bush removal, grading, trenching, fence post placement and removal, construction excavation, excavation for all water supply, electrical, and irrigation lines, and landscaping phases, excavation of any kind), work in the immediate vicinity of the discovery shall immediately stop (within 100-foot buffer of the discovery), the area shall be protected, project personnel/observers restricted, and the County Coroner to be contacted pursuant to State and Safety Code §7050.5. and Public Resources Code (PRC) § 5097.98. In the event human remains are found and identified as Native American, the landowner shall also notify the City Planning Department so that the City can ensure PRC § 5097.98 is followed. No photographs are to be taken except by the Coroner.*

a) *In the event that Tribal Cultural Resources or other cultural resources are discovered during project development and construction, all work in the immediate vicinity of the discovery shall stop (within 60-foot buffer of the discovery) and the area protected by fencing and guarding until a qualified archaeologist (i.e. meeting Secretary of the Interior standards) assesses the discovery. Overall project work may continue during this period of assessment.*

b) *If archaeological assessment indicates that significant Native American cultural resources or other cultural resources are present, a Treatment Plan must be prepared in consultation with the Tribe. The developer will notify the Lead Agency and contract with qualified Cultural Resources Management (CRM) firm to develop the Treatment Plan.*

c) *If requested by the Tribe, the developer or the project archaeologist shall, in good faith, immediately initiate consultation with the Morongo Band of Mission Indians regarding further actions to be taken including, but not limited to, avoidance, preservation in place, removal, and disposition.*

TCR-5-Inadvertent Discovery During Grading: *In the event that archaeological or tribal cultural resources are unearthed during ground-disturbing activities, ground-disturbing activities shall stop (within 60-foot buffer of the discovery) or shall be diverted away from the vicinity of the find,*

so that the find can be evaluated by the qualified Archaeologist. A treatment plan shall be developed by a qualified Archaeologist (meeting SOI standards) in consultation with the Tribe and the City Planning Department to include relinquishment of all artifacts through one of the following methods:

a) This reburial area of cultural resource items shall be away from any future impacts and reside in perpetuity. Reburial shall not occur until all cataloguing; analysis and any necessary special studies have been completed on the cultural resources. Details of contents and location of the reburial shall be documented in a Final Report and shall remain as confidential.

b) The Tribes Most Likely Descendant (MLD) may wish to rebury the human remains and/or associated funerary objects, as close to the place of their discovery, in an area that will not be subject to future disturbances and reside in perpetuity. The place(s) of reburial will not be disclosed by any party and is exempt from the California Public Records Act (California Government Code § 6254[r]). Reburial location of human remains will be determined by the landowner, City Planning Department, in consultation with the Tribes Most Likely Descendant (MLD).

c) Curation at a Riverside County Curation facility that meets federal standards per 36 CFR Part 79 and therefore will be professionally curated and made available to other archaeologists/researchers and tribal members for further study. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence shall be provided in the form of a letter from the curation facility identifying that archaeological materials have been received and that all fees have been paid.

TCR-6-Documents: *Any and all cultural documents created as a part of the project (Archaeological Monitoring and Treatment Plans, isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to consulting Tribe.*

Level of Significance: Less than significant with incorporation of Mitigation Measures TCR-1 through TCR-6.

4.12.6 Cumulative Impacts

The cumulative area for tribal cultural resources is the City boundaries, but can also vary depending on which tribe is being consulted with. Other cumulative developments not exempt from CEQA would be subject to the provisions of AB 52 and SB 18 and would be required to apply mitigation measures as necessary to mitigate impacts. Because the Project and other cumulative developments would be required to comply with AB 52 and SB 18, and because the Project has

incorporated mitigation measures to preclude impacts, cumulatively-considerable impacts would be less than significant.

Level of Significance*:* Less than significant with incorporation of Mitigation Measures TCR-1 through TCR-6.

4.12.7 References

Cultural Resources Records Search Results and Recommendations for the Sun Lakes Boulevard Project (APN 419-140-057), City of Banning, County of Riverside, California, L&L Environmental Inc., February 20, 2020. (Appendix D).

Phase I Cultural Resources Assessment for the Sun Lakes Boulevard Project (APN 419-140-057), City of Banning, County of Riverside, California, L&L Environmental Inc., February 20, 2020. (Appendix E).

4.13 UTILITIES AND SERVICE SYSTEMS

This section of the EIR evaluates the potential for implementation of the Project to impact utility and service systems in the City of Banning. Utilities and services systems include water supply and distribution systems; wastewater (sewage) conveyance and treatment; storm drainage systems; solid waste collection and disposal services; and other public utilities. The analysis in this section is based, in part, upon the following:

- *Water Supply Assessment for the Sun Lakes Village North Specific Plan Amendment No. 5*, Romo Planning Group, August 31, 2020.

4.13.1 Environmental Setting

The project site is located within an urbanized area of the City of Banning where existing utilities and service systems are available. Surrounding land uses include railroad tracks followed by Interstate 10 to the north, Sun Lakes Boulevard followed by single-family residential homes to the south, senior apartments, assisted living/memory care residential facility, and single-family residential homes to the east, and a shopping center to the west.

Water Facilities

The City of Banning Public Works and Utilities Department provides domestic water services to the City of Banning. The City also provides domestic water services to unincorporated Riverside County lands located southwesterly of the City limits. The City owns and operates wells, reservoirs, and a distribution line system to deliver domestic water within their service area. The distribution line system serving the City consists of water lines ranging from 2" to 30" in diameter. (Banning General Plan p. VI-1).

Wastewater Facilities

The City of Banning owns and operates a Water Reclamation Facility (WRF) at 2242 East Charles Street in Banning. The wastewater collection system to the Banning WRF includes 115 miles of gravity sewer mains, 5 miles of force mains, and 4 sewer lift stations. The Facility Design Capacity = 3.6 MGD, the Average Daily Flow = 2.4 MGD, and. the Average Dry Weather Flow = 2.3 MGD. (Ref. *Sewer System Management Plan City of Banning*, June 30, 2016).

Storm Water Drainage Facilities

The Project site is currently vacant with no buildings or structures onsite. Thus, there are no existing storm drains connected to the City's storm drain system.

Electric Power Facilities

Banning Electric Utility is a not-for-profit, publicly owned retail electrical energy distribution utility.
The Banning Electricity owns a variety of power generation resources to provide the electricity required to meet the demands of its customers. This includes power from: Coal (20 MW), Geothermal generation resources (3.4 MW), Nuclear (2 MW) and Hydro (2 MW). Electricity is conveyed to the City through a series of transmission lines including several owned by Southern California Edison (SCE). (Banning Electric Utility website).

Natural Gas Facilities

Natural gas services are provided to the City of Banning by SoCalGas. There is a high-pressure distribution line located in Sun Lakes Boulevard adjacent to the site and a transmission line located in Highland Springs Avenue approximately 800 feet west of the site.

Telecommunication Facilities

Telecommunication Facilities

Telecommunication facilities include a fixed, mobile, or transportable structure, including, all installed electrical and electronic wiring, cabling, and equipment, all supporting structures, such as utility, ground network, and electrical supporting structures, and a transmission pathway and associated equipment in order to provide cable TV, internet, telephone, and wireless telephone services to the City of Banning. Some of the primary providers in banning include Verizon, AT&T, Frontier Communications, Charter Spectrum, Viasat Internet, and Hughes Net.

4.13.2 NOP/Scoping Comments

A Notice of Preparation (NOP) for the proposed Project was released for public review commencing on February 21, 2020 and ending on March 21, 2020. No comments were received during the NOP comment period that pertain to the topic of Utility and Service Systems.

4.13.3 Regulatory Framework

The following is a brief description of the primary state and local environmental laws and related regulations related to utilities and service systems.

State Water Supply Regulations

State Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires preparation of a plan that:

- Plans for water supply and assesses reliability of each source of water, over a 20-year period, in 5-year increments.
- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands, in normal, single-dry, and multiple-dry years.
- Implements conservation and the efficient use of urban water supplies.

The City of Banning Urban Water Management Plan (UWMP) was adopted by the City Council on June 14, 2016. The UWMP includes all information necessary to meet the requirements of the UWMP Act (UWMP Act), as set forth above.

Senate Bill 610

SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, water assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 [a]) subject to CEQA. SB 610 is applicable to the Project because it is a proposed industrial park planned to occupy more than 40 acres of land and having more than 650,000 square feet of floor area.

Local Water Supply Regulations

City of Banning Municipal Code

- Section 15.68.070. Requires a water facilities development impact fee to be used to mitigate impacts from constructing water facilities pursuant to the most current wastewater facilities plan.

- Section 13.16.030 requires all new developments to comply with water conservation provisions that use xeriscape principles such as, turf limitations, irrigation techniques, use of mulch, and water-conserving landscaping plans.

Local Wastewater Treatment Capacity Regulations

City of Banning Municipal Code

The following provisions from the municipal code focus on wastewater treatment:

- Section 15.68.060. Requires a wastewater facilities development impact fee to be used to mitigate impacts from constructing wastewater facilities pursuant to the most current wastewater facilities plan.

State Solid Waste Capacity Regulations

California Solid Waste Integrated Waste Management Act (AB 939, 1989)

The California Integrated Waste Management Act established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the Act established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. Per the requirements of the Integrated Waste Management Act, the Riverside County Board of Supervisors adopted the Riverside Countywide Integrated Waste Management Plan which outlines the goals, policies, and programs the County and its cities will implement to create an integrated and cost effective waste management system that complies with the provisions of California Integrated Waste Management Act and its diversion mandates.

2016 California Green Building Standards

Section 4.408 of the 2016 California Green Building Code Standards requires new development projects to submit and implement a construction waste management plan to reduce the amount of construction waste transported to landfills. Prior to the issuance of building permits, the City of Banning shall confirm that a sufficient plan has been submitted, and prior to final building inspections, the City of Banning shall review and verify the Contractor's documentation that confirms the volumes and types of wastes that were diverted from landfill disposal, in accordance with the approved construction waste management plan.

Local Solid Waste Capacity Regulations

City of Banning Municipal Code

Chapter 8.52 – Recycling: The intent of this chapter is to eliminate barriers to recycling in the City in order to enable the city to reach waste reduction goals mandated by Assembly Bill 939 and space allocation requirements mandated by the California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327), and to lengthen the lifespan of the landfills and decrease the costs of hauling to landfills.

4.13.4 Thresholds of Significance

Would the Project:

(a) 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?

(b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple years?

(c) 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?

(d) Generate solid waste more than State or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

4.13.5 Impact Analysis

Threshold 4.13.5 (a) - 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?

Construction of the Project would require connections to existing water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunications facilities. The Project area already is served by these utilities, and it is anticipated that proposed improvements to provide service to the Project site would occur within existing improved rights-of way off-site, or on-site within areas already planned for impact and development by the Project. The proposed connections to these utilities are inherent to the Project's construction phase, which has been evaluated throughout this EIR. Where significant construction-related impacts are identified, feasible mitigation measures are identified to reduce impacts to the maximum feasible extent. There are no components of the Project's proposed utility connections that would result in significant environmental effects not already addressed by this EIR.

Level of Significance*:* Less than significant.

Threshold 4.13.5 (b) - Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple years?

The City potable water is primarily supplied from groundwater wells. The City overlies the Coachella Valley Groundwater Basin, which is underlain by several large sub-basins. The City overlies the San Gorgonio Pass Sub-basin, which is divided into water storage units. The City extracts groundwater from the Banning Storage Unit, Banning Bench Storage Unit, Cabazon Storage Unit, Beaumont Basin, and Banning Canyon Storage Unit.

The City purchases imported water from the San Gorgonio Pass Water Agency to recharge to the Beaumont Basin at Beaumont Cherry Valley Water District's Noble Creek spreading facility. Based on the City's 2015 UWMP, the City recharged approximately 694 afy in year 2015. Although the City purchases imported water, the imported water supply connection is only used for recharge.

To assess the ultimate effect of the Project's water demands and service needs, the City of Banning Water Department has prepared a Water Supply Assessment, included as Technical Appendix J to this EIR, in accordance with Senate Bill 610 (SB 610). Provided below is a summary of the City of Banning's water supplies and water demand projections based on the assessment.

At the time the assessment was prepared, there were no land use development entitlements being sought (i.e. site plan, parcel map, etc.) by the Project proponent. In the absence of site-specific details, the water demand for the Project is based on the *City of Banning, Integrated Master Plan, Final Report*, March 2018. According to Table 3.8, *Known Developments Demand Projections,* the Project is estimated to have an annual water demand of 279-acre feet per year (afy). Table 4.13-1 provides a summary of the available groundwater supplies from 2020 to 2040.

4.13.1 - Quantities of Available Water Supplies (AF/YR)

Basin Name	2020	2025	2030	2035	2040
Beaumont Storage Unit	1,266	1,14	1,029	925	925
Beaumont Storage Unit Recharge	2,718	2,71 8	2,718	2,718	2,718
Banning Storage Unit	1,130	1,13	1,130	1,130	1,130
Banning Bench Storage Unit	1,960	1,96	1,960	1,960	1,960
Cabazon Storage Unit	2,515	2,51	2,515	2,515	2,515
Banning Canyon Storage Unit	4,070	4,07	4,070	4,070	4,070
San Gorgonio Pass Subbasin Total	**13,659**	**13,538**	**13,422**	**13,318**	**13,318**

Source: Banning 2015 Urban Water Management Plan.

Table 4.13-2 shows a comparison of the Project's projected water demand compared to the available City industrial and commercial sector water supplies for the period 2020 to 2040.

4.13.2 - Comparison of Project Demand vs. Projected Deliveries (afy)

Land Use	2020	2025	2030	2035	2040
Industrial	94	99	103	107	111
Commercial	2.281	2,382	2,484	2,586	2,694
Total	2,375	2,481	2,587	2,693	2,805
Project Demand	279	279	279	279	279
Project's Percent of Total	11.7%	11.2%	10.8	10.4	9.9%

Source: Source: Banning 2015 Urban Water Management Plan

As shown in Table 4.13-2 above, the Project's expected water demand is within the City's total projected water supplies available during normal, single dry, and multiple dry water years for the next 20 years. Therefore, there will be adequate supplies to meet the projected water demand associated with the Project in addition to the existing and other planned future uses of the City's water system.

Level of Significance: Less than significant.

Threshold 4.13.5 (c) - 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?

All wastewater flows collected within the City's service area are currently treated at one facility, the Banning Wastewater Treatment Plant. The plant is in the southeast portion of the City adjacent to Smith Creek and east of Hathaway Street. The City contracts with United Water Services for the operation and maintenance of the plant. The plant has capacity to treat up to 3.6 million gallons per day (MGD. The Plant treated an average of 2.07 MGD in 2016. According to the City of Banning, *Integrated Master Plan*, 2018, the Project is estimated to generate approximately 53,580 gpd (0.5 MGD).

A comparison of the Project's wastewater generation as compared to the overall City's projected wastewater flows by percentage are shown in Table 4.13-3.

4.13.3 - Project's Wastewater Generation as Compared to the Overall City's Projected Wastewater Flows

Flow Condition	Existing	2025	2040
City	2.01	2.80	4.29
Project	0.00	0.05	0.05
Project % of Total	**0%**	**1.78**	**1.16**

Source: Table 3.22, City of Banning, Integrated Master Plan, 2018.

As shown in Table 4.13-3, the Project's estimated wastewater flows represent 1.78% of the treatment plant's capacity in 2025 and 1.16% in 2040.

Level of Significance*:* Less than significant.

Threshold 4.13.5 (d) - Generate solid waste more than State or local standards, or more than the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Waste Management Inc. is the franchise waste hauler for the City of Banning and collects solid waste from all residential and commercial customers. The Riverside County Waste Management Department provides recycling and disposal services for the City of Banning. Solid waste generated by the Project will be disposed of at three facilities in Riverside County, the Badlands Sanitary Landfill near the City of Moreno Valley, the El Sobrante Landfill near the City of Corona, and the Lamb Canyon Sanitary Landfill near the City of Beaumont. As shown in Table 4.13-4, these three landfills have residual capacity for additional waste and are estimated to close beyond 2020.

4.13. 4 - Capacity of Landfills Serving Banning

Landfill	Capacity (cubic yards)	Remaining Capacity (cubic yards)	Closure Date
Badlands Sanitary Landfill	34,400,000	15,748,789	1/1/2022
El Sobrante Landfill	209,910,000	143,977,170	1/1/2051
Lamb Canyon Sanitary Landfill	38,935,653	19,242,950	4/1/2029

Source: CalRecycle, SWIS Facility/Site Activity Details website, July 2020.

Construction and operation of the proposed Project would result in the generation of solid waste, requiring disposal at a landfill. During construction of the proposed Project, solid waste in the

form of demolition material and remnants of unused construction materials would require disposal at a landfill. Waste also would be generated by the construction process, primarily consisting of discarded materials and packaging. Section 5.408 of the 2016 California Green Building Standards Code (CALGreen; Part 11 of Title 24, California Code of Regulations) requires that 65 percent of construction/demolition waste be diverted from landfills, and 100 percent of trees, stumps, rocks, and associated vegetation and soils resulting from land clearing be reused or recycled.

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential air quality criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The model can also be used to estimate solid waste generation rates for various types of land uses for analysis in CEQA documents. Waste disposal rates by land use and overall composition of municipal solid waste in California is primarily based on CalRecycle data. Based on solid waste generation usage obtained from CalEEMod, the Project would generate approximately 1,689 tons of solid waste per year (6,255 cubic yards). This amount represents 0.018% of the remaining capacity of the Badlands Sanitary Landfill, 0.003% of the El Sobrante Sanitary Landfill, and 0.0001% of the Lamb Canyon Sanitary Landfill. As such, the nominal portion of the Project's solid waste generation would not contribute significantly to landfill capacity, and the landfill facilities are sufficient. Accordingly, impacts would be less than significant.

Level of Significance: Less than significant.

4.13.6 Cumulative Impacts

This cumulative impact analysis considers development of the Project in conjunction with other development projects and planned development in the vicinity of the Project site, including buildout of the City of Banning General Plan Land Use Plan. This study area was selected because utilities and service systems are provided to all the existing and planned developments in the City of Banning by the same service providers.

Water Facilities

According to the Water Supply Assessment prepared for the Project (see Appendix I) the water demand estimated for the Project is within the limit of growth anticipated by the Urban Water Management Plan (UWMP). The implementation of existing water conservation measures and recycling programs in the Banning service area would also help reduce the need for increased water supply. Additionally, Banning has established a Water Shortage Contingency Plan (detailed in Banning's 2015 UWMP) to reduce water demand during a water supply shortage, including a reduction in water supplies due to legal, environmental, and/or climatic conditions. The Water Shortage Contingency Plan provides several prohibitions and consumptive reduction methods that would reduce demand up to 50% under the most extreme deficiencies. Because the Banning

Water Division is projected to have adequate water supply for projected growth through at least the Year 2040 in normal, dry, and multiple-dry years, cumulatively-considerable effects to water supply would not result from construction or operation of the Project.

Wastewater Treatment Facilities

Based on historical records, the average annual flow at the City's wastewater treatment plant (WWTP) was estimated to be roughly 2.02 mgd for years 2011 through 2016. The existing average dry weather flow (ADWF) is approximately 2.08 mgd for years 2011 through 2016. The City's 5-year average per capita wastewater generation was estimated at 73 gallons per capita per day (gpcd). The WWTP has capacity to treat up to 3.6 million gallons per day (MGD).

The City of Banning Integrated Master Plan, 2018*,* found that capacity upgrades are not required to accommodate future buildout of the City. As such, the Projects' incremental contribution of 1.16% of the total capacity demand in 2040 would not require expanded treatment capacity and impacts are less-than-cumulatively considerable.

Storm Water Drainage Facilities

Cumulative impacts associated with the construction of storm water drainage facilities will result in physical impacts to the surface of the site. In all cases, where cumulatively significant physical impacts associated with construction of drainage facilities are identified, mitigation measures have been imposed to reduce such impacts to the maximum feasible extent. Accordingly, impacts associated with the provision of storm water drainage facilities to serve the Project would be less-than-cumulatively considerable.

Electric Power Facilities

The Project will connect to the existing Southern California Edison electrical distribution facilities available in the vicinity of the Project site. As discussed in Section 4.5, *Energy* of this EIR, the Project would create a net increase in electricity demand of approximately 1,679,221 kWh per year. This net increase is well within SCE's systemwide net increase in electricity supplies of approximately 15,273 GWh annually over the 2012-2024 period.[4] Therefore, there are sufficient planned electricity supplies in the region for the estimated net increase in electricity demands, and buildout under the proposed Project would not require expanded electricity supplies and impacts are less-than-cumulatively considerable.

[4] California Energy Commission, Electricity Consumption by County, https://ecdms.energy.ca.gov/elecbycounty.aspx

Natural Gas Facilities

The Project will connect to the existing Southern California Gas natural gas distribution facilities available in the vicinity of the Project site. As discussed in Section 4.5, *Energy* of this EIR, the Project would generate a net increase in natural gas demand of approximately 248,201 KBTU/yr. This net increase is well within the Southern California Gas Company's systemwide natural gas supplies of approximately 923 million of therms during the 2017 period[5]. Therefore, there are sufficient planned natural gas supplies in the region for the estimated net increase in natural gas demands, and buildout under the proposed Project would not require expanded natural gas supplies and impacts are less-than-cumulatively considerable.

Telecommunication Facilities

Some of the primary providers in Banning include Verizon, AT&T, Frontier Communications, Charter Spectrum, Viasat Internet, and Hughes Net. Internet inquiries of these service providers' websites indicate that their respective services are available to serve the Project site with existing facilities. Accordingly, impacts are less than cumulatively considerable.

Solid Waste Facilities

As previously discussed in the analysis provided under Threshold 4.13.5 (d), solid waste generated by construction and operation of the Project would represent nominal proportions of the daily disposal capacity at El Sobrante Landfill, Lamb Canyon Landfill, and/or Badlands Landfill. The landfills are currently projected to remain open until as far into the future as 2045 (El Sobrante Landfill) and have sufficient daily capacity to handle solid waste generated by the Project and other cumulative developments both during construction and long-term operation. Therefore, the Project's cumulative impacts to solid waste facilities are less than significant.

Level of Significance*:* Less than significant with mitigation incorporated.

4.13.7 References

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[5] California Energy Commission, Gas Consumption by County, https://ecdms.energy.ca.gov/gasbycounty.aspx

Krieger and Stewart Engineering Consultants, *City of Banning Final 2015 Urban Water Management Plan*, May 2016. (Available at: http://ci.banning.ca.us/DocumentCenter/View/4543, accessed July 1, 2020.

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5. OTHER CEQA TOPICS

5.1 Significant Environmental Effects Which Cannot Be Avoided If the Proposed Project Is Implemented

The *CEQA Guidelines* require that an EIR disclose the significant environmental effects of a project that cannot be avoided if the proposed project is implemented (CEQA Guidelines § 15126(b)) describes the significant unavoidable impacts that would occur should the proposed Project be implemented and after the application of regulatory requirements or the application of feasible mitigation measures (MMs).

Table 5. 1 - Significant Environmental Effects Which Cannot be Avoided

Topic	Type of Impact Details of Impact
Air Quality	Development allowed by the Project will result in an unavoidable significant adverse impact to regional air quality caused by construction emissions of volatile organic compounds (VOC) and operational emissions of NOx more than the SCAQMD regional significance thresholds for these pollutants.
Greenhouse (GHG) emissions	Development allowed by the Project will generate 11,966.30 MTCO2e per year from construction, area, energy, mobile, waste, and water usage which exceeds the Tier 3 screening thresholds established by the SCAQMD.
Vehicle Miles Traveled (VMT)	The Project would exceed the 15 percent below existing regional HBW VMT per worker by 19.12 percent. As such, the Project's impact based on VMT for the light industrial and business park component as recommended by the Office of Planning & Research.

Source: DEIR Section 4.0.

5.2 Significant Irreversible Environmental Changes

The *CEQA Guidelines* require EIRs address any significant irreversible environmental changes that would be involved with the proposed action should it be implemented (CEQA Guidelines § 15126(c); § 15126.2(d)). An environmental change would fall into this category if: a) the project would involve a large commitment of non-renewable resources; b) the primary and secondary impacts of the project would generally commit future generations to similar uses; c) the project involves uses in which irreversible damage could result from any potential environmental accidents; or d) the proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy). Each of these issues are discussed below.

Commitment of Non-Renewable Resources

Determining whether the proposed Project may result in significant irreversible environmental changes requires a determination of whether key non-renewable resources would be degraded or destroyed in such a way that there would be little possibility of restoring them.

Natural resources, in the form of construction materials and energy resources, would be used in the construction of the proposed Project. The consumption of these natural resources would represent an irreversible change to the environment. However, development of the Project site as proposed would have no measurable adverse effect on the availability of such resources, including resources that may be non-renewable (e.g., fossil fuels).

Commit Future Generations to Similar Uses

Implementation of the Project would commit future generations to the uses proposed by the Project on the Project site. As demonstrated in the analysis presented throughout Draft EIR Section 4.0, construction and long-term operation of the proposed Project would be compatible with existing and planned future land uses that surround the Project site and would not result in significant and unavoidable physical environmental effects to nearby properties.

Wasteful Use of Energy

The Project is required by law to comply with the California Building Standards Code (CALGreen), which will minimize the Project's demand for energy, including energy produced from non-renewable sources. A more detailed discussion of energy consumption is provided is Section 4.7 *Energy*.

Potential Environmental Accidents

Initial Study Section 4.8, *Hazards and Hazardous Materials* provides an analysis of the Project's potential to transport or handle hazardous materials which, if released into the environment, could result in irreversible damage to the environment. As concluded in the analysis, compliance with federal, state, and local regulation related to hazardous materials would be required of all contractors working on the property during the Project's construction and of all the persons that occupy the Project's buildings. As such, construction and long-term operation of the Project would not have the potential to cause significant irreversible damage to the environment, including damage that may result from upset or accident conditions.

5.3 Growth Inducing Impacts

According to State CEQA Guidelines (Section 15126.2 (e)), a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria: remove obstacles to population growth; increases in the population that may tax existing community service facilities, causing significant environmental effects; a project would encourage and facilitate other activities that could significantly affect the environment. Each of these issues is discussed below.

Remove Obstacles to Population Growth

The Project will not remove obstacles to population growth or directly contribute to population growth. The proposed Project involves construction and operation of business and warehouse, office and professional, and retail and service uses in an area that the City has planned for this type of development. Consistency with the *SCAG Regional Transportation Plan Sustainable Communities Strategy* (RTP-SCS) is included in the analysis for this Project. Because the proposed Project is consistent with the General Plan land uses for the site, development of the site in this manner would have been considered in the RTP-SCS projections. Therefore, the Project is consistent with the goals and strategies outlined in the RTP-SCS and no mitigation measures are necessary.

Increases in the Population That May Tax Existing Community Service Facilities, Causing Significant Environmental Effects

The Project may indirectly induce population growth in the short term because it will be a new source of employment within the City. However, the extent to which the new jobs created by a project are filled by existing residents is a factor that tends to reduce the growth inducing effect of a project. Construction of the Project will create short-term construction jobs which are anticipated to be filled by workers who, for the most part, reside in the Project area; therefore, construction of the proposed Project will not generate a permanent increase in population within the Project area. The workers constructing the Project are also not expected to require additional housing needs beyond those which are currently available in the City of Banning, or the surrounding County areas.

The Southern California Council of Governments (SCAG) publishes population, housing, and employment predictions for all cities within their region, including the City of Banning, based on information gathered from local planning documents, such as general and specific plans, within each SCAG-participating jurisdiction. As shown in Table 8.0-1 – Demographics and Growth, the City's population was 30,100 in 2012 and is anticipated to grow to 32,400 in 2020, 36,500 in 2035 and 37,600 in 2040. Additionally, the number of jobs is anticipated to increase to 10,000 in 2020, 13,500 in 2035 and 14,200 in 2040, from its previous level of 7,300 jobs.

Table 5. 2 - Demographics and Growth

Metric	2012	2020	2035	2040
Population	30,100	32,400	36,500	37,600
Housing Units	10,800	11,900	13,350	14,000
Employment	7,300	10,000	13,500	14,200

Source: SCAG

The proposed Project is consistent with the land use designation of Business Park (with Specific Plan Overlay) General Commercial (with Specific Plan Overlay) and was contained in the City's GP, which is included in SCAG's forecasts. Therefore, any potential increases in population because of the proposed Project would have been accounted for by SCAG when they developed their growth predictions. The Banning GP EIR also considered urbanization of land, in general, will have a growth inducing impact and found that development consistent with the Banning GP reflects the logical geographic expansion of development within Western Riverside County. Thus, as the Project is substantially similar to other development within the City of Banning General Plan and in the Project vicinity, and is consistent with the land uses assumed by SCAG in their growth forecasts, the Project will also not result in urbanization in a remote location

In addition, the analysis in Section 3.14, *Public Services*, of the Initial Study Checklist (see Appendix A) demonstrates that the impacts on public services are less than significant so the public service provider's ability to provide services will not be reduced. Therefore, the amount of growth represented by the proposed Project is not expected to induce additional or substantial unanticipated growth into the surrounding area in the foreseeable future.

Encourage and Facilitate Other Activities That Could Significantly Affect the Environment.

The Project's potential influence on other nearby properties to redevelop at greater intensities and/or different uses than the City's General Plan and Zoning Code is nil because the Project site is surrounded by development on 3 sides and railroad tracks and the I-10 Freeway on one side and is considered an infill site.

For the reasons outlined above, it is unlikely, speculative, and not reasonably foreseeable that the Project would induce substantial growth in the form of additional housing or non-residential economic activity or employment that would result in measurable impacts on the off-site physical environment. In addition, the development of the proposed Project would not reasonably or foreseeably cause the redevelopment of other properties or cause development on other properties.

6. ALTERNATIVES

6.1 Requirements for Alternatives

An EIR must identify ways to mitigate or avoid the significant effects that a proposed project may have on the environment. In compliance with CEQA Guidelines Section 15126.6(a), this EIR must 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*." The EIR does not need to consider every conceivable alternative; rather, it must consider a reasonable range of potentially feasible alternatives to the Project or to the location of the Project, which would avoid or substantially lessen significant effects of the 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(b)].

The discussion of project alternatives must, "*include sufficient information about each (to) allow meaningful evaluation, analysis, and comparison with the proposed project*." An EIR must also evaluate a "No Project" alternative in order to allow decision-makers to compare the effect of approving the Project to the effect of not approving the Project. The City, acting as the CEQA Lead Agency, is responsible for selecting a range of alternatives for examination and must publicly disclose its reasoning for selecting those alternatives.

The range of alternatives addressed in an EIR is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR needs to examine in detail only those that the Lead Agency determines could feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project. Per State CEQA Guidelines Section 15364, "feasible" has been defined as "*capable of being accomplished in a successful manner within a reasonable period of time, considering economic, environmental, legal, social, and technological factors*."

6.2 Alternatives Considered but Not Analyzed Further

An EIR is required to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible. Among the factors described by CEQA Guidelines §15126.6 in determining whether to exclude alternatives from detailed consideration in the EIR are a) failure to meet most of the basic project objectives, b) infeasibility, or c) inability to avoid significant environmental impacts. With respect to the feasibility of potential alternatives to the Project, CEQA Guidelines §15126.6(f) (1) notes:

"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…"

6.2.1 Alternative Site

A vacant 42- acre site that has a General Plan land use designation of General Commercial located at the southwest corner of I-10 and Sunset Avenue was considered as an alternative site. Development of the Project at this location would have similar impacts as would occur with implementation of the Project at its location. The Project's significant and unavoidable impacts are primarily the result of Project-generated traffic, which in turn are a result of the Project design itself, and not necessarily the physical setting or characteristics of the Project site; thus, implementing the Project at the alternative site would not substantially reduce the Project's impacts due to air quality emissions, greenhouse gas emissions, and vehicle miles traveled. Therefore, this alternative was rejected.

6.3 Project Objectives

One factor that must be considered in the evaluation of alternatives is the ability of a specific alternative to attain most of the basic objectives of the Project (CCR Section 15126.6[a]).

The Project's basic objectives are:

5) To efficiently develop an underutilized property with a complementary mix of land uses, including business park, light industrial, commercial, office and professional, and optional residential land uses.

6) Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities and expansion of the tax base.

7) Provide local employment for residents of the City to improve the jobs-housing balance within the City.

8) To provide Development Standards and Design Guidelines that establish general provisions for site design, circulation, architecture, landscape, walls, fences, screening, and buffers that would ensure that the Project is developed in a manner that is aesthetically pleasing.

6.4 Summary of the Project's Significant Environmental Impacts

As discussed in EIR Section 4.0, *Environmental Analysis*, the Project would result in significant adverse environmental effects that cannot be mitigated to below levels of significance after the implementation of feasible mitigation measures. The unavoidable significant impacts are identified in Table 6-1 below.

Table 6. 1- Summary of Significant Environmental Impacts

Topic	Details of Impact
Air Quality	The Project will exceed the thresholds established by the SCAQMD for VOC emissions because of painting and NOx emissions because of the amount of vehicle traffic generated.
Greenhouse Gas Emissions (GHG)	The Project site will generate 11,966.30 MTCO2e per year from construction, area, energy, mobile, waste, and water usage which exceeds the significance screening threshold of 3,000 MTCO2e per year both on a project and cumulative basis.
Vehicle Miles Traveled (VMT)	The Project will not reduce VMT 15% below the existing regional VMT per worker threshold of 11.19.

6.5 Alternative Analysis

6.5.1 . Description of the Alternatives

No Project/No Development Alternative

This Alternative considers no development/disturbance on the Project site beyond that which occurs under existing conditions. As such, the approximately 47-acre Project site would continue to consist of vacant land that has been subject to regular discing as part of on-going fire abatement activities. Under this Alternative, no improvements would be made to the Project site and none of the Project's roadway, drainage, utility, and other infrastructure improvements would occur. This Alternative was selected by the City to compare the environmental effects of the Project with an alternative that would leave the Project site in its existing condition.

No Project/General Plan Land Use Alternative

This Alternative considers development of the Project site in accordance with the site's existing General Plan land use designations of Business Park (with Specific Plan Overlay) and General Commercial (with Specific Plan Overlay). Under this Alternative, the site would be developed with up to 25-acres of auto dealerships and 18 acres of commercial retail uses.

This Alternative was selected by the City to compare the environmental effects of the Project with an alternative that would develop the Project site in accordance with the General Plan land use designations of Business Park (with Specific Plan Overlay) General Commercial (with Specific Plan Overlay).

Reduced Development Alternative

This Alternative considers a 20% reduction in the amount of building square footage allowed by the Project from 966,552 square feet to 773.242 square feet. This Alternative was selected by the City because a 20% reduction in building square footage would reduce air emissions of nitrogen oxides (NOx) caused by vehicle traffic to less than significant levels. However, volatile organic compound (VOC) emissions from painting and the amount of vehicle miles traveled will remain significant.

6.5.2 Analysis of Alternatives

The following discussion compares the impacts of each Alternative considered by the Lead Agency with the significant impacts of the Project, as detailed in EIR Subsection 4.0*, Environmental Analysis* and as summarized in Table 6.1 above. A conclusion is provided for each impact as to whether the alternative results in one of the following:

(1) Reduction or elimination of the Project's impact;

(2) Greater impact(s) than would occur under the Project;

(3) Same impact as the Project; or

(4) New impact in addition to the Project's impacts.

6.5.3 No Project/No Development Alternative

Under existing conditions, the site consists of undeveloped and vacant land that has been subject to regular discing as part of on-going fire abatement activities. This Alternative would eliminate all the significant impacts from construction and operation of the Project (air quality, greenhouse gas emissions, and vehicle miles traveled). However, this alternative does not achieve any of the objectives of the Project. Impacts are **less** than the Project.

6.5.4 No Project/General Plan Development Alternative

Under this Alternative, the site would be developed with up to 25-acres of auto dealerships and 18 acres of commercial retail uses.

Air Quality

Development under this Alternative would allow the following amount of development:

- 150,000 square feet (sf) of New Car Sales;
- 67,500 sf of Medical Office;
- 21,000 sf of High Turn-over Restaurant;
- 5,000 sf of Bank w/ Drive-thru; and
- 5,000 sf of Office.

Total: 248,500 sf.

For comparison purposes, the Land Use Plan for the Project would allow the following:

- 877,298 square feet (sf) of Industrial Park;
- 52,065 sf of Medical Office, and
- 37,189 sf of Retail Use.

Total: 966,552 sf.

Under long-term operating conditions, the primary source of air quality pollutants from both the Project and development under this alternative would occur because of vehicular traffic. Development under this Alternative would generate 10,828 daily trips (passenger car equivalent) compared to 5.594 daily trips generated by the Project because this Alternative has more retail and sales uses than the Project. This represents a 93 % increase in daily vehicle trips. Thus, this Alternative would result in increased vehicle trips in comparison to the Project and therefore increased vehicular-related air quality pollutant emissions as compared to the Project. Thus, this Alternative would exacerbate the Project's significant and unavoidable impacts due to operational emissions from NOx. Impacts are **greater** than the Project.

Both this Alternative and the Project would conflict with the 2016 SCAQMD Air Quality Management Plan because NOx emissions because of vehicle traffic. Impacts are the **same** as the Project.

Odor impacts under both the this Alternative and the Project would be similar, as the operation of light industrial and/or commercial land uses would not result in the generation of substantial amounts of odor. Impacts are the **same**.

Greenhouse Gas Emissions

Under this Alternative, GHG emissions would be 8,582 MTCO2e per year as compared to the Project's emissions of 11,966 MTCO2e per year. Impacts are **less** than the Project. Although this

Alternative generates less greenhouse emissions than the Project, both this Alternative and the Project exceed the 3,000 MTCO2e screening significance thresholds and impacts remain significant.

Transportation (Vehicle Miles Traveled)

This Alternative would generate 10,828 daily trips (passenger car equivalent) as compared to 5.594 daily trips generated by the Project because this Alternative has more retail and sales uses. This represents a 93 % increase in daily vehicle trips, and thus more vehicle miles traveled. Impacts are **greater** than the Project. However, this Alternative will not reduce VMT by 15% below the existing regional VMT per worker threshold of 11.19 and impacts will remain significant.

6.5.5 Reduced Development Alternative

Under this Alternative building square footage would be reduced by 20% (from 966,552 square feet to 773.242 square feet).

Air Quality

This would reduce NOx emissions from vehicle traffic to a less than significant level. However, VOC emissions from painting during construction would remain significant as a 54% reduction in building square footage is required to reduce these emissions to a less than significant level. Impacts are **less** than the Project, but impacts will remain significant for VOC emissions.

Both this Alternative and the Project would conflict with the 2016 SCAQMD Air Quality Management Plan because VOC emissions during building construction would exceed significance thresholds. Impacts are the **same** as the Project.

Odor impacts under both the this Alternative and the Project would be similar, as the operation of industrial and/or commercial land uses would not result in the generation of substantial amounts of odor. Impacts are the **same** as the Project

Greenhouse Gas Emissions

Under this Alternative, greenhouse gas emissions would be 8,102 MTCO2e per year as compared to the Project's emissions of 11,966 MTCO2e per year. Development under this Alternative would have **less** impacts than the Project.

Transportation (Vehicle Miles Traveled)

Because vehicle miles traveled are in part related to the number of vehicle trips generated by a project, if building square footage were reduced by 20% overall, vehicle miles traveled will be reduced. Impacts are **less** than the Project. Although this Alternative generates less vehicle miles traveled than the Project, impacts will remain significant.

6.6 Summary of Environmental Impacts

Table 6. 2- Summary of Environmental Impacts

Environmental Topic	No Project/No Development	No Project/General Plan Development Alternative	Reduced Development Alternative(1)
Air Quality	Less	Greater	Less
Greenhouse Gas Emissions	Less	Greater	Less
Vehicle Miles Traveled	Less	Greater	Less
(1) Although impacts are less, impacts for air quality (VOC emissions), greenhouse gas emissions, and vehicle miles traveled remain significant.			

6.7 Environmentally Superior Alternative

Because the No Project Alternative would result in lower impacts resulting from construction and operation of the Project to less than significant levels, it is the environmentally superior alternative. However, the No Project Alternative would not meet the Project objectives. When the environmentally superior alternative is the No Project Alternative, the State CEQA Guidelines (Section 15126[d][2]) require selection of an environmentally superior alternative from among the other alternatives evaluated.

As shown in Table 6-2, the Reduced Development Alternative would be environmentally superior to the Project. Under this Alternative, impacts related to air quality NOx emissions would be reduced to less than significant, but VOC emissions will remain significant. Impacts from greenhouse gas emissions will be less but remain significant. Impacts from vehicle miles traveled will be less, but remain significant. .

City of Banning
99 E. Ramsey Street · P.O. Box 998 · Banning, CA 92220-0998 · (951) 922-3125 · Fax (951) 922-3128

COMMUNITY DEVELOPMENT
DEPARTMENT

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING FOR SUN LAKES VILLAGE NORTH SPECIFIC PLAN AMENDMENT No. 6

To: State Clearing House, Governor's Office of Planning and Research
1400 Tenth Street, Sacramento, California 95814
-AND-
Agencies, Organizations, and Interested Parties

From: City of Banning
99 E. Ramsey Street · P.O. Box 998 · Banning, CA 92220-0998

Subject: Notice of Preparation (NOP) of an Environmental Impact Report and Scoping Meeting for the Sun Lakes Village North Specific Plan Amendment No. 6

Date: February 21, 2020

The City of Banning (City) is the Lead Agency under the California Environmental Quality Act (CEQA) for preparation of an Environmental Impact Report (EIR) for the Sun Lakes Village North Specific Plan Amendment No. 6 (proposed project), described below. The City is soliciting input from the public, agencies, organizations, and other interested parties regarding the scope and content of the environmental information presented in the EIR. The project description, location, and the potential environmental effects are described below.

The City will accept comments on the NOP regarding the scope and content of the EIR between February 21, 2020 and March 21, 2020. Written comments with the project name in the subject line may be sent via mail, e-mail, or fax no later than 5:00 PM on March 21, 2017. Please send your comments at the earliest possible date to:

Adam Rush, M.A., AICP
Community Development Director
99 E. Ramsey Street
Banning, CA 92220
(Fax) 951-922-3128
arush@banningca.gov

SCOPING MEETING

As part of the EIR scoping process, a public scoping meeting will be held by the City on **Monday, March 2, 2020 at 5:30 pm** at the Sun Lakes Village Community Center/Country Club, 850 Country Club Drive, Banning, California 92220. Verbal and written comments regarding the scope and content of the EIR will be accepted during the meeting.

PROJECT LOCATION

The project site is located on approximately 47 gross acres between Sun Lakes Boulevard and Interstate 10 approximately 840 feet east of Highland Springs Avenue. The Project site is also identified as APN 419-140-057. (See Figures 1 and 2).

PROJECT DESCRIPTION

The Project proposes Specific Plan Amendment No. 6 to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary I-10 Freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage. The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions as shown on the plans on file with the City.

POTENTIAL ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

The following list identifies the environmental issues that, pursuant to the findings of the Initial Study, have been determined to pose ***no potentially significant environmental impacts and WILL NOT be analyzed in the EIR:***

- Aesthetics (scenic vistas, scenic highways)
- Agriculture and Forestry Resources
- Hazards and Hazardous Materials
- Geology and Soils (soils and seismic hazards)
- Hydrology and Water Quality (decrease groundwater supplies or interfere substantially with groundwater recharge; located in flood hazard, tsunami, or seiche zone).
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Wildfire

The following list identifies the environmental issues that, pursuant to the findings of the Initial Study, have been determined to pose ***potentially significant environmental impacts and WILL be analyzed in the EIR:***

- Aesthetics (visual character, light and glare)
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils (Paleontological Resources)
- Greenhouse Gas Emissions
- Hydrology and Water Quality (water quality standards or waste discharge requirements; erosion/siltation; flooding, and storm drain capacity)
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

A copy of the Initial Study is available on the City's website at the address below:

(http://www.ci.banning.ca.us/426/Public-Notices-Announcements

Attachments:

Figure 1. Project Location Map/Aerial Photo
Figure 2. Proposed Land Use Plan

Figure 1
Project Location Map/Aerial Photo

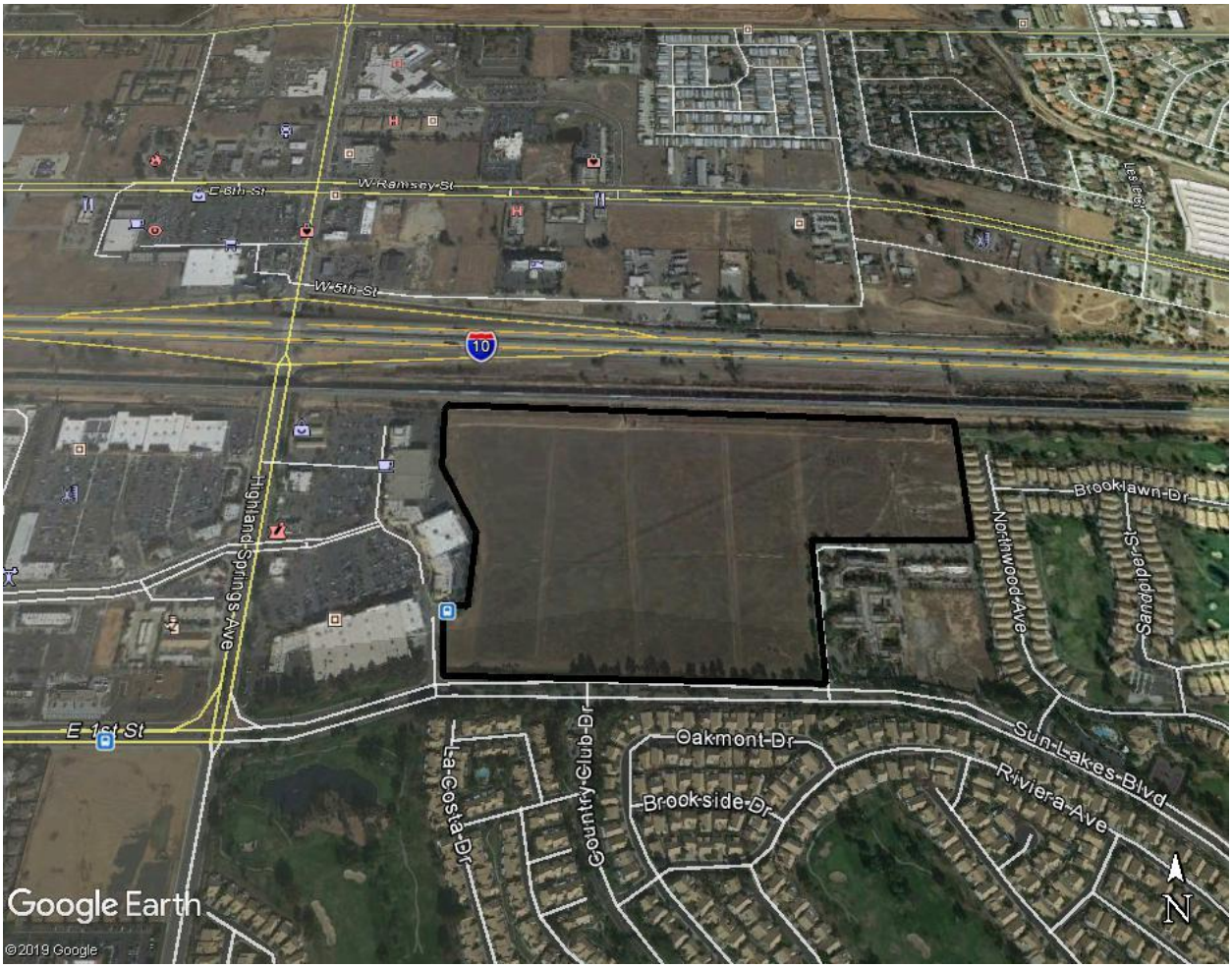


Figure 2
Proposed Land Use Plan



Initial Study

Sun Lakes Village North Specific Plan Amendment No. 6



City of Banning
99 E. Ramsey Street
Banning, CA 92220

Prepared by:
Romo Planning Group, Inc.
9431 Haven Avenue, Ste. 232
Rancho Cucamonga, CA 91730

February 18, 2020

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INTRODUCTION

1.1 Purpose of the Initial Study

The City of Banning (Lead Agency) has been determined that an Environmental Impact Report (EIR) will be required for the project. One of the purposes of an Initial Study is to focus an EIR on the effects determined to be significant, identifying the effects determined not to be significant, (and) explaining the reasons for determining that potentially significant effects would not be significant." (State CEQA Guidelines, Section 15063(c)). Therefore, one of the key purposes of this Initial Study is to focus the EIR's analysis on impacts that are potentially significant as part of the Project, while eliminating potential impacts that are clearly less-than-significant.

1.2 Initial Study Document

This document in its entirety is an Initial Study prepared in accordance with the California Environmental Quality Act (CEQA), including all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.).

1.3 Environmental Effects Not Found to be Potentially Significant

The following list identifies the environmental issues that, pursuant to the findings of this Initial Study, have been determined to pose ***no potentially significant environmental impacts***.

- Aesthetics (scenic vistas, scenic highways)
- Agriculture and Forestry Resources
- Hazards and Hazardous Materials
- Geology and Soils (soils and seismic hazards)
- Hydrology and Water Quality (decrease groundwater supplies or interfere substantially with groundwater recharge; located in flood hazard, tsunami, or seiche zone).
- Mineral Resources
- Population and Housing
- Public Services
- Recreation
- Wildfire

1.4 Potentially Significant Environmental Effects

The analysis presented in this Initial Study indicates that the Project may result in or cause potentially significant effects related to:

- Aesthetics (visual character, light and glare)
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils (Paleontological Resources)
- Greenhouse Gas Emissions

- Hydrology and Water Quality (water quality standards or waste discharge requirements; erosion/siltation; flooding, and storm drain capacity)
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

Consistent with the conclusion and findings of this Initial Study, an EIR will be prepared for the Project. At a minimum, the EIR will evaluate the Project's potential environmental impacts under the topical areas identified above. Additional issues or concerns that may be raised pursuant to the EIR Notice of Preparation (NOP) process and/or scoping meeting(s) conducted for the Project will also be evaluated and addressed in the EIR.

2.0 PROJECT BACKGROUND

2.1 Project Location

The Project site is located on approximately 47 gross acres between Sun Lakes Boulevard and Interstate 10 approximately 840 feet east of Highland Springs Avenue as shown in Figure 1 – Project Location Map/Aerial Photo. The Project site is also identified as APN 419-140-057.

2.2 Project Description

Background

The Sun Lakes Village Specific Plan ("Specific Plan") was originally approved by the City of Banning on February 28, 1983. The Specific Plan consisted of 4,131 dwelling units, a 150-acre golf course, 12 acres of commercial use and 144 acres of office/industrial use on approximately 963 acres. The Specific Plan was has been amended four (4) times between 1984 and 2006 to accommodate various changes to the land use plan, infrastructure requirements, and the vehicle and pedestrian circulation plan.

Proposed Project

The Project proposes Specific Plan Amendment No. 5 to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary I-10 Freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage. (See Figure 2- Land Use Plan).The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

2.3 Previous CEQA Documentation

An EIR was certified for the original Specific Plan (1983). The EIR was relied upon for CEQA compliance for the various amendments prior to 2006. For Amendment No. 4 (2006), a Mitigated Negative Declaration was adopted.

CEQA (Section 15150) permits the incorporation by reference of all or portions of other documents that are generally available to the public. Any document incorporated by reference shall be made available to the public for inspection at a public place or public building and requires that the Initial Study state where the incorporated documents will be made available for public inspection.

The following documents have been incorporated by reference and cited as appropriate:

- *The City of Banning General Plan,* various elements, adopted by the City Council on January 3 1, 2006 and as currently amended.

- *City of Banning General Plan with Zoning Overlay Map*, January 1, 2016 and as currently amended.

- *City of Banning Municipal Code* (various chapters), approved through November 15, 2019.
- *Draft Environmental Impact Report, for the Presley-Banning Property*, August 27, 1982.
- *Final Environmental Impact Report, for the Presley-Banning Property*, February 28, 1983.
- *Initial Study & Mitigated Negative Declaration No. 17-1504 for Careage Medical Office Building (GPA 17-2503, Zone Change 17-3503),* May 2018.

The Project's application materials and above described documents are on file with the City of Banning Community Development Department, 99 E. Ramsey Street Banning, CA 92220 and are hereby incorporated by reference.

2.4 Existing Site Conditions/Environmental Setting

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as "…the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, or if no Notice of Preparation is published, at the time the environmental analysis is commenced…" (CEQA Guidelines §15125[a]). In the case of the proposed Project, the Initial Study determined that an EIR is the appropriate form of CEQA compliance document, which requires a Notice of Preparation. Thus, the baseline environmental setting for the Project is the approximate date that the Project's Notice of Preparation was issued on February 21, 2020.

Land Use

The Project site consists of ± 47 acres. Existing and surrounding land uses are shown on Table 1.

Table 1. Existing and Surrounding Land Uses

Location	Existing Use
Site	Vacant land
North	Railroad tracks Interstate 10
South	Sun Lakes Boulevard followed by single-family residential homes
East	Senior apartments Assisted living/memory care residential facility single-family residential homes
West	Shopping center
Source: Field Inspection, December, 2019	

Existing General Plan Land Use Designations and Zoning Classifications

A summary of the existing General Plan land use designations and zoning classifications for the Project site and surrounding properties are shown on Table 2.

Table 2. Existing General Plan Designations and Zoning Classifications

Location	General Plan Designation	Specific Plan Designation
Site	Business Park (with Specific Plan Overlay) General Commercial (with Specific Plan Overlay)	Retail Commercial (Auto Dealer)
North	Public Facilities - Railroad/Interstate	N/A
South	Medium Density Residential (0-10 du/ac) (with Specific Plan Overlay)	Sun Lakes Specific Plan
East	Medium Density Residential (0-10 du/ac) High Density Residential (11-18 du/ac) High Density Residential-20/Affordable Housing Opportunity (20-24 du/ac) (all with Specific Plan Overlay)	N/A
West	General Commercial (with Specific Plan Overlay)	Retail Commercial

Source: Banning General Plan/Zoning Map

Access

Access is provided via Sun Lakes Boulevard which is a paved 4-lane roadway with a curb, gutter, and sidewalk and a raised median along the southern boundary of the site.

Drainage

The Project site currently drains southerly to Sun Lakes Boulevard and sheet flows to the existing storm drain system which conveys the flows to Smith Creek to the east and Potero Creek to the west.

Topography

The Project site is relatively flat with an elevation of 2,552 above mean sea level.

Vegetation

The site is characterized as a historically graded site that is regularly grubbed/disced. Primary vegetation consists of annual grasslands and ornamental vegetation. The site has also been exposed to other recurring anthropogenic activities such as ORV uses.

Figure 1
Project Location Map/Aerial Photo

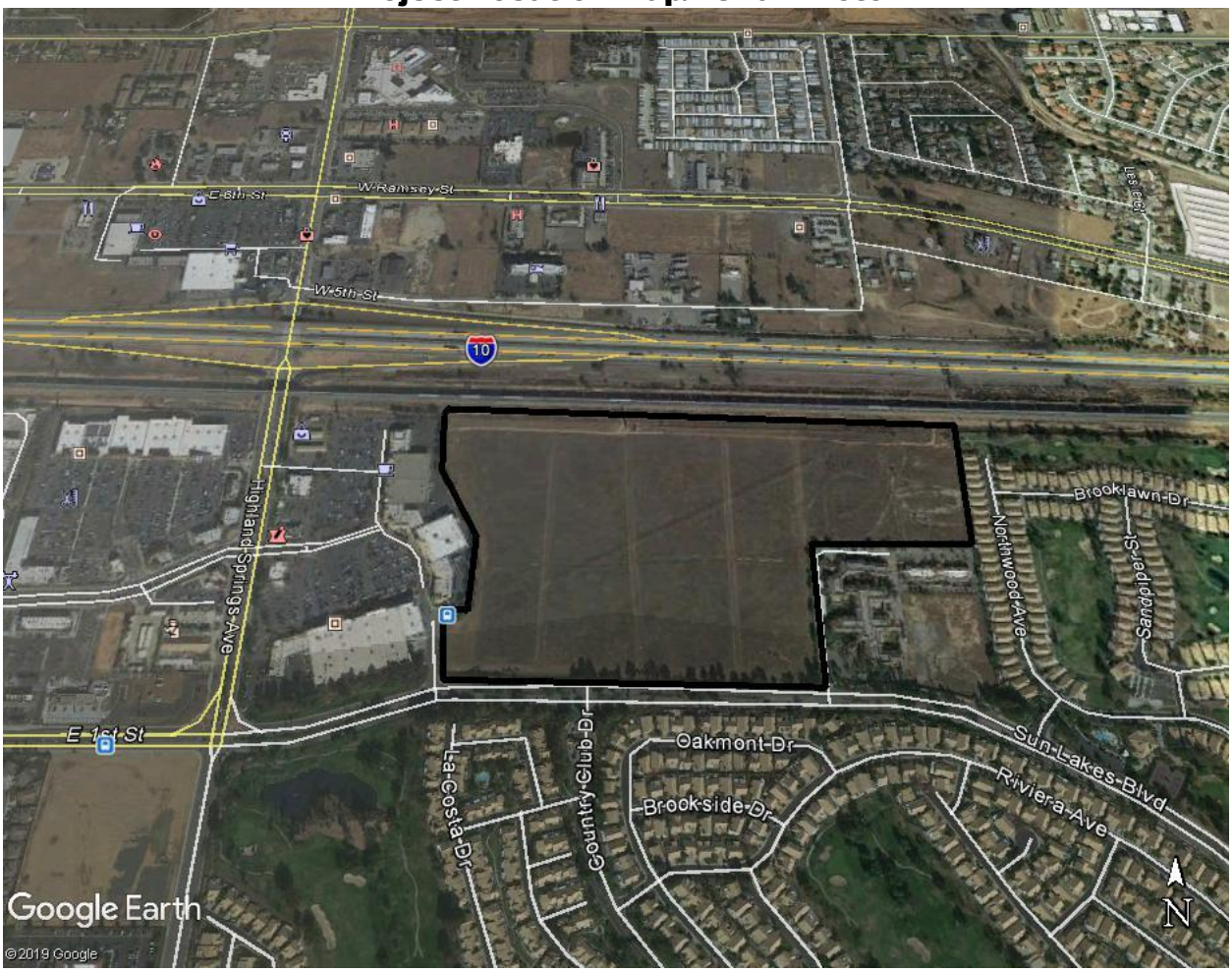


Figure 2
Proposed Land Use Plan



3.0 INITIAL STUDY CHECKLIST

Evaluation Format

This Initial Study has been prepared in compliance with the California Environmental Quality Act (CEQA) Guidelines. The Project is evaluated based on its potential effect on twenty-one (21) environmental factors categorized as follows, as well as Mandatory Findings of Significance:

1. Aesthetics
2. Agriculture & Forestry Resources
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Energy
7. Geology & Soils
8. Greenhouse Gas Emissions
9. Hazards & Hazardous Materials
10. Hydrology & Water Quality
11. Land Use & Planning
12. Mineral Resources
13. Noise
14. Population & Housing
15. Public Services
16. Recreation
17. Transportation
18. Tribal Cultural Resources
19. Utilities and Service Systems
20. Wildfire
21. Mandatory Findings of Significance

Each factor is analyzed by responding to a series of questions pertaining to the impact of the Project on the particular factor in the form of a checklist. This Initial Study provides a manner to analyze the impacts of the Project on each factor in order to determine the severity of the impact and determine if mitigation measures can be implemented to reduce the impact to less than significant without having to prepare an Environmental Impact Report.

CEQA also requires Lead Agencies to evaluate potential environmental effects based to the fullest extent possible on scientific and factual data (CEQA Guidelines §15064[b]). A determination of whether or not a particular environmental impact will be significant must be based on substantial evidence, which includes facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts (CEQA Guidelines §15064f[5]).

The effects of the Project are then placed in the following four categories, which are each followed by a summary to substantiate why the Project does not impact the particular factor with or without mitigation. If "Potentially Significant Impacts" that cannot be mitigated are determined, then the Project does not qualify for a Mitigated Negative Declaration and an Environmental Impact Report must be prepared:

Potentially Significant Impact	*Less Than Significant Impact with Mitigation Incorporated*	*Less Than Significant Impact*	*No Impact*
Potentially significant impact(s) have been identified or anticipated that cannot be mitigated to a level of insignificance. An Environmental Impact Report must therefore be prepared.	Potentially significant impact(s) have been identified or anticipated, but mitigation is possible to reduce impact(s) to a less than significant category. Mitigation measures must then be identified.	No "significant" impact(s) identified or anticipated. Therefore, no mitigation is necessary.	No impact(s) identified or anticipated. Therefore, no mitigation is necessary.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agriculture and Forestry Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☒ Energy
☒ Geology and Soils	☒ Greenhouse Gas Emissions	☒ Hazards and Hazardous Materials
☐ Hydrology and Water Quality	☒ Land Use and Planning	☐ Mineral Resources
☒ Noise	☐ Population and Housing	☐ Public Services
☐ Recreation	☒ Transportation	☒ Tribal Cultural Resources
☒ Utilities and Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be recommended for adoption. ☐

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project Applicant. A MITIGATED NEGATIVE DECLARATION will be recommended for adoption. ☐

I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. **X**

I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed Project could have a significant effect on tyhe environment, because all potgentially significnat effect (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to all applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures are are imposed upon the proposed Project, nothing further is required. ☐

By:

Adam Rush, Community Development Director	February 19 , 2020
Printed Name/Title	Date

3.1 AESTHETICS

Would the Project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?			■	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				■
c. 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?	■			
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	■			

3.1 (a) Would the project have a substantial adverse effect on a scenic vista?

Determination: Less Than Significant Impact.
Source: Project Application Materials.

Impact Analysis

The Project proposes a Specific Plan that will allow development of business park, industrial, office, and commercial uses on a vacant site. As such, the construction and operation of future development allowed by the Specific Plan has the potential to result in impacts to scenic vistas.

The General Plan Environmental Resources Element describes Open Space for the Preservation of Natural Resources and Open Space for Outdoor Recreation as having scenic value. Open Space for the Preservation of Natural Resources refers to areas required for the protection of scenic resources, (GP, p. IV-19). Open Space for Outdoor Recreation includes areas of outstanding scenic, historic and cultural value. (GP. P. IV-22).

The majority of the City is located within the narrow east-west trending valley of the San Gorgonio Pass, which is dominated by the San Bernardino Mountains along the northern end of the valley and the San Jacinto Mountains along the southern end of the valley (GP DEIR, p. III-189). These mountain ranges present impressive viewsheds and dramatic scenery, including frequently snow-covered mountain peaks and ranges with rugged slopes. The Project site is located approximately 3

miles south of the foothills of the San Bernardino Mountains and approximately 1-mile north of the San Jacinto Mountains.

Because of the distance to the above identified scenic vistas and the intervening topography and development, the Project will not have an impact on scenic vistas.

This issue **WILL NOT** be evaluated further in the forthcoming EIR.

3.1 (b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Determination: No Impact.
Sources: California Department of Transportation "Scenic Highway Program Eligible and Officially Designated Routes," General Plan, General Plan Figure 4.23, Google Earth.

Impact Analysis

California's Scenic Highway Program was created by the Legislature in 1963. Its purpose is to protect and enhance the natural scenic beauty of California highways and adjacent corridors, through special conservation treatment. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Sections 260 through 263. According to the California Department of Transportation, the Project site is not located within a State Scenic Highway. As such, there is no impact.

This issue **WILL NOT** be evaluated further in the forthcoming EIR.

3.1 (c) 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?

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

According to the Census 2010 Urbanized Area Outline Maps, the Project site is located in the Riverside-San Bernardino, CA Urbanized Area. As such, the Project is subject to applicable General Plan and zoning regulations governing scenic quality. The Project proposes a Specific Plan that will allow development of business park, industrial, office, and commercial uses on a vacant site. As such, the construction and operation of future development allowed by the Specific Plan has the potential to result in impacts to the existing visual character or quality of public views of the site and its surroundings. Development standards regulating architecture and landscaping will be detailed in the forthcoming specific plan.

This issue **WILL** be evaluated further in the forthcoming EIR.

3.1 (c) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

The Project proposes a specific plan that will allow development of business park, industrial, office, and commercial uses on a vacant site. As such, the construction and operation of future development allowed by the Specific Plan has the potential to result in impacts relating to light and glare. Development standards regulating light and glare will be detailed in the forthcoming Specific Plan.

This issue **WILL** be evaluated further in the forthcoming EIR.

3.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:	**Potentially Significant Impact**	**Less Than Significant Impact With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				■
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				■
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				■
d. Result in the loss of forest land or conversion of forest land to non-forest use?				■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				■

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

Determination: No Impact
Sources: California Department of Conservation "Farmland Mapping and Monitoring Program.

Impact Analysis

According to the Riverside County Parcel Report obtained from the Map My County website on January 17, 2020, the site is identified as Farmland of Local Importance and Urban-Built Up Land. As such, the site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program. The Project has no potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use and no impact would occur in this regard.

This issue **WILL NOT** be addressed further in the EIR.

3.2 (b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Determination: No Impact.
Sources: Banning General Plan Land/Zoning Map.

Impact Analysis

Agricultural Zoning

The Project site is designated as Business Park (with Specific Plan Overlay) and General Commercial (with Specific Plan Overlay). There is no agricultural zoning or uses in close proximity to the Project site. Therefore, the Project will not conflict with existing zoning for agricultural use.

Williamson Act

Pursuant to the California Land Conservation Act of 1965, a Williamson Act Contract enables private landowners to voluntarily enter into contracts with local governments for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive lower property tax assessments based upon farming and open space uses as opposed to full market value. According to the Riverside County Parcel Report for the Project, the site is not under a Williamson Act Contract. As such, there is no impact. No mitigation measures are required.

These issues **WILL NOT** be evaluated further in the EIR.

3.2 (c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?

Determination: No Impact.
Sources: Banning General Plan/ Zoning Map.

Impact Analysis

The Project site is designated as Business Park (with Specific Plan Overlay) and General Commercial (with Specific Plan Overlay). The Project site does not contain any forest lands, timberland, or timberland zoned as Timberland Production, nor are any forest lands or timberlands located on or nearby the Project site. Because no lands on the Project site are zoned for forestland or timberland, the Project has no potential to impact such zoning. No impact would occur.

This issue **WILL NOT** be evaluated further in the EIR.

3.2 (d) Result in the loss of forest land or conversion of forest land to non-forest use?

Determination: No Impact
Source: Field Survey.

Impact Analysis

The Project site and surrounding properties do not contain forest lands, are not zoned for forest lands, nor are they identified as containing forest resources by the General Plan. Because forest land is not present on the Project site or in the immediate vicinity of the Project site, the Project has no potential to result in the loss of forest land or the conversion of forest land to non-forest use. No impact would occur.

This issue **WILL NOT** be evaluated further in the EIR.

3.2 (e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

Determination: No Impact.
Sources: Banning General Plan/Zoning Map, Field Survey.

Impact Analysis

The Farmland Mapping and Monitoring Program classifies the Project site as Farmland of Local Importance. Farmland of Local Importance is either currently producing, or has the capability of production; but does not meet the criteria of Prime, Statewide or Unique Farmland.

The site can be considered to be Fallow Agricultural Land. The description of this habitat and vegetation communities is based on the definitions found in MSHCP Section 2.1.3 and *A Manual of California Vegetation: Second Edition* (Sawyer et al. 2009). Fallow Agricultural Land includes fallow fields that have been recently disked, plowed, or are no longer used to produce crops and are slowly being encroached by non-native herbaceous plant species. In some cases, native annual wildflowers become established in fallow agricultural lands. As such, the Project site is not currently providing active agricultural land of use to the local economy.

In addition, the Project site has been planned for industrial, business park, and commercial uses by the General Plan since 1983 and this type of development has been anticipated for the Project site.

This issue **WILL NOT** be evaluated further in the EIR.

3.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	■			
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	■			
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	■			
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	■			

3.3 (a-d)

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

The Project is located within the South Coast Air Basin (Basin) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is locally responsible for administration and implementation of the Air Quality Management Plan (AQMP). Development of the Project could result in the production of additional criteria air pollutants which may interfere with, or obstruct, the SCAQMD's implementation of the AQMP. The South Coast Air Quality Management District has developed regional and localized significance thresholds for regulated pollutants. As with any new development project, the Project has the potential to generate pollutant concentrations during both construction activities and long-term operation that may exceed regional and localized significance thresholds both individually and cumulatively.

Sensitive receptors near the Project site include residences which are located south and east of the Project site. Construction activities associated with the proposed Project would result in temporary sources of fugitive dust and construction vehicle emissions. Long-term operation of the Project would result in daily vehicular trips that would generate local emissions which could expose sensitive receptors to substantial pollutant concentrations.

The construction and operation of the proposed Project has the potential to result in odor impacts. Construction-related short-term odor impacts may include exhaust fumes as well as other emissions from construction vehicles. Once the Project is operational, mobile sources of odors may occur, including truck traffic serving the Project site operations.

These issues **WILL** be further evaluated in the EIR.

3.4 BIOLOGICAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	■			
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	■			
c. 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?	■			
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	■			
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	■			
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	■			

3.4 (a-f)

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

The Project site is currently vacant undeveloped land and may have the potential to support species that might be listed as candidate, sensitive or special status.

The Project site naturally sheet flows to Sun Lakes Boulevard may have features that may be potentially subject to regulations from California Department of Fish and Wildlife and US Fish and Wildlife Service. On a preliminary basis, the proposed Project could result in potentially significant impacts to riparian habitat, other sensitive natural communities, or wetlands.

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) requires surveys for burrowing owl and narrow endemic plants (Marvin's [Yucaipa] onion and many-stemmed dudleya).

For the reasons stated above, the Project has the potential to impact biological resources. These issues **WILL** be evaluated further in the EIR.

3.5 CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	■			
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5 or a tribal cultural resource pursuant to Public Resources Code 21074?	■			
c. Disturb any human remains, including those interred outside of formal cemeteries?	■			

3.5 (a-c)

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

Archaeological records maintained by the University of California, Riverside, Eastern Information Center indicate that the general area was subject to at least three prior studies and that a minimum of 25 cultural resources studies have been completed within one-mile of the Project site. Two reports in 1981 and 1982 specifically referenced the Old Stewart Ranch, and confirm that the current Project area is within the historic boundaries of the Old Stewart Ranch. Three cultural resources have been recorded within one-mile of the current Project area. As such, the Project site may have the potential to impact sub-surface cultural resources.

This issue **WILL** be evaluated further in the EIR.

3.6 ENERGY

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	■			
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	■			

3.6 (a-b)

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Construction of the Project would create temporary increased demands for electricity and vehicle fuels compared to existing conditions. Construction of the Project would require electricity use to power some of the construction-related equipment. The electricity use during construction would vary during different phases of construction, where the majority of construction equipment during grading would be gas-powered or diesel-powered, and the later construction phases would require electricity-powered, such as interior construction and architectural coatings.

Operation of the Project would create additional demands for electricity and natural gas as compared to existing conditions, and would result in increased energy use.

This issue **WILL** be evaluated further in the EIR.

3.7 GEOLOGY AND SOILS

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) 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.				■
2) Strong seismic ground shaking?			■	
3) Seismic-related ground failure, including liquefaction?			■	
4) Landslides?				■
b. Result in substantial soil erosion or the loss of topsoil?			■	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on-site or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?			■	
d. 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?			■	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	■			

3.7 (a) (1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Determination: No Impact.
Source: Riverside County Parcel Report.

Impact Analysis

The Project site is not located within an Alquist-Priolo (AP) Earthquake Fault Zone, and no known faults underlie the site. The San Gorgonio Pass Fault is the closest Alquist-Priolo Earthquake Fault Zone to the Project site as delineated in the latest State Earthquake Fault Zone maps and in Exhibit V-3 of the General Plan. The San Gorgonio Pass Fault is located approximately 2.5 miles north of Interstate 10. Because there are no faults located on the Project site, there is no potential for the Project to expose people or structures to adverse effects related to ground rupture.

This issue **WILL NOT** be evaluated further in the EIR.

3.7 (a) (2) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

Determination: Less Than Significant Impact.
Source: Project Application Materials, Municipal Cod.

Impact Analysis

The Project site is located in a seismically active area of Southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. This risk is not considered substantially different than that of other similar properties in the Southern California area. As a mandatory condition of Project approval, the Project would be required to construct the proposed structures in accordance with the *California Building Code* (CBC). The City's Building and Safety Department would review the building plans through building plan checks, issuance of a building permit, and inspection of the building during construction, which would ensure that all required CBC seismic safety measures are incorporated into the building. Compliance with the CBC as verified by the City's review process, would reduce impacts related to strong seismic ground shaking.

This issue **WILL NOT** be evaluated further in the EIR.

3.7 (a) (3) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Determination: Less Than Significant Impact.
Source: Riverside County Parcel Report, Municipal Code

Impact Analysis

Liquefaction is a phenomenon in which loose, saturated, relatively cohesion-less soil deposits lose shear strength during strong ground motions. The factors controlling liquefaction are:

- Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause soils to liquefy and temporarily behave as a dense fluid. For liquefaction to occur, the following conditions have to occur:

    - Intense seismic shaking;

- Presence of loose granular soils prone to liquefaction; and
- Saturation of soils due to shallow groundwater.

The Riverside County Parcel Report for the site indicates that the site has a "low" potential for liquefaction.

Detailed design-level geotechnical studies and building plans pursuant to the *California Building Standards Code* are required prior to approval of construction. Compliance with the recommendations of the geotechnical study for soils conditions, is a standard practice and would be required by the City Building and Safety Department. Therefore, compliance with the requirements of the *California Building Standards Code* as identified in a site specific geotechnical design would be reviewed by the City for appropriate inclusion, as part of the building plan check and development review process, would reduce the low potential for liquefaction to a less than significant level. As such, liquefaction is not anticipated in the event of seismic ground failure.

This issue **WILL NOT** be evaluated further in the EIR.

3.7 (a) (4) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

Determination: No Impact.
Source: Project Application Materials.

Impact Analysis

Generally, a landslide is defined as the downward and outward movement of loosened rock or earth down a hillside or slope. Landslides can occur either very suddenly or slowly, and frequently accompany other natural hazards such as earthquakes, floods, or wildfires.

The Project site is relatively flat and there are no slopes on the site that are subject to a landslide.

This issue **WILL NOT** be evaluated further in the EIR.

3.7(b) Result in substantial soil erosion or the loss of topsoil?

Determination: Less Than Significant Impact.
Source: Project Application Materials.

Impact Analysis

The Project site has historically graded site that is regularly grubbed/disced Therefore, the loss of topsoil is not a significant impact.

Soils in the Project area are particularly prone to erosion during the grading phase, especially during heavy rains. Reduction of the erosion potential can be accomplished through implementation of a Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices for temporary erosion controls. Such measures typically include temporary catch basins and/or sandbagging to control runoff and contain sediment transport within the

Project site. The SWPPP is required for plan check and approval by the City's Building and Safety Department, prior to provision of permits for the Project, and would include construction BMPs such as:

- Silt fencing, fiber rolls, or gravel bags
- Street sweeping and vacuuming
- Storm drain inlet protection
- Stabilized construction entrance/exit
- Vehicle and equipment maintenance, cleaning, and fueling
- Hydroseeding
- Material delivery and storage
- Stockpile management
- Spill prevention and control
- Solid waste management
- Concrete waste management

This issue **WILL NOT** be evaluated further in the EIR.

3.7(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on-or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Determination: Less Than Significant Impact.
Source: Project Application Materials, Municipal Code.

Impact Analysis

Landslide

The Project site is relatively flat and there are no slopes on the site that are susceptible to a landslide.

Lateral Spreading

Lateral spread or flow are terms referring to landslides that commonly form on gentle slopes and that have rapid fluid-like flow movement, like water. The Project site is relatively flat and there are no slopes on the site that are susceptible to lateral spreading.

Subsidence

The Riverside County Parcel Report for the site indicates that the site is "susceptible" to subsidence. Soils in the Project area have been mapped as consisting primarily of well-drained, sandy loams of the Ramona sandy loam series. Sandy loams are not expansive and compact well for construction.

Liquefaction

The Riverside County Parcel Report for the site indicates that the site has a "low" potential for liquefaction.

Collapse

Collapse can occur in compressible fine-grained cohesive soil of low strength, which consolidate and cause settlement when subjected to fill or structural loads. Collapsible soils are low density, fine-grained granular soils. When these soils are saturated with water, the grains are realigned into a configuration of less volume, resulting in a rapid settlement under relatively low loads. Collapse is also principally caused by the extraction of subsurface liquids or mining of mineral resources. Sandy loams have a low potential for collapse and there are no mining activities occurring on or near the Project site.

Conclusion

Detailed design-level geotechnical studies and building plans pursuant to the *California Building Standards Code* are required prior to approval of construction. Compliance with the recommendations of a site specific geotechnical study for soils conditions is a standard practice and would be required by the City Building and Safety Department. Therefore, compliance with the requirements of the *California Building Standards Code* as identified in a site specific geotechnical design would be reviewed by the City for appropriate inclusion, as part of the building plan check and development review process, would reduce potential for the above described seismic issues to a less than significant level.

These issues **WILL NOT** be evaluated further in the EIR.

3.7(d) Be located on expansive soil, as defined in the Uniform Building Code, creating substantial risks to life or property?

Determination: Less than Significant Impact.
Source: Project Application Materials.

Impact Analysis

Expansive soils are those that undergo volume changes as moisture content fluctuates; swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement and distorting structural elements.

The Project site is generally underlain by Ramona sandy loam soil which is generally not considered to be expansive. In addition, detailed design-level geotechnical studies and building plans pursuant to the *California Building Standards Code* are required prior to approval of construction. Compliance with the recommendations of the geotechnical study for soils conditions, is a standard practice and would be required by the City Building and Safety Department. Therefore, compliance with the requirements of the *California Building Standards Code* as identified in a site specific geotechnical design would be reviewed by the City for appropriate inclusion, as part of the building plan check and development review process, would reduce the low potential for impacts related to expansive soils to a less than significant

This issue **WILL NOT** be evaluated further in the EIR.

3.7(e) 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?

Determination: No Impact.
Source: Project Application Materials.

Impact Analysis

The Project does not propose the use of septic tanks or alternative waste water disposal systems. The Project would install domestic sewer infrastructure and connect to the City of Banning's existing sewer conveyance system. As such, there are no impacts and no mitigation measures are required.

This issue **WILL NOT** be evaluated further in the EIR.

3.7 (f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Determination: Potentially Significant Impact.
Source:

Impact Analysis

Paleontological Resources

Paleontological resources are the preserved fossilized remains of plants and animals. Fossils and traces of fossils are preserved in sedimentary rock units, particularly fine to medium grained marine, lake, and stream deposits, such as limestone, siltstone, sandstone, or shale, and in ancient soils. They are also found in coarse-grained sediments; such as conglomerates or coarse alluvium sediments. Fossils are rarely preserved in igneous or metamorphic rock units. Fossils may occur throughout a sedimentary unit and, in fact, are more likely to be preserved subsurface, where they have not been damaged or destroyed by previous ground disturbance, amateur collecting, or natural causes such as erosion.

The Project site is underlain by alluvial deposits consisting of mainly of Qc: Quaternary Continental and Qal: Quantermary Alluvium. The potential for paleontological resources exist in these type of alluvial deposits.
This issue **WILL** be evaluated further in the EIR.

Unique Geologic Feature

Unique geologic features are those that are unique to the field of Geology. Unique geologic features are not common in Banning and the San Gorgonio Pass Area. The geologic processes that formed the landforms in Banning and the San Gorgonio Pass Area are generally the same as those in other parts of the state. What makes a geologic unit or feature unique can vary considerably. A geologic feature is unique if it:

• Is the best example of its kind locally or regionally;

- Embodies the distinctive characteristics of a geologic principle that is exclusive locally or regionally;

- Provides a key piece of geologic information important in geology or geologic history;

- Is a "type locality" (the locality where a particular rock type, stratigraphic unit or mineral species is first identified) of a geologic feature;

- Is a geologic formation that is exclusive locally or regionally;

- Contains a mineral that is not known to occur elsewhere in the City; or

- Is used repeatedly as a teaching tool.

The Project site is relatively flat and the subsurface material encountered at the site consists of disturbed topsoil and native soils. The upper native soils consist Ramona sandy loam. This type of soil feature is not considered "unique."

Based on the analysis above, the Project will not directly or indirectly destroy a unique geologic feature.

This issue **WILL NOT** be evaluated further in the EIR.

3.8 GREENHOUSE GAS EMISSIONS

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	■			
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	■			

3.8 (a-b)

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

Construction and operation activities associated with the Project would produce greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment and may conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

This issue **WILL** be evaluated further in the EIR.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			■	
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			■	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				■
d. Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment?				■
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			■	
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires			■	

3.9(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

3.9(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Determination: Less than Significant Impact.
Source: Project Application Materials.

Impact Analysis

Construction Activities

Heavy equipment that would be used during construction of the Project would be fueled and maintained by substances such as oil, diesel fuel, gasoline, hydraulic fluid, and other liquid materials that would be considered hazardous if improperly stored or handled. In addition, materials such as paints, roofing materials, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. The potential for accidental releases and spills of hazardous materials during construction is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with future development that would be a reasonably consequence of the development of the Project than would occur on any other similar construction site. Construction contractors are required to comply with all applicable federal, state, and local laws and regulations regarding hazardous materials, including but not limited requirements imposed by the Environmental Protection Agency, California Department of Toxic Substances Control, South Coast Air Quality Management District, and the Regional Water Quality Control Board. As such, impacts are less than significant.

Operational Activities

Federal and State Community-Right-to-Know laws allow the public access to information about the amounts and types of chemicals that may be used by the businesses that would operate at the Project site. Laws also are in place that requires businesses to plan and prepare for possible chemical emergencies. Any business that operates any of the facilities at the Project site and that handles and/or stores substantial quantities of hazardous materials (§ 25500 of California Health and Safety Code, Division 20, Chapter 6.95) would be required to prepare and submit a Hazardous Materials Business Emergency Plan (HMBEP) to the Riverside County Department of Environmental Health (RCDEH) in order to register the business as a hazardous materials handler. Such business is also required to comply with California's Hazardous Materials Release Response Plans and Inventory Law, which require immediate reporting to Riverside County Fire Department and State Office of Emergency Services regarding any release or threatened release of a hazardous material, regardless of the amount handled by the business.

Potential hazardous materials impacts associated with long-term operation of the Project is not expected to pose a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials, nor would the Project increase the potential for accident operations which could result in the release of hazardous materials into the environment. because Use, transport, handling, and disposal of any hazardous substances must comply with all federal, State and local laws regulating their management and use.

These issues **WILL NOT** be evaluated further in the EIR.

3.9(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Determination: No Impact.

Sources: Project Application Materials, Google Earth.

Impact Analysis

The Project site is not located within one-quarter mile of an existing or proposed school. The nearest school is the San Gorgonio Middle School is located approximately 2 miles northwest of the Project site. In addition, as discussed in the responses to issues 3.9 (a) and 3.9 (b) above, the use and handling of all hazardous or potentially hazardous materials must comply with all applicable federal, State, and local agencies and regulations. Impacts are less than significant.

This issue **WILL NOT** be evaluated further in the EIR.

3.9(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Determination: No Impact.
Sources: DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List,).

Impact Analysis

The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As such, no impact would occur.

This issue **WILL NOT** be evaluated further in the EIR.

3.9(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?

Determination: No Impact.
Source: Ontario International Airport Land Use Compatibility Plan.

Impact Analysis

The Project site is located approximately 4.5 miles west of the Banning Municipal Airport and is not within the *Banning Municipal Airport Compatibility Plan*. There is no impact.

This issue **WILL NOT** be evaluated further in the EIR.

3.9(f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Determination: Less Than Significant Impact.
Sources: General Plan, Project Application Materials.

Impact Analysis

The City of Banning has adopted the *Local Hazard Mitigation Plan*, *2017 (*"Plan*").* The purpose of the Plan is to identify the City's hazards, review and assess past disaster occurrences, estimate the

probability of future occurrences and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards. The Plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to achieve eligibility and potentially secure mitigation funding through Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs.

The City has incorporated the *Local Hazard Mitigation Plan* by adoption into the Safety Element of the City's General Plan. The Safety Element of the General Plan includes a discussion of fire, earthquake, flooding, and landslide hazards. The Plan was adopted as an implementation appendix to the Safety Element. In addition, the City enforces the requirements of the California Environmental Quality Act (CEQA), which requires mitigation for identified natural hazards. The City has used these pre-existing programs as a basis for identifying gaps that may lead to disaster vulnerabilities in order to work on ways to address these risks through mitigation. Development of the Project will not impair implementation Plan as evidenced in the analysis in this Initial Study as it relates to emergencies as a result of hazards and natural disasters.

The City does not have an established evacuation route; however, depending on the location and extent of an emergency, major surface streets could be utilized to route traffic through the City. The I-10 Freeway and State Highway 243 to State Route 79 are also major regional access routes serving the City which could be used during disaster events. Emergency access to the Project site is available from Sun Lakes Boulevard. During construction and long-term operation, the Project would be required to maintain adequate emergency access for emergency vehicles to Sun Lakes Boulevard as required by the City. Therefore, the Project would not result in a substantial alteration to the design or capacity of any public road that would impair or interfere with the implementation of evacuation procedures. Because the Project would not interfere with an adopted emergency response or evacuation plan, impacts are less than significant.

This issue **WILL NOT** be evaluated further in the EIR.

3.9 (h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires?

Determination: Less Than Significant Impact.
Source: General Plan.

Impact Analysis

According to Cal Fire website accessed on January 20, (https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/) the Project site is identified as being located in a Non-Very High Fire Hazard Severity Zones. In addition, the Project site is adjacent to railroad tracks and the I-10 on the north, and existing development to the east, west, and south. Therefore, the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires and no impact would occur.

This issue **WILL NOT** be evaluated further in the EIR.

3.10 HYDROLOGY AND WATER QUALITY

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	■			
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			■	
c. 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 that 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 offsite?	■			
(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?	■			
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				■
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	■			

3.9(a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Determination: Potentially Significant Impact.
Source: Project Application Materials

Impact Analysis

Waste Discharge Requirements

Waste Discharge Requirements (WDRs) are issued by the Regional Water Quality Control Board under the provisions of the California Water Code, Division 7 "Water Quality," Article 4 "Waste Discharge Requirements." These requirements regulate the discharge of wastes which are not made

to surface waters but which may impact the region's water quality by affecting underlying groundwater basins. Such WDRs are issued for Publically Owned Treatment Works' wastewater reclamation operations, discharges of wastes from industries, subsurface waste discharges such as septic systems, sanitary landfills, dairies and a variety of other activities which can affect water quality.

Water Quality Requirements

The Porter-Cologne Act defines water quality objectives (i.e. standards) as "…*the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific a*rea" (§13050 (h)).

Construction Impacts

Construction of the Project would involve clearing, grading, paving, utility installation, building construction, and the installation of landscaping, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction activities in the absence of any protective or avoidance measures.

Pursuant to the requirements of the applicable Regional Water Quality Control Board, the Riverside County Municipal Storm Water Permit (MS-4), and the City of Banning, the Project proponent will be required to obtain a National Pollutant Discharge Elimination System Municipal Stormwater Permit for construction activities. The National Pollutant Discharge Elimination System permit is required for all Projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least one acre of total land area.

In addition, the Project will be required to comply with the applicable Regional Water Quality Control Board's Basin Water Quality Control Program. Compliance with the National Pollutant Discharge Elimination System permit and the Basin's Water Quality Control Program involves the preparation and implementation of a Storm Water Pollution Prevention Plan for construction-related activities, including grading. The Storm Water Pollution Prevention Plan would specify the Best Management Practices that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the site.

Operational Impacts

Storm water pollutants commonly associated with the type of land uses that could occupy the Project site include sediment/turbidity, nutrients, trash and debris, oxygen-demanding substances, organic compounds, bacteria and viruses, oil and grease, and pesticides.

Pursuant to the requirements of the City's National Pollutant Discharge Elimination System permit, a Water Quality Management Plan is required for managing the quality of storm water or urban runoff that flows from a developed site after construction is completed and the facilities or structures are occupied and/or operational. A Water Quality Management Plan describes the Best Management Practices that will be implemented and maintained throughout the life of a project to prevent and minimize water pollution that can be caused by storm water or urban runoff.

The Project site currently drains southerly to Sun Lakes Boulevard. The portion of the site which drains to Sun Lakes Boulevard, sheet flows to existing storm drain system which conveys the flows to Smith Creek to the east and Potero Creek to the west. The proposed drainage on-site system is undefined at this time. Ultimately, surface runoff is anticipated to connect to the existing storm drainage system and discharge to Smith Creek to the east and Potero Creek to the west.

This issue **WILL** be evaluated further in the EIR.

3.10(b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Determination: Less Than Significant Impact.
Source: City of Banning 2015 Urban Water Management Plan.

Impact Analysis

Groundwater Supplies

The Project site would be served with potable water by the City of Banning. Domestic water supplies from this service provider are reliant on groundwater from the Coachella Valley Hydrologic Unit, which encompasses several groundwater basins, including the Coachella Valley Groundwater Basin (Basin), within which the City is located. The Basin is underlain by several large subbasins, the boundaries of which are generally defined by fault lines that restrict the lateral flow of water. The Basin extends from Banning easterly to the Salton Sea.

The City is underlain by the San Gorgonio Pass Subbasin (SGP Subbasin) portion of the Basin. The City extracts groundwater from the Beaumont Storage Unit (Beaumont Basin), Banning Storage Unit, Cabazon Storage Unit, and the Banning Canyon Storage Unit of the San Gorgonio Pass Subbasin portion of the Coachella Valley Groundwater Basin. Because the City's water supply is primarily groundwater, the City is not subject to short-term water shortages resulting from temporary dry weather conditions. Further, as part of the Beaumont Basin adjudication, the City has the option of storing up to 80,000 acre feet of water in the Beaumont Basin. As such, impacts are less than significant.

Groundwater Recharge

Groundwater recharge in the area results from precipitation infiltrating into the ground within the surface water catchments and particularly in the canyons north of the City. An additional source of recharge is subsurface inflow (also referred to as underflow) from storage unit to storage unit, infiltration of Whitewater River diversions in the Banning Canyon, and from percolation of treated wastewater into the Cabazon Storage Unit. The Banning Canyon area receives water from the percolation of canyon flows through the gravelly soils of the canyon bottom. The San Gorgonio River running southerly through the Banning Canyon provides intake areas for distributing water to spreading ditches that interconnect with spreading ponds located approximately one-mile north of the Banning Bench to enhance percolation.

Development of the Project would increase impervious surface coverage on the site which would in turn reduce the amount of direct infiltration of runoff into the ground. This would have a less than

significant impact on groundwater recharge in the areas of the San Gorgonio Pass Subbasin that are managed for that purpose, since those recharge areas do not encompass the Project site. As such, impacts are less than significant.

This issue **WILL NOT** be evaluated further in the EIR.

3.10(c)	***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 that 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 offsite?***
(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?***

Determination: Less Than Significant Impact.
Sources: Project Application Materials.

Impact Analysis

Existing Condition

The Project site currently drains southerly to Sun Lakes Boulevard. The portion of the site which drains to Sun Lakes Boulevard, sheet flows to existing storm drain system which conveys the flows to Smith Creek to the east and Potero Creek to the west.

Post-Development Condition

The Project entails a Specific Plan Amendment to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary I-10 Freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage. (See Figure 2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions. The proposed drainage on-site system is undefined at this time. Ultimately, surface runoff is anticipated to discharge to Smith Creek to the east and Potero Creek to the west. Surface runoff may possibly have a significant impact with respect to drainage patterns, siltation. flooding, storm drain capacity, and flood flows.

This issue **WILL** be evaluated further in the EIR.

3.10(d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Determination: No Impact.
Sources: FEMA, California Department of Conservation.

Impact Analysis

Flood Hazard Zone

Per FEMA Flood Insurance Rate Map (FIRM) Panel No. 06065C0812G (effective date: August 28, 2008) the Project Site lies within an unshaded Zone "X" floodplain. Unshaded Zone "X" is defined as Area of Minimal Flood Hazard. As such, there is no impact.

Tsunami or Seiche Zone

According to the California Department of Conservation, California Official Tsunami Inundation Maps the site is not located within a tsunami inundation zone. The Project would not be at risk from seiche because there is no water body in the area of the Project site capable of producing as sesiche. As such, there is no impact.

This issue **WILL NOT** be evaluated further in the EIR.

3.10(e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

As noted in the response to Issue 3.10 (c), the proposed drainage on-site system is undefined at this time. Ultimately, surface runoff is anticipated to discharge to Smith Creek to the east and Potero Creek to the west. Surface runoff may possibly have an impact on a water quality control plan or sustainable groundwater management plan.

This issue **WILL** be evaluated further in the EIR.

3.11 LAND USE AND PLANNING

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				■
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	■			

3.11 (a) Physically divide an established community?

Determination: No Impact.

Source: Project Application Materials.

Impact Analysis

An example of a Project that has the potential to divide an established community includes the construction of a new freeway or highway through an established neighborhood. The Project site consists of approximately 47-acres of undeveloped land that is adjacent to railroad tracks and I-10 to the north and existing development to the east, south, and west. There is no impact.

This issue **WILL NOT** be evaluated further in the EIR.

3.11 (b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Determination: Potentially Significant Impact.

Source: Project Application Materials.

Impact Analysis

The Project entails a Specific Plan Amendment to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary I-10 Freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage. (See Figure 2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions. The proposed amendments could possibly result in a significant impact due to conflicting with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

This issue **WILL be** evaluated further in the EIR.

3.12 MINERAL RESOURCES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				■
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				■

3.12(a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Determination: No Impact.
Sources: General Plan.

Impact Analysis

The Project site is located within a mineral resource zone area classified as MRZ-3 as identified in Exhibit IV-8 in the City of Banning General Plan. Areas classified as MRZ-3 are defined as containing mineral deposits, the significance of which cannot be evaluated from available data. The City of Banning General Plan identifies one aggregate producer within its planning area; the Banning Quarry which is located in the eastern portion of the City approximately 1.25 miles northeast of the Project site. Implementation of the Project would not result in the loss of known mineral resources.

This issue **WILL NOT** be evaluated further in the EIR.

3.12(b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Determination: No Impact.
Source: General Plan.

Impact Analysis

The existing land use designations for the Project site is "Commercial" and General Commercial (with Specific Plan Overlay) which allows for light industrial, office, and retail uses. As such, the Project site is not delineated on a local general plan, specific plan or other land use plan as a locally important mineral resource recovery site. There is no impact.

This issue **WILL NOT** be evaluated further in the EIR.

3.13 NOISE

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?	■			
b. Generation of excessive groundborne vibration or groundborne noise levels?	■			
c. 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 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	■			

3.13 (a) 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?

3.13 (b) Generation of excessive groundborne vibration or groundborne noise levels?

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

Noise

The Project would create a temporary increase in noise during construction activities. The Project would also result in long-term changes in ambient noise associated with typical business, industrial, and commercial activities. Noise would be generated by truck and passenger vehicle trips to and from the site on adjacent roadways; trucks backing up, starting, and idling; forklifts; and mechanical systems (heating, ventilation, and air conditioning). Long-term operational noises also include project-generated traffic and the resulting traffic noise on adjacent roads.

Groundborne Vibration

Some equipment used during construction would have the potential to create groundborne noise or vibration, including dozers, graders, cranes, loaded trucks, water trucks, and pavers. Continuous vibrations with a peak particle velocity (PPV) of approximately 0.10 inches per second are considered to cause annoyance. The Project is forecast to create potentially significant vibration levels generated during construction activities.

These issues **WILL** be evaluated further in the EIR.

3.13 (c) 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 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Determination: No Impact.
Source: Project Application Materials.

Impact Analysis

The Project site is located approximately 4.5 miles west of the Banning Municipal Airport and is not within the *Banning Municipal Airport Compatibility Plan*. There is no impact.

This issue **WILL NOT** be evaluated further in the EIR.

3.14 POPULATION AND HOUSING

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			■	
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				■

3.14(a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Determination: Less than Significant Impact.
Source: Project Application Materials.

Impact Analysis

The Project would not directly result in population growth because it does not propose any residential dwelling units. It is anticipated that new employees generated by the Project could come from within the local area and would not generate the need for any housing.

Typically, population growth would be considered a significant impact pursuant to CEQA if it directly or indirectly affects the ability of agencies to provide needed public services and requires the expansion or new construction of public facilities and utilities.

Water and sewer service to the Project site will be provided by the City of Banning. No additional water or sewer infrastructure will be needed to serve the Project other than connection to the existing water and sewer lines. Water and sewer infrastructure will not have to be extended in the area to serve the Project.

In addition, the analysis in Section 3.14, *Public Services*, of this Initial Study demonstrates that the impacts on public services are less than significant so the public service provider's ability to provide services will not be reduced.

This issue **WILL NOT** be evaluated further in the EIR.

3.14(b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Determination: No Impact.
Source: Project Application Materials.

Impact Analysis

The Project site contains does not contain any residential housing. Therefore, implementation of the Project would not displace a substantial number of existing housing, nor would it necessitate the construction of replacement housing elsewhere.

This issue **WILL NOT** be evaluated further in the EIR.

3.15 PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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:				
1) Fire protection?			■	
2) Police protection?			■	
3) Schools?			■	
4) Parks?			■	
5) Other public facilities?			■	

3.15(a) 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:

FIRE PROTECTION

Determination: Less Than Significant Impact.
Sources: City of Banning, Riverside County Fire Department.

Impact Analysis

Fire protection services for the Project would be provided by the City of Banning through a contractual agreement with the Riverside County Fire Department, which contracts with the California Department of Forestry. Through a mutual aid agreement with surrounding communities, including Beaumont, Calimesa and Cabazon, each city has access to and benefits from the services provided by fire stations in other cities. The Project site is served by Fire Station #20 located approximately 0.6 roadway miles west of the site at 1550 E. 6th Street, Beaumont, CA.

Development of the Project would impact fire protection services by placing an additional demand on existing Riverside County Fire Department resources should its resources not be augmented. To offset the increased demand for fire protection services, the Project would be conditioned by the

City to provide a minimum of fire safety and support fire suppression activities, including compliance with State and local fire codes, fire sprinklers, a fire hydrant system, paved access, and secondary access routes.

Furthermore, the Project would be required to comply with the provisions of the City's Development Impact Fee Ordinance, which requires a fee payment to assist the City in providing for fire protection facilities. Payment of the Development Impact Fee would ensure that the Project provides fair share funds for the provision of additional fire protection facilities.

Based on the analysis Above, the Project would not result in the need for new or physically altered fire facilities in order to maintain acceptable service ratios, response times or other performance objectives.

This issue **WILL NOT** be evaluated further in the EIR.

POLICE PROTECTION

Determination: Less Than Significant Impact.
Sources: City of Banning, Riverside County Sheriff's Department.

Impact Analysis

The Project Site is currently serviced by the City of Banning Police Department which is located approximately 4.5 miles east of the Project site at 125 E Ramsey Street in Banning. Development of the Project would impact fire protection services by placing an additional demand on existing Riverside County Fire Department resources should its resources not be augmented. The Project would be required to comply with the provisions of the City's Development Impact Fee Ordinance, which requires a fee payment to assist the City in providing for police protection facilities to offset impacts created by new development. Payment of the Development Impact Fee would ensure that the Project provides fair share funds for the provision of additional police protection facilities. In addition, the Project site is located in a developed area of the City which is routinely patrolled. It is not anticipated that new police facilities will need to be constructed to serve the Project in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services

This issue **WILL NOT** be evaluated further in the EIR.

SCHOOLS

Determination: Less Than Significant Impact.
Sources: California Senate Bill 50 (Greene), Project Application Materials.

Impact Analysis

The Project does not create an additional need for housing thus directly increasing the overall population of the City and generating additional students to be served by the Banning Unified School District. However, the Project would be required to contribute fees to the Banning Unified School District in accordance with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50).

Pursuant to Senate Bill 50, payment of school impact fees constitutes complete mitigation under CEQA for Project-related impacts to school services.

This issue **WILL NOT** be evaluated further in the EIR.

PARKS

Determination: Less Than Significant Impact.
Source: Project Application Materials.

Impact Analysis

The Project does not create a direct additional need for parkland as it does not propose residential uses. The payment of development impact fees will reduce any indirect Project impacts related to parks.

This issue **WILL NOT** be evaluated further in the EIR.

OTHER PUBLIC FACILITIES

Determination: Less Than Significant Impact.
Source: Project Application Materials.

Impact Analysis

As noted above, development of the Project would not result in a direct increase in the population of the Project area and would not increase the demand for public services, including public health services and library services which would require the construction of new or expanded public facilities.

The Project would be required to comply with the provisions of the City's Development Impact Fee Ordinance, which requires a fee payment to assist the City in providing public facilities. Payment of the Development Impact Fee would ensure that the Project provides fair share of funds for additional public facilities. These funds may be applied to the acquisition and/or construction of public services and/or equipment.

This issue **WILL NOT** be evaluated further in the EIR.

3.16 RECREATION

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			■	
b. Does the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				■

Impact Analysis

3.16(a) Would the proposed Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Determination: Less than Significant Impact.
Source: Project Application Materials.

Impact Analysis

The Project proposes a Specific Plan Amendment to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary I-10 Freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage. (See Figure 2- Land Use Plan).The Specific Plan is also proposed to be amended to revise the permitted land uses; development standards (including maximum building height, setbacks, open space, landscaping, parking, and signage); design guidelines for development; and administration and implementation provisions.

Therefore, the Project would not cause a substantial physical deterioration of any park facilities or would accelerate the physical deterioration of any park facilities because the Project does not proposes residential dwelling units which would increase the population that would use parks. The payment of development impact fees will reduce any indirect Project impacts related to recreational facilities.

This issue **WILL NOT** be evaluated further in the EIR.

3.16(b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment?

Determination: No Impact.

Source: Project Application Materials

Impact Analysis

As noted in the response to Issue 3.16(a) above, the Project does not propose any recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment. In addition, no offsite parks or recreational improvements are proposed or required as part of the Project.

Based on the above analysis, impacts related to parks and recreational facilities would be less than significant.

This issue **WILL NOT** be evaluated further in the EIR.

3.17 TRANSPORTATION

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, taking into account all modes of transportation including transit, roadway, bicycle and pedestrian facilities?	■			
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	■			
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	■		■	
d. Result in inadequate emergency access?			■	

3.17 (a) Conflict with a program, plan, ordinance or policy addressing the circulation system, taking into account all modes of transportation including transit, roadway, bicycle and pedestrian facilities?

Determination: Potentially Significant Impact.
Source: Project Application Materials

Impact Analysis

The Project proposes a Specific Plan Amendment to the Sun Lakes Village North Specific Plan that updates the Specific Plan document to amend the Specific Plan Land Use Plan from "Retail Commercial" to "Business Park" and 'Professional Office" along the primary I-10 Freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage. (See Figure 2- Land Use Plan).

The Project is forecast to generate vehicular and truck traffic from construction and operational activities. These trips will impact intersection and roadway segments in the Project area.

This issue **WILL BE** evaluated further in the EIR.

3.17 (b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Determination: Potentially Significant Impact.
Source: Project Application Materials

Impact Analysis

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

reduce vehicle miles traveled (VMT) and thereby contribute to the reduction of greenhouse gas emissions (GHG), as required by the California Global Warming Solutions Act of 2006 (AB 32). Additionally, AB 1358, described above, requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users. SB 743 started a process that would fundamentally change transportation impact analysis as part of CEQA compliance. These changes will include the elimination of auto delay, level of service (LOS), and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts under CEQA

As part of the new CEQA Guidelines, the new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

OPR developed alternative metrics and thresholds based on VMT. The guidelines were certified by the Secretary of the Natural Resources Agency in December 2018, and automobile delay, as described solely by level of service of similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment. There is an opt-in period until July 1, 2020, for agencies to adopt new VMT-based criteria.

Because this EIR is likely to be circulated for public review after July 1, 2020, the City, as the lead agency, will use a VMT metric in its analysis of traffic impacts.

This issue **WILL BE** evaluated further in the EIR.

3.18 TRIBAL CULTURAL RESOURCES

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:	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a. 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)?	■			
b. 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?	■			

3.18 (a) 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)?

Determination: Potentially Significant Impact.

Source: Project Application Materials.

Impact Analysis

Archaeological records maintained by the University of California, Riverside, Eastern Information Center indicate that the general area was subject to at least three prior studies and that a minimum of 25 cultural resources studies have been completed within one-mile of the Project site. Two reports in 1981 and 1982 specifically referenced the Old Stewart Ranch, and confirm that the current Project area is within the historic boundaries of the Old Stewart Ranch. Three cultural resources have been recorded within one-mile of the current Project area. Therefore, the Project site may have the potential to impact sub-surface tribal cultural resources.

This issue **WILL** be evaluated further in the EIR.

3.18(b) 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?

Determination: Potentially Significant Impact.

Source: Project Application Materials.

Impact Analysis

The Planning Department has initiated notification of the Project under both Senate Bill (SB) 18 and Assembly Bill (AB) 52 in order to determine there is a potential for tribal cultural resources to be present on the site.

This issue **WILL** be evaluated further in the EIR.

3.19 UTILITIES AND SERVICE SYSTEMS

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?	■			
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple years?			■	
c. 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?	■			
d. 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?	■			
e. Comply with federal, state, and local management and reduction statutes b. A resource determined by the lead agency,			■	

3.19 (a) 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?

Determination: Potentially Significant Impact.

Source: Project Application Materials.

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact Analysis

Water Facilities

The Project site would be served with potable water by the City of Banning. Via connection to the existing water supply system.

Wastewater Treatment Facilities

Wastewater generated by the Project is proposed to be conveyed to the Wastewater Reclamation Plant operated by the City of Banning for treatment via connection to the existing sewer system.

Storm Drainage Facilities

The Project site currently drains southerly to Sun Lakes Boulevard. The portion of the site which drains to Sun Lakes Boulevard , sheet flows to existing storm drain system which conveys the flows to Smith Creek to the east and Potero Creek to the west. The Project is proposing to construct storm drain facilities that will connect to the existing facilities in Sun Lakes Boulevard and ultimately discharge to Smith Creek and/or Potero Creek.

Electric Power Facilities

The Project will connect to the existing electrical distribution facilities available in the vicinity of the Project site operated by the Banning Electric Utility.

Natural Gas Facilities

The Project will connect to the existing Southern California Gas natural gas distribution facilities available in the vicinity of the Project site.

Telecommunication Facilities

The Project will connect to the existing facilities available in the vicinity of the Project site.

The installation of the facilities described above will have physical impacts on the environment.

These impacts **WILL BE** evaluated further in the EIR.

3.19 (b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple years?

Determination: Potentially Significant Impact.

Source: City of Banning 2015 Urban Water Management Plan.

Impact Analysis

The Project site would be served with potable water by the City of Banning. The Project site would be served with potable water by the City of Banning. Domestic water supplies from this service provider are reliant on groundwater from the Coachella Valley Hydrologic Unit, which encompasses several groundwater basins, including the Coachella Valley Groundwater Basin (Basin), within which the City is located. The Basin is underlain by several large subbasins, the boundaries of which are generally defined by fault lines that restrict the lateral flow of water. The Basin extends from Banning easterly to the Salton Sea.

The City is underlain by the San Gorgonio Pass Subbasin (SGP Subbasin) portion of the Basin. The City extracts groundwater from the Beaumont Storage Unit (Beaumont Basin), Banning Storage

Unit, Cabazon Storage Unit, and the Banning Canyon Storage Unit of the San Gorgonio Pass Subbasin portion of the Coachella Valley Groundwater Basin.

Under the proposed Specific Plan amendment, the Project would create a water demand for potable water, wastewater, and landscaping for development of the 47 acre Project site. A project of this size has the potential to impact water supplies.

This impact **WILL** be evaluated further in the EIR.

3.19 (c) 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?

Determination: Potentially Significant Impact.
Source: City of Banning 2015 Urban Water Management Plan, City of Banning, Integrated Master Plan/Final Revision 1.2, 2018.

Impact Analysis

All wastewater flows collected within the City's service area are currently treated at one facility, the Banning WWTP. The WWTP is designed to treat wastewater to secondary standards and consists of the following processes: headworks, screening, grit removal, two primary clarifiers, two trickling filters, and two secondary clarifiers. The plant currently discharges the effluent to percolation ponds. The City contracts with United Water Services for the operation and maintenance of the WWTP. Recent upgrades of the plant resulted in an increase of secondary treatment capacity to 3.6 million gallons-per-day, including improvements that could accommodate future capacity to approximately 5.8 million gallons-per-day. On a daily basis the, plant currently receives an average flow of approximately 2.3–2.4 million gallons-per day.

Under the proposed Specific Plan amendment, the Project would create a wastewater demand for development of the 47 acre Project site. A project of this size has the potential to impact wastewater treatment capacity.

This issue **WILL** be evaluated further in the EIR.

3.19 (d) 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?

Determination: Potentially Significant Impact.
Source: Project Application Materials.

Impact Analysis

The City of Banning contracts with Waste Management Inland Empire for solid waste and disposal services. Solid waste that is not diverted to recycling or composting facilities is transported to the Lamb Canyon Sanitary Landfill. The Lamb Canyon Sanitary Landfill is located in the City of Beaumont, approximately three miles southwest of the City of Banning. It is owned and operated by the Riverside County Waste Management Department and accepts solid waste collected from the

communities of Banning, Beaumont, Hemet and San Jacinto. It may also accept solid waste generated from anywhere within Riverside County.

Under the proposed Specific Plan amendment, the Project would create a wastewater demand for development of the 47 acre Project site. A project of this size has the potential to generate solid waste that will impact th ecap0acity of solid water collection facilities.

This issue **WILL** be evaluated further in the EIR.

3.19 (e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Determination: Less Than Significant Impact.

Source: Project Application Materials.

Impact Analysis

The California Integrated Waste Management Act established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the Act established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. Per the requirements of the Integrated Waste Management Act, the Riverside County Board of Supervisors adopted the Riverside Countywide Integrated Waste Management Plan which outlines the goals, policies, and programs the County and its cities will implement to create an integrated and cost effective waste management system that complies with the provisions of California Integrated Waste Management Act and its diversion mandates.

The Project operator(s) would be required to coordinate with the waste hauler to develop collection of recyclable materials for the commercial facility on a common schedule as set forth in applicable local, regional, and State programs. Recyclable materials that would be recycled by the commercial facility include paper products, glass, aluminum, and plastic.

Additionally, the Project's waste hauler would be required to comply with all applicable local, State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to the landfills that serve the commercial facility are reduced in accordance with existing regulations.

Based on the above analysis, impacts are less than significant.

This issue **WILL NOT** be evaluated further in the EIR.

3.20 WILDFIRE

WILDFIRE -- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	**Potentially Significant Impact**	**Less than Significant With Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				■
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				■
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				■
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				■

3.20 (a-d)

Determination: No Impact.
Sources: General Plan, Cal Fire.

Impact Analysis

According to Cal Fire website accessed on January 20, (https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/) the Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones and no impact would occur.

This issue **WILL NOT** be evaluated further in the EIR.

3.19 MANDATORY FINDINGS OF SIGNIFICANCE

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	■			
b. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	■			
c. Does the Project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	■			

Impact Analysis

3.19(a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Determination: Potentially Significant Impact.
Source: This Initial Study.

Impact Analysis

As discussed in this Initial Study, biological resources, cultural resources, and tribal cultural resources may be significantly impacted by the Project.

These issues **WILL** be evaluated further in the EIR.

3.19(b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Determination: Potentially Significant Impact.
Source: This Initial Study.

Impact Analysis

The Project has the potential to result in cumulatively considerable impacts. As discussed in this Initial Study, implementation of the Project may result in potentially significant impacts under the environmental topics of:

- Aesthetics (visual character, light and glare)
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils (Paleontological Resources)
- Greenhouse Gas Emissions
- Hydrology and Water Quality (water quality standards or waste discharge requirements; erosion/siltation; flooding, and storm drain capacity).
- Land Use and Planning
- Noise
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

To a certain extent, impacts of the Project, together with other known or anticipated projects in the area, may have a cumulative effect under all of the aforementioned environmental topics.

These issues **WILL** be addressed further in the EIR.

3.19(c) Does the Project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?

Determination: Potentially Significant Impact.
Source: This Initial Study Checklist.

Impact Analysis

As indicated by this Initial Study, the Project may cause or result in certain potentially significant environmental effects, resulting in potentially adverse effects to human beings. While adverse environmental effects that could affect human beings could, to some degree,

be substantiated under all CEQA issue areas, Project impacts that could directly affect human beings include:

- Aesthetics (visual character, light and glare)
- Air Quality
- Greenhouse Gas Emissions
- Hydrology and Water Quality (water quality standards or waste discharge requirements; erosion/siltation; flooding, and storm drain capacity).
- Land Use and Planning
- Noise
- Transportation
- Utilities and Service Systems

These issues **WILL** be evaluated further in the EIR.

4.0 REFERENCES

General References

California Department of Conservation. *California Important Farmland Finder*. Accessed on January 7, 2020 from http://maps.conservation.ca.gov/ciff/ciff.html.

California Department of Toxic Substances Control. *EnviroStor Database*. Accessed on December 22, 2020 from https://www.envirostor.dtsc.ca.gov/public/

California Department of Transportation. *California Scenic Highway Mapping System*. Accessed on December 17, 2020 from http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/

City of Banning General Plan, City of Banning Community Development Department and Terra Nova Planning & Research, Inc., adopted January 31, 2006.

City of Banning, *Integrated Master Plan/Final Revision 1.2*, 2018.

City of Banning, *Initial Study & Mitigated Negative Declaration No. 17-1504 for Careage Medical Office Building*, May 2018.

Soils Map, https://casoilresource.lawr.ucdavis.edu/gmap/ accessed on January 14, 2020.

Banning Unified School District, http://www.banning.k12.ca.us/ accessed on December 16, 2020.

5.0 REPORT PREPARATION PERSONNEL

LEAD AGENCY:

City of Banning (Lead Agency)
Community Development Department
Adam Rush, Community Development Director

Romo Planning Group, Inc.
Ernest Perea, Director of Environmental Services

JASON E. UHLEY
General Manager-Chief Engineer

1995 MARKET STREET
RIVERSIDE, CA 92501
951.955.1200
FAX 951.788.9965
www.rcflood.org

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

March 23, 2020

RECEIVED
MAR 31 2020
By

City of Banning
99 East Ramsey Street
Banning, CA 92220-0998

Attention: Adam Rush

Re: Sun Lakes Village North Specific Plan
Amendment No. 8, PM 33326
APN 419-140-057

The Riverside County Flood Control and Water Conservation District (District) does not normally recommend conditions for land divisions or other land use cases in incorporated cities. The District also does not plan check City land use cases, or provide State Division of Real Estate letters or other flood hazard reports for such cases. District comments/recommendations for such cases are normally limited to items of specific interest to the District including District Master Drainage Plan facilities, other regional flood control and drainage facilities which could be considered a logical component or extension of a master plan system, and District Area Drainage Plan fees (development mitigation fees). In addition, information of a general nature is provided.

The District's review is based on the above-referenced project transmittal, received February 24, 2020. The District **has not** reviewed the proposed project in detail, and the following comments do not in any way constitute or imply District approval or endorsement of the proposed project with respect to flood hazard, public health and safety, or any other such issue:

☒ This project would not be impacted by District Master Drainage Plan facilities, nor are other facilities of regional interest proposed.

☐ This project involves District proposed Master Drainage Plan facilities, namely, _____. The District will accept ownership of such facilities on written request of the City. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection, and administrative fees will be required.

☐ This project proposes channels, storm drains 36 inches or larger in diameter, or other facilities that could be considered regional in nature and/or a logical extension of the adopted Banning Master Drainage Plan. The District would consider accepting ownership of such facilities on written request of the City. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection, and administrative fees will be required.

☐ An encroachment permit shall be obtained for any construction related activities occurring within District right of way or facilities, namely, _____. For further information, contact the District's Encroachment Permit Section at 951.955.1266.

☐ The District's previous comments are still valid.

GENERAL INFORMATION

This project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Clearance for grading, recordation, or other final approval should not be given until the City has determined that the project has been granted a permit or is shown to be exempt.

If this project involves a Federal Emergency Management Agency (FEMA) mapped floodplain, then the City should require the applicant to provide all studies, calculations, plans, and other information required to meet FEMA requirements, and should further require that the applicant obtain a Conditional Letter of Map Revision (CLOMR) prior to grading, recordation, or other final approval of the project and a Letter of Map Revision (LOMR) prior to occupancy.

If a natural watercourse or mapped floodplain is impacted by this project, the City should require the applicant to obtain a Section 1602 Agreement from the California Department of Fish and Wildlife and a Clean Water Act Section 404 Permit from the U.S. Army Corps of Engineers, or written correspondence from these agencies indicating the project is exempt from these requirements. A Clean Water Act Section 401 Water Quality Certification may be required from the local California Regional Water Quality Control Board prior to issuance of the Corps 404 permit.

Very truly yours,

Deborah de Chambeau

DEBORAH DE CHAMBEAU
Engineering Project Manager

c: Riverside County Planning Department
Attn: John Hildebrand

SLJ:mcv
P8\230279

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL: March 17, 2020

arush@banningca.gov
Adam Rush, M.A. AICP, Director
City of Banning, Community Development Department
99 East Ramsey Street
Banning, CA 92220

Notice of Preparation of an Environmental Impact Report for the Proposed Sun Lakes Village North Specific Plan Amendment No. 6

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. South Coast AQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Environmental Impact Report (EIR). Please send South Coast AQMD a copy of the EIR upon its completion and public release. Note that copies of the EIR that are submitted to the State Clearinghouse are not forwarded to South Coast AQMD. Please forward a copy of the EIR directly to South Coast AQMD at the address shown in the letterhead. **In addition, please send with the EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files[1]. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, South Coast AQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.**

Air Quality Analysis

South Coast AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. South Coast AQMD staff recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analyses. Copies of the Handbook are available from the South Coast AQMD's Subscription Services Department by calling (909) 396-3720. More recent guidance developed since this Handbook was published is also available on South Coast AQMD's website at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). South Coast AQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

On March 3, 2017, the South Coast AQMD's Governing Board adopted the 2016 Air Quality Management Plan (2016 AQMP), which was later approved by the California Air Resources Board on March 23, 2017. Built upon the progress in implementing the 2007 and 2012 AQMPs, the 2016 AQMP

[1] Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

provides a regional perspective on air quality and the challenges facing the South Coast Air Basin. The most significant air quality challenge in the Basin is to achieve an additional 45 percent reduction in nitrogen oxide (NOx) emissions in 2023 and an additional 55 percent NOx reduction beyond 2031 levels for ozone attainment. The 2016 AQMP is available on South Coast AQMD's website at: http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan.

South Coast AQMD staff recognizes that there are many factors Lead Agencies must consider when making local planning and land use decisions. To facilitate stronger collaboration between Lead Agencies and South Coast AQMD to reduce community exposure to source-specific and cumulative air pollution impacts, South Coast AQMD adopted the Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning in 2005[2]. This Guidance Document provides suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. South Coast AQMD staff recommends that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions. Additional guidance on siting incompatible land uses (such as placing homes near freeways or other polluting sources) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: http://www.arb.ca.gov/ch/handbook.pdf. Guidance[3] on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

South Coast AQMD has also developed both regional and localized air quality significance thresholds. South Coast AQMD staff requests that the Lead Agency compare the emissions to the recommended regional significance thresholds found here: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. In addition to analyzing regional air quality impacts, South Coast AQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by South Coast AQMD or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

When specific development is reasonably foreseeable as result of the goals, policies, and guidelines in the Proposed Project, the Lead Agency should identify any potential adverse air quality impacts and sources of air pollution that could occur using its best efforts to find out and a good-faith effort at full disclosure in the EIR. The degree of specificity will correspond to the degree of specificity involved in the underlying activity which is described in the EIR (CEQA Guidelines Section 15146). When quantifying air quality emissions, emissions from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area

[2] South Coast AQMD. 2005. Accessed at: http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf.

[3] In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: https://www.arb.ca.gov/ch/landuse.htm.

sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, for phased projects where there will be an overlap between construction and operational activities, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA ***operational*** thresholds to determine the level of significance.

If the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("*Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis*") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

If the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying possible mitigation measures for the Proposed Project, including:

- Chapter 11 "Mitigating the Impact of a Project" of South Coast AQMD's *CEQA Air Quality Handbook*
- South Coast AQMD's CEQA web pages available here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies
- South Coast AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities
- California Air Pollution Control Officers Association's (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

Alternatives

If the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits

If implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the EIR. For more information on permits, please visit South Coast AQMD's webpage at: http://www.aqmd.gov/home/permits. Questions on permits can be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

Data Sources

South Coast AQMD rules and relevant air quality reports and data are available by calling the South Coast AQMD's Public Information Center at (909) 396-2001. Much of the information available through the Public Information Center is also available via the South Coast AQMD's webpage (http://www.aqmd.gov).

South Coast AQMD staff is available to work with the Lead Agency to ensure that project's air quality impacts are accurately evaluated and mitigated where feasible. Please contact me at lsun@aqmd.gov, should you have any questions.

Sincerely,

Lijin Sun

Lijin Sun, J.D.
Program Supervisor, CEQA IGR
Planning, Rule Development & Area Sources

LS
RVC200226-02
Control Number

URBAN CROSSROADS

260 E. Baker St. | Suite 200 | Costa Mesa, CA 92626 | (949) 660-1994
urbanxroads.com

July 9, 2020

Mr. Ernie Perea
Romo Planning Group, Inc.
9431 Haven Avenue, Ste. 232
Rancho Cucamonga, CA 91730

SUBJECT: SUN LAKES NORTH SPECIFIC PLAN AMENDMENT NO. 6 AIR QUALITY AND GREENHOUSE GAS EVALUATION

Dear Mr. Ernie Perea:

The following air quality and greenhouse gas evaluation has been prepared for the proposed Sun Lakes North Specific Plan Amendment No. 6 (**Project**) in the City of Banning. It is our understanding that the Project is to consist of a Specific Plan Amendment that amends the allowed Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage.

PROJECT OVERVIEW

The Project proposes to develop up to approximately 877,298 square feet (sf) of Industrial Park, 52,065 sf of medical office, and 37,189 sf of retail use on 47.11 acres.

CALIFORNIA EMISSIONS ESTIMATOR MODEL™ EMPLOYED TO ESTIMATE EMISSIONS

On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model (CalEEMod) Version 2016.3.2. The purpose of this model is to more accurately calculate construction-source and operational-source criteria pollutant (Nitrogen Oxides (NO_X), VOC, Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), Sulfur Oxides (SO_X), and Carbon Monoxide (CO)) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational impacts related to the Project. Model outputs from the model runs are provided in Attachment A.

Emissions estimates associated with the existing land use designations and the proposed Project are summarized on Tables 1 through 6.

CONSTRUCTION

TABLE 1: PROPOSED PROJECT CONSTRUCTION EMISSIONS

Construction Activities	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2020	4.55	50.26	32.76	0.06	9.45	5.95
2021	4.29	46.45	33.86	0.11	6.46	3.29
2022	3.81	30.38	32.33	0.11	6.31	2.28
2023	3.49	25.63	30.88	0.11	6.18	2.16
2024	163.40	24.55	29.95	0.10	6.10	2.08
Total Maximum Daily Emissions	**163.40**	**50.26**	**33.86**	**0.11**	**9.45**	**5.95**
Winter						
2020	4.55	50.26	32.61	0.06	9.45	5.95
2021	4.28	46.46	31.51	0.10	6.46	3.29
2022	3.80	30.27	30.16	0.10	6.31	2.28
2023	3.48	25.52	28.77	0.10	6.18	2.16
2024	163.40	24.44	27.96	0.10	6.10	2.08
Total Maximum Daily Emissions	**163.40**	**50.26**	**32.61**	**0.10**	**9.45**	**5.95**

TABLE 2: PROPOSED PROJECT CONSTRUCTION GHG EMISSIONS

Emission Source	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e
2020	92.06	0.03	0.00	92.77
2021	1,141.62	0.15	0.00	1,145.30
2022	1,240.05	0.12	0.00	1,243.00
2023	1,210.29	0.11	0.00	1,212.99
2024	174.43	0.03	0.00	175.10
Total CO2E (All Sources)	**3,869.15**			
Amortized over 30 years	**128.97**			

OPERATIONS

TABLE 3: EXISTING LAND USE DESIGNATION OPERATIONAL EMISSIONS

Operational Activities	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Area Source	5.55	0.00	0.03	0.00	0.00	0.00
Energy Source	0.29	2.62	2.20	0.02	0.20	0.20
Mobile	22.17	54.41	155.61	0.41	32.45	9.18
Total Maximum Daily Emissions	**28.02**	**57.03**	**157.83**	**0.43**	**32.65**	**9.38**
Winter						
Area Source	5.55	0.00	0.03	0.00	0.00	0.00
Energy Source	0.29	2.62	2.20	0.02	0.20	0.20
Mobile	22.61	56.61	151.46	0.40	32.44	9.18
Total Maximum Daily Emissions	**28.46**	**59.23**	**153.69**	**0.41**	**32.64**	**9.38**

TABLE 4: PROPOSED PROJECT OPERATIONAL EMISSIONS

Operational Activities	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
Area Source	21.60	0.00	0.10	0.00	0.00	0.00
Energy Source	0.07	0.62	0.52	0.00	0.05	0.05
Mobile	17.03	62.66	163.79	0.53	42.89	12.11
Total Maximum Daily Emissions	**38.70**	**63.28**	**164.41**	**0.54**	**42.94**	**12.15**
Winter						
Area Source	21.60	0.00	0.10	0.00	0.00	0.00
Energy Source	0.07	0.62	0.52	0.00	0.05	0.05
Mobile	17.26	65.13	152.99	0.51	42.88	12.10
Total Maximum Daily Emissions	**38.93**	**65.76**	**153.62**	**0.52**	**42.93**	**12.15**

TABLE 5: EXISTING LAND USE DESIGNATION OPERATIONAL GHG EMISSIONS

Emission Source	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e
Area	6.17E-03	2.00E-05	0	6.58E-03
Energy	1,398.16	0.0462	0.017	1,404.39
Mobile	5,816.70	0.429	0	5,827.42
Waste	270.0754	15.961	0	669.1004
Water Usage	174.3001	0.9858	0.0245	206.2518
Total CO2E (All Sources)	**8,107.17**			

MT/yr = Metric Tons per Year

TABLE 6: PROPOSED PROJECT EMISSIONS SUMMARY

Emission Source	Emissions (MT/yr)			
	CO_2	CH_4	N_2O	Total CO_2e
Construction (Amortized over 30 years)	128.61	0.01	0.00	128.97
Area	0.024	6.00E-05	0	0.0256
Energy	2,457.91	0.0987	0.0222	2,467.00
Mobile	7,330.65	0.3031	0	7,338.23
Waste	342.8822	20.2638	0	849.4761
Water Usage	957.9059	6.9501	0.1709	1,182.57
Total CO2E (All Sources)	**11,966.27**			

ATTACHMENT A:

CALEEMOD EMISSIONS MODEL OUTPUTS

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Proposed 2020 Construction Run

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	52.06	1000sqft	4.00	52,065.00	0
Industrial Park	877.30	1000sqft	40.28	877,298.00	0
Strip Mall	37.19	1000sqft	2.83	37,189.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per land use plan

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Off-road Equipment - Operations only

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Trips and VMT - Construction only

On-road Fugitive Dust - Construction only

Grading - Construction only

Architectural Coating - Construction only

Vehicle Trips - Construction only

Energy Use - Construction only

Fleet Mix - Only cars and trucks present on site

Construction Phase -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0
tblAreaCoating	Area_EF_Nonresidential_Interior	100	0

tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_EF_Residential_Exterior	50	0
tblAreaCoating	Area_EF_Residential_Interior	50	0
tblAreaCoating	Area_Nonresidential_Exterior	483276	0
tblAreaCoating	Area_Nonresidential_Interior	1449828	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	5.61	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	2.44	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	4.58	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	1.92	0.00
tblLandUse	LandUseSquareFeet	52,060.00	52,065.00
tblLandUse	LandUseSquareFeet	877,300.00	877,298.00
tblLandUse	LandUseSquareFeet	37,190.00	37,189.00
tblLandUse	LotAcreage	1.20	4.00
tblLandUse	LotAcreage	20.14	40.28
tblLandUse	LotAcreage	0.85	2.83
tblRoadDust	MeanVehicleSpeed	40	0
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00

tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	1,087.85	0.00
tblSolidWaste	SolidWasteGenerationRate	562.25	0.00
tblSolidWaste	SolidWasteGenerationRate	39.05	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	202,875,625.00	0.00
tblWater	IndoorWaterUseRate	6,532,516.79	0.00
tblWater	IndoorWaterUseRate	2,754,757.07	0.00
tblWater	OutdoorWaterUseRate	1,244,288.91	0.00
tblWater	OutdoorWaterUseRate	1,688,399.50	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0942	0.9890	0.5605	1.0500e-003	0.4171	0.0482	0.4653	0.1841	0.0444	0.2284	0.0000	92.0554	92.0554	0.0287	0.0000	92.7715
2021	0.5285	4.7481	4.1517	0.0126	0.8259	0.1619	0.9878	0.2581	0.1510	0.4091	0.0000	1,141.6186	1,141.6186	0.1474	0.0000	1,145.3034
2022	0.4749	3.9685	3.9671	0.0136	0.6970	0.1116	0.8085	0.1881	0.1049	0.2930	0.0000	1,240.0469	1,240.0469	0.1180	0.0000	1,242.9967
2023	0.4342	3.3403	3.7902	0.0133	0.6970	0.0956	0.7926	0.1881	0.0899	0.2779	0.0000	1,210.2859	1,210.2859	0.1080	0.0000	1,212.9868
2024	4.5528	0.5470	0.7999	1.9400e-003	0.0820	0.0212	0.1032	0.0220	0.0198	0.0418	0.0000	174.4268	174.4268	0.0268	0.0000	175.0962
Maximum	**4.5528**	**4.7481**	**4.1517**	**0.0136**	**0.8259**	**0.1619**	**0.9878**	**0.2581**	**0.1510**	**0.4091**	**0.0000**	**1,240.0469**	**1,240.0469**	**0.1474**	**0.0000**	**1,242.9967**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0942	0.9890	0.5605	1.0500e-003	0.1654	0.0482	0.2136	0.0725	0.0444	0.1169	0.0000	92.0553	92.0553	0.0287	0.0000	92.7714
2021	0.5285	4.7481	4.1517	0.0126	0.6533	0.1619	0.8151	0.1900	0.1510	0.3410	0.0000	1,141.6181	1,141.6181	0.1474	0.0000	1,145.3029
2022	0.4749	3.9685	3.9671	0.0136	0.6970	0.1116	0.8085	0.1881	0.1049	0.2930	0.0000	1,240.0466	1,240.0466	0.1180	0.0000	1,242.9963
2023	0.4342	3.3403	3.7902	0.0133	0.6970	0.0956	0.7926	0.1881	0.0899	0.2779	0.0000	1,210.2856	1,210.2856	0.1080	0.0000	1,212.9864
2024	4.5528	0.5470	0.7999	1.9400e-003	0.0820	0.0212	0.1032	0.0220	0.0198	0.0418	0.0000	174.4267	174.4267	0.0268	0.0000	175.0961
Maximum	**4.5528**	**4.7481**	**4.1517**	**0.0136**	**0.6970**	**0.1619**	**0.8151**	**0.1900**	**0.1510**	**0.3410**	**0.0000**	**1,240.0466**	**1,240.0466**	**0.1474**	**0.0000**	**1,242.9963**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**15.61**	**0.00**	**13.44**	**21.38**	**0.00**	**14.37**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2020	1-31-2021	1.6362	1.6362
2	2-1-2021	4-30-2021	1.4443	1.4443
3	5-1-2021	7-31-2021	1.2248	1.2248
4	8-1-2021	10-31-2021	1.2237	1.2237
5	11-1-2021	1-31-2022	1.1872	1.1872
6	2-1-2022	4-30-2022	1.0843	1.0843

7	**5-1-2022**	**7-31-2022**	1.1233	1.1233
8	**8-1-2022**	**10-31-2022**	1.1220	1.1220
9	**11-1-2022**	**1-31-2023**	1.0634	1.0634
10	**2-1-2023**	**4-30-2023**	0.9230	0.9230
11	**5-1-2023**	**7-31-2023**	0.9566	0.9566
12	**8-1-2023**	**10-31-2023**	0.9553	0.9553
13	**11-1-2023**	**1-31-2024**	0.9081	0.9081
14	**2-1-2024**	**4-30-2024**	1.3319	1.3319
15	**5-1-2024**	**7-31-2024**	3.4720	3.4720
		Highest	3.4720	3.4720

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.4938	1.1000e-004	0.0123	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.4938**	**1.1000e-004**	**0.0123**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0240**	**0.0240**	**6.0000e-005**	**0.0000**	**0.0256**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.4938	1.1000e-004	0.0123	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.4938**	**1.1000e-004**	**0.0123**	**0.0000**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0240**	**0.0240**	**6.0000e-005**	**0.0000**	**0.0256**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2020	12/11/2020	5	30	
2	Grading	Grading	12/12/2020	3/26/2021	5	75	
3	Building Construction	Building Construction	3/27/2021	1/26/2024	5	740	
4	Paving	Paving	1/27/2024	4/12/2024	5	55	
5	Architectural Coating	Architectural Coating	4/13/2024	6/28/2024	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,449,828; Non-Residential Outdoor: 483,276; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	397.00	158.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	79.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6363	0.3227	5.7000e-004		0.0330	0.0330		0.0303	0.0303	0.0000	50.1460	50.1460	0.0162	0.0000	50.5515
Total	**0.0612**	**0.6363**	**0.3227**	**5.7000e-004**	**0.2710**	**0.0330**	**0.3040**	**0.1490**	**0.0303**	**0.1793**	**0.0000**	**50.1460**	**50.1460**	**0.0162**	**0.0000**	**50.5515**

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	8.7000e-004	9.2800e-003	3.0000e-005	2.9700e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.0000e-004	0.0000	2.4829	2.4829	6.0000e-005	0.0000	2.4845
Total	**1.2400e-003**	**8.7000e-004**	**9.2800e-003**	**3.0000e-005**	**2.9700e-003**	**2.0000e-005**	**2.9900e-003**	**7.9000e-004**	**2.0000e-005**	**8.0000e-004**	**0.0000**	**2.4829**	**2.4829**	**6.0000e-005**	**0.0000**	**2.4845**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1057	0.0000	0.1057	0.0581	0.0000	0.0581	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6363	0.3227	5.7000e-004		0.0330	0.0330		0.0303	0.0303	0.0000	50.1460	50.1460	0.0162	0.0000	50.5514
Total	**0.0612**	**0.6363**	**0.3227**	**5.7000e-004**	**0.1057**	**0.0330**	**0.1387**	**0.0581**	**0.0303**	**0.0884**	**0.0000**	**50.1460**	**50.1460**	**0.0162**	**0.0000**	**50.5514**

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2400e-003	8.7000e-004	9.2800e-003	3.0000e-005	2.9700e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.0000e-004	0.0000	2.4829	2.4829	6.0000e-005	0.0000	2.4845
Total	**1.2400e-003**	**8.7000e-004**	**9.2800e-003**	**3.0000e-005**	**2.9700e-003**	**2.0000e-005**	**2.9900e-003**	**7.9000e-004**	**2.0000e-005**	**8.0000e-004**	**0.0000**	**2.4829**	**2.4829**	**6.0000e-005**	**0.0000**	**2.4845**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1416	0.0000	0.1416	0.0339	0.0000	0.0339	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.3514	0.2237	4.3000e-004		0.0152	0.0152		0.0140	0.0140	0.0000	38.1390	38.1390	0.0123	0.0000	38.4474
Total	**0.0312**	**0.3514**	**0.2237**	**4.3000e-004**	**0.1416**	**0.0152**	**0.1568**	**0.0339**	**0.0140**	**0.0479**	**0.0000**	**38.1390**	**38.1390**	**0.0123**	**0.0000**	**38.4474**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.5000e-004	4.8100e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2874	1.2874	3.0000e-005	0.0000	1.2882
Total	**6.4000e-004**	**4.5000e-004**	**4.8100e-003**	**1.0000e-005**	**1.5400e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.2874**	**1.2874**	**3.0000e-005**	**0.0000**	**1.2882**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0552	0.0000	0.0552	0.0132	0.0000	0.0132	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0312	0.3514	0.2237	4.3000e-004		0.0152	0.0152		0.0140	0.0140	0.0000	38.1390	38.1390	0.0123	0.0000	38.4473
Total	**0.0312**	**0.3514**	**0.2237**	**4.3000e-004**	**0.0552**	**0.0152**	**0.0704**	**0.0132**	**0.0140**	**0.0272**	**0.0000**	**38.1390**	**38.1390**	**0.0123**	**0.0000**	**38.4473**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.4000e-004	4.5000e-004	4.8100e-003	1.0000e-005	1.5400e-003	1.0000e-005	1.5500e-003	4.1000e-004	1.0000e-005	4.2000e-004	0.0000	1.2874	1.2874	3.0000e-005	0.0000	1.2882
Total	**6.4000e-004**	**4.5000e-004**	**4.8100e-003**	**1.0000e-005**	**1.5400e-003**	**1.0000e-005**	**1.5500e-003**	**4.1000e-004**	**1.0000e-005**	**4.2000e-004**	**0.0000**	**1.2874**	**1.2874**	**3.0000e-005**	**0.0000**	**1.2882**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2831	0.0000	0.2831	0.1117	0.0000	0.1117	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1278	1.4152	0.9418	1.8900e-003		0.0606	0.0606		0.0557	0.0557	0.0000	166.2097	166.2097	0.0538	0.0000	167.5536
Total	**0.1278**	**1.4152**	**0.9418**	**1.8900e-003**	**0.2831**	**0.0606**	**0.3437**	**0.1117**	**0.0557**	**0.1674**	**0.0000**	**166.2097**	**166.2097**	**0.0538**	**0.0000**	**167.5536**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6200e-003	1.7600e-003	0.0192	6.0000e-005	6.7000e-003	4.0000e-005	6.7400e-003	1.7800e-003	4.0000e-005	1.8200e-003	0.0000	5.4220	5.4220	1.3000e-004	0.0000	5.4251
Total	**2.6200e-003**	**1.7600e-003**	**0.0192**	**6.0000e-005**	**6.7000e-003**	**4.0000e-005**	**6.7400e-003**	**1.7800e-003**	**4.0000e-005**	**1.8200e-003**	**0.0000**	**5.4220**	**5.4220**	**1.3000e-004**	**0.0000**	**5.4251**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1104	0.0000	0.1104	0.0436	0.0000	0.0436	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1278	1.4152	0.9418	1.8900e-003		0.0606	0.0606		0.0557	0.0557	0.0000	166.2095	166.2095	0.0538	0.0000	167.5534
Total	**0.1278**	**1.4152**	**0.9418**	**1.8900e-003**	**0.1104**	**0.0606**	**0.1710**	**0.0436**	**0.0557**	**0.0993**	**0.0000**	**166.2095**	**166.2095**	**0.0538**	**0.0000**	**167.5534**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6200e-003	1.7600e-003	0.0192	6.0000e-005	6.7000e-003	4.0000e-005	6.7400e-003	1.7800e-003	4.0000e-005	1.8200e-003	0.0000	5.4220	5.4220	1.3000e-004	0.0000	5.4251
Total	**2.6200e-003**	**1.7600e-003**	**0.0192**	**6.0000e-005**	**6.7000e-003**	**4.0000e-005**	**6.7400e-003**	**1.7800e-003**	**4.0000e-005**	**1.8200e-003**	**0.0000**	**5.4220**	**5.4220**	**1.3000e-004**	**0.0000**	**5.4251**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1901	1.7432	1.6575	2.6900e-003		0.0959	0.0959		0.0901	0.0901	0.0000	231.6373	231.6373	0.0559	0.0000	233.0344
Total	**0.1901**	**1.7432**	**1.6575**	**2.6900e-003**		**0.0959**	**0.0959**		**0.0901**	**0.0901**	**0.0000**	**231.6373**	**231.6373**	**0.0559**	**0.0000**	**233.0344**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0377	1.4732	0.2835	4.0300e-003	0.0998	2.8200e-003	0.1026	0.0288	2.6900e-003	0.0315	0.0000	385.4776	385.4776	0.0294	0.0000	386.2128
Worker	0.1702	0.1147	1.2498	3.9000e-003	0.4364	2.6100e-003	0.4390	0.1159	2.4100e-003	0.1183	0.0000	352.8720	352.8720	8.2200e-003	0.0000	353.0775
Total	**0.2079**	**1.5879**	**1.5332**	**7.9300e-003**	**0.5361**	**5.4300e-003**	**0.5416**	**0.1447**	**5.1000e-003**	**0.1498**	**0.0000**	**738.3497**	**738.3497**	**0.0376**	**0.0000**	**739.2903**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1901	1.7432	1.6575	2.6900e-003		0.0959	0.0959		0.0901	0.0901	0.0000	231.6370	231.6370	0.0559	0.0000	233.0341
Total	**0.1901**	**1.7432**	**1.6575**	**2.6900e-003**		**0.0959**	**0.0959**		**0.0901**	**0.0901**	**0.0000**	**231.6370**	**231.6370**	**0.0559**	**0.0000**	**233.0341**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0377	1.4732	0.2835	4.0300e-003	0.0998	2.8200e-003	0.1026	0.0288	2.6900e-003	0.0315	0.0000	385.4776	385.4776	0.0294	0.0000	386.2128
Worker	0.1702	0.1147	1.2498	3.9000e-003	0.4364	2.6100e-003	0.4390	0.1159	2.4100e-003	0.1183	0.0000	352.8720	352.8720	8.2200e-003	0.0000	353.0775
Total	**0.2079**	**1.5879**	**1.5332**	**7.9300e-003**	**0.5361**	**5.4300e-003**	**0.5416**	**0.1447**	**5.1000e-003**	**0.1498**	**0.0000**	**738.3497**	**738.3497**	**0.0376**	**0.0000**	**739.2903**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total	**0.2218**	**2.0300**	**2.1272**	**3.5000e-003**		**0.1052**	**0.1052**		**0.0990**	**0.0990**	**0.0000**	**301.2428**	**301.2428**	**0.0722**	**0.0000**	**303.0471**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0457	1.8043	0.3432	5.1900e-003	0.1297	3.0800e-003	0.1328	0.0374	2.9500e-003	0.0404	0.0000	496.8104	496.8104	0.0362	0.0000	497.7158
Worker	0.2073	0.1342	1.4967	4.8900e-003	0.5673	3.3100e-003	0.5706	0.1506	3.0500e-003	0.1537	0.0000	441.9938	441.9938	9.6000e-003	0.0000	442.2339
Total	**0.2530**	**1.9385**	**1.8399**	**0.0101**	**0.6970**	**6.3900e-003**	**0.7034**	**0.1881**	**6.0000e-003**	**0.1941**	**0.0000**	**938.8041**	**938.8041**	**0.0458**	**0.0000**	**939.9497**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total	**0.2218**	**2.0300**	**2.1272**	**3.5000e-003**		**0.1052**	**0.1052**		**0.0990**	**0.0990**	**0.0000**	**301.2425**	**301.2425**	**0.0722**	**0.0000**	**303.0467**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0457	1.8043	0.3432	5.1900e-003	0.1297	3.0800e-003	0.1328	0.0374	2.9500e-003	0.0404	0.0000	496.8104	496.8104	0.0362	0.0000	497.7158
Worker	0.2073	0.1342	1.4967	4.8900e-003	0.5673	3.3100e-003	0.5706	0.1506	3.0500e-003	0.1537	0.0000	441.9938	441.9938	9.6000e-003	0.0000	442.2339
Total	**0.2530**	**1.9385**	**1.8399**	**0.0101**	**0.6970**	**6.3900e-003**	**0.7034**	**0.1881**	**6.0000e-003**	**0.1941**	**0.0000**	**938.8041**	**938.8041**	**0.0458**	**0.0000**	**939.9497**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total	**0.2045**	**1.8700**	**2.1117**	**3.5000e-003**		**0.0910**	**0.0910**		**0.0856**	**0.0856**	**0.0000**	**301.3462**	**301.3462**	**0.0717**	**0.0000**	**303.1383**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0350	1.3494	0.2989	5.0500e-003	0.1297	1.3800e-003	0.1311	0.0374	1.3200e-003	0.0387	0.0000	483.7211	483.7211	0.0277	0.0000	484.4141
Worker	0.1947	0.1209	1.3796	4.7000e-003	0.5673	3.2300e-003	0.5705	0.1506	2.9700e-003	0.1536	0.0000	425.2187	425.2187	8.6300e-003	0.0000	425.4344
Total	**0.2297**	**1.4703**	**1.6785**	**9.7500e-003**	**0.6970**	**4.6100e-003**	**0.7016**	**0.1881**	**4.2900e-003**	**0.1923**	**0.0000**	**908.9397**	**908.9397**	**0.0364**	**0.0000**	**909.8485**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total	**0.2045**	**1.8700**	**2.1117**	**3.5000e-003**		**0.0910**	**0.0910**		**0.0856**	**0.0856**	**0.0000**	**301.3458**	**301.3458**	**0.0717**	**0.0000**	**303.1380**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0350	1.3494	0.2989	5.0500e-003	0.1297	1.3800e-003	0.1311	0.0374	1.3200e-003	0.0387	0.0000	483.7211	483.7211	0.0277	0.0000	484.4141
Worker	0.1947	0.1209	1.3796	4.7000e-003	0.5673	3.2300e-003	0.5705	0.1506	2.9700e-003	0.1536	0.0000	425.2187	425.2187	8.6300e-003	0.0000	425.4344
Total	**0.2297**	**1.4703**	**1.6785**	**9.7500e-003**	**0.6970**	**4.6100e-003**	**0.7016**	**0.1881**	**4.2900e-003**	**0.1923**	**0.0000**	**908.9397**	**908.9397**	**0.0364**	**0.0000**	**909.8485**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0147	0.1344	0.1617	2.7000e-004		6.1300e-003	6.1300e-003		5.7700e-003	5.7700e-003	0.0000	23.1849	23.1849	5.4800e-003	0.0000	23.3220
Total	**0.0147**	**0.1344**	**0.1617**	**2.7000e-004**		**6.1300e-003**	**6.1300e-003**		**5.7700e-003**	**5.7700e-003**	**0.0000**	**23.1849**	**23.1849**	**5.4800e-003**	**0.0000**	**23.3220**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6400e-003	0.1032	0.0222	3.9000e-004	9.9800e-003	1.1000e-004	0.0101	2.8800e-003	1.0000e-004	2.9800e-003	0.0000	37.0693	37.0693	2.0900e-003	0.0000	37.1214
Worker	0.0141	8.4300e-003	0.0993	3.5000e-004	0.0436	2.5000e-004	0.0439	0.0116	2.3000e-004	0.0118	0.0000	31.5409	31.5409	6.1000e-004	0.0000	31.5560
Total	**0.0168**	**0.1117**	**0.1216**	**7.4000e-004**	**0.0536**	**3.6000e-004**	**0.0540**	**0.0145**	**3.3000e-004**	**0.0148**	**0.0000**	**68.6102**	**68.6102**	**2.7000e-003**	**0.0000**	**68.6774**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0147	0.1344	0.1617	2.7000e-004		6.1300e-003	6.1300e-003		5.7700e-003	5.7700e-003	0.0000	23.1849	23.1849	5.4800e-003	0.0000	23.3220
Total	**0.0147**	**0.1344**	**0.1617**	**2.7000e-004**		**6.1300e-003**	**6.1300e-003**		**5.7700e-003**	**5.7700e-003**	**0.0000**	**23.1849**	**23.1849**	**5.4800e-003**	**0.0000**	**23.3220**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.6400e-003	0.1032	0.0222	3.9000e-004	9.9800e-003	1.1000e-004	0.0101	2.8800e-003	1.0000e-004	2.9800e-003	0.0000	37.0693	37.0693	2.0900e-003	0.0000	37.1214
Worker	0.0141	8.4300e-003	0.0993	3.5000e-004	0.0436	2.5000e-004	0.0439	0.0116	2.3000e-004	0.0118	0.0000	31.5409	31.5409	6.1000e-004	0.0000	31.5560
Total	**0.0168**	**0.1117**	**0.1216**	**7.4000e-004**	**0.0536**	**3.6000e-004**	**0.0540**	**0.0145**	**3.3000e-004**	**0.0148**	**0.0000**	**68.6102**	**68.6102**	**2.7000e-003**	**0.0000**	**68.6774**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0272	0.2619	0.4022	6.3000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	55.0730	55.0730	0.0178	0.0000	55.5183
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0272**	**0.2619**	**0.4022**	**6.3000e-004**		**0.0129**	**0.0129**		**0.0119**	**0.0119**	**0.0000**	**55.0730**	**55.0730**	**0.0178**	**0.0000**	**55.5183**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4700e-003	8.8000e-004	0.0103	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	2.0000e-005	1.2300e-003	0.0000	3.2772	3.2772	6.0000e-005	0.0000	3.2788
Total	**1.4700e-003**	**8.8000e-004**	**0.0103**	**4.0000e-005**	**4.5300e-003**	**3.0000e-005**	**4.5600e-003**	**1.2000e-003**	**2.0000e-005**	**1.2300e-003**	**0.0000**	**3.2772**	**3.2772**	**6.0000e-005**	**0.0000**	**3.2788**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0272	0.2619	0.4022	6.3000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	55.0729	55.0729	0.0178	0.0000	55.5182
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0272**	**0.2619**	**0.4022**	**6.3000e-004**		**0.0129**	**0.0129**		**0.0119**	**0.0119**	**0.0000**	**55.0729**	**55.0729**	**0.0178**	**0.0000**	**55.5182**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4700e-003	8.8000e-004	0.0103	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	2.0000e-005	1.2300e-003	0.0000	3.2772	3.2772	6.0000e-005	0.0000	3.2788
Total	**1.4700e-003**	**8.8000e-004**	**0.0103**	**4.0000e-005**	**4.5300e-003**	**3.0000e-005**	**4.5600e-003**	**1.2000e-003**	**2.0000e-005**	**1.2300e-003**	**0.0000**	**3.2772**	**3.2772**	**6.0000e-005**	**0.0000**	**3.2788**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.4800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9700e-003	0.0335	0.0498	8.0000e-005		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	7.0215	7.0215	4.0000e-004	0.0000	7.0313
Total	**4.4849**	**0.0335**	**0.0498**	**8.0000e-005**		**1.6800e-003**	**1.6800e-003**		**1.6800e-003**	**1.6800e-003**	**0.0000**	**7.0215**	**7.0215**	**4.0000e-004**	**0.0000**	**7.0313**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7400e-003	4.6100e-003	0.0544	1.9000e-004	0.0239	1.3000e-004	0.0240	6.3400e-003	1.2000e-004	6.4600e-003	0.0000	17.2601	17.2601	3.3000e-004	0.0000	17.2684
Total	**7.7400e-003**	**4.6100e-003**	**0.0544**	**1.9000e-004**	**0.0239**	**1.3000e-004**	**0.0240**	**6.3400e-003**	**1.2000e-004**	**6.4600e-003**	**0.0000**	**17.2601**	**17.2601**	**3.3000e-004**	**0.0000**	**17.2684**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.4800					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.9700e-003	0.0335	0.0498	8.0000e-005		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	7.0214	7.0214	4.0000e-004	0.0000	7.0313
Total	**4.4849**	**0.0335**	**0.0498**	**8.0000e-005**		**1.6800e-003**	**1.6800e-003**		**1.6800e-003**	**1.6800e-003**	**0.0000**	**7.0214**	**7.0214**	**4.0000e-004**	**0.0000**	**7.0313**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7400e-003	4.6100e-003	0.0544	1.9000e-004	0.0239	1.3000e-004	0.0240	6.3400e-003	1.2000e-004	6.4600e-003	0.0000	17.2601	17.2601	3.3000e-004	0.0000	17.2684
Total	**7.7400e-003**	**4.6100e-003**	**0.0544**	**1.9000e-004**	**0.0239**	**1.3000e-004**	**0.0240**	**6.3400e-003**	**1.2000e-004**	**6.4600e-003**	**0.0000**	**17.2601**	**17.2601**	**3.3000e-004**	**0.0000**	**17.2684**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Medical Office Building	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Strip Mall	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.4938	1.1000e-004	0.0123	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Unmitigated	3.4938	1.1000e-004	0.0123	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.4926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1400e-003	1.1000e-004	0.0123	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Total	**3.4938**	**1.1000e-004**	**0.0123**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0240**	**0.0240**	**6.0000e-005**	**0.0000**	**0.0256**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.4926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1400e-003	1.1000e-004	0.0123	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Total	**3.4938**	**1.1000e-004**	**0.0123**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0240**	**0.0240**	**6.0000e-005**	**0.0000**	**0.0256**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	0	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Proposed 2020 Construction Run

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	52.06	1000sqft	4.00	52,065.00	0
Industrial Park	877.30	1000sqft	40.28	877,298.00	0
Strip Mall	37.19	1000sqft	2.83	37,189.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per land use plan

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Off-road Equipment - Operations only

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Trips and VMT - Construction only

On-road Fugitive Dust - Construction only

Grading - Construction only

Architectural Coating - Construction only

Vehicle Trips - Construction only

Energy Use - Construction only

Fleet Mix - Only cars and trucks present on site

Construction Phase -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0
tblAreaCoating	Area_EF_Nonresidential_Interior	100	0

tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_EF_Residential_Exterior	50	0
tblAreaCoating	Area_EF_Residential_Interior	50	0
tblAreaCoating	Area_Nonresidential_Exterior	483276	0
tblAreaCoating	Area_Nonresidential_Interior	1449828	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	5.61	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	2.44	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	4.58	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	1.92	0.00
tblLandUse	LandUseSquareFeet	52,060.00	52,065.00
tblLandUse	LandUseSquareFeet	877,300.00	877,298.00
tblLandUse	LandUseSquareFeet	37,190.00	37,189.00
tblLandUse	LotAcreage	1.20	4.00
tblLandUse	LotAcreage	20.14	40.28
tblLandUse	LotAcreage	0.85	2.83
tblRoadDust	MeanVehicleSpeed	40	0
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00

tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	1,087.85	0.00
tblSolidWaste	SolidWasteGenerationRate	562.25	0.00
tblSolidWaste	SolidWasteGenerationRate	39.05	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	202,875,625.00	0.00
tblWater	IndoorWaterUseRate	6,532,516.79	0.00
tblWater	IndoorWaterUseRate	2,754,757.07	0.00
tblWater	OutdoorWaterUseRate	1,244,288.91	0.00
tblWater	OutdoorWaterUseRate	1,688,399.50	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5519	50.2577	32.7647	0.0642	18.2675	2.1986	20.4661	9.9840	2.0227	12.0068	0.0000	6,226.1842	6,226.1842	1.9481	0.0000	6,274.8858
2021	4.2860	46.4539	33.8614	0.1103	8.8969	1.9867	10.8836	3.6558	1.8277	5.4835	0.0000	11,097.7912	11,097.7912	1.9479	0.0000	11,123.4330
2022	3.8107	30.3753	32.3279	0.1084	5.4492	0.8579	6.3071	1.4681	0.8070	2.2751	0.0000	10,907.5602	10,907.5602	0.9950	0.0000	10,932.4351
2023	3.4872	25.6281	30.8767	0.1057	5.4492	0.7350	6.1842	1.4681	0.6913	2.1594	0.0000	10,639.8178	10,639.8178	0.9136	0.0000	10,662.6569
2024	163.3983	24.5496	29.9477	0.1042	5.4491	0.6483	6.0974	1.4681	0.6095	2.0776	0.0000	10,484.1436	10,484.1436	0.8980	0.0000	10,506.5946
Maximum	**163.3983**	**50.2577**	**33.8614**	**0.1103**	**18.2675**	**2.1986**	**20.4661**	**9.9840**	**2.0227**	**12.0068**	**0.0000**	**11,097.7912**	**11,097.7912**	**1.9481**	**0.0000**	**11,123.4330**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5519	50.2577	32.7647	0.0642	7.2470	2.1986	9.4457	3.9263	2.0227	5.9491	0.0000	6,226.1842	6,226.1842	1.9481	0.0000	6,274.8858
2021	4.2860	46.4539	33.8614	0.1103	5.4493	1.9867	6.4618	1.4681	1.8277	3.2897	0.0000	11,097.7912	11,097.7912	1.9479	0.0000	11,123.4329
2022	3.8107	30.3753	32.3279	0.1084	5.4492	0.8579	6.3071	1.4681	0.8070	2.2751	0.0000	10,907.5602	10,907.5602	0.9950	0.0000	10,932.4351
2023	3.4872	25.6281	30.8767	0.1057	5.4492	0.7350	6.1842	1.4681	0.6913	2.1594	0.0000	10,639.8178	10,639.8178	0.9136	0.0000	10,662.6569
2024	163.3983	24.5496	29.9477	0.1042	5.4491	0.6483	6.0974	1.4681	0.6095	2.0776	0.0000	10,484.1436	10,484.1436	0.8980	0.0000	10,506.5946
Maximum	**163.3983**	**50.2577**	**33.8614**	**0.1103**	**7.2470**	**2.1986**	**9.4457**	**3.9263**	**2.0227**	**5.9491**	**0.0000**	**11,097.7912**	**11,097.7912**	**1.9481**	**0.0000**	**11,123.4329**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.25**	**0.00**	**30.92**	**45.70**	**0.00**	**34.38**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.1468	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**19.1468**	**8.9000e-004**	**0.0985**	**1.0000e-005**	**0.0000**	**3.5000e-004**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**3.5000e-004**		**0.2115**	**0.2115**	**5.5000e-004**	**0.0000**	**0.2253**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.1468	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**19.1468**	**8.9000e-004**	**0.0985**	**1.0000e-005**	**0.0000**	**3.5000e-004**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**3.5000e-004**		**0.2115**	**0.2115**	**5.5000e-004**	**0.0000**	**0.2253**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2020	12/11/2020	5	30	
2	Grading	Grading	12/12/2020	3/26/2021	5	75	
3	Building Construction	Building Construction	3/27/2021	1/26/2024	5	740	
4	Paving	Paving	1/27/2024	4/12/2024	5	55	
5	Architectural Coating	Architectural Coating	4/13/2024	6/28/2024	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,449,828; Non-Residential Outdoor: 483,276; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	397.00	158.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	79.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0542	0.7258	1.9900e-003	0.2012	1.2200e-003	0.2024	0.0534	1.1200e-003	0.0545		198.2870	198.2870	5.0800e-003		198.4141
Total	**0.0916**	**0.0542**	**0.7258**	**1.9900e-003**	**0.2012**	**1.2200e-003**	**0.2024**	**0.0534**	**1.1200e-003**	**0.0545**		**198.2870**	**198.2870**	**5.0800e-003**		**198.4141**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**7.0458**	**2.1974**	**9.2433**	**3.8730**	**2.0216**	**5.8946**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0916	0.0542	0.7258	1.9900e-003	0.2012	1.2200e-003	0.2024	0.0534	1.1200e-003	0.0545		198.2870	198.2870	5.0800e-003		198.4141
Total	**0.0916**	**0.0542**	**0.7258**	**1.9900e-003**	**0.2012**	**1.2200e-003**	**0.2024**	**0.0534**	**1.1200e-003**	**0.0545**		**198.2870**	**198.2870**	**5.0800e-003**		**198.4141**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**		**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		220.3189	220.3189	5.6500e-003		220.4601
Total	**0.1018**	**0.0602**	**0.8064**	**2.2100e-003**	**0.2236**	**1.3500e-003**	**0.2249**	**0.0593**	**1.2500e-003**	**0.0605**		**220.3189**	**220.3189**	**5.6500e-003**		**220.4601**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**3.3826**	**2.1739**	**5.5565**	**1.4026**	**2.0000**	**3.4026**	**0.0000**	**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		220.3189	220.3189	5.6500e-003		220.4601
Total	**0.1018**	**0.0602**	**0.8064**	**2.2100e-003**	**0.2236**	**1.3500e-003**	**0.2249**	**0.0593**	**1.2500e-003**	**0.0605**		**220.3189**	**220.3189**	**5.6500e-003**		**220.4601**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0948	0.0540	0.7394	2.1400e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		212.9502	212.9502	5.0800e-003		213.0771
Total	**0.0948**	**0.0540**	**0.7394**	**2.1400e-003**	**0.2236**	**1.3200e-003**	**0.2249**	**0.0593**	**1.2100e-003**	**0.0605**		**212.9502**	**212.9502**	**5.0800e-003**		**213.0771**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**3.3826**	**1.9853**	**5.3679**	**1.4026**	**1.8265**	**3.2292**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0948	0.0540	0.7394	2.1400e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		212.9502	212.9502	5.0800e-003		213.0771
Total	**0.0948**	**0.0540**	**0.7394**	**2.1400e-003**	**0.2236**	**1.3200e-003**	**0.2249**	**0.0593**	**1.2100e-003**	**0.0605**		**212.9502**	**212.9502**	**5.0800e-003**		**213.0771**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3689	14.6212	2.6087	0.0409	1.0117	0.0278	1.0395	0.2913	0.0266	0.3179		4,317.3662	4,317.3662	0.3089		4,325.0878
Worker	1.8822	1.0723	14.6776	0.0424	4.4375	0.0262	4.4637	1.1769	0.0241	1.2009		4,227.0611	4,227.0611	0.1008		4,229.5809
Total	**2.2510**	**15.6934**	**17.2862**	**0.0834**	**5.4493**	**0.0540**	**5.5032**	**1.4681**	**0.0507**	**1.5188**		**8,544.4273**	**8,544.4273**	**0.4097**		**8,554.6687**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3689	14.6212	2.6087	0.0409	1.0117	0.0278	1.0395	0.2913	0.0266	0.3179		4,317.3662	4,317.3662	0.3089		4,325.0878
Worker	1.8822	1.0723	14.6776	0.0424	4.4375	0.0262	4.4637	1.1769	0.0241	1.2009		4,227.0611	4,227.0611	0.1008		4,229.5809
Total	**2.2510**	**15.6934**	**17.2862**	**0.0834**	**5.4493**	**0.0540**	**5.5032**	**1.4681**	**0.0507**	**1.5188**		**8,544.4273**	**8,544.4273**	**0.4097**		**8,554.6687**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3439	13.7947	2.4264	0.0406	1.0117	0.0234	1.0351	0.2913	0.0224	0.3136		4,280.6178	4,280.6178	0.2925		4,287.9308
Worker	1.7605	0.9650	13.5381	0.0409	4.4375	0.0255	4.4630	1.1769	0.0234	1.2003		4,072.6088	4,072.6088	0.0905		4,074.8722
Total	**2.1045**	**14.7596**	**15.9645**	**0.0815**	**5.4492**	**0.0488**	**5.4981**	**1.4681**	**0.0458**	**1.5139**		**8,353.2266**	**8,353.2266**	**0.3831**		**8,362.8029**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3439	13.7947	2.4264	0.0406	1.0117	0.0234	1.0351	0.2913	0.0224	0.3136		4,280.6178	4,280.6178	0.2925		4,287.9308
Worker	1.7605	0.9650	13.5381	0.0409	4.4375	0.0255	4.4630	1.1769	0.0234	1.2003		4,072.6088	4,072.6088	0.0905		4,074.8722
Total	**2.1045**	**14.7596**	**15.9645**	**0.0815**	**5.4492**	**0.0488**	**5.4981**	**1.4681**	**0.0458**	**1.5139**		**8,353.2266**	**8,353.2266**	**0.3831**		**8,362.8029**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2638	10.3730	2.1386	0.0395	1.0117	0.0104	1.0221	0.2913	9.9800e-003	0.3012		4,166.7688	4,166.7688	0.2245		4,172.3803
Worker	1.6507	0.8702	12.4941	0.0393	4.4375	0.0249	4.4624	1.1769	0.0229	1.1997		3,917.8390	3,917.8390	0.0813		3,919.8706
Total	**1.9145**	**11.2432**	**14.6327**	**0.0788**	**5.4492**	**0.0353**	**5.4845**	**1.4681**	**0.0329**	**1.5010**		**8,084.6078**	**8,084.6078**	**0.3057**		**8,092.2509**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2638	10.3730	2.1386	0.0395	1.0117	0.0104	1.0221	0.2913	9.9800e-003	0.3012		4,166.7688	4,166.7688	0.2245		4,172.3803
Worker	1.6507	0.8702	12.4941	0.0393	4.4375	0.0249	4.4624	1.1769	0.0229	1.1997		3,917.8390	3,917.8390	0.0813		3,919.8706
Total	**1.9145**	**11.2432**	**14.6327**	**0.0788**	**5.4492**	**0.0353**	**5.4845**	**1.4681**	**0.0329**	**1.5010**		**8,084.6078**	**8,084.6078**	**0.3057**		**8,092.2509**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2587	10.3167	2.0659	0.0393	1.0116	0.0104	1.0220	0.2913	9.9300e-003	0.3012		4,150.4678	4,150.4678	0.2196		4,155.9575
Worker	1.5556	0.7891	11.7150	0.0379	4.4375	0.0246	4.4621	1.1769	0.0226	1.1995		3,777.9769	3,777.9769	0.0741		3,779.8294
Total	**1.8144**	**11.1058**	**13.7809**	**0.0772**	**5.4491**	**0.0350**	**5.4841**	**1.4681**	**0.0326**	**1.5007**		**7,928.4447**	**7,928.4447**	**0.2937**		**7,935.7869**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2587	10.3167	2.0659	0.0393	1.0116	0.0104	1.0220	0.2913	9.9300e-003	0.3012		4,150.4678	4,150.4678	0.2196		4,155.9575
Worker	1.5556	0.7891	11.7150	0.0379	4.4375	0.0246	4.4621	1.1769	0.0226	1.1995		3,777.9769	3,777.9769	0.0741		3,779.8294
Total	**1.8144**	**11.1058**	**13.7809**	**0.0772**	**5.4491**	**0.0350**	**5.4841**	**1.4681**	**0.0326**	**1.5007**		**7,928.4447**	**7,928.4447**	**0.2937**		**7,935.7869**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
Total	**0.0588**	**0.0298**	**0.4426**	**1.4300e-003**	**0.1677**	**9.3000e-004**	**0.1686**	**0.0445**	**8.6000e-004**	**0.0453**		**142.7447**	**142.7447**	**2.8000e-003**		**142.8147**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
Total	**0.0588**	**0.0298**	**0.4426**	**1.4300e-003**	**0.1677**	**9.3000e-004**	**0.1686**	**0.0445**	**8.6000e-004**	**0.0453**		**142.7447**	**142.7447**	**2.8000e-003**		**142.8147**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	162.9080					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**163.0887**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3096	0.1570	2.3312	7.5400e-003	0.8830	4.8900e-003	0.8879	0.2342	4.5000e-003	0.2387		751.7889	751.7889	0.0148		752.1575
Total	**0.3096**	**0.1570**	**2.3312**	**7.5400e-003**	**0.8830**	**4.8900e-003**	**0.8879**	**0.2342**	**4.5000e-003**	**0.2387**		**751.7889**	**751.7889**	**0.0148**		**752.1575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	162.9080					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**163.0887**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3096	0.1570	2.3312	7.5400e-003	0.8830	4.8900e-003	0.8879	0.2342	4.5000e-003	0.2387		751.7889	751.7889	0.0148		752.1575
Total	**0.3096**	**0.1570**	**2.3312**	**7.5400e-003**	**0.8830**	**4.8900e-003**	**0.8879**	**0.2342**	**4.5000e-003**	**0.2387**		**751.7889**	**751.7889**	**0.0148**		**752.1575**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Medical Office Building	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Strip Mall	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.1468	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Unmitigated	19.1468	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.1377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-003	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Total	**19.1468**	**8.9000e-004**	**0.0985**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**		**0.2115**	**0.2115**	**5.5000e-004**		**0.2253**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.1377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-003	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Total	**19.1468**	**8.9000e-004**	**0.0985**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**		**0.2115**	**0.2115**	**5.5000e-004**		**0.2253**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Proposed 2020 Construction Run

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	52.06	1000sqft	4.00	52,065.00	0
Industrial Park	877.30	1000sqft	40.28	877,298.00	0
Strip Mall	37.19	1000sqft	2.83	37,189.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per land use plan

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Off-road Equipment - Operations only

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Off-road Equipment - Construction only

Trips and VMT - Construction only

On-road Fugitive Dust - Construction only

Grading - Construction only

Architectural Coating - Construction only

Vehicle Trips - Construction only

Energy Use - Construction only

Fleet Mix - Only cars and trucks present on site

Construction Phase -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0
tblAreaCoating	Area_EF_Nonresidential_Interior	100	0

tblAreaCoating	Area_EF_Parking	100	0
tblAreaCoating	Area_EF_Residential_Exterior	50	0
tblAreaCoating	Area_EF_Residential_Interior	50	0
tblAreaCoating	Area_Nonresidential_Exterior	483276	0
tblAreaCoating	Area_Nonresidential_Interior	1449828	0
tblAreaCoating	ReapplicationRatePercent	10	0
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	5.61	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	2.44	0.00
tblEnergyUse	NT24NG	0.30	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	4.58	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	1.92	0.00
tblLandUse	LandUseSquareFeet	52,060.00	52,065.00
tblLandUse	LandUseSquareFeet	877,300.00	877,298.00
tblLandUse	LandUseSquareFeet	37,190.00	37,189.00
tblLandUse	LotAcreage	1.20	4.00
tblLandUse	LotAcreage	20.14	40.28
tblLandUse	LotAcreage	0.85	2.83
tblRoadDust	MeanVehicleSpeed	40	0
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00

tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillCaptureGasFlare	94.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	LandfillNoGasCapture	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	1,087.85	0.00
tblSolidWaste	SolidWasteGenerationRate	562.25	0.00
tblSolidWaste	SolidWasteGenerationRate	39.05	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	8.96	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	1.55	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	36.13	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWater	IndoorWaterUseRate	202,875,625.00	0.00
tblWater	IndoorWaterUseRate	6,532,516.79	0.00
tblWater	IndoorWaterUseRate	2,754,757.07	0.00
tblWater	OutdoorWaterUseRate	1,244,288.91	0.00
tblWater	OutdoorWaterUseRate	1,688,399.50	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5498	50.2598	32.6106	0.0640	18.2675	2.1986	20.4661	9.9840	2.0227	12.0068	0.0000	6,203.5124	6,203.5124	1.9473	0.0000	6,252.1956
2021	4.2842	46.4557	31.5088	0.1044	8.8969	1.9867	10.8836	3.6558	1.8277	5.4835	0.0000	10,500.4592	10,500.4592	1.9472	0.0000	10,526.6540
2022	3.8048	30.2697	30.1553	0.1026	5.4492	0.8586	6.3078	1.4681	0.8077	2.2758	0.0000	10,326.7777	10,326.7777	1.0170	0.0000	10,352.2031
2023	3.4821	25.5161	28.7691	0.1002	5.4492	0.7354	6.1845	1.4681	0.6916	2.1597	0.0000	10,081.9574	10,081.9574	0.9275	0.0000	10,105.1444
2024	163.3953	24.4363	27.9643	0.0988	5.4491	0.6486	6.0977	1.4681	0.6098	2.0779	0.0000	9,942.2027	9,942.2027	0.9123	0.0000	9,965.0108
Maximum	**163.3953**	**50.2598**	**32.6106**	**0.1044**	**18.2675**	**2.1986**	**20.4661**	**9.9840**	**2.0227**	**12.0068**	**0.0000**	**10,500.4592**	**10,500.4592**	**1.9473**	**0.0000**	**10,526.6540**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.5498	50.2598	32.6106	0.0640	7.2470	2.1986	9.4457	3.9263	2.0227	5.9491	0.0000	6,203.5124	6,203.5124	1.9473	0.0000	6,252.1956
2021	4.2842	46.4557	31.5088	0.1044	5.4493	1.9867	6.4627	1.4681	1.8277	3.2897	0.0000	10,500.4592	10,500.4592	1.9472	0.0000	10,526.6540
2022	3.8048	30.2697	30.1553	0.1026	5.4492	0.8586	6.3078	1.4681	0.8077	2.2758	0.0000	10,326.7777	10,326.7777	1.0170	0.0000	10,352.2031
2023	3.4821	25.5161	28.7691	0.1002	5.4492	0.7354	6.1845	1.4681	0.6916	2.1597	0.0000	10,081.9574	10,081.9574	0.9275	0.0000	10,105.1444
2024	163.3953	24.4363	27.9643	0.0988	5.4491	0.6486	6.0977	1.4681	0.6098	2.0779	0.0000	9,942.2027	9,942.2027	0.9123	0.0000	9,965.0108
Maximum	**163.3953**	**50.2598**	**32.6106**	**0.1044**	**7.2470**	**2.1986**	**9.4457**	**3.9263**	**2.0227**	**5.9491**	**0.0000**	**10,500.4592**	**10,500.4592**	**1.9473**	**0.0000**	**10,526.6540**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**33.25**	**0.00**	**30.92**	**45.70**	**0.00**	**34.38**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.1468	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**19.1468**	**8.9000e-004**	**0.0985**	**1.0000e-005**	**0.0000**	**3.5000e-004**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**3.5000e-004**		**0.2115**	**0.2115**	**5.5000e-004**	**0.0000**	**0.2253**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	19.1468	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**19.1468**	**8.9000e-004**	**0.0985**	**1.0000e-005**	**0.0000**	**3.5000e-004**	**3.5000e-004**	**0.0000**	**3.5000e-004**	**3.5000e-004**		**0.2115**	**0.2115**	**5.5000e-004**	**0.0000**	**0.2253**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/1/2020	12/11/2020	5	30	
2	Grading	Grading	12/12/2020	3/26/2021	5	75	
3	Building Construction	Building Construction	3/27/2021	1/26/2024	5	740	
4	Paving	Paving	1/27/2024	4/12/2024	5	55	
5	Architectural Coating	Architectural Coating	4/13/2024	6/28/2024	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,449,828; Non-Residential Outdoor: 483,276; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	397.00	158.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	79.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0897	0.0560	0.5871	1.7900e-003	0.2012	1.2200e-003	0.2024	0.0534	1.1200e-003	0.0545		177.8824	177.8824	4.4200e-003		177.9929
Total	**0.0897**	**0.0560**	**0.5871**	**1.7900e-003**	**0.2012**	**1.2200e-003**	**0.2024**	**0.0534**	**1.1200e-003**	**0.0545**		**177.8824**	**177.8824**	**4.4200e-003**		**177.9929**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**7.0458**	**2.1974**	**9.2433**	**3.8730**	**2.0216**	**5.8946**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.2 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0897	0.0560	0.5871	1.7900e-003	0.2012	1.2200e-003	0.2024	0.0534	1.1200e-003	0.0545		177.8824	177.8824	4.4200e-003		177.9929
Total	**0.0897**	**0.0560**	**0.5871**	**1.7900e-003**	**0.2012**	**1.2200e-003**	**0.2024**	**0.0534**	**1.1200e-003**	**0.0545**		**177.8824**	**177.8824**	**4.4200e-003**		**177.9929**

3.3 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**		**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

3.3 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		197.6472	197.6472	4.9100e-003		197.7699
Total	**0.0997**	**0.0623**	**0.6524**	**1.9800e-003**	**0.2236**	**1.3500e-003**	**0.2249**	**0.0593**	**1.2500e-003**	**0.0605**		**197.6472**	**197.6472**	**4.9100e-003**		**197.7699**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**3.3826**	**2.1739**	**5.5565**	**1.4026**	**2.0000**	**3.4026**	**0.0000**	**6,005.8653**	**6,005.8653**	**1.9424**		**6,054.4257**

3.3 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605		197.6472	197.6472	4.9100e-003		197.7699
Total	**0.0997**	**0.0623**	**0.6524**	**1.9800e-003**	**0.2236**	**1.3500e-003**	**0.2249**	**0.0593**	**1.2500e-003**	**0.0605**		**197.6472**	**197.6472**	**4.9100e-003**		**197.7699**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6733**	**1.9853**	**10.6587**	**3.5965**	**1.8265**	**5.4230**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.3 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0931	0.0559	0.5969	1.9200e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		191.0387	191.0387	4.4100e-003		191.1491
Total	**0.0931**	**0.0559**	**0.5969**	**1.9200e-003**	**0.2236**	**1.3200e-003**	**0.2249**	**0.0593**	**1.2100e-003**	**0.0605**		**191.0387**	**191.0387**	**4.4100e-003**		**191.1491**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**3.3826**	**1.9853**	**5.3679**	**1.4026**	**1.8265**	**3.2292**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.3 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0931	0.0559	0.5969	1.9200e-003	0.2236	1.3200e-003	0.2249	0.0593	1.2100e-003	0.0605		191.0387	191.0387	4.4100e-003		191.1491
Total	**0.0931**	**0.0559**	**0.5969**	**1.9200e-003**	**0.2236**	**1.3200e-003**	**0.2249**	**0.0593**	**1.2100e-003**	**0.0605**		**191.0387**	**191.0387**	**4.4100e-003**		**191.1491**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3918	14.4953	3.0859	0.0394	1.0117	0.0287	1.0404	0.2913	0.0274	0.3187		4,154.9769	4,154.9769	0.3442		4,163.5807
Worker	1.8471	1.1089	11.8477	0.0380	4.4375	0.0262	4.4637	1.1769	0.0241	1.2009		3,792.1184	3,792.1184	0.0876		3,794.3091
Total	**2.2388**	**15.6042**	**14.9336**	**0.0774**	**5.4493**	**0.0548**	**5.5041**	**1.4681**	**0.0515**	**1.5196**		**7,947.0953**	**7,947.0953**	**0.4318**		**7,957.8898**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3918	14.4953	3.0859	0.0394	1.0117	0.0287	1.0404	0.2913	0.0274	0.3187		4,154.9769	4,154.9769	0.3442		4,163.5807
Worker	1.8471	1.1089	11.8477	0.0380	4.4375	0.0262	4.4637	1.1769	0.0241	1.2009		3,792.1184	3,792.1184	0.0876		3,794.3091
Total	**2.2388**	**15.6042**	**14.9336**	**0.0774**	**5.4493**	**0.0548**	**5.5041**	**1.4681**	**0.0515**	**1.5196**		**7,947.0953**	**7,947.0953**	**0.4318**		**7,957.8898**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3658	13.6565	2.8806	0.0391	1.0117	0.0241	1.0358	0.2913	0.0231	0.3144		4,118.6988	4,118.6988	0.3263		4,126.8555
Worker	1.7328	0.9976	10.9113	0.0366	4.4375	0.0255	4.4630	1.1769	0.0234	1.2003		3,653.7454	3,653.7454	0.0788		3,655.7154
Total	**2.0986**	**14.6541**	**13.7919**	**0.0757**	**5.4492**	**0.0496**	**5.4988**	**1.4681**	**0.0465**	**1.5147**		**7,772.4441**	**7,772.4441**	**0.4051**		**7,782.5709**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3658	13.6565	2.8806	0.0391	1.0117	0.0241	1.0358	0.2913	0.0231	0.3144		4,118.6988	4,118.6988	0.3263		4,126.8555
Worker	1.7328	0.9976	10.9113	0.0366	4.4375	0.0255	4.4630	1.1769	0.0234	1.2003		3,653.7454	3,653.7454	0.0788		3,655.7154
Total	**2.0986**	**14.6541**	**13.7919**	**0.0757**	**5.4492**	**0.0496**	**5.4988**	**1.4681**	**0.0465**	**1.5147**		**7,772.4441**	**7,772.4441**	**0.4051**		**7,782.5709**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2795	10.2320	2.4699	0.0380	1.0117	0.0108	1.0224	0.2913	0.0103	0.3016		4,011.6616	4,011.6616	0.2488		4,017.8819
Worker	1.6298	0.8992	10.0552	0.0353	4.4375	0.0249	4.4624	1.1769	0.0229	1.1997		3,515.0858	3,515.0858	0.0708		3,516.8565
Total	**1.9093**	**11.1312**	**12.5251**	**0.0733**	**5.4492**	**0.0356**	**5.4848**	**1.4681**	**0.0332**	**1.5013**		**7,526.7475**	**7,526.7475**	**0.3196**		**7,534.7384**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2795	10.2320	2.4699	0.0380	1.0117	0.0108	1.0224	0.2913	0.0103	0.3016		4,011.6616	4,011.6616	0.2488		4,017.8819
Worker	1.6298	0.8992	10.0552	0.0353	4.4375	0.0249	4.4624	1.1769	0.0229	1.1997		3,515.0858	3,515.0858	0.0708		3,516.8565
Total	**1.9093**	**11.1312**	**12.5251**	**0.0733**	**5.4492**	**0.0356**	**5.4848**	**1.4681**	**0.0332**	**1.5013**		**7,526.7475**	**7,526.7475**	**0.3196**		**7,534.7384**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**		**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2741	10.1775	2.3905	0.0379	1.0116	0.0107	1.0223	0.2913	0.0102	0.3015		3,997.4206	3,997.4206	0.2434		4,003.5046
Worker	1.5407	0.8150	9.4070	0.0340	4.4375	0.0246	4.4621	1.1769	0.0226	1.1995		3,389.0832	3,389.0832	0.0646		3,390.6985
Total	**1.8148**	**10.9925**	**11.7975**	**0.0719**	**5.4491**	**0.0353**	**5.4844**	**1.4681**	**0.0329**	**1.5010**		**7,386.5038**	**7,386.5038**	**0.3080**		**7,394.2031**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	**1.4716**	**13.4438**	**16.1668**	**0.0270**		**0.6133**	**0.6133**		**0.5769**	**0.5769**	**0.0000**	**2,555.6989**	**2,555.6989**	**0.6044**		**2,570.8077**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2741	10.1775	2.3905	0.0379	1.0116	0.0107	1.0223	0.2913	0.0102	0.3015		3,997.4206	3,997.4206	0.2434		4,003.5046
Worker	1.5407	0.8150	9.4070	0.0340	4.4375	0.0246	4.4621	1.1769	0.0226	1.1995		3,389.0832	3,389.0832	0.0646		3,390.6985
Total	**1.8148**	**10.9925**	**11.7975**	**0.0719**	**5.4491**	**0.0353**	**5.4844**	**1.4681**	**0.0329**	**1.5010**		**7,386.5038**	**7,386.5038**	**0.3080**		**7,394.2031**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**		**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
Total	**0.0582**	**0.0308**	**0.3554**	**1.2800e-003**	**0.1677**	**9.3000e-004**	**0.1686**	**0.0445**	**8.6000e-004**	**0.0453**		**128.0510**	**128.0510**	**2.4400e-003**		**128.1120**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.9882**	**9.5246**	**14.6258**	**0.0228**		**0.4685**	**0.4685**		**0.4310**	**0.4310**	**0.0000**	**2,207.5472**	**2,207.5472**	**0.7140**		**2,225.3963**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
Total	**0.0582**	**0.0308**	**0.3554**	**1.2800e-003**	**0.1677**	**9.3000e-004**	**0.1686**	**0.0445**	**8.6000e-004**	**0.0453**		**128.0510**	**128.0510**	**2.4400e-003**		**128.1120**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	162.9080					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**163.0887**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3066	0.1622	1.8719	6.7600e-003	0.8830	4.8900e-003	0.8879	0.2342	4.5000e-003	0.2387		674.4020	674.4020	0.0129		674.7234
Total	**0.3066**	**0.1622**	**1.8719**	**6.7600e-003**	**0.8830**	**4.8900e-003**	**0.8879**	**0.2342**	**4.5000e-003**	**0.2387**		**674.4020**	**674.4020**	**0.0129**		**674.7234**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	162.9080					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**163.0887**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3066	0.1622	1.8719	6.7600e-003	0.8830	4.8900e-003	0.8879	0.2342	4.5000e-003	0.2387		674.4020	674.4020	0.0129		674.7234
Total	**0.3066**	**0.1622**	**1.8719**	**6.7600e-003**	**0.8830**	**4.8900e-003**	**0.8879**	**0.2342**	**4.5000e-003**	**0.2387**		**674.4020**	**674.4020**	**0.0129**		**674.7234**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	0.00	0.00	0.00		
Medical Office Building	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Medical Office Building	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840
Strip Mall	0.551648	0.035769	0.187848	0.110184	0.013450	0.004660	0.017552	0.070120	0.001413	0.001134	0.004476	0.000905	0.000840

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Medical Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Strip Mall	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	19.1468	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Unmitigated	19.1468	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.1377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-003	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Total	**19.1468**	**8.9000e-004**	**0.0985**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**		**0.2115**	**0.2115**	**5.5000e-004**		**0.2253**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.1377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.1000e-003	8.9000e-004	0.0985	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004		0.2115	0.2115	5.5000e-004		0.2253
Total	**19.1468**	**8.9000e-004**	**0.0985**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**		**0.2115**	**0.2115**	**5.5000e-004**		**0.2253**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Existing 2020 Operational Run

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	5.00	1000sqft	0.11	5,000.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Medical Office Building	67.50	1000sqft	1.55	67,500.00	0
Quality Restaurant	21.00	1000sqft	0.48	21,000.00	0
Automobile Care Center	125.00	1000sqft	2.87	125,000.00	0
Automobile Care Center	25.00	1000sqft	0.57	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Trips and VMT - Operations only

On-road Fugitive Dust - Operations only

Grading - Operations only

Architectural Coating - Operations

Energy Use - 2019 Title 24 Standards

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	ConstArea_Nonresidential_Interior	372,750.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblEnergyUse	LightingElect	2.93	2.05
tblEnergyUse	LightingElect	2.93	2.05
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	6.62	4.63

tblEnergyUse	T24E	2.20	1.54
tblEnergyUse	T24E	2.20	1.54
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	12.38	8.66
tblEnergyUse	T24NG	15.36	10.75
tblEnergyUse	T24NG	15.36	10.75
tblEnergyUse	T24NG	3.47	2.42
tblEnergyUse	T24NG	3.47	2.42
tblEnergyUse	T24NG	77.67	54.30
tblGrading	MeanVehicleSpeed	7.10	0.00
tblGrading	MeanVehicleSpeed	7.10	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblTripsAndVMT	VendorTripNumber	41.00	0.00
tblTripsAndVMT	WorkerTripNumber	82.00	0.00
tblTripsAndVMT	WorkerTripNumber	16.00	0.00
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tblVehicleEF	HHD	0.04	0.04

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tblVehicleEF	HHD	0.03	0.03
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tblVehicleEF	LDA	1.6430e-003	1.9039e-003
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tblVehicleEF	LDA	2.0000e-003	2.0000e-003
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tblVehicleEF	LDA	0.04	0.05

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tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
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tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.27	0.45
tblVehicleEF	LDT1	3.2720e-003	3.2808e-003
tblVehicleEF	LDT1	8.0700e-004	6.6594e-004

tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.30	0.49
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.95	1.93
tblVehicleEF	LDT1	3.33	2.09
tblVehicleEF	LDT1	353.10	345.86
tblVehicleEF	LDT1	74.01	66.53
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.22	0.29
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.22	0.77

tblVehicleEF	LDT1	0.23	0.39
tblVehicleEF	LDT1	3.5570e-003	3.4225e-003
tblVehicleEF	LDT1	7.9900e-004	6.5837e-004
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.22	0.77
tblVehicleEF	LDT1	0.26	0.43
tblVehicleEF	LDT1	0.01	9.3109e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.52	1.70
tblVehicleEF	LDT1	3.84	2.53
tblVehicleEF	LDT1	316.88	326.99
tblVehicleEF	LDT1	74.01	67.43
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28

tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.28	0.46
tblVehicleEF	LDT1	3.1880e-003	3.2357e-003
tblVehicleEF	LDT1	8.0800e-004	6.6731e-004
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.30	0.50
tblVehicleEF	LDT2	6.1110e-003	5.7338e-003
tblVehicleEF	LDT2	8.2750e-003	0.08
tblVehicleEF	LDT2	0.82	1.16
tblVehicleEF	LDT2	1.71	2.85
tblVehicleEF	LDT2	366.61	361.86
tblVehicleEF	LDT2	83.75	73.87
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003

tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	3.6730e-003	3.5801e-003
tblVehicleEF	LDT2	8.6600e-004	7.3103e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.04
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.12	0.41
tblVehicleEF	LDT2	6.9350e-003	6.1404e-003
tblVehicleEF	LDT2	7.1890e-003	0.07
tblVehicleEF	LDT2	1.00	1.29
tblVehicleEF	LDT2	1.51	2.43
tblVehicleEF	LDT2	398.95	376.16
tblVehicleEF	LDT2	83.75	73.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.32
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.10	0.33
tblVehicleEF	LDT2	3.9980e-003	3.7215e-003
tblVehicleEF	LDT2	8.6300e-004	7.2299e-004
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.11	0.36
tblVehicleEF	LDT2	5.8750e-003	5.6213e-003
tblVehicleEF	LDT2	8.5090e-003	0.08
tblVehicleEF	LDT2	0.76	1.12
tblVehicleEF	LDT2	1.74	2.93
tblVehicleEF	LDT2	356.95	357.31
tblVehicleEF	LDT2	83.75	74.02
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04

tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.11	0.38
tblVehicleEF	LDT2	3.5750e-003	3.5351e-003
tblVehicleEF	LDT2	8.6700e-004	7.3252e-004
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.13	0.42
tblVehicleEF	LHD1	5.6490e-003	5.8817e-003
tblVehicleEF	LHD1	0.01	6.7552e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.81
tblVehicleEF	LHD1	2.54	1.20

tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.81
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.35	0.99
tblVehicleEF	LHD1	1.02	0.36
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2675e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003

tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8948e-003
tblVehicleEF	LHD1	0.01	6.8828e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.05	0.82
tblVehicleEF	LHD1	2.42	1.14
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.92
tblVehicleEF	LHD1	30.90	12.71
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.21	0.93
tblVehicleEF	LHD1	0.98	0.35
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003

tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.27	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6820e-003
tblVehicleEF	LHD1	3.5500e-004	1.2579e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.29	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8802e-003
tblVehicleEF	LHD1	0.01	6.7279e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.80
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.82

tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.32	0.98
tblVehicleEF	LHD1	1.01	0.37
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2686e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003

tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD2	3.8330e-003	4.1865e-003
tblVehicleEF	LHD2	5.1000e-003	4.7023e-003
tblVehicleEF	LHD2	9.1950e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.23	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.98
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.94	1.23
tblVehicleEF	LHD2	0.56	0.25
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06

tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6672e-003
tblVehicleEF	LHD2	2.6200e-004	9.8743e-005
tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1958e-003
tblVehicleEF	LHD2	5.1600e-003	4.7587e-003
tblVehicleEF	LHD2	8.8690e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.18	0.78
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.42
tblVehicleEF	LHD2	23.90	9.91
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.83	1.16
tblVehicleEF	LHD2	0.54	0.24

tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6673e-003
tblVehicleEF	LHD2	2.6100e-004	9.8090e-005
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.13	0.07

tblVehicleEF	LHD2	3.8330e-003	4.1853e-003
tblVehicleEF	LHD2	5.0860e-003	4.6903e-003
tblVehicleEF	LHD2	9.2490e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.24	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.99
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.92	1.21
tblVehicleEF	LHD2	0.56	0.26
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.06	0.06

tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6671e-003
tblVehicleEF	LHD2	2.6200e-004	9.8819e-005
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.93	19.66
tblVehicleEF	MCY	9.66	8.48
tblVehicleEF	MCY	164.88	218.98
tblVehicleEF	MCY	46.70	60.53
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003

tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.17	2.53
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.09	1.84
tblVehicleEF	MCY	2.0370e-003	2.1670e-003
tblVehicleEF	MCY	6.8600e-004	5.9901e-004
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.66	3.12
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.27	2.00
tblVehicleEF	MCY	0.41	0.36
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	20.66	19.00
tblVehicleEF	MCY	9.11	7.76
tblVehicleEF	MCY	164.88	217.72
tblVehicleEF	MCY	46.70	58.69
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003

tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.15	2.46
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	1.87	1.63
tblVehicleEF	MCY	2.0470e-003	2.1545e-003
tblVehicleEF	MCY	6.7100e-004	5.8079e-004
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.63	3.04
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.43	19.68
tblVehicleEF	MCY	9.60	8.55
tblVehicleEF	MCY	164.88	219.04
tblVehicleEF	MCY	46.70	60.74
tblVehicleEF	MCY	1.13	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01

tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.60	1.29
tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.17	2.54
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.10	1.87
tblVehicleEF	MCY	2.0290e-003	2.1676e-003
tblVehicleEF	MCY	6.8600e-004	6.0106e-004
tblVehicleEF	MCY	1.60	1.29
tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.66	3.13
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.28	2.03
tblVehicleEF	MDV	0.01	8.1275e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.58	1.49
tblVehicleEF	MDV	3.47	3.45
tblVehicleEF	MDV	501.88	442.94
tblVehicleEF	MDV	112.78	90.12

tblVehicleEF	MDV	0.19	0.15
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.27	0.49
tblVehicleEF	MDV	5.0330e-003	4.3797e-003
tblVehicleEF	MDV	1.1890e-003	8.9179e-004
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.30	0.53
tblVehicleEF	MDV	0.02	8.6153e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.91	1.63

tblVehicleEF	MDV	3.08	2.93
tblVehicleEF	MDV	544.80	458.44
tblVehicleEF	MDV	112.78	89.12
tblVehicleEF	MDV	0.18	0.13
tblVehicleEF	MDV	0.33	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.24	0.43
tblVehicleEF	MDV	5.4670e-003	4.5332e-003
tblVehicleEF	MDV	1.1820e-003	8.8191e-004
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.26	0.47

tblVehicleEF	MDV	0.01	7.9891e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.48	1.45
tblVehicleEF	MDV	3.54	3.54
tblVehicleEF	MDV	489.12	438.16
tblVehicleEF	MDV	112.78	90.29
tblVehicleEF	MDV	0.18	0.14
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MDV	4.9040e-003	4.3324e-003
tblVehicleEF	MDV	1.1910e-003	8.9352e-004
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09

tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.31	0.54
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.14	0.32
tblVehicleEF	MH	6.37	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.76	4.09
tblVehicleEF	MH	0.89	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9900e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00

tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
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tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
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tblVehicleEF	MH	5.95	0.00
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tblVehicleEF	MH	1.63	3.87
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00

tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	9.9910e-003	9.3020e-003
tblVehicleEF	MH	6.9300e-004	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.40	0.00
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.12	0.32
tblVehicleEF	MH	6.40	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.74	4.02
tblVehicleEF	MH	0.89	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00

tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9890e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00
tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MHD	0.02	4.2934e-003
tblVehicleEF	MHD	6.1240e-003	8.3332e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.43	0.38
tblVehicleEF	MHD	0.47	0.75
tblVehicleEF	MHD	6.54	1.42
tblVehicleEF	MHD	156.54	67.47
tblVehicleEF	MHD	1,067.94	1,101.43
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tblVehicleEF	MHD	11.65	1.02
tblVehicleEF	MHD	3.7720e-003	2.2012e-003
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tblVehicleEF	MHD	0.01	0.01

tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.6080e-003	2.1060e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.40	0.07
tblVehicleEF	MHD	1.5050e-003	6.4116e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6700e-004	1.1717e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	MHD	0.02	4.0641e-003
tblVehicleEF	MHD	6.1890e-003	8.3939e-003
tblVehicleEF	MHD	0.06	0.01

tblVehicleEF	MHD	0.31	0.30
tblVehicleEF	MHD	0.47	0.76
tblVehicleEF	MHD	6.24	1.35
tblVehicleEF	MHD	165.81	69.00
tblVehicleEF	MHD	1,067.94	1,101.45
tblVehicleEF	MHD	55.18	11.72
tblVehicleEF	MHD	1.10	0.61
tblVehicleEF	MHD	1.60	2.49
tblVehicleEF	MHD	11.62	1.02
tblVehicleEF	MHD	3.1790e-003	1.8578e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.0420e-003	1.7774e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.38	0.06
tblVehicleEF	MHD	1.5920e-003	6.5574e-004

tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6100e-004	1.1597e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.42	0.07
tblVehicleEF	MHD	0.02	4.6225e-003
tblVehicleEF	MHD	6.0850e-003	8.3163e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.60	0.49
tblVehicleEF	MHD	0.47	0.75
tblVehicleEF	MHD	6.63	1.43
tblVehicleEF	MHD	143.73	65.36
tblVehicleEF	MHD	1,067.94	1,101.43
tblVehicleEF	MHD	55.18	11.86
tblVehicleEF	MHD	1.01	0.59
tblVehicleEF	MHD	1.68	2.60
tblVehicleEF	MHD	11.66	1.02
tblVehicleEF	MHD	4.5890e-003	2.6754e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	4.3910e-003	2.5596e-003

tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.4650e-003	7.1674e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.15
tblVehicleEF	MHD	0.40	0.07
tblVehicleEF	MHD	1.3840e-003	6.2095e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6800e-004	1.1736e-004
tblVehicleEF	MHD	1.4650e-003	7.1674e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.15
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	OBUS	0.01	9.0789e-003
tblVehicleEF	OBUS	9.4560e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.58
tblVehicleEF	OBUS	0.63	1.23
tblVehicleEF	OBUS	6.57	2.56

tblVehicleEF	OBUS	74.57	92.99
tblVehicleEF	OBUS	1,103.17	1,454.83
tblVehicleEF	OBUS	70.73	20.25
tblVehicleEF	OBUS	0.39	0.66
tblVehicleEF	OBUS	1.35	2.43
tblVehicleEF	OBUS	2.21	0.60
tblVehicleEF	OBUS	1.7700e-004	3.1503e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004
tblVehicleEF	OBUS	1.6900e-004	3.0140e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	2.2350e-003	1.9757e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	9.4600e-004	9.6790e-004
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.26
tblVehicleEF	OBUS	0.41	0.12
tblVehicleEF	OBUS	7.2400e-004	8.8498e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2300e-004	2.0041e-004
tblVehicleEF	OBUS	2.2350e-003	1.9757e-003

tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	9.4600e-004	9.6790e-004
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.26
tblVehicleEF	OBUS	0.45	0.14
tblVehicleEF	OBUS	0.01	9.0761e-003
tblVehicleEF	OBUS	9.6420e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.55
tblVehicleEF	OBUS	0.65	1.25
tblVehicleEF	OBUS	6.15	2.42
tblVehicleEF	OBUS	77.97	94.12
tblVehicleEF	OBUS	1,103.17	1,454.86
tblVehicleEF	OBUS	70.73	20.01
tblVehicleEF	OBUS	0.40	0.67
tblVehicleEF	OBUS	1.26	2.28
tblVehicleEF	OBUS	2.17	0.59
tblVehicleEF	OBUS	1.4900e-004	2.6601e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004
tblVehicleEF	OBUS	1.4300e-004	2.5450e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05

tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	4.1760e-003	2.9545e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	1.8320e-003	1.4406e-003
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.25
tblVehicleEF	OBUS	0.39	0.12
tblVehicleEF	OBUS	7.5600e-004	8.9558e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1600e-004	1.9799e-004
tblVehicleEF	OBUS	4.1760e-003	2.9545e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.8320e-003	1.4406e-003
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.25
tblVehicleEF	OBUS	0.43	0.13
tblVehicleEF	OBUS	0.01	9.1031e-003
tblVehicleEF	OBUS	9.4220e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.29	0.63
tblVehicleEF	OBUS	0.63	1.23
tblVehicleEF	OBUS	6.63	2.58
tblVehicleEF	OBUS	69.87	91.44
tblVehicleEF	OBUS	1,103.17	1,454.82
tblVehicleEF	OBUS	70.73	20.29

tblVehicleEF	OBUS	0.37	0.66
tblVehicleEF	OBUS	1.34	2.38
tblVehicleEF	OBUS	2.21	0.60
tblVehicleEF	OBUS	2.1500e-004	3.8273e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004
tblVehicleEF	OBUS	2.0600e-004	3.6617e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	1.9540e-003	2.0891e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.13
tblVehicleEF	OBUS	6.7900e-004	8.7034e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2400e-004	2.0080e-004
tblVehicleEF	OBUS	1.9540e-003	2.0891e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004

tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.45	0.14
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0558e-003
tblVehicleEF	SBUS	0.06	6.4940e-003
tblVehicleEF	SBUS	7.81	2.72
tblVehicleEF	SBUS	0.66	0.79
tblVehicleEF	SBUS	6.73	0.92
tblVehicleEF	SBUS	1,154.91	356.52
tblVehicleEF	SBUS	1,108.94	1,135.70
tblVehicleEF	SBUS	53.24	5.46
tblVehicleEF	SBUS	10.58	3.53
tblVehicleEF	SBUS	4.99	5.58
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	5.3126e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	5.0828e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.5410e-003	1.0878e-003
tblVehicleEF	SBUS	0.03	8.9941e-003

tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.01	3.4013e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.4900e-004	5.4047e-005
tblVehicleEF	SBUS	4.5410e-003	1.0878e-003
tblVehicleEF	SBUS	0.03	8.9941e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	0.04
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.1649e-003
tblVehicleEF	SBUS	0.05	5.7028e-003
tblVehicleEF	SBUS	7.67	2.68
tblVehicleEF	SBUS	0.67	0.80
tblVehicleEF	SBUS	4.88	0.73
tblVehicleEF	SBUS	1,207.92	366.39
tblVehicleEF	SBUS	1,108.94	1,135.72
tblVehicleEF	SBUS	53.24	5.15
tblVehicleEF	SBUS	10.92	3.62
tblVehicleEF	SBUS	4.69	5.26
tblVehicleEF	SBUS	12.56	0.70

tblVehicleEF	SBUS	0.01	4.4850e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	9.8070e-003	4.2910e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	0.93	0.32
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.31	0.03
tblVehicleEF	SBUS	0.01	3.4945e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.1800e-004	5.0916e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.34	0.04

tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0312e-003
tblVehicleEF	SBUS	0.07	6.6366e-003
tblVehicleEF	SBUS	7.99	2.78
tblVehicleEF	SBUS	0.66	0.78
tblVehicleEF	SBUS	7.09	0.94
tblVehicleEF	SBUS	1,081.70	342.89
tblVehicleEF	SBUS	1,108.94	1,135.69
tblVehicleEF	SBUS	53.24	5.51
tblVehicleEF	SBUS	10.11	3.41
tblVehicleEF	SBUS	4.94	5.49
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	6.4556e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	6.1763e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.11	0.11

tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.2726e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	5.4498e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.42	0.04
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.35	38.44
tblVehicleEF	UBUS	16.43	0.97
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.92
tblVehicleEF	UBUS	5.46	1.54
tblVehicleEF	UBUS	12.53	0.12
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003

tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8570e-003	1.1798e-004
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.40	0.07
tblVehicleEF	UBUS	1.61	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.64	38.44
tblVehicleEF	UBUS	14.18	0.85
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.72
tblVehicleEF	UBUS	5.09	1.54
tblVehicleEF	UBUS	12.44	0.11
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005

tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	0.65	0.14
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.17	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8170e-003	1.1596e-004
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	2.31	6.22
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.10	0.02
tblVehicleEF	UBUS	10.37	38.44
tblVehicleEF	UBUS	16.61	0.98
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.95
tblVehicleEF	UBUS	5.42	1.54
tblVehicleEF	UBUS	12.54	0.12
tblVehicleEF	UBUS	0.50	0.07

tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.29	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8600e-003	1.1829e-004
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.42	0.07

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0134	3.0000e-005	3.1900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1700e-003	6.1700e-003	2.0000e-005	0.0000	6.5800e-003
Energy	0.0526	0.4779	0.4014	2.8700e-003		0.0363	0.0363		0.0363	0.0363	0.0000	1,398.1593	1,398.1593	0.0462	0.0170	1,404.3915
Mobile	3.4000	8.9595	23.9879	0.0617	4.8167	0.1155	4.9322	1.2895	0.1094	1.3989	0.0000	5,816.6990	5,816.6990	0.4290	0.0000	5,827.4236
Waste						0.0000	0.0000		0.0000	0.0000	270.0754	0.0000	270.0754	15.9610	0.0000	669.1004
Water						0.0000	0.0000		0.0000	0.0000	9.5313	164.7688	174.3001	0.9858	0.0245	206.2518
Total	**4.4660**	**9.4374**	**24.3925**	**0.0646**	**4.8167**	**0.1518**	**4.9685**	**1.2895**	**0.1457**	**1.4352**	**279.6067**	**7,379.6333**	**7,659.2400**	**17.4220**	**0.0416**	**8,107.1739**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0134	3.0000e-005	3.1900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1700e-003	6.1700e-003	2.0000e-005	0.0000	6.5800e-003
Energy	0.0526	0.4779	0.4014	2.8700e-003		0.0363	0.0363		0.0363	0.0363	0.0000	1,398.1593	1,398.1593	0.0462	0.0170	1,404.3915
Mobile	3.4000	8.9595	23.9879	0.0617	4.8167	0.1155	4.9322	1.2895	0.1094	1.3989	0.0000	5,816.6990	5,816.6990	0.4290	0.0000	5,827.4236
Waste						0.0000	0.0000		0.0000	0.0000	270.0754	0.0000	270.0754	15.9610	0.0000	669.1004
Water						0.0000	0.0000		0.0000	0.0000	9.5313	164.7688	174.3001	0.9858	0.0245	206.2518
Total	**4.4660**	**9.4374**	**24.3925**	**0.0646**	**4.8167**	**0.1518**	**4.9685**	**1.2895**	**0.1457**	**1.4352**	**279.6067**	**7,379.6333**	**7,659.2400**	**17.4220**	**0.0416**	**8,107.1739**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/30/2019	7/26/2019	5	20	
2	Site Preparation	Site Preparation	7/27/2019	8/9/2019	5	10	
3	Grading	Grading	8/10/2019	9/6/2019	5	20	
4	Building Construction	Building Construction	9/7/2019	7/24/2020	5	230	
5	Paving	Paving	7/25/2020	8/21/2020	5	20	
6	Architectural Coating	Architectural Coating	8/22/2020	9/18/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.4000	8.9595	23.9879	0.0617	4.8167	0.1155	4.9322	1.2895	0.1094	1.3989	0.0000	5,816.6990	5,816.6990	0.4290	0.0000	5,827.4236
Unmitigated	3.4000	8.9595	23.9879	0.0617	4.8167	0.1155	4.9322	1.2895	0.1094	1.3989	0.0000	5,816.6990	5,816.6990	0.4290	0.0000	5,827.4236

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	2,965.00	2,965.00	1485.00	3,688,552	3,688,552
Automobile Care Center	593.00	593.00	297.00	737,710	737,710
Bank (with Drive-Through)	740.75	431.60	159.50	658,121	658,121
General Office Building	55.15	12.30	5.25	134,979	134,979
Medical Office Building	2,438.78	604.80	104.63	4,781,334	4,781,334
Quality Restaurant	1,888.95	1,981.56	1515.36	2,632,024	2,632,024
Total	8,681.63	6,588.26	3,566.74	12,632,720	12,632,720

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Bank (with Drive-Through)	16.60	8.40	6.90	6.60	74.40	19.00	27	26	47
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Bank (with Drive-Through)	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
General Office Building	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Medical Office Building	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Quality Restaurant	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Existing 2020 Operational Run - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	877.9518	877.9518	0.0363	7.5000e-003	881.0927
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	877.9518	877.9518	0.0363	7.5000e-003	881.0927
NaturalGas Mitigated	0.0526	0.4779	0.4014	2.8700e-003		0.0363	0.0363		0.0363	0.0363	0.0000	520.2075	520.2075	9.9700e-003	9.5400e-003	523.2988
NaturalGas Unmitigated	0.0526	0.4779	0.4014	2.8700e-003		0.0363	0.0363		0.0363	0.0363	0.0000	520.2075	520.2075	9.9700e-003	9.5400e-003	523.2988

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	3.485e+006	0.0188	0.1708	0.1435	1.0200e-003		0.0130	0.0130		0.0130	0.0130	0.0000	185.9729	185.9729	3.5600e-003	3.4100e-003	187.0780
Automobile Care Center	697000	3.7600e-003	0.0342	0.0287	2.1000e-004		2.6000e-003	2.6000e-003		2.6000e-003	2.6000e-003	0.0000	37.1946	37.1946	7.1000e-004	6.8000e-004	37.4156
Bank (with Drive-Through)	139400	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4389	7.4389	1.4000e-004	1.4000e-004	7.4831
General Office Building	12100	7.0000e-005	5.9000e-004	5.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6457	0.6457	1.0000e-005	1.0000e-005	0.6495
Medical Office Building	163350	8.8000e-004	8.0100e-003	6.7300e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7170	8.7170	1.7000e-004	1.6000e-004	8.7688
Quality Restaurant	5.25147e+006	0.0283	0.2574	0.2162	1.5400e-003		0.0196	0.0196		0.0196	0.0196	0.0000	280.2384	280.2384	5.3700e-003	5.1400e-003	281.9038
Total		**0.0526**	**0.4779**	**0.4014**	**2.8600e-003**		**0.0363**	**0.0363**		**0.0363**	**0.0363**	**0.0000**	**520.2075**	**520.2075**	**9.9600e-003**	**9.5400e-003**	**523.2988**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	3.485e+006	0.0188	0.1708	0.1435	1.0200e-003		0.0130	0.0130		0.0130	0.0130	0.0000	185.9729	185.9729	3.5600e-003	3.4100e-003	187.0780
Automobile Care Center	697000	3.7600e-003	0.0342	0.0287	2.1000e-004		2.6000e-003	2.6000e-003		2.6000e-003	2.6000e-003	0.0000	37.1946	37.1946	7.1000e-004	6.8000e-004	37.4156
Bank (with Drive-Through)	139400	7.5000e-004	6.8300e-003	5.7400e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004	0.0000	7.4389	7.4389	1.4000e-004	1.4000e-004	7.4831
General Office Building	12100	7.0000e-005	5.9000e-004	5.0000e-004	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.6457	0.6457	1.0000e-005	1.0000e-005	0.6495
Medical Office Building	163350	8.8000e-004	8.0100e-003	6.7300e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7170	8.7170	1.7000e-004	1.6000e-004	8.7688
Quality Restaurant	5.25147e+006	0.0283	0.2574	0.2162	1.5400e-003		0.0196	0.0196		0.0196	0.0196	0.0000	280.2384	280.2384	5.3700e-003	5.1400e-003	281.9038
Total		**0.0526**	**0.4779**	**0.4014**	**2.8600e-003**		**0.0363**	**0.0363**		**0.0363**	**0.0363**	**0.0000**	**520.2075**	**520.2075**	**9.9600e-003**	**9.5400e-003**	**523.2988**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	1.07625e+006	342.9163	0.0142	2.9300e-003	344.1431
Automobile Care Center	215250	68.5833	2.8300e-003	5.9000e-004	68.8286
Bank (with Drive-Through)	43050	13.7167	5.7000e-004	1.2000e-004	13.7657
General Office Building	37500	11.9483	4.9000e-004	1.0000e-004	11.9911
Medical Office Building	506250	161.3021	6.6600e-003	1.3800e-003	161.8792
Quality Restaurant	877170	279.4852	0.0115	2.3900e-003	280.4850
Total		**877.9518**	**0.0363**	**7.5100e-003**	**881.0927**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	1.07625e+006	342.9163	0.0142	2.9300e-003	344.1431
Automobile Care Center	215250	68.5833	2.8300e-003	5.9000e-004	68.8286
Bank (with Drive-Through)	43050	13.7167	5.7000e-004	1.2000e-004	13.7657
General Office Building	37500	11.9483	4.9000e-004	1.0000e-004	11.9911
Medical Office Building	506250	161.3021	6.6600e-003	1.3800e-003	161.8792
Quality Restaurant	877170	279.4852	0.0115	2.3900e-003	280.4850
Total		**877.9518**	**0.0363**	**7.5100e-003**	**881.0927**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0134	3.0000e-005	3.1900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1700e-003	6.1700e-003	2.0000e-005	0.0000	6.5800e-003
Unmitigated	1.0134	3.0000e-005	3.1900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1700e-003	6.1700e-003	2.0000e-005	0.0000	6.5800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8980					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.1900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1700e-003	6.1700e-003	2.0000e-005	0.0000	6.5800e-003
Total	**1.0134**	**3.0000e-005**	**3.1900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.1700e-003**	**6.1700e-003**	**2.0000e-005**	**0.0000**	**6.5800e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8980					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-004	3.0000e-005	3.1900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	6.1700e-003	6.1700e-003	2.0000e-005	0.0000	6.5800e-003
Total	**1.0134**	**3.0000e-005**	**3.1900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**6.1700e-003**	**6.1700e-003**	**2.0000e-005**	**0.0000**	**6.5800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	174.3001	0.9858	0.0245	206.2518
Unmitigated	174.3001	0.9858	0.0245	206.2518

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	14.1122 / 8.64939	93.6431	0.4635	0.0116	108.6939
Bank (with Drive-Through)	0.198115 / 0.121425	1.3146	6.5100e-003	1.6000e-004	1.5259
General Office Building	0.888669 / 0.544668	5.8969	0.0292	7.3000e-004	6.8447
Medical Office Building	8.46994 / 1.61332	43.5379	0.2777	6.8700e-003	52.5259
Quality Restaurant	6.37421 / 0.406864	29.9076	0.2089	5.1400e-003	36.6615
Total		**174.3001**	**0.9858**	**0.0245**	**206.2518**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	14.1122 / 8.64939	93.6431	0.4635	0.0116	108.6939
Bank (with Drive-Through)	0.198115 / 0.121425	1.3146	6.5100e-003	1.6000e-004	1.5259
General Office Building	0.888669 / 0.544668	5.8969	0.0292	7.3000e-004	6.8447
Medical Office Building	8.46994 / 1.61332	43.5379	0.2777	6.8700e-003	52.5259
Quality Restaurant	6.37421 / 0.406864	29.9076	0.2089	5.1400e-003	36.6615
Total		**174.3001**	**0.9858**	**0.0245**	**206.2518**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	270.0754	15.9610	0.0000	669.1004
Unmitigated	270.0754	15.9610	0.0000	669.1004

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	573	116.3138	6.8740	0.0000	288.1626
Bank (with Drive-Through)	4.67	0.9480	0.0560	0.0000	2.3486
General Office Building	4.65	0.9439	0.0558	0.0000	2.3385
Medical Office Building	729	147.9804	8.7454	0.0000	366.6152
Quality Restaurant	19.16	3.8893	0.2299	0.0000	9.6356
Total		**270.0754**	**15.9610**	**0.0000**	**669.1004**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	573	116.3138	6.8740	0.0000	288.1626
Bank (with Drive-Through)	4.67	0.9480	0.0560	0.0000	2.3486
General Office Building	4.65	0.9439	0.0558	0.0000	2.3385
Medical Office Building	729	147.9804	8.7454	0.0000	366.6152
Quality Restaurant	19.16	3.8893	0.2299	0.0000	9.6356
Total		**270.0754**	**15.9610**	**0.0000**	**669.1004**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Existing 2020 Operational Run

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	5.00	1000sqft	0.11	5,000.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Medical Office Building	67.50	1000sqft	1.55	67,500.00	0
Quality Restaurant	21.00	1000sqft	0.48	21,000.00	0
Automobile Care Center	125.00	1000sqft	2.87	125,000.00	0
Automobile Care Center	25.00	1000sqft	0.57	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Trips and VMT - Operations only

On-road Fugitive Dust - Operations only

Grading - Operations only

Architectural Coating - Operations

Energy Use - 2019 Title 24 Standards

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblEnergyUse	LightingElect	2.93	2.05
tblEnergyUse	LightingElect	2.93	2.05
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	6.62	4.63

tblEnergyUse	T24E	2.20	1.54
tblEnergyUse	T24E	2.20	1.54
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	12.38	8.66
tblEnergyUse	T24NG	15.36	10.75
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tblEnergyUse	T24NG	3.47	2.42
tblEnergyUse	T24NG	77.67	54.30
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tblGrading	MeanVehicleSpeed	7.10	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
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tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblTripsAndVMT	VendorTripNumber	41.00	0.00
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tblVehicleEF	LDA	0.04	0.05

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tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.27	0.45
tblVehicleEF	LDT1	3.2720e-003	3.2808e-003
tblVehicleEF	LDT1	8.0700e-004	6.6594e-004

tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.30	0.49
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.95	1.93
tblVehicleEF	LDT1	3.33	2.09
tblVehicleEF	LDT1	353.10	345.86
tblVehicleEF	LDT1	74.01	66.53
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.22	0.29
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.22	0.77

tblVehicleEF	LDT1	0.23	0.39
tblVehicleEF	LDT1	3.5570e-003	3.4225e-003
tblVehicleEF	LDT1	7.9900e-004	6.5837e-004
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.22	0.77
tblVehicleEF	LDT1	0.26	0.43
tblVehicleEF	LDT1	0.01	9.3109e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.52	1.70
tblVehicleEF	LDT1	3.84	2.53
tblVehicleEF	LDT1	316.88	326.99
tblVehicleEF	LDT1	74.01	67.43
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28

tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.28	0.46
tblVehicleEF	LDT1	3.1880e-003	3.2357e-003
tblVehicleEF	LDT1	8.0800e-004	6.6731e-004
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.30	0.50
tblVehicleEF	LDT2	6.1110e-003	5.7338e-003
tblVehicleEF	LDT2	8.2750e-003	0.08
tblVehicleEF	LDT2	0.82	1.16
tblVehicleEF	LDT2	1.71	2.85
tblVehicleEF	LDT2	366.61	361.86
tblVehicleEF	LDT2	83.75	73.87
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003

tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	3.6730e-003	3.5801e-003
tblVehicleEF	LDT2	8.6600e-004	7.3103e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.04
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.12	0.41
tblVehicleEF	LDT2	6.9350e-003	6.1404e-003
tblVehicleEF	LDT2	7.1890e-003	0.07
tblVehicleEF	LDT2	1.00	1.29
tblVehicleEF	LDT2	1.51	2.43
tblVehicleEF	LDT2	398.95	376.16
tblVehicleEF	LDT2	83.75	73.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.32
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.10	0.33
tblVehicleEF	LDT2	3.9980e-003	3.7215e-003
tblVehicleEF	LDT2	8.6300e-004	7.2299e-004
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.11	0.36
tblVehicleEF	LDT2	5.8750e-003	5.6213e-003
tblVehicleEF	LDT2	8.5090e-003	0.08
tblVehicleEF	LDT2	0.76	1.12
tblVehicleEF	LDT2	1.74	2.93
tblVehicleEF	LDT2	356.95	357.31
tblVehicleEF	LDT2	83.75	74.02
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04

tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.11	0.38
tblVehicleEF	LDT2	3.5750e-003	3.5351e-003
tblVehicleEF	LDT2	8.6700e-004	7.3252e-004
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.13	0.42
tblVehicleEF	LHD1	5.6490e-003	5.8817e-003
tblVehicleEF	LHD1	0.01	6.7552e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.81
tblVehicleEF	LHD1	2.54	1.20

tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.81
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.35	0.99
tblVehicleEF	LHD1	1.02	0.36
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2675e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003

tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8948e-003
tblVehicleEF	LHD1	0.01	6.8828e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.05	0.82
tblVehicleEF	LHD1	2.42	1.14
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.92
tblVehicleEF	LHD1	30.90	12.71
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.21	0.93
tblVehicleEF	LHD1	0.98	0.35
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003

tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.27	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6820e-003
tblVehicleEF	LHD1	3.5500e-004	1.2579e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.29	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8802e-003
tblVehicleEF	LHD1	0.01	6.7279e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.80
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.82

tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.32	0.98
tblVehicleEF	LHD1	1.01	0.37
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2686e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003

tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD2	3.8330e-003	4.1865e-003
tblVehicleEF	LHD2	5.1000e-003	4.7023e-003
tblVehicleEF	LHD2	9.1950e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.23	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.98
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.94	1.23
tblVehicleEF	LHD2	0.56	0.25
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06

tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6672e-003
tblVehicleEF	LHD2	2.6200e-004	9.8743e-005
tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1958e-003
tblVehicleEF	LHD2	5.1600e-003	4.7587e-003
tblVehicleEF	LHD2	8.8690e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.18	0.78
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.42
tblVehicleEF	LHD2	23.90	9.91
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.83	1.16
tblVehicleEF	LHD2	0.54	0.24

tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6673e-003
tblVehicleEF	LHD2	2.6100e-004	9.8090e-005
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.13	0.07

tblVehicleEF	LHD2	3.8330e-003	4.1853e-003
tblVehicleEF	LHD2	5.0860e-003	4.6903e-003
tblVehicleEF	LHD2	9.2490e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.24	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.99
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.92	1.21
tblVehicleEF	LHD2	0.56	0.26
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.06	0.06

tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6671e-003
tblVehicleEF	LHD2	2.6200e-004	9.8819e-005
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.93	19.66
tblVehicleEF	MCY	9.66	8.48
tblVehicleEF	MCY	164.88	218.98
tblVehicleEF	MCY	46.70	60.53
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003

tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.17	2.53
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.09	1.84
tblVehicleEF	MCY	2.0370e-003	2.1670e-003
tblVehicleEF	MCY	6.8600e-004	5.9901e-004
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.66	3.12
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.27	2.00
tblVehicleEF	MCY	0.41	0.36
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	20.66	19.00
tblVehicleEF	MCY	9.11	7.76
tblVehicleEF	MCY	164.88	217.72
tblVehicleEF	MCY	46.70	58.69
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003

tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.15	2.46
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	1.87	1.63
tblVehicleEF	MCY	2.0470e-003	2.1545e-003
tblVehicleEF	MCY	6.7100e-004	5.8079e-004
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.63	3.04
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.43	19.68
tblVehicleEF	MCY	9.60	8.55
tblVehicleEF	MCY	164.88	219.04
tblVehicleEF	MCY	46.70	60.74
tblVehicleEF	MCY	1.13	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01

tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.60	1.29
tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.17	2.54
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.10	1.87
tblVehicleEF	MCY	2.0290e-003	2.1676e-003
tblVehicleEF	MCY	6.8600e-004	6.0106e-004
tblVehicleEF	MCY	1.60	1.29
tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.66	3.13
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.28	2.03
tblVehicleEF	MDV	0.01	8.1275e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.58	1.49
tblVehicleEF	MDV	3.47	3.45
tblVehicleEF	MDV	501.88	442.94
tblVehicleEF	MDV	112.78	90.12

tblVehicleEF	MDV	0.19	0.15
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.27	0.49
tblVehicleEF	MDV	5.0330e-003	4.3797e-003
tblVehicleEF	MDV	1.1890e-003	8.9179e-004
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.30	0.53
tblVehicleEF	MDV	0.02	8.6153e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.91	1.63

tblVehicleEF	MDV	3.08	2.93
tblVehicleEF	MDV	544.80	458.44
tblVehicleEF	MDV	112.78	89.12
tblVehicleEF	MDV	0.18	0.13
tblVehicleEF	MDV	0.33	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.24	0.43
tblVehicleEF	MDV	5.4670e-003	4.5332e-003
tblVehicleEF	MDV	1.1820e-003	8.8191e-004
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.26	0.47

tblVehicleEF	MDV	0.01	7.9891e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.48	1.45
tblVehicleEF	MDV	3.54	3.54
tblVehicleEF	MDV	489.12	438.16
tblVehicleEF	MDV	112.78	90.29
tblVehicleEF	MDV	0.18	0.14
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MDV	4.9040e-003	4.3324e-003
tblVehicleEF	MDV	1.1910e-003	8.9352e-004
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09

tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.31	0.54
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.14	0.32
tblVehicleEF	MH	6.37	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.76	4.09
tblVehicleEF	MH	0.89	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9900e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00

tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.24	0.32
tblVehicleEF	MH	5.95	0.00
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tblVehicleEF	MH	1.63	3.87
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tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00

tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	9.9910e-003	9.3020e-003
tblVehicleEF	MH	6.9300e-004	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.40	0.00
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.12	0.32
tblVehicleEF	MH	6.40	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.74	4.02
tblVehicleEF	MH	0.89	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00

tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9890e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00
tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MHD	0.02	4.2934e-003
tblVehicleEF	MHD	6.1240e-003	8.3332e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.43	0.38
tblVehicleEF	MHD	0.47	0.75
tblVehicleEF	MHD	6.54	1.42
tblVehicleEF	MHD	156.54	67.47
tblVehicleEF	MHD	1,067.94	1,101.43
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tblVehicleEF	MHD	11.65	1.02
tblVehicleEF	MHD	3.7720e-003	2.2012e-003
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tblVehicleEF	MHD	0.01	0.01

tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.6080e-003	2.1060e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.40	0.07
tblVehicleEF	MHD	1.5050e-003	6.4116e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6700e-004	1.1717e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	MHD	0.02	4.0641e-003
tblVehicleEF	MHD	6.1890e-003	8.3939e-003
tblVehicleEF	MHD	0.06	0.01

tblVehicleEF	MHD	0.31	0.30
tblVehicleEF	MHD	0.47	0.76
tblVehicleEF	MHD	6.24	1.35
tblVehicleEF	MHD	165.81	69.00
tblVehicleEF	MHD	1,067.94	1,101.45
tblVehicleEF	MHD	55.18	11.72
tblVehicleEF	MHD	1.10	0.61
tblVehicleEF	MHD	1.60	2.49
tblVehicleEF	MHD	11.62	1.02
tblVehicleEF	MHD	3.1790e-003	1.8578e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.0420e-003	1.7774e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.38	0.06
tblVehicleEF	MHD	1.5920e-003	6.5574e-004

tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6100e-004	1.1597e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.42	0.07
tblVehicleEF	MHD	0.02	4.6225e-003
tblVehicleEF	MHD	6.0850e-003	8.3163e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.60	0.49
tblVehicleEF	MHD	0.47	0.75
tblVehicleEF	MHD	6.63	1.43
tblVehicleEF	MHD	143.73	65.36
tblVehicleEF	MHD	1,067.94	1,101.43
tblVehicleEF	MHD	55.18	11.86
tblVehicleEF	MHD	1.01	0.59
tblVehicleEF	MHD	1.68	2.60
tblVehicleEF	MHD	11.66	1.02
tblVehicleEF	MHD	4.5890e-003	2.6754e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	4.3910e-003	2.5596e-003

tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.4650e-003	7.1674e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.15
tblVehicleEF	MHD	0.40	0.07
tblVehicleEF	MHD	1.3840e-003	6.2095e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6800e-004	1.1736e-004
tblVehicleEF	MHD	1.4650e-003	7.1674e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.15
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	OBUS	0.01	9.0789e-003
tblVehicleEF	OBUS	9.4560e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.58
tblVehicleEF	OBUS	0.63	1.23
tblVehicleEF	OBUS	6.57	2.56

tblVehicleEF	OBUS	74.57	92.99
tblVehicleEF	OBUS	1,103.17	1,454.83
tblVehicleEF	OBUS	70.73	20.25
tblVehicleEF	OBUS	0.39	0.66
tblVehicleEF	OBUS	1.35	2.43
tblVehicleEF	OBUS	2.21	0.60
tblVehicleEF	OBUS	1.7700e-004	3.1503e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004
tblVehicleEF	OBUS	1.6900e-004	3.0140e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	2.2350e-003	1.9757e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	9.4600e-004	9.6790e-004
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.26
tblVehicleEF	OBUS	0.41	0.12
tblVehicleEF	OBUS	7.2400e-004	8.8498e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2300e-004	2.0041e-004
tblVehicleEF	OBUS	2.2350e-003	1.9757e-003

tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	9.4600e-004	9.6790e-004
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.26
tblVehicleEF	OBUS	0.45	0.14
tblVehicleEF	OBUS	0.01	9.0761e-003
tblVehicleEF	OBUS	9.6420e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.55
tblVehicleEF	OBUS	0.65	1.25
tblVehicleEF	OBUS	6.15	2.42
tblVehicleEF	OBUS	77.97	94.12
tblVehicleEF	OBUS	1,103.17	1,454.86
tblVehicleEF	OBUS	70.73	20.01
tblVehicleEF	OBUS	0.40	0.67
tblVehicleEF	OBUS	1.26	2.28
tblVehicleEF	OBUS	2.17	0.59
tblVehicleEF	OBUS	1.4900e-004	2.6601e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004
tblVehicleEF	OBUS	1.4300e-004	2.5450e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05

tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	4.1760e-003	2.9545e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	1.8320e-003	1.4406e-003
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.25
tblVehicleEF	OBUS	0.39	0.12
tblVehicleEF	OBUS	7.5600e-004	8.9558e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1600e-004	1.9799e-004
tblVehicleEF	OBUS	4.1760e-003	2.9545e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.8320e-003	1.4406e-003
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.25
tblVehicleEF	OBUS	0.43	0.13
tblVehicleEF	OBUS	0.01	9.1031e-003
tblVehicleEF	OBUS	9.4220e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.29	0.63
tblVehicleEF	OBUS	0.63	1.23
tblVehicleEF	OBUS	6.63	2.58
tblVehicleEF	OBUS	69.87	91.44
tblVehicleEF	OBUS	1,103.17	1,454.82
tblVehicleEF	OBUS	70.73	20.29

tblVehicleEF	OBUS	0.37	0.66
tblVehicleEF	OBUS	1.34	2.38
tblVehicleEF	OBUS	2.21	0.60
tblVehicleEF	OBUS	2.1500e-004	3.8273e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004
tblVehicleEF	OBUS	2.0600e-004	3.6617e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	1.9540e-003	2.0891e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.13
tblVehicleEF	OBUS	6.7900e-004	8.7034e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2400e-004	2.0080e-004
tblVehicleEF	OBUS	1.9540e-003	2.0891e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004

tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.45	0.14
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0558e-003
tblVehicleEF	SBUS	0.06	6.4940e-003
tblVehicleEF	SBUS	7.81	2.72
tblVehicleEF	SBUS	0.66	0.79
tblVehicleEF	SBUS	6.73	0.92
tblVehicleEF	SBUS	1,154.91	356.52
tblVehicleEF	SBUS	1,108.94	1,135.70
tblVehicleEF	SBUS	53.24	5.46
tblVehicleEF	SBUS	10.58	3.53
tblVehicleEF	SBUS	4.99	5.58
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	5.3126e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	5.0828e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.5410e-003	1.0878e-003
tblVehicleEF	SBUS	0.03	8.9941e-003

tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.01	3.4013e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.4900e-004	5.4047e-005
tblVehicleEF	SBUS	4.5410e-003	1.0878e-003
tblVehicleEF	SBUS	0.03	8.9941e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	0.04
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.1649e-003
tblVehicleEF	SBUS	0.05	5.7028e-003
tblVehicleEF	SBUS	7.67	2.68
tblVehicleEF	SBUS	0.67	0.80
tblVehicleEF	SBUS	4.88	0.73
tblVehicleEF	SBUS	1,207.92	366.39
tblVehicleEF	SBUS	1,108.94	1,135.72
tblVehicleEF	SBUS	53.24	5.15
tblVehicleEF	SBUS	10.92	3.62
tblVehicleEF	SBUS	4.69	5.26
tblVehicleEF	SBUS	12.56	0.70

tblVehicleEF	SBUS	0.01	4.4850e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	9.8070e-003	4.2910e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	0.93	0.32
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.31	0.03
tblVehicleEF	SBUS	0.01	3.4945e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.1800e-004	5.0916e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.34	0.04

tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0312e-003
tblVehicleEF	SBUS	0.07	6.6366e-003
tblVehicleEF	SBUS	7.99	2.78
tblVehicleEF	SBUS	0.66	0.78
tblVehicleEF	SBUS	7.09	0.94
tblVehicleEF	SBUS	1,081.70	342.89
tblVehicleEF	SBUS	1,108.94	1,135.69
tblVehicleEF	SBUS	53.24	5.51
tblVehicleEF	SBUS	10.11	3.41
tblVehicleEF	SBUS	4.94	5.49
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	6.4556e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	6.1763e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.11	0.11

tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.2726e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	5.4498e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.42	0.04
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.35	38.44
tblVehicleEF	UBUS	16.43	0.97
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.92
tblVehicleEF	UBUS	5.46	1.54
tblVehicleEF	UBUS	12.53	0.12
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003

tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8570e-003	1.1798e-004
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.40	0.07
tblVehicleEF	UBUS	1.61	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.64	38.44
tblVehicleEF	UBUS	14.18	0.85
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.72
tblVehicleEF	UBUS	5.09	1.54
tblVehicleEF	UBUS	12.44	0.11
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005

tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	0.65	0.14
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.17	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8170e-003	1.1596e-004
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	2.31	6.22
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.10	0.02
tblVehicleEF	UBUS	10.37	38.44
tblVehicleEF	UBUS	16.61	0.98
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.95
tblVehicleEF	UBUS	5.42	1.54
tblVehicleEF	UBUS	12.54	0.12
tblVehicleEF	UBUS	0.50	0.07

tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.29	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8600e-003	1.1829e-004
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.42	0.07

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5538	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Energy	0.2880	2.6184	2.1995	0.0157		0.1990	0.1990		0.1990	0.1990		3,142.0854	3,142.0854	0.0602	0.0576	3,160.7573
Mobile	22.1741	54.4135	155.6079	0.4107	31.7027	0.7459	32.4486	8.4758	0.7066	9.1824		42,621.8702	42,621.8702	2.9298		42,695.1155
Total	**28.0159**	**57.0322**	**157.8329**	**0.4264**	**31.7027**	**0.9450**	**32.6477**	**8.4758**	**0.9057**	**9.3815**		**45,764.0100**	**45,764.0100**	**2.9902**	**0.0576**	**45,855.9308**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5538	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Energy	0.2880	2.6184	2.1995	0.0157		0.1990	0.1990		0.1990	0.1990		3,142.0854	3,142.0854	0.0602	0.0576	3,160.7573
Mobile	22.1741	54.4135	155.6079	0.4107	31.7027	0.7459	32.4486	8.4758	0.7066	9.1824		42,621.8702	42,621.8702	2.9298		42,695.1155
Total	**28.0159**	**57.0322**	**157.8329**	**0.4264**	**31.7027**	**0.9450**	**32.6477**	**8.4758**	**0.9057**	**9.3815**		**45,764.0100**	**45,764.0100**	**2.9902**	**0.0576**	**45,855.9308**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/30/2019	7/26/2019	5	20	
2	Site Preparation	Site Preparation	7/27/2019	8/9/2019	5	10	
3	Grading	Grading	8/10/2019	9/6/2019	5	20	
4	Building Construction	Building Construction	9/7/2019	7/24/2020	5	230	
5	Paving	Paving	7/25/2020	8/21/2020	5	20	
6	Architectural Coating	Architectural Coating	8/22/2020	9/18/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.1741	54.4135	155.6079	0.4107	31.7027	0.7459	32.4486	8.4758	0.7066	9.1824		42,621.8702	42,621.8702	2.9298		42,695.1155
Unmitigated	22.1741	54.4135	155.6079	0.4107	31.7027	0.7459	32.4486	8.4758	0.7066	9.1824		42,621.8702	42,621.8702	2.9298		42,695.1155

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	2,965.00	2,965.00	1485.00	3,688,552	3,688,552
Automobile Care Center	593.00	593.00	297.00	737,710	737,710
Bank (with Drive-Through)	740.75	431.60	159.50	658,121	658,121
General Office Building	55.15	12.30	5.25	134,979	134,979
Medical Office Building	2,438.78	604.80	104.63	4,781,334	4,781,334
Quality Restaurant	1,888.95	1,981.56	1515.36	2,632,024	2,632,024
Total	8,681.63	6,588.26	3,566.74	12,632,720	12,632,720

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Bank (with Drive-Through)	16.60	8.40	6.90	6.60	74.40	19.00	27	26	47
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Bank (with Drive-Through)	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
General Office Building	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Medical Office Building	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Quality Restaurant	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Existing 2020 Operational Run - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2880	2.6184	2.1995	0.0157		0.1990	0.1990		0.1990	0.1990		3,142.0854	3,142.0854	0.0602	0.0576	3,160.7573
NaturalGas Unmitigated	0.2880	2.6184	2.1995	0.0157		0.1990	0.1990		0.1990	0.1990		3,142.0854	3,142.0854	0.0602	0.0576	3,160.7573

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1909.59	0.0206	0.1872	0.1573	1.1200e-003		0.0142	0.0142		0.0142	0.0142		224.6575	224.6575	4.3100e-003	4.1200e-003	225.9926
Automobile Care Center	9547.95	0.1030	0.9361	0.7863	5.6200e-003		0.0711	0.0711		0.0711	0.0711		1,123.2877	1,123.2877	0.0215	0.0206	1,129.9628
Bank (with Drive-Through)	381.918	4.1200e-003	0.0374	0.0315	2.2000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003		44.9315	44.9315	8.6000e-004	8.2000e-004	45.1985
General Office Building	33.1507	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		3.9001	3.9001	7.0000e-005	7.0000e-005	3.9233
Medical Office Building	447.534	4.8300e-003	0.0439	0.0369	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003		52.6511	52.6511	1.0100e-003	9.7000e-004	52.9640
Quality Restaurant	14387.6	0.1552	1.4106	1.1849	8.4600e-003		0.1072	0.1072		0.1072	0.1072		1,692.6575	1,692.6575	0.0324	0.0310	1,702.7162
Total		**0.2880**	**2.6184**	**2.1995**	**0.0157**		**0.1990**	**0.1990**		**0.1990**	**0.1990**		**3,142.0854**	**3,142.0854**	**0.0602**	**0.0576**	**3,160.7573**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1.90959	0.0206	0.1872	0.1573	1.1200e-003		0.0142	0.0142		0.0142	0.0142		224.6575	224.6575	4.3100e-003	4.1200e-003	225.9926
Automobile Care Center	9.54795	0.1030	0.9361	0.7863	5.6200e-003		0.0711	0.0711		0.0711	0.0711		1,123.2877	1,123.2877	0.0215	0.0206	1,129.9628
Bank (with Drive-Through)	0.381918	4.1200e-003	0.0374	0.0315	2.2000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003		44.9315	44.9315	8.6000e-004	8.2000e-004	45.1985
General Office Building	0.0331507	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		3.9001	3.9001	7.0000e-005	7.0000e-005	3.9233
Medical Office Building	0.447534	4.8300e-003	0.0439	0.0369	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003		52.6511	52.6511	1.0100e-003	9.7000e-004	52.9640
Quality Restaurant	14.3876	0.1552	1.4106	1.1849	8.4600e-003		0.1072	0.1072		0.1072	0.1072		1,692.6575	1,692.6575	0.0324	0.0310	1,702.7162
Total		**0.2880**	**2.6184**	**2.1995**	**0.0157**		**0.1990**	**0.1990**		**0.1990**	**0.1990**		**3,142.0854**	**3,142.0854**	**0.0602**	**0.0576**	**3,160.7573**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.5538	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Unmitigated	5.5538	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6311					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e-003	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Total	**5.5538**	**2.4000e-004**	**0.0255**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0544**	**0.0544**	**1.5000e-004**		**0.0580**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6311					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e-003	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Total	**5.5538**	**2.4000e-004**	**0.0255**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0544**	**0.0544**	**1.5000e-004**		**0.0580**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Existing 2020 Operational Run

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Bank (with Drive-Through)	5.00	1000sqft	0.11	5,000.00	0
General Office Building	5.00	1000sqft	0.11	5,000.00	0
Medical Office Building	67.50	1000sqft	1.55	67,500.00	0
Quality Restaurant	21.00	1000sqft	0.48	21,000.00	0
Automobile Care Center	125.00	1000sqft	2.87	125,000.00	0
Automobile Care Center	25.00	1000sqft	0.57	25,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Existing 2020 Operational Run - Riverside-South Coast County, Winter

Project Characteristics -

Land Use -

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Trips and VMT - Operations only

On-road Fugitive Dust - Operations only

Grading - Operations only

Architectural Coating - Operations

Energy Use - 2019 Title 24 Standards

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	124,250.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	372,750.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblEnergyUse	LightingElect	2.93	2.05
tblEnergyUse	LightingElect	2.93	2.05
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	6.62	4.63

tblEnergyUse	T24E	2.20	1.54
tblEnergyUse	T24E	2.20	1.54
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	12.38	8.66
tblEnergyUse	T24NG	15.36	10.75
tblEnergyUse	T24NG	15.36	10.75
tblEnergyUse	T24NG	3.47	2.42
tblEnergyUse	T24NG	3.47	2.42
tblEnergyUse	T24NG	77.67	54.30
tblGrading	MeanVehicleSpeed	7.10	0.00
tblGrading	MeanVehicleSpeed	7.10	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblTripsAndVMT	VendorTripNumber	41.00	0.00
tblTripsAndVMT	WorkerTripNumber	82.00	0.00
tblTripsAndVMT	WorkerTripNumber	16.00	0.00
tblVehicleEF	HHD	1.50	0.03
tblVehicleEF	HHD	0.03	0.09
tblVehicleEF	HHD	0.11	4.6629e-007
tblVehicleEF	HHD	3.46	5.53
tblVehicleEF	HHD	0.46	0.76
tblVehicleEF	HHD	1.51	9.4864e-003
tblVehicleEF	HHD	6,555.40	1,119.65
tblVehicleEF	HHD	1,477.34	1,531.38
tblVehicleEF	HHD	4.68	0.09
tblVehicleEF	HHD	27.96	6.29
tblVehicleEF	HHD	3.07	4.45
tblVehicleEF	HHD	20.33	1.79
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04

tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	4.0000e-005	2.1559e-006
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.8586e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.9942e-006
tblVehicleEF	HHD	9.2000e-005	8.7614e-006
tblVehicleEF	HHD	2.7720e-003	3.5026e-004
tblVehicleEF	HHD	0.90	0.45
tblVehicleEF	HHD	5.1000e-005	5.9309e-006
tblVehicleEF	HHD	0.07	0.14
tblVehicleEF	HHD	1.9500e-004	1.7747e-003
tblVehicleEF	HHD	0.05	2.4505e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	8.9814e-007
tblVehicleEF	HHD	9.2000e-005	8.7614e-006
tblVehicleEF	HHD	2.7720e-003	3.5026e-004
tblVehicleEF	HHD	1.03	0.52
tblVehicleEF	HHD	5.1000e-005	5.9309e-006
tblVehicleEF	HHD	0.11	0.25
tblVehicleEF	HHD	1.9500e-004	1.7747e-003
tblVehicleEF	HHD	0.06	2.6830e-006
tblVehicleEF	HHD	1.42	0.03
tblVehicleEF	HHD	0.03	0.09
tblVehicleEF	HHD	0.11	4.4667e-007

tblVehicleEF	HHD	2.53	5.37
tblVehicleEF	HHD	0.46	0.76
tblVehicleEF	HHD	1.43	9.0047e-003
tblVehicleEF	HHD	6,940.41	1,120.47
tblVehicleEF	HHD	1,477.34	1,531.38
tblVehicleEF	HHD	4.68	0.09
tblVehicleEF	HHD	28.85	6.16
tblVehicleEF	HHD	2.90	4.21
tblVehicleEF	HHD	20.32	1.79
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	4.0000e-005	2.1559e-006
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.8586e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.9942e-006
tblVehicleEF	HHD	1.7900e-004	1.4432e-005
tblVehicleEF	HHD	3.1980e-003	3.6287e-004
tblVehicleEF	HHD	0.84	0.47
tblVehicleEF	HHD	1.0100e-004	9.8546e-006
tblVehicleEF	HHD	0.07	0.14
tblVehicleEF	HHD	2.0100e-004	1.7655e-003
tblVehicleEF	HHD	0.05	2.3541e-006
tblVehicleEF	HHD	0.07	0.01

tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	8.9058e-007
tblVehicleEF	HHD	1.7900e-004	1.4432e-005
tblVehicleEF	HHD	3.1980e-003	3.6287e-004
tblVehicleEF	HHD	0.97	0.54
tblVehicleEF	HHD	1.0100e-004	9.8546e-006
tblVehicleEF	HHD	0.11	0.25
tblVehicleEF	HHD	2.0100e-004	1.7655e-003
tblVehicleEF	HHD	0.05	2.5774e-006
tblVehicleEF	HHD	1.62	0.02
tblVehicleEF	HHD	0.03	6.4690e-003
tblVehicleEF	HHD	0.11	4.6976e-007
tblVehicleEF	HHD	4.76	5.65
tblVehicleEF	HHD	0.46	0.56
tblVehicleEF	HHD	1.51	9.5464e-003
tblVehicleEF	HHD	6,023.73	1,099.62
tblVehicleEF	HHD	1,477.34	1,476.92
tblVehicleEF	HHD	4.68	0.09
tblVehicleEF	HHD	26.74	6.35
tblVehicleEF	HHD	3.05	4.31
tblVehicleEF	HHD	20.33	1.79
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	4.0000e-005	2.1559e-006
tblVehicleEF	HHD	0.02	0.01

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.7195e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.9942e-006
tblVehicleEF	HHD	7.4000e-005	9.2695e-006
tblVehicleEF	HHD	2.9910e-003	4.0976e-004
tblVehicleEF	HHD	0.96	0.43
tblVehicleEF	HHD	4.5000e-005	6.0706e-006
tblVehicleEF	HHD	0.07	0.14
tblVehicleEF	HHD	2.0800e-004	1.8772e-003
tblVehicleEF	HHD	0.05	2.4672e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	8.9908e-007
tblVehicleEF	HHD	7.4000e-005	9.2695e-006
tblVehicleEF	HHD	2.9910e-003	4.0976e-004
tblVehicleEF	HHD	1.11	0.49
tblVehicleEF	HHD	4.5000e-005	6.0706e-006
tblVehicleEF	HHD	0.11	0.16
tblVehicleEF	HHD	2.0800e-004	1.8772e-003
tblVehicleEF	HHD	0.06	2.7013e-006
tblVehicleEF	LDA	4.4730e-003	3.6439e-003
tblVehicleEF	LDA	6.2970e-003	0.06
tblVehicleEF	LDA	0.62	0.82
tblVehicleEF	LDA	1.29	2.22
tblVehicleEF	LDA	266.01	281.79
tblVehicleEF	LDA	60.91	56.36

tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.09	0.21
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003
tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.27
tblVehicleEF	LDA	2.6640e-003	2.7877e-003
tblVehicleEF	LDA	6.3100e-004	5.5773e-004
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.09	0.29
tblVehicleEF	LDA	5.0810e-003	3.9168e-003
tblVehicleEF	LDA	5.4700e-003	0.05
tblVehicleEF	LDA	0.76	0.91

tblVehicleEF	LDA	1.14	1.89
tblVehicleEF	LDA	289.77	295.95
tblVehicleEF	LDA	60.91	55.74
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.08	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003
tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	0.07	0.24
tblVehicleEF	LDA	2.9040e-003	2.9279e-003
tblVehicleEF	LDA	6.2800e-004	5.5159e-004
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	0.08	0.26

tblVehicleEF	LDA	4.3110e-003	3.5693e-003
tblVehicleEF	LDA	6.4670e-003	0.06
tblVehicleEF	LDA	0.58	0.79
tblVehicleEF	LDA	1.32	2.28
tblVehicleEF	LDA	259.39	277.36
tblVehicleEF	LDA	60.91	56.47
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.09	0.21
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003
tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.26
tblVehicleEF	LDA	0.09	0.27
tblVehicleEF	LDA	2.5980e-003	2.7439e-003
tblVehicleEF	LDA	6.3200e-004	5.5885e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05

tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.26
tblVehicleEF	LDA	0.10	0.30
tblVehicleEF	LDT1	0.01	9.4839e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.62	1.75
tblVehicleEF	LDT1	3.78	2.46
tblVehicleEF	LDT1	325.17	331.55
tblVehicleEF	LDT1	74.01	67.29
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.27	0.45
tblVehicleEF	LDT1	3.2720e-003	3.2808e-003
tblVehicleEF	LDT1	8.0700e-004	6.6594e-004

tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.30	0.49
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	0.02	0.08
tblVehicleEF	LDT1	1.95	1.93
tblVehicleEF	LDT1	3.33	2.09
tblVehicleEF	LDT1	353.10	345.86
tblVehicleEF	LDT1	74.01	66.53
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.22	0.29
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.22	0.77

tblVehicleEF	LDT1	0.23	0.39
tblVehicleEF	LDT1	3.5570e-003	3.4225e-003
tblVehicleEF	LDT1	7.9900e-004	6.5837e-004
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.22	0.77
tblVehicleEF	LDT1	0.26	0.43
tblVehicleEF	LDT1	0.01	9.3109e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.52	1.70
tblVehicleEF	LDT1	3.84	2.53
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tblVehicleEF	LDT1	74.01	67.43
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28

tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.28	0.46
tblVehicleEF	LDT1	3.1880e-003	3.2357e-003
tblVehicleEF	LDT1	8.0800e-004	6.6731e-004
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.30	0.50
tblVehicleEF	LDT2	6.1110e-003	5.7338e-003
tblVehicleEF	LDT2	8.2750e-003	0.08
tblVehicleEF	LDT2	0.82	1.16
tblVehicleEF	LDT2	1.71	2.85
tblVehicleEF	LDT2	366.61	361.86
tblVehicleEF	LDT2	83.75	73.87
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003

tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	3.6730e-003	3.5801e-003
tblVehicleEF	LDT2	8.6600e-004	7.3103e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.04
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.12	0.41
tblVehicleEF	LDT2	6.9350e-003	6.1404e-003
tblVehicleEF	LDT2	7.1890e-003	0.07
tblVehicleEF	LDT2	1.00	1.29
tblVehicleEF	LDT2	1.51	2.43
tblVehicleEF	LDT2	398.95	376.16
tblVehicleEF	LDT2	83.75	73.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.32
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.10	0.33
tblVehicleEF	LDT2	3.9980e-003	3.7215e-003
tblVehicleEF	LDT2	8.6300e-004	7.2299e-004
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.11	0.36
tblVehicleEF	LDT2	5.8750e-003	5.6213e-003
tblVehicleEF	LDT2	8.5090e-003	0.08
tblVehicleEF	LDT2	0.76	1.12
tblVehicleEF	LDT2	1.74	2.93
tblVehicleEF	LDT2	356.95	357.31
tblVehicleEF	LDT2	83.75	74.02
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04

tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.11	0.38
tblVehicleEF	LDT2	3.5750e-003	3.5351e-003
tblVehicleEF	LDT2	8.6700e-004	7.3252e-004
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.13	0.42
tblVehicleEF	LHD1	5.6490e-003	5.8817e-003
tblVehicleEF	LHD1	0.01	6.7552e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.81
tblVehicleEF	LHD1	2.54	1.20

tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.81
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.35	0.99
tblVehicleEF	LHD1	1.02	0.36
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2675e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003

tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8948e-003
tblVehicleEF	LHD1	0.01	6.8828e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.05	0.82
tblVehicleEF	LHD1	2.42	1.14
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.92
tblVehicleEF	LHD1	30.90	12.71
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.21	0.93
tblVehicleEF	LHD1	0.98	0.35
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003

tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.27	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6820e-003
tblVehicleEF	LHD1	3.5500e-004	1.2579e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.29	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8802e-003
tblVehicleEF	LHD1	0.01	6.7279e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.80
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.82

tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.32	0.98
tblVehicleEF	LHD1	1.01	0.37
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2686e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003

tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD2	3.8330e-003	4.1865e-003
tblVehicleEF	LHD2	5.1000e-003	4.7023e-003
tblVehicleEF	LHD2	9.1950e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.23	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.98
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.94	1.23
tblVehicleEF	LHD2	0.56	0.25
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06

tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6672e-003
tblVehicleEF	LHD2	2.6200e-004	9.8743e-005
tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1958e-003
tblVehicleEF	LHD2	5.1600e-003	4.7587e-003
tblVehicleEF	LHD2	8.8690e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.18	0.78
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.42
tblVehicleEF	LHD2	23.90	9.91
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.83	1.16
tblVehicleEF	LHD2	0.54	0.24

tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6673e-003
tblVehicleEF	LHD2	2.6100e-004	9.8090e-005
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.13	0.07

tblVehicleEF	LHD2	3.8330e-003	4.1853e-003
tblVehicleEF	LHD2	5.0860e-003	4.6903e-003
tblVehicleEF	LHD2	9.2490e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.24	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.99
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.92	1.21
tblVehicleEF	LHD2	0.56	0.26
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.06	0.06

tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6671e-003
tblVehicleEF	LHD2	2.6200e-004	9.8819e-005
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.93	19.66
tblVehicleEF	MCY	9.66	8.48
tblVehicleEF	MCY	164.88	218.98
tblVehicleEF	MCY	46.70	60.53
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003

tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.17	2.53
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.09	1.84
tblVehicleEF	MCY	2.0370e-003	2.1670e-003
tblVehicleEF	MCY	6.8600e-004	5.9901e-004
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.66	3.12
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.27	2.00
tblVehicleEF	MCY	0.41	0.36
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	20.66	19.00
tblVehicleEF	MCY	9.11	7.76
tblVehicleEF	MCY	164.88	217.72
tblVehicleEF	MCY	46.70	58.69
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003

tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.15	2.46
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	1.87	1.63
tblVehicleEF	MCY	2.0470e-003	2.1545e-003
tblVehicleEF	MCY	6.7100e-004	5.8079e-004
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.63	3.04
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.43	19.68
tblVehicleEF	MCY	9.60	8.55
tblVehicleEF	MCY	164.88	219.04
tblVehicleEF	MCY	46.70	60.74
tblVehicleEF	MCY	1.13	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01

tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.60	1.29
tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.17	2.54
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.10	1.87
tblVehicleEF	MCY	2.0290e-003	2.1676e-003
tblVehicleEF	MCY	6.8600e-004	6.0106e-004
tblVehicleEF	MCY	1.60	1.29
tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.66	3.13
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.28	2.03
tblVehicleEF	MDV	0.01	8.1275e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.58	1.49
tblVehicleEF	MDV	3.47	3.45
tblVehicleEF	MDV	501.88	442.94
tblVehicleEF	MDV	112.78	90.12

tblVehicleEF	MDV	0.19	0.15
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.27	0.49
tblVehicleEF	MDV	5.0330e-003	4.3797e-003
tblVehicleEF	MDV	1.1890e-003	8.9179e-004
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.30	0.53
tblVehicleEF	MDV	0.02	8.6153e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.91	1.63

tblVehicleEF	MDV	3.08	2.93
tblVehicleEF	MDV	544.80	458.44
tblVehicleEF	MDV	112.78	89.12
tblVehicleEF	MDV	0.18	0.13
tblVehicleEF	MDV	0.33	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.24	0.43
tblVehicleEF	MDV	5.4670e-003	4.5332e-003
tblVehicleEF	MDV	1.1820e-003	8.8191e-004
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.26	0.47

tblVehicleEF	MDV	0.01	7.9891e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.48	1.45
tblVehicleEF	MDV	3.54	3.54
tblVehicleEF	MDV	489.12	438.16
tblVehicleEF	MDV	112.78	90.29
tblVehicleEF	MDV	0.18	0.14
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MDV	4.9040e-003	4.3324e-003
tblVehicleEF	MDV	1.1910e-003	8.9352e-004
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09

tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.31	0.54
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.14	0.32
tblVehicleEF	MH	6.37	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.76	4.09
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9900e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00

tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.24	0.32
tblVehicleEF	MH	5.95	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.63	3.87
tblVehicleEF	MH	0.86	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00

tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	9.9910e-003	9.3020e-003
tblVehicleEF	MH	6.9300e-004	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.40	0.00
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.12	0.32
tblVehicleEF	MH	6.40	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.74	4.02
tblVehicleEF	MH	0.89	0.00
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00

tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9890e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00
tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MHD	0.02	4.2934e-003
tblVehicleEF	MHD	6.1240e-003	8.3332e-003
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tblVehicleEF	MHD	0.01	0.01

tblVehicleEF	MHD	0.06	0.08
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tblVehicleEF	MHD	3.6080e-003	2.1060e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.40	0.07
tblVehicleEF	MHD	1.5050e-003	6.4116e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6700e-004	1.1717e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	MHD	0.02	4.0641e-003
tblVehicleEF	MHD	6.1890e-003	8.3939e-003
tblVehicleEF	MHD	0.06	0.01

tblVehicleEF	MHD	0.31	0.30
tblVehicleEF	MHD	0.47	0.76
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tblVehicleEF	MHD	1,067.94	1,101.45
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tblVehicleEF	MHD	1.60	2.49
tblVehicleEF	MHD	11.62	1.02
tblVehicleEF	MHD	3.1790e-003	1.8578e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.0420e-003	1.7774e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
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tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.38	0.06
tblVehicleEF	MHD	1.5920e-003	6.5574e-004

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tblVehicleEF	MHD	6.6100e-004	1.1597e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
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tblVehicleEF	MHD	0.02	0.13
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tblVehicleEF	MHD	6.0850e-003	8.3163e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	4.3910e-003	2.5596e-003

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tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
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tblVehicleEF	MHD	0.04	0.03
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tblVehicleEF	MHD	0.05	0.03
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tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	OBUS	7.2400e-004	8.8498e-004
tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	2.2350e-003	1.9757e-003

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tblVehicleEF	OBUS	1.4300e-004	2.5450e-003
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	OBUS	7.1510e-003	0.05
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
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tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.13
tblVehicleEF	OBUS	6.7900e-004	8.7034e-004
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tblVehicleEF	OBUS	8.2400e-004	2.0080e-004
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tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004

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tblVehicleEF	SBUS	0.03	0.04
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tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
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tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	0.04
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.1649e-003
tblVehicleEF	SBUS	0.05	5.7028e-003
tblVehicleEF	SBUS	7.67	2.68
tblVehicleEF	SBUS	0.67	0.80
tblVehicleEF	SBUS	4.88	0.73
tblVehicleEF	SBUS	1,207.92	366.39
tblVehicleEF	SBUS	1,108.94	1,135.72
tblVehicleEF	SBUS	53.24	5.15
tblVehicleEF	SBUS	10.92	3.62
tblVehicleEF	SBUS	4.69	5.26
tblVehicleEF	SBUS	12.56	0.70

tblVehicleEF	SBUS	0.01	4.4850e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	9.8070e-003	4.2910e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	0.93	0.32
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.31	0.03
tblVehicleEF	SBUS	0.01	3.4945e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.1800e-004	5.0916e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.34	0.04

tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0312e-003
tblVehicleEF	SBUS	0.07	6.6366e-003
tblVehicleEF	SBUS	7.99	2.78
tblVehicleEF	SBUS	0.66	0.78
tblVehicleEF	SBUS	7.09	0.94
tblVehicleEF	SBUS	1,081.70	342.89
tblVehicleEF	SBUS	1,108.94	1,135.69
tblVehicleEF	SBUS	53.24	5.51
tblVehicleEF	SBUS	10.11	3.41
tblVehicleEF	SBUS	4.94	5.49
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	6.4556e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	6.1763e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.11	0.11

tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.2726e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	5.4498e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.42	0.04
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.35	38.44
tblVehicleEF	UBUS	16.43	0.97
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.92
tblVehicleEF	UBUS	5.46	1.54
tblVehicleEF	UBUS	12.53	0.12
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003

tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8570e-003	1.1798e-004
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.40	0.07
tblVehicleEF	UBUS	1.61	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.64	38.44
tblVehicleEF	UBUS	14.18	0.85
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.72
tblVehicleEF	UBUS	5.09	1.54
tblVehicleEF	UBUS	12.44	0.11
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005

tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	0.65	0.14
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.17	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8170e-003	1.1596e-004
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	2.31	6.22
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.10	0.02
tblVehicleEF	UBUS	10.37	38.44
tblVehicleEF	UBUS	16.61	0.98
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.95
tblVehicleEF	UBUS	5.42	1.54
tblVehicleEF	UBUS	12.54	0.12
tblVehicleEF	UBUS	0.50	0.07

tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.29	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8600e-003	1.1829e-004
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.42	0.07

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5538	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Energy	0.2880	2.6184	2.1995	0.0157		0.1990	0.1990		0.1990	0.1990		3,142.0854	3,142.0854	0.0602	0.0576	3,160.7573
Mobile	22.6147	56.6111	151.4639	0.3959	31.6935	0.7476	32.4410	8.4725	0.7081	9.1806		40,771.7134	40,771.7134	2.5288		40,834.9332
Total	**28.4565**	**59.2298**	**153.6889**	**0.4116**	**31.6935**	**0.9467**	**32.6401**	**8.4725**	**0.9072**	**9.3797**		**43,913.8532**	**43,913.8532**	**2.5892**	**0.0576**	**43,995.7485**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.5538	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Energy	0.2880	2.6184	2.1995	0.0157		0.1990	0.1990		0.1990	0.1990		3,142.0854	3,142.0854	0.0602	0.0576	3,160.7573
Mobile	22.6147	56.6111	151.4639	0.3959	31.6935	0.7476	32.4410	8.4725	0.7081	9.1806		40,771.7134	40,771.7134	2.5288		40,834.9332
Total	**28.4565**	**59.2298**	**153.6889**	**0.4116**	**31.6935**	**0.9467**	**32.6401**	**8.4725**	**0.9072**	**9.3797**		**43,913.8532**	**43,913.8532**	**2.5892**	**0.0576**	**43,995.7485**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/30/2019	7/26/2019	5	20	
2	Site Preparation	Site Preparation	7/27/2019	8/9/2019	5	10	
3	Grading	Grading	8/10/2019	9/6/2019	5	20	
4	Building Construction	Building Construction	9/7/2019	7/24/2020	5	230	
5	Paving	Paving	7/25/2020	8/21/2020	5	20	
6	Architectural Coating	Architectural Coating	8/22/2020	9/18/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Paving	Pavers	0	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.6147	56.6111	151.4639	0.3959	31.6935	0.7476	32.4410	8.4725	0.7081	9.1806		40,771.7134	40,771.7134	2.5288		40,834.9332
Unmitigated	22.6147	56.6111	151.4639	0.3959	31.6935	0.7476	32.4410	8.4725	0.7081	9.1806		40,771.7134	40,771.7134	2.5288		40,834.9332

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	2,965.00	2,965.00	1485.00	3,688,552	3,688,552
Automobile Care Center	593.00	593.00	297.00	737,710	737,710
Bank (with Drive-Through)	740.75	431.60	159.50	658,121	658,121
General Office Building	55.15	12.30	5.25	134,979	134,979
Medical Office Building	2,438.78	604.80	104.63	4,781,334	4,781,334
Quality Restaurant	1,888.95	1,981.56	1515.36	2,632,024	2,632,024
Total	8,681.63	6,588.26	3,566.74	12,632,720	12,632,720

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Bank (with Drive-Through)	16.60	8.40	6.90	6.60	74.40	19.00	27	26	47
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Bank (with Drive-Through)	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
General Office Building	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Medical Office Building	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Quality Restaurant	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Existing 2020 Operational Run - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2880	2.6184	2.1995	0.0157		0.1990	0.1990		0.1990	0.1990		3,142.0854	3,142.0854	0.0602	0.0576	3,160.7573
NaturalGas Unmitigated	0.2880	2.6184	2.1995	0.0157		0.1990	0.1990		0.1990	0.1990		3,142.0854	3,142.0854	0.0602	0.0576	3,160.7573

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1909.59	0.0206	0.1872	0.1573	1.1200e-003		0.0142	0.0142		0.0142	0.0142		224.6575	224.6575	4.3100e-003	4.1200e-003	225.9926
Automobile Care Center	9547.95	0.1030	0.9361	0.7863	5.6200e-003		0.0711	0.0711		0.0711	0.0711		1,123.2877	1,123.2877	0.0215	0.0206	1,129.9628
Bank (with Drive-Through)	381.918	4.1200e-003	0.0374	0.0315	2.2000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003		44.9315	44.9315	8.6000e-004	8.2000e-004	45.1985
General Office Building	33.1507	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		3.9001	3.9001	7.0000e-005	7.0000e-005	3.9233
Medical Office Building	447.534	4.8300e-003	0.0439	0.0369	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003		52.6511	52.6511	1.0100e-003	9.7000e-004	52.9640
Quality Restaurant	14387.6	0.1552	1.4106	1.1849	8.4600e-003		0.1072	0.1072		0.1072	0.1072		1,692.6575	1,692.6575	0.0324	0.0310	1,702.7162
Total		**0.2880**	**2.6184**	**2.1995**	**0.0157**		**0.1990**	**0.1990**		**0.1990**	**0.1990**		**3,142.0854**	**3,142.0854**	**0.0602**	**0.0576**	**3,160.7573**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	1.90959	0.0206	0.1872	0.1573	1.1200e-003		0.0142	0.0142		0.0142	0.0142		224.6575	224.6575	4.3100e-003	4.1200e-003	225.9926
Automobile Care Center	9.54795	0.1030	0.9361	0.7863	5.6200e-003		0.0711	0.0711		0.0711	0.0711		1,123.2877	1,123.2877	0.0215	0.0206	1,129.9628
Bank (with Drive-Through)	0.381918	4.1200e-003	0.0374	0.0315	2.2000e-004		2.8500e-003	2.8500e-003		2.8500e-003	2.8500e-003		44.9315	44.9315	8.6000e-004	8.2000e-004	45.1985
General Office Building	0.0331507	3.6000e-004	3.2500e-003	2.7300e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		3.9001	3.9001	7.0000e-005	7.0000e-005	3.9233
Medical Office Building	0.447534	4.8300e-003	0.0439	0.0369	2.6000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003		52.6511	52.6511	1.0100e-003	9.7000e-004	52.9640
Quality Restaurant	14.3876	0.1552	1.4106	1.1849	8.4600e-003		0.1072	0.1072		0.1072	0.1072		1,692.6575	1,692.6575	0.0324	0.0310	1,702.7162
Total		**0.2880**	**2.6184**	**2.1995**	**0.0157**		**0.1990**	**0.1990**		**0.1990**	**0.1990**		**3,142.0854**	**3,142.0854**	**0.0602**	**0.0576**	**3,160.7573**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.5538	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Unmitigated	5.5538	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6311					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e-003	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Total	**5.5538**	**2.4000e-004**	**0.0255**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0544**	**0.0544**	**1.5000e-004**		**0.0580**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6311					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	4.9203					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e-003	2.4000e-004	0.0255	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0544	0.0544	1.5000e-004		0.0580
Total	**5.5538**	**2.4000e-004**	**0.0255**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0544**	**0.0544**	**1.5000e-004**		**0.0580**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Proposed 2020 Operational Run

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	52.06	1000sqft	4.00	52,065.00	0
Industrial Park	877.30	1000sqft	40.28	877,298.00	0
Strip Mall	37.19	1000sqft	2.83	37,189.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Proposed 2020 Operational Run - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Per land use plan

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Trips and VMT - Operations only

On-road Fugitive Dust - Operations only

Grading - Operations only

Architectural Coating - Operations

Vehicle Trips - ITE 10th Generation

Energy Use - 2019 Title 24 Standards

Fleet Mix - Only cars and trucks present on site

Table Name	Column Name	Default Value	New Value
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tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,449,828.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	5.61	3.92

tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	4.58	3.20
tblEnergyUse	T24NG	3.47	2.43
tblEnergyUse	T24NG	3.47	2.43
tblEnergyUse	T24NG	1.92	1.34
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tblFleetMix	HHD	0.07	0.07
tblFleetMix	HHD	0.07	0.07
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDA	0.54	0.54
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tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
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tblFleetMix	LHD1	0.02	0.02
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tblFleetMix	LHD2	5.3390e-003	7.0000e-003
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tblFleetMix	MCY	4.6290e-003	0.00
tblFleetMix	MCY	4.6290e-003	0.00

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tblFleetMix	MDV	0.12	0.12
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tblFleetMix	MH	1.1200e-003	0.00
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tblFleetMix	UBUS	1.2130e-003	0.00
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tblGrading	MeanVehicleSpeed	7.10	0.00
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tblLandUse	LandUseSquareFeet	877,300.00	877,298.00
tblLandUse	LandUseSquareFeet	37,190.00	37,189.00
tblLandUse	LotAcreage	1.20	4.00
tblLandUse	LotAcreage	20.14	40.28
tblLandUse	LotAcreage	0.85	2.83
tblOffRoadEquipment	UsageHours	6.00	0.00

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tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
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tblOffRoadEquipment	UsageHours	8.00	0.00
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tblVehicleEF	HHD	0.96	0.43
tblVehicleEF	HHD	4.5000e-005	6.0706e-006

tblVehicleEF	HHD	0.07	0.14
tblVehicleEF	HHD	2.0800e-004	1.8772e-003
tblVehicleEF	HHD	0.05	2.4672e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	8.9908e-007
tblVehicleEF	HHD	7.4000e-005	9.2695e-006
tblVehicleEF	HHD	2.9910e-003	4.0976e-004
tblVehicleEF	HHD	1.11	0.49
tblVehicleEF	HHD	4.5000e-005	6.0706e-006
tblVehicleEF	HHD	0.11	0.16
tblVehicleEF	HHD	2.0800e-004	1.8772e-003
tblVehicleEF	HHD	0.06	2.7013e-006
tblVehicleEF	LDA	4.4730e-003	3.6439e-003
tblVehicleEF	LDA	6.2970e-003	0.06
tblVehicleEF	LDA	0.62	0.82
tblVehicleEF	LDA	1.29	2.22
tblVehicleEF	LDA	266.01	281.79
tblVehicleEF	LDA	60.91	56.36
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.09	0.21
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003
tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003

tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.27
tblVehicleEF	LDA	2.6640e-003	2.7877e-003
tblVehicleEF	LDA	6.3100e-004	5.5773e-004
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.09	0.29
tblVehicleEF	LDA	5.0810e-003	3.9168e-003
tblVehicleEF	LDA	5.4700e-003	0.05
tblVehicleEF	LDA	0.76	0.91
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tblVehicleEF	LDA	289.77	295.95
tblVehicleEF	LDA	60.91	55.74
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.08	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003

tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	0.07	0.24
tblVehicleEF	LDA	2.9040e-003	2.9279e-003
tblVehicleEF	LDA	6.2800e-004	5.5159e-004
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	0.08	0.26
tblVehicleEF	LDA	4.3110e-003	3.5693e-003
tblVehicleEF	LDA	6.4670e-003	0.06
tblVehicleEF	LDA	0.58	0.79
tblVehicleEF	LDA	1.32	2.28
tblVehicleEF	LDA	259.39	277.36
tblVehicleEF	LDA	60.91	56.47
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.09	0.21

tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003
tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.26
tblVehicleEF	LDA	0.09	0.27
tblVehicleEF	LDA	2.5980e-003	2.7439e-003
tblVehicleEF	LDA	6.3200e-004	5.5885e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.26
tblVehicleEF	LDA	0.10	0.30
tblVehicleEF	LDT1	0.01	9.4839e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.62	1.75
tblVehicleEF	LDT1	3.78	2.46
tblVehicleEF	LDT1	325.17	331.55

tblVehicleEF	LDT1	74.01	67.29
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.27	0.45
tblVehicleEF	LDT1	3.2720e-003	3.2808e-003
tblVehicleEF	LDT1	8.0700e-004	6.6594e-004
tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.30	0.49
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	0.02	0.08

tblVehicleEF	LDT1	1.95	1.93
tblVehicleEF	LDT1	3.33	2.09
tblVehicleEF	LDT1	353.10	345.86
tblVehicleEF	LDT1	74.01	66.53
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.22	0.29
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.22	0.77
tblVehicleEF	LDT1	0.23	0.39
tblVehicleEF	LDT1	3.5570e-003	3.4225e-003
tblVehicleEF	LDT1	7.9900e-004	6.5837e-004
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.22	0.77

tblVehicleEF	LDT1	0.26	0.43
tblVehicleEF	LDT1	0.01	9.3109e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.52	1.70
tblVehicleEF	LDT1	3.84	2.53
tblVehicleEF	LDT1	316.88	326.99
tblVehicleEF	LDT1	74.01	67.43
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.28	0.46
tblVehicleEF	LDT1	3.1880e-003	3.2357e-003
tblVehicleEF	LDT1	8.0800e-004	6.6731e-004
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28

tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.30	0.50
tblVehicleEF	LDT2	6.1110e-003	5.7338e-003
tblVehicleEF	LDT2	8.2750e-003	0.08
tblVehicleEF	LDT2	0.82	1.16
tblVehicleEF	LDT2	1.71	2.85
tblVehicleEF	LDT2	366.61	361.86
tblVehicleEF	LDT2	83.75	73.87
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	3.6730e-003	3.5801e-003

tblVehicleEF	LDT2	8.6600e-004	7.3103e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.04
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.12	0.41
tblVehicleEF	LDT2	6.9350e-003	6.1404e-003
tblVehicleEF	LDT2	7.1890e-003	0.07
tblVehicleEF	LDT2	1.00	1.29
tblVehicleEF	LDT2	1.51	2.43
tblVehicleEF	LDT2	398.95	376.16
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tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.32
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.02	0.03

tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.10	0.33
tblVehicleEF	LDT2	3.9980e-003	3.7215e-003
tblVehicleEF	LDT2	8.6300e-004	7.2299e-004
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.11	0.36
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tblVehicleEF	LDT2	8.5090e-003	0.08
tblVehicleEF	LDT2	0.76	1.12
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tblVehicleEF	LDT2	356.95	357.31
tblVehicleEF	LDT2	83.75	74.02
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.06	0.08

tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.11	0.38
tblVehicleEF	LDT2	3.5750e-003	3.5351e-003
tblVehicleEF	LDT2	8.6700e-004	7.3252e-004
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.13	0.42
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tblVehicleEF	LHD1	0.01	6.7552e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.81
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.81
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.35	0.99
tblVehicleEF	LHD1	1.02	0.36
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08

tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2675e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8948e-003
tblVehicleEF	LHD1	0.01	6.8828e-003

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.05	0.82
tblVehicleEF	LHD1	2.42	1.14
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.92
tblVehicleEF	LHD1	30.90	12.71
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.21	0.93
tblVehicleEF	LHD1	0.98	0.35
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.27	0.09

tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6820e-003
tblVehicleEF	LHD1	3.5500e-004	1.2579e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.29	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8802e-003
tblVehicleEF	LHD1	0.01	6.7279e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.80
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.82
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.32	0.98
tblVehicleEF	LHD1	1.01	0.37
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004

tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2686e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD2	3.8330e-003	4.1865e-003
tblVehicleEF	LHD2	5.1000e-003	4.7023e-003
tblVehicleEF	LHD2	9.1950e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55

tblVehicleEF	LHD2	1.23	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.98
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.94	1.23
tblVehicleEF	LHD2	0.56	0.25
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6672e-003
tblVehicleEF	LHD2	2.6200e-004	9.8743e-005

tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1958e-003
tblVehicleEF	LHD2	5.1600e-003	4.7587e-003
tblVehicleEF	LHD2	8.8690e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.18	0.78
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.42
tblVehicleEF	LHD2	23.90	9.91
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.83	1.16
tblVehicleEF	LHD2	0.54	0.24
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6673e-003
tblVehicleEF	LHD2	2.6100e-004	9.8090e-005
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.13	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1853e-003
tblVehicleEF	LHD2	5.0860e-003	4.6903e-003
tblVehicleEF	LHD2	9.2490e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.24	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41

tblVehicleEF	LHD2	23.90	9.99
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.92	1.21
tblVehicleEF	LHD2	0.56	0.26
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6671e-003
tblVehicleEF	LHD2	2.6200e-004	9.8819e-005
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.02	0.03

tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.93	19.66
tblVehicleEF	MCY	9.66	8.48
tblVehicleEF	MCY	164.88	218.98
tblVehicleEF	MCY	46.70	60.53
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.17	2.53
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.09	1.84
tblVehicleEF	MCY	2.0370e-003	2.1670e-003

tblVehicleEF	MCY	6.8600e-004	5.9901e-004
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.66	3.12
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.27	2.00
tblVehicleEF	MCY	0.41	0.36
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	20.66	19.00
tblVehicleEF	MCY	9.11	7.76
tblVehicleEF	MCY	164.88	217.72
tblVehicleEF	MCY	46.70	58.69
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.15	2.46

tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	1.87	1.63
tblVehicleEF	MCY	2.0470e-003	2.1545e-003
tblVehicleEF	MCY	6.7100e-004	5.8079e-004
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.63	3.04
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.43	19.68
tblVehicleEF	MCY	9.60	8.55
tblVehicleEF	MCY	164.88	219.04
tblVehicleEF	MCY	46.70	60.74
tblVehicleEF	MCY	1.13	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
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tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.60	1.29

tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.17	2.54
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.10	1.87
tblVehicleEF	MCY	2.0290e-003	2.1676e-003
tblVehicleEF	MCY	6.8600e-004	6.0106e-004
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tblVehicleEF	MCY	0.75	0.70
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tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.28	2.03
tblVehicleEF	MDV	0.01	8.1275e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.58	1.49
tblVehicleEF	MDV	3.47	3.45
tblVehicleEF	MDV	501.88	442.94
tblVehicleEF	MDV	112.78	90.12
tblVehicleEF	MDV	0.19	0.15
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003

tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.27	0.49
tblVehicleEF	MDV	5.0330e-003	4.3797e-003
tblVehicleEF	MDV	1.1890e-003	8.9179e-004
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.30	0.53
tblVehicleEF	MDV	0.02	8.6153e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.91	1.63
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tblVehicleEF	MDV	544.80	458.44
tblVehicleEF	MDV	112.78	89.12
tblVehicleEF	MDV	0.18	0.13
tblVehicleEF	MDV	0.33	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003

tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.24	0.43
tblVehicleEF	MDV	5.4670e-003	4.5332e-003
tblVehicleEF	MDV	1.1820e-003	8.8191e-004
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.26	0.47
tblVehicleEF	MDV	0.01	7.9891e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.48	1.45
tblVehicleEF	MDV	3.54	3.54
tblVehicleEF	MDV	489.12	438.16
tblVehicleEF	MDV	112.78	90.29
tblVehicleEF	MDV	0.18	0.14
tblVehicleEF	MDV	0.34	0.42

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.28	0.50
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tblVehicleEF	MDV	1.1910e-003	8.9352e-004
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tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.05	0.05
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tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.14	0.32
tblVehicleEF	MH	6.37	0.00
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tblVehicleEF	MH	0.89	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9900e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
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tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00

tblVehicleEF	MH	3.24	0.32
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tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	9.9910e-003	9.3020e-003
tblVehicleEF	MH	6.9300e-004	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00

tblVehicleEF	MH	0.40	0.00
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.12	0.32
tblVehicleEF	MH	6.40	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.74	4.02
tblVehicleEF	MH	0.89	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00
tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9890e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00

tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MHD	0.02	4.2934e-003
tblVehicleEF	MHD	6.1240e-003	8.3332e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.43	0.38
tblVehicleEF	MHD	0.47	0.75
tblVehicleEF	MHD	6.54	1.42
tblVehicleEF	MHD	156.54	67.47
tblVehicleEF	MHD	1,067.94	1,101.43
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tblVehicleEF	MHD	11.65	1.02
tblVehicleEF	MHD	3.7720e-003	2.2012e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.6080e-003	2.1060e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004

tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.03	0.02
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tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.40	0.07
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6700e-004	1.1717e-004
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tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	MHD	0.02	4.0641e-003
tblVehicleEF	MHD	6.1890e-003	8.3939e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.31	0.30
tblVehicleEF	MHD	0.47	0.76
tblVehicleEF	MHD	6.24	1.35
tblVehicleEF	MHD	165.81	69.00
tblVehicleEF	MHD	1,067.94	1,101.45
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tblVehicleEF	MHD	1.60	2.49

tblVehicleEF	MHD	11.62	1.02
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.0420e-003	1.7774e-003
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tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
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tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.38	0.06
tblVehicleEF	MHD	1.5920e-003	6.5574e-004
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tblVehicleEF	MHD	6.6100e-004	1.1597e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
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tblVehicleEF	MHD	0.02	0.13

tblVehicleEF	MHD	0.42	0.07
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tblVehicleEF	MHD	0.60	0.49
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tblVehicleEF	MHD	1,067.94	1,101.43
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tblVehicleEF	MHD	11.66	1.02
tblVehicleEF	MHD	4.5890e-003	2.6754e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
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tblVehicleEF	MHD	4.3910e-003	2.5596e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.4650e-003	7.1674e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004

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tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	OBUS	7.2400e-004	8.8498e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2300e-004	2.0041e-004
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tblVehicleEF	OBUS	0.45	0.14
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
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tblVehicleEF	OBUS	4.1760e-003	2.9545e-003
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tblVehicleEF	OBUS	7.1510e-003	0.05
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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
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tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	0.65	0.14

tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.17	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8170e-003	1.1596e-004
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	2.31	6.22
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.10	0.02
tblVehicleEF	UBUS	10.37	38.44
tblVehicleEF	UBUS	16.61	0.98
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.95
tblVehicleEF	UBUS	5.42	1.54
tblVehicleEF	UBUS	12.54	0.12
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.4530e-004

tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.29	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8600e-003	1.1829e-004
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.42	0.07
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	ST_TR	8.96	8.57
tblVehicleTrips	ST_TR	42.04	46.12
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	SU_TR	1.55	1.42
tblVehicleTrips	SU_TR	20.43	21.10
tblVehicleTrips	WD_TR	6.83	3.37
tblVehicleTrips	WD_TR	36.13	34.80
tblVehicleTrips	WD_TR	44.32	37.75

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9418	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Energy	0.0125	0.1137	0.0955	6.8000e-004		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2,457.9096	2,457.9096	0.0987	0.0222	2,466.9956
Mobile	2.4763	10.0466	23.7161	0.0782	6.2502	0.1448	6.3950	1.6715	0.1372	1.8087	0.0000	7,330.6500	7,330.6500	0.3031	0.0000	7,338.2275
Waste						0.0000	0.0000		0.0000	0.0000	342.8822	0.0000	342.8822	20.2638	0.0000	849.4761
Water						0.0000	0.0000		0.0000	0.0000	67.3095	890.5964	957.9059	6.9501	0.1709	1,182.5704
Total	**6.4306**	**10.1604**	**23.8240**	**0.0788**	**6.2502**	**0.1534**	**6.4037**	**1.6715**	**0.1459**	**1.8174**	**410.1917**	**10,679.1800**	**11,089.3716**	**27.6158**	**0.1931**	**11,837.2951**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.9418	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Energy	0.0125	0.1137	0.0955	6.8000e-004		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	2,457.9096	2,457.9096	0.0987	0.0222	2,466.9956
Mobile	2.4763	10.0466	23.7161	0.0782	6.2502	0.1448	6.3950	1.6715	0.1372	1.8087	0.0000	7,330.6500	7,330.6500	0.3031	0.0000	7,338.2275
Waste						0.0000	0.0000		0.0000	0.0000	342.8822	0.0000	342.8822	20.2638	0.0000	849.4761
Water						0.0000	0.0000		0.0000	0.0000	67.3095	890.5964	957.9059	6.9501	0.1709	1,182.5704
Total	**6.4306**	**10.1604**	**23.8240**	**0.0788**	**6.2502**	**0.1534**	**6.4037**	**1.6715**	**0.1459**	**1.8174**	**410.1917**	**10,679.1800**	**11,089.3716**	**27.6158**	**0.1931**	**11,837.2951**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/30/2019	9/6/2019	5	50	
2	Site Preparation	Site Preparation	9/7/2019	10/18/2019	5	30	
3	Grading	Grading	10/19/2019	1/31/2020	5	75	
4	Building Construction	Building Construction	2/1/2020	12/2/2022	5	740	
5	Paving	Paving	12/3/2022	2/17/2023	5	55	
6	Architectural Coating	Architectural Coating	2/18/2023	5/5/2023	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Demolition	Excavators	3	0.00	158	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Grading	Excavators	2	0.00	158	0.38
Grading	Graders	1	0.00	187	0.41
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Grading	Scrapers	2	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	0.00	97	0.37
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Building Construction	Welders	1	0.00	46	0.45
Paving	Pavers	2	0.00	130	0.42
Paving	Paving Equipment	2	0.00	132	0.36
Paving	Rollers	2	0.00	80	0.38
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.4763	10.0466	23.7161	0.0782	6.2502	0.1448	6.3950	1.6715	0.1372	1.8087	0.0000	7,330.6500	7,330.6500	0.3031	0.0000	7,338.2275
Unmitigated	2.4763	10.0466	23.7161	0.0782	6.2502	0.1448	6.3950	1.6715	0.1372	1.8087	0.0000	7,330.6500	7,330.6500	0.3031	0.0000	7,338.2275

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	2,956.50	2,228.34	1087.85	10,282,353	10,282,353
Medical Office Building	1,811.69	446.15	73.93	3,549,332	3,549,332
Strip Mall	1,403.92	1,715.20	784.71	2,587,400	2,587,400
Total	6,172.11	4,389.70	1,946.49	16,419,086	16,419,086

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000
Medical Office Building	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000
Strip Mall	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,334.1407	2,334.1407	0.0964	0.0199	2,342.4912
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,334.1407	2,334.1407	0.0964	0.0199	2,342.4912
NaturalGas Mitigated	0.0125	0.1137	0.0955	6.8000e-004		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	123.7689	123.7689	2.3700e-003	2.2700e-003	124.5044
NaturalGas Unmitigated	0.0125	0.1137	0.0955	6.8000e-004		8.6400e-003	8.6400e-003		8.6400e-003	8.6400e-003	0.0000	123.7689	123.7689	2.3700e-003	2.2700e-003	124.5044

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	2.13183e+006	0.0115	0.1045	0.0878	6.3000e-004		7.9400e-003	7.9400e-003		7.9400e-003	7.9400e-003	0.0000	113.7628	113.7628	2.1800e-003	2.0900e-003	114.4388
Medical Office Building	126518	6.8000e-004	6.2000e-003	5.2100e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7515	6.7515	1.3000e-004	1.2000e-004	6.7916
Strip Mall	60990	3.3000e-004	2.9900e-003	2.5100e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.2547	3.2547	6.0000e-005	6.0000e-005	3.2740
Total		**0.0125**	**0.1137**	**0.0955**	**6.9000e-004**		**8.6400e-003**	**8.6400e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**123.7689**	**123.7689**	**2.3700e-003**	**2.2700e-003**	**124.5044**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	2.13183e+006	0.0115	0.1045	0.0878	6.3000e-004		7.9400e-003	7.9400e-003		7.9400e-003	7.9400e-003	0.0000	113.7628	113.7628	2.1800e-003	2.0900e-003	114.4388
Medical Office Building	126518	6.8000e-004	6.2000e-003	5.2100e-003	4.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	6.7515	6.7515	1.3000e-004	1.2000e-004	6.7916
Strip Mall	60990	3.3000e-004	2.9900e-003	2.5100e-003	2.0000e-005		2.3000e-004	2.3000e-004		2.3000e-004	2.3000e-004	0.0000	3.2547	3.2547	6.0000e-005	6.0000e-005	3.2740
Total		**0.0125**	**0.1137**	**0.0955**	**6.9000e-004**		**8.6400e-003**	**8.6400e-003**		**8.6400e-003**	**8.6400e-003**	**0.0000**	**123.7689**	**123.7689**	**2.3700e-003**	**2.2700e-003**	**124.5044**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	6.57974e+006	2,096.4445	0.0866	0.0179	2,103.9446
Medical Office Building	390488	124.4177	5.1400e-003	1.0600e-003	124.8628
Strip Mall	355527	113.2785	4.6800e-003	9.7000e-004	113.6837
Total		**2,334.1407**	**0.0964**	**0.0199**	**2,342.4912**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	6.57974e+006	2,096.4445	0.0866	0.0179	2,103.9446
Medical Office Building	390488	124.4177	5.1400e-003	1.0600e-003	124.8628
Strip Mall	355527	113.2785	4.6800e-003	9.7000e-004	113.6837
Total		**2,334.1407**	**0.0964**	**0.0199**	**2,342.4912**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.9418	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Unmitigated	3.9418	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4480					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.4926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1700e-003	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Total	**3.9418**	**1.1000e-004**	**0.0124**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0240**	**0.0240**	**6.0000e-005**	**0.0000**	**0.0256**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4480					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.4926					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1700e-003	1.1000e-004	0.0124	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0240	0.0240	6.0000e-005	0.0000	0.0256
Total	**3.9418**	**1.1000e-004**	**0.0124**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0240**	**0.0240**	**6.0000e-005**	**0.0000**	**0.0256**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	957.9059	6.9501	0.1709	1,182.5704
Unmitigated	957.9059	6.9501	0.1709	1,182.5704

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	202.876 / 0	906.0473	6.6455	0.1633	1,120.8418
Medical Office Building	6.53252 / 1.24429	33.5790	0.2142	5.3000e-003	40.5111
Strip Mall	2.75476 / 1.6884	18.2796	0.0905	2.2700e-003	21.2175
Total		**957.9059**	**6.9501**	**0.1709**	**1,182.5704**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	202.876 / 0	906.0473	6.6455	0.1633	1,120.8418
Medical Office Building	6.53252 / 1.24429	33.5790	0.2142	5.3000e-003	40.5111
Strip Mall	2.75476 / 1.6884	18.2796	0.0905	2.2700e-003	21.2175
Total		**957.9059**	**6.9501**	**0.1709**	**1,182.5704**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	342.8822	20.2638	0.0000	849.4761
Unmitigated	342.8822	20.2638	0.0000	849.4761

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	1087.85	220.8237	13.0503	0.0000	547.0814
Medical Office Building	562.25	114.1317	6.7450	0.0000	282.7564
Strip Mall	39.05	7.9268	0.4685	0.0000	19.6383
Total		**342.8822**	**20.2638**	**0.0000**	**849.4761**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	1087.85	220.8237	13.0503	0.0000	547.0814
Medical Office Building	562.25	114.1317	6.7450	0.0000	282.7564
Strip Mall	39.05	7.9268	0.4685	0.0000	19.6383
Total		**342.8822**	**20.2638**	**0.0000**	**849.4761**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Proposed 2020 Operational Run

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	52.06	1000sqft	4.00	52,065.00	0
Industrial Park	877.30	1000sqft	40.28	877,298.00	0
Strip Mall	37.19	1000sqft	2.83	37,189.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per land use plan

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Trips and VMT - Operations only

On-road Fugitive Dust - Operations only

Grading - Operations only

Architectural Coating - Operations

Vehicle Trips - ITE 10th Generation

Energy Use - 2019 Title 24 Standards

Fleet Mix - Only cars and trucks present on site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	483,276.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,449,828.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	5.61	3.92

tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	4.58	3.20
tblEnergyUse	T24NG	3.47	2.43
tblEnergyUse	T24NG	3.47	2.43
tblEnergyUse	T24NG	1.92	1.34
tblFleetMix	HHD	0.07	0.07
tblFleetMix	HHD	0.07	0.07
tblFleetMix	HHD	0.07	0.07
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.3390e-003	7.0000e-003
tblFleetMix	LHD2	5.3390e-003	7.0000e-003
tblFleetMix	LHD2	5.3390e-003	7.0000e-003
tblFleetMix	MCY	4.6290e-003	0.00
tblFleetMix	MCY	4.6290e-003	0.00
tblFleetMix	MCY	4.6290e-003	0.00

tblFleetMix	MDV	0.12	0.12
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	1.1200e-003	0.00
tblFleetMix	MH	1.1200e-003	0.00
tblFleetMix	MH	1.1200e-003	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.3650e-003	0.00
tblFleetMix	OBUS	1.3650e-003	0.00
tblFleetMix	OBUS	1.3650e-003	0.00
tblFleetMix	SBUS	9.5900e-004	0.00
tblFleetMix	SBUS	9.5900e-004	0.00
tblFleetMix	SBUS	9.5900e-004	0.00
tblFleetMix	UBUS	1.2130e-003	0.00
tblFleetMix	UBUS	1.2130e-003	0.00
tblFleetMix	UBUS	1.2130e-003	0.00
tblGrading	MeanVehicleSpeed	7.10	0.00
tblGrading	MeanVehicleSpeed	7.10	0.00
tblLandUse	LandUseSquareFeet	52,060.00	52,065.00
tblLandUse	LandUseSquareFeet	877,300.00	877,298.00
tblLandUse	LandUseSquareFeet	37,190.00	37,189.00
tblLandUse	LotAcreage	1.20	4.00
tblLandUse	LotAcreage	20.14	40.28
tblLandUse	LotAcreage	0.85	2.83
tblOffRoadEquipment	UsageHours	6.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblTripsAndVMT	VendorTripNumber	158.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00

tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	397.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	79.00	0.00
tblVehicleEF	HHD	1.50	0.03
tblVehicleEF	HHD	0.03	0.09
tblVehicleEF	HHD	0.11	4.6629e-007
tblVehicleEF	HHD	3.46	5.53
tblVehicleEF	HHD	0.46	0.76
tblVehicleEF	HHD	1.51	9.4864e-003
tblVehicleEF	HHD	6,555.40	1,119.65
tblVehicleEF	HHD	1,477.34	1,531.38
tblVehicleEF	HHD	4.68	0.09
tblVehicleEF	HHD	27.96	6.29
tblVehicleEF	HHD	3.07	4.45
tblVehicleEF	HHD	20.33	1.79
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	4.0000e-005	2.1559e-006
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.8586e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.9942e-006
tblVehicleEF	HHD	9.2000e-005	8.7614e-006

tblVehicleEF	HHD	2.7720e-003	3.5026e-004
tblVehicleEF	HHD	0.90	0.45
tblVehicleEF	HHD	5.1000e-005	5.9309e-006
tblVehicleEF	HHD	0.07	0.14
tblVehicleEF	HHD	1.9500e-004	1.7747e-003
tblVehicleEF	HHD	0.05	2.4505e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	8.9814e-007
tblVehicleEF	HHD	9.2000e-005	8.7614e-006
tblVehicleEF	HHD	2.7720e-003	3.5026e-004
tblVehicleEF	HHD	1.03	0.52
tblVehicleEF	HHD	5.1000e-005	5.9309e-006
tblVehicleEF	HHD	0.11	0.25
tblVehicleEF	HHD	1.9500e-004	1.7747e-003
tblVehicleEF	HHD	0.06	2.6830e-006
tblVehicleEF	HHD	1.42	0.03
tblVehicleEF	HHD	0.03	0.09
tblVehicleEF	HHD	0.11	4.4667e-007
tblVehicleEF	HHD	2.53	5.37
tblVehicleEF	HHD	0.46	0.76
tblVehicleEF	HHD	1.43	9.0047e-003
tblVehicleEF	HHD	6,940.41	1,120.47
tblVehicleEF	HHD	1,477.34	1,531.38
tblVehicleEF	HHD	4.68	0.09
tblVehicleEF	HHD	28.85	6.16
tblVehicleEF	HHD	2.90	4.21

tblVehicleEF	HHD	20.32	1.79
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	4.0000e-005	2.1559e-006
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.8586e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.9942e-006
tblVehicleEF	HHD	1.7900e-004	1.4432e-005
tblVehicleEF	HHD	3.1980e-003	3.6287e-004
tblVehicleEF	HHD	0.84	0.47
tblVehicleEF	HHD	1.0100e-004	9.8546e-006
tblVehicleEF	HHD	0.07	0.14
tblVehicleEF	HHD	2.0100e-004	1.7655e-003
tblVehicleEF	HHD	0.05	2.3541e-006
tblVehicleEF	HHD	0.07	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.1000e-005	8.9058e-007
tblVehicleEF	HHD	1.7900e-004	1.4432e-005
tblVehicleEF	HHD	3.1980e-003	3.6287e-004
tblVehicleEF	HHD	0.97	0.54
tblVehicleEF	HHD	1.0100e-004	9.8546e-006
tblVehicleEF	HHD	0.11	0.25
tblVehicleEF	HHD	2.0100e-004	1.7655e-003

tblVehicleEF	HHD	0.05	2.5774e-006
tblVehicleEF	HHD	1.62	0.02
tblVehicleEF	HHD	0.03	6.4690e-003
tblVehicleEF	HHD	0.11	4.6976e-007
tblVehicleEF	HHD	4.76	5.65
tblVehicleEF	HHD	0.46	0.56
tblVehicleEF	HHD	1.51	9.5464e-003
tblVehicleEF	HHD	6,023.73	1,099.62
tblVehicleEF	HHD	1,477.34	1,476.92
tblVehicleEF	HHD	4.68	0.09
tblVehicleEF	HHD	26.74	6.35
tblVehicleEF	HHD	3.05	4.31
tblVehicleEF	HHD	20.33	1.79
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	4.0000e-005	2.1559e-006
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.7195e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.9942e-006
tblVehicleEF	HHD	7.4000e-005	9.2695e-006
tblVehicleEF	HHD	2.9910e-003	4.0976e-004
tblVehicleEF	HHD	0.96	0.43
tblVehicleEF	HHD	4.5000e-005	6.0706e-006

tblVehicleEF	HHD	0.07	0.14
tblVehicleEF	HHD	2.0800e-004	1.8772e-003
tblVehicleEF	HHD	0.05	2.4672e-006
tblVehicleEF	HHD	0.06	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	8.9908e-007
tblVehicleEF	HHD	7.4000e-005	9.2695e-006
tblVehicleEF	HHD	2.9910e-003	4.0976e-004
tblVehicleEF	HHD	1.11	0.49
tblVehicleEF	HHD	4.5000e-005	6.0706e-006
tblVehicleEF	HHD	0.11	0.16
tblVehicleEF	HHD	2.0800e-004	1.8772e-003
tblVehicleEF	HHD	0.06	2.7013e-006
tblVehicleEF	LDA	4.4730e-003	3.6439e-003
tblVehicleEF	LDA	6.2970e-003	0.06
tblVehicleEF	LDA	0.62	0.82
tblVehicleEF	LDA	1.29	2.22
tblVehicleEF	LDA	266.01	281.79
tblVehicleEF	LDA	60.91	56.36
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.09	0.21
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003
tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003

tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.27
tblVehicleEF	LDA	2.6640e-003	2.7877e-003
tblVehicleEF	LDA	6.3100e-004	5.5773e-004
tblVehicleEF	LDA	0.06	0.06
tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.09	0.29
tblVehicleEF	LDA	5.0810e-003	3.9168e-003
tblVehicleEF	LDA	5.4700e-003	0.05
tblVehicleEF	LDA	0.76	0.91
tblVehicleEF	LDA	1.14	1.89
tblVehicleEF	LDA	289.77	295.95
tblVehicleEF	LDA	60.91	55.74
tblVehicleEF	LDA	0.05	0.04
tblVehicleEF	LDA	0.08	0.19
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003

tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	0.07	0.24
tblVehicleEF	LDA	2.9040e-003	2.9279e-003
tblVehicleEF	LDA	6.2800e-004	5.5159e-004
tblVehicleEF	LDA	0.11	0.10
tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	0.08	0.26
tblVehicleEF	LDA	4.3110e-003	3.5693e-003
tblVehicleEF	LDA	6.4670e-003	0.06
tblVehicleEF	LDA	0.58	0.79
tblVehicleEF	LDA	1.32	2.28
tblVehicleEF	LDA	259.39	277.36
tblVehicleEF	LDA	60.91	56.47
tblVehicleEF	LDA	0.05	0.05
tblVehicleEF	LDA	0.09	0.21

tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	1.6430e-003	1.9039e-003
tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.26
tblVehicleEF	LDA	0.09	0.27
tblVehicleEF	LDA	2.5980e-003	2.7439e-003
tblVehicleEF	LDA	6.3200e-004	5.5885e-004
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.26
tblVehicleEF	LDA	0.10	0.30
tblVehicleEF	LDT1	0.01	9.4839e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.62	1.75
tblVehicleEF	LDT1	3.78	2.46
tblVehicleEF	LDT1	325.17	331.55

tblVehicleEF	LDT1	74.01	67.29
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.27	0.45
tblVehicleEF	LDT1	3.2720e-003	3.2808e-003
tblVehicleEF	LDT1	8.0700e-004	6.6594e-004
tblVehicleEF	LDT1	0.22	0.16
tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.30	0.49
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	0.02	0.08

tblVehicleEF	LDT1	1.95	1.93
tblVehicleEF	LDT1	3.33	2.09
tblVehicleEF	LDT1	353.10	345.86
tblVehicleEF	LDT1	74.01	66.53
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.22	0.29
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.22	0.77
tblVehicleEF	LDT1	0.23	0.39
tblVehicleEF	LDT1	3.5570e-003	3.4225e-003
tblVehicleEF	LDT1	7.9900e-004	6.5837e-004
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.22	0.77

tblVehicleEF	LDT1	0.26	0.43
tblVehicleEF	LDT1	0.01	9.3109e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.52	1.70
tblVehicleEF	LDT1	3.84	2.53
tblVehicleEF	LDT1	316.88	326.99
tblVehicleEF	LDT1	74.01	67.43
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.28	0.46
tblVehicleEF	LDT1	3.1880e-003	3.2357e-003
tblVehicleEF	LDT1	8.0800e-004	6.6731e-004
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28

tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.30	0.50
tblVehicleEF	LDT2	6.1110e-003	5.7338e-003
tblVehicleEF	LDT2	8.2750e-003	0.08
tblVehicleEF	LDT2	0.82	1.16
tblVehicleEF	LDT2	1.71	2.85
tblVehicleEF	LDT2	366.61	361.86
tblVehicleEF	LDT2	83.75	73.87
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	3.6730e-003	3.5801e-003

tblVehicleEF	LDT2	8.6600e-004	7.3103e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.04
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.12	0.41
tblVehicleEF	LDT2	6.9350e-003	6.1404e-003
tblVehicleEF	LDT2	7.1890e-003	0.07
tblVehicleEF	LDT2	1.00	1.29
tblVehicleEF	LDT2	1.51	2.43
tblVehicleEF	LDT2	398.95	376.16
tblVehicleEF	LDT2	83.75	73.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.32
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.02	0.03

tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.10	0.33
tblVehicleEF	LDT2	3.9980e-003	3.7215e-003
tblVehicleEF	LDT2	8.6300e-004	7.2299e-004
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.11	0.36
tblVehicleEF	LDT2	5.8750e-003	5.6213e-003
tblVehicleEF	LDT2	8.5090e-003	0.08
tblVehicleEF	LDT2	0.76	1.12
tblVehicleEF	LDT2	1.74	2.93
tblVehicleEF	LDT2	356.95	357.31
tblVehicleEF	LDT2	83.75	74.02
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.06	0.08

tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.11	0.38
tblVehicleEF	LDT2	3.5750e-003	3.5351e-003
tblVehicleEF	LDT2	8.6700e-004	7.3252e-004
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.13	0.42
tblVehicleEF	LHD1	5.6490e-003	5.8817e-003
tblVehicleEF	LHD1	0.01	6.7552e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.81
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.81
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.35	0.99
tblVehicleEF	LHD1	1.02	0.36
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08

tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2675e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8948e-003
tblVehicleEF	LHD1	0.01	6.8828e-003

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.05	0.82
tblVehicleEF	LHD1	2.42	1.14
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.92
tblVehicleEF	LHD1	30.90	12.71
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.21	0.93
tblVehicleEF	LHD1	0.98	0.35
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.27	0.09

tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6820e-003
tblVehicleEF	LHD1	3.5500e-004	1.2579e-004
tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.29	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8802e-003
tblVehicleEF	LHD1	0.01	6.7279e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.80
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.82
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.32	0.98
tblVehicleEF	LHD1	1.01	0.37
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004

tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2686e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD2	3.8330e-003	4.1865e-003
tblVehicleEF	LHD2	5.1000e-003	4.7023e-003
tblVehicleEF	LHD2	9.1950e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55

tblVehicleEF	LHD2	1.23	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.98
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.94	1.23
tblVehicleEF	LHD2	0.56	0.25
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6672e-003
tblVehicleEF	LHD2	2.6200e-004	9.8743e-005

tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1958e-003
tblVehicleEF	LHD2	5.1600e-003	4.7587e-003
tblVehicleEF	LHD2	8.8690e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.18	0.78
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.42
tblVehicleEF	LHD2	23.90	9.91
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.83	1.16
tblVehicleEF	LHD2	0.54	0.24
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6673e-003
tblVehicleEF	LHD2	2.6100e-004	9.8090e-005
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.13	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1853e-003
tblVehicleEF	LHD2	5.0860e-003	4.6903e-003
tblVehicleEF	LHD2	9.2490e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.24	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41

tblVehicleEF	LHD2	23.90	9.99
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tblVehicleEF	LHD2	1.92	1.21
tblVehicleEF	LHD2	0.56	0.26
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6671e-003
tblVehicleEF	LHD2	2.6200e-004	9.8819e-005
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.02	0.03

tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.93	19.66
tblVehicleEF	MCY	9.66	8.48
tblVehicleEF	MCY	164.88	218.98
tblVehicleEF	MCY	46.70	60.53
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.17	2.53
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.09	1.84
tblVehicleEF	MCY	2.0370e-003	2.1670e-003

tblVehicleEF	MCY	6.8600e-004	5.9901e-004
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.66	3.12
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.27	2.00
tblVehicleEF	MCY	0.41	0.36
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	20.66	19.00
tblVehicleEF	MCY	9.11	7.76
tblVehicleEF	MCY	164.88	217.72
tblVehicleEF	MCY	46.70	58.69
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.15	2.46

tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	1.87	1.63
tblVehicleEF	MCY	2.0470e-003	2.1545e-003
tblVehicleEF	MCY	6.7100e-004	5.8079e-004
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.63	3.04
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.43	19.68
tblVehicleEF	MCY	9.60	8.55
tblVehicleEF	MCY	164.88	219.04
tblVehicleEF	MCY	46.70	60.74
tblVehicleEF	MCY	1.13	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.60	1.29

tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.17	2.54
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.10	1.87
tblVehicleEF	MCY	2.0290e-003	2.1676e-003
tblVehicleEF	MCY	6.8600e-004	6.0106e-004
tblVehicleEF	MCY	1.60	1.29
tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.66	3.13
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.28	2.03
tblVehicleEF	MDV	0.01	8.1275e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.58	1.49
tblVehicleEF	MDV	3.47	3.45
tblVehicleEF	MDV	501.88	442.94
tblVehicleEF	MDV	112.78	90.12
tblVehicleEF	MDV	0.19	0.15
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003

tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.27	0.49
tblVehicleEF	MDV	5.0330e-003	4.3797e-003
tblVehicleEF	MDV	1.1890e-003	8.9179e-004
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.30	0.53
tblVehicleEF	MDV	0.02	8.6153e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.91	1.63
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tblVehicleEF	MDV	544.80	458.44
tblVehicleEF	MDV	112.78	89.12
tblVehicleEF	MDV	0.18	0.13
tblVehicleEF	MDV	0.33	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003

tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.24	0.43
tblVehicleEF	MDV	5.4670e-003	4.5332e-003
tblVehicleEF	MDV	1.1820e-003	8.8191e-004
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.26	0.47
tblVehicleEF	MDV	0.01	7.9891e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.48	1.45
tblVehicleEF	MDV	3.54	3.54
tblVehicleEF	MDV	489.12	438.16
tblVehicleEF	MDV	112.78	90.29
tblVehicleEF	MDV	0.18	0.14
tblVehicleEF	MDV	0.34	0.42

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.28	0.50
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tblVehicleEF	MDV	1.1910e-003	8.9352e-004
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tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.31	0.54
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tblVehicleEF	MH	3.14	0.32
tblVehicleEF	MH	6.37	0.00
tblVehicleEF	MH	1,005.77	983.97

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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9900e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
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tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00

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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	9.9910e-003	9.3020e-003
tblVehicleEF	MH	6.9300e-004	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00

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tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00
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tblVehicleEF	MH	0.03	0.00
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tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00

tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.15	0.08
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.6080e-003	2.1060e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004

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tblVehicleEF	MHD	0.03	0.02
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tblVehicleEF	MHD	0.02	0.14
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tblVehicleEF	MHD	6.6700e-004	1.1717e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004
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tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
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tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	MHD	0.02	4.0641e-003
tblVehicleEF	MHD	6.1890e-003	8.3939e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.0420e-003	1.7774e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
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tblVehicleEF	MHD	0.01	0.01
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tblVehicleEF	MHD	0.02	0.13

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tblVehicleEF	MHD	11.66	1.02
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	4.3910e-003	2.5596e-003
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tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.4650e-003	7.1674e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004

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tblVehicleEF	MHD	7.2400e-004	4.1297e-004
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tblVehicleEF	OBUS	1.35	2.43
tblVehicleEF	OBUS	2.21	0.60
tblVehicleEF	OBUS	1.7700e-004	3.1503e-003
tblVehicleEF	OBUS	0.13	0.13

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
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tblVehicleEF	OBUS	1.6900e-004	3.0140e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
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tblVehicleEF	OBUS	0.04	0.07
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tblVehicleEF	OBUS	7.2400e-004	8.8498e-004
tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	2.2350e-003	1.9757e-003
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tblVehicleEF	OBUS	0.05	0.08
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tblVehicleEF	OBUS	1.4900e-004	2.6601e-003
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tblVehicleEF	OBUS	0.01	0.01
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tblVehicleEF	OBUS	1.4300e-004	2.5450e-003
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tblVehicleEF	OBUS	1.8320e-003	1.4406e-003
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tblVehicleEF	OBUS	0.39	0.12

tblVehicleEF	OBUS	7.5600e-004	8.9558e-004
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tblVehicleEF	OBUS	4.1760e-003	2.9545e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.8320e-003	1.4406e-003
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.25
tblVehicleEF	OBUS	0.43	0.13
tblVehicleEF	OBUS	0.01	9.1031e-003
tblVehicleEF	OBUS	9.4220e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.29	0.63
tblVehicleEF	OBUS	0.63	1.23
tblVehicleEF	OBUS	6.63	2.58
tblVehicleEF	OBUS	69.87	91.44
tblVehicleEF	OBUS	1,103.17	1,454.82
tblVehicleEF	OBUS	70.73	20.29
tblVehicleEF	OBUS	0.37	0.66
tblVehicleEF	OBUS	1.34	2.38
tblVehicleEF	OBUS	2.21	0.60
tblVehicleEF	OBUS	2.1500e-004	3.8273e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004

tblVehicleEF	OBUS	2.0600e-004	3.6617e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	1.9540e-003	2.0891e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.13
tblVehicleEF	OBUS	6.7900e-004	8.7034e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2400e-004	2.0080e-004
tblVehicleEF	OBUS	1.9540e-003	2.0891e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.45	0.14
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0558e-003
tblVehicleEF	SBUS	0.06	6.4940e-003
tblVehicleEF	SBUS	7.81	2.72
tblVehicleEF	SBUS	0.66	0.79

tblVehicleEF	SBUS	6.73	0.92
tblVehicleEF	SBUS	1,154.91	356.52
tblVehicleEF	SBUS	1,108.94	1,135.70
tblVehicleEF	SBUS	53.24	5.46
tblVehicleEF	SBUS	10.58	3.53
tblVehicleEF	SBUS	4.99	5.58
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	5.3126e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	5.0828e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.5410e-003	1.0878e-003
tblVehicleEF	SBUS	0.03	8.9941e-003
tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.01	3.4013e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.4900e-004	5.4047e-005

tblVehicleEF	SBUS	4.5410e-003	1.0878e-003
tblVehicleEF	SBUS	0.03	8.9941e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	0.04
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.1649e-003
tblVehicleEF	SBUS	0.05	5.7028e-003
tblVehicleEF	SBUS	7.67	2.68
tblVehicleEF	SBUS	0.67	0.80
tblVehicleEF	SBUS	4.88	0.73
tblVehicleEF	SBUS	1,207.92	366.39
tblVehicleEF	SBUS	1,108.94	1,135.72
tblVehicleEF	SBUS	53.24	5.15
tblVehicleEF	SBUS	10.92	3.62
tblVehicleEF	SBUS	4.69	5.26
tblVehicleEF	SBUS	12.56	0.70
tblVehicleEF	SBUS	0.01	4.4850e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	9.8070e-003	4.2910e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003

tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	0.93	0.32
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.31	0.03
tblVehicleEF	SBUS	0.01	3.4945e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.1800e-004	5.0916e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0312e-003
tblVehicleEF	SBUS	0.07	6.6366e-003
tblVehicleEF	SBUS	7.99	2.78
tblVehicleEF	SBUS	0.66	0.78
tblVehicleEF	SBUS	7.09	0.94
tblVehicleEF	SBUS	1,081.70	342.89
tblVehicleEF	SBUS	1,108.94	1,135.69

tblVehicleEF	SBUS	53.24	5.51
tblVehicleEF	SBUS	10.11	3.41
tblVehicleEF	SBUS	4.94	5.49
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	6.4556e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	6.1763e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.2726e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	5.4498e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	1.35	0.46

tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.42	0.04
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.35	38.44
tblVehicleEF	UBUS	16.43	0.97
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.92
tblVehicleEF	UBUS	5.46	1.54
tblVehicleEF	UBUS	12.53	0.12
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003

tblVehicleEF	UBUS	1.8570e-003	1.1798e-004
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.40	0.07
tblVehicleEF	UBUS	1.61	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.64	38.44
tblVehicleEF	UBUS	14.18	0.85
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.72
tblVehicleEF	UBUS	5.09	1.54
tblVehicleEF	UBUS	12.44	0.11
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	0.65	0.14

tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.17	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8170e-003	1.1596e-004
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	2.31	6.22
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.10	0.02
tblVehicleEF	UBUS	10.37	38.44
tblVehicleEF	UBUS	16.61	0.98
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.95
tblVehicleEF	UBUS	5.42	1.54
tblVehicleEF	UBUS	12.54	0.12
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.4530e-004

tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.29	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8600e-003	1.1829e-004
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.42	0.07
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	ST_TR	8.96	8.57
tblVehicleTrips	ST_TR	42.04	46.12
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	SU_TR	1.55	1.42
tblVehicleTrips	SU_TR	20.43	21.10
tblVehicleTrips	WD_TR	6.83	3.37
tblVehicleTrips	WD_TR	36.13	34.80
tblVehicleTrips	WD_TR	44.32	37.75

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	21.6019	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Energy	0.0685	0.6230	0.5233	3.7400e-003		0.0474	0.0474		0.0474	0.0474		747.5720	747.5720	0.0143	0.0137	752.0144
Mobile	17.0285	62.6604	163.7902	0.5317	41.9335	0.9562	42.8897	11.1993	0.9063	12.1055		54,936.1028	54,936.1028	2.1672		54,990.2817
Total	**38.6989**	**63.2843**	**164.4129**	**0.5354**	**41.9335**	**1.0039**	**42.9374**	**11.1993**	**0.9540**	**12.1533**		**55,683.8863**	**55,683.8863**	**2.1821**	**0.0137**	**55,742.5219**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	21.6019	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Energy	0.0685	0.6230	0.5233	3.7400e-003		0.0474	0.0474		0.0474	0.0474		747.5720	747.5720	0.0143	0.0137	752.0144
Mobile	17.0285	62.6604	163.7902	0.5317	41.9335	0.9562	42.8897	11.1993	0.9063	12.1055		54,936.1028	54,936.1028	2.1672		54,990.2817
Total	**38.6989**	**63.2843**	**164.4129**	**0.5354**	**41.9335**	**1.0039**	**42.9374**	**11.1993**	**0.9540**	**12.1533**		**55,683.8863**	**55,683.8863**	**2.1821**	**0.0137**	**55,742.5219**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/30/2019	9/6/2019	5	50	
2	Site Preparation	Site Preparation	9/7/2019	10/18/2019	5	30	
3	Grading	Grading	10/19/2019	1/31/2020	5	75	
4	Building Construction	Building Construction	2/1/2020	12/2/2022	5	740	
5	Paving	Paving	12/3/2022	2/17/2023	5	55	
6	Architectural Coating	Architectural Coating	2/18/2023	5/5/2023	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Demolition	Excavators	3	0.00	158	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Grading	Excavators	2	0.00	158	0.38
Grading	Graders	1	0.00	187	0.41
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Grading	Scrapers	2	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	0.00	97	0.37
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Building Construction	Welders	1	0.00	46	0.45
Paving	Pavers	2	0.00	130	0.42
Paving	Paving Equipment	2	0.00	132	0.36
Paving	Rollers	2	0.00	80	0.38
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.0285	62.6604	163.7902	0.5317	41.9335	0.9562	42.8897	11.1993	0.9063	12.1055		54,936.1028	54,936.1028	2.1672		54,990.2817
Unmitigated	17.0285	62.6604	163.7902	0.5317	41.9335	0.9562	42.8897	11.1993	0.9063	12.1055		54,936.1028	54,936.1028	2.1672		54,990.2817

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	2,956.50	2,228.34	1087.85	10,282,353	10,282,353
Medical Office Building	1,811.69	446.15	73.93	3,549,332	3,549,332
Strip Mall	1,403.92	1,715.20	784.71	2,587,400	2,587,400
Total	6,172.11	4,389.70	1,946.49	16,419,086	16,419,086

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000
Medical Office Building	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000
Strip Mall	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0685	0.6230	0.5233	3.7400e-003		0.0474	0.0474		0.0474	0.0474		747.5720	747.5720	0.0143	0.0137	752.0144
NaturalGas Unmitigated	0.0685	0.6230	0.5233	3.7400e-003		0.0474	0.0474		0.0474	0.0474		747.5720	747.5720	0.0143	0.0137	752.0144

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	5840.64	0.0630	0.5726	0.4810	3.4400e-003		0.0435	0.0435		0.0435	0.0435		687.1343	687.1343	0.0132	0.0126	691.2176
Medical Office Building	346.625	3.7400e-003	0.0340	0.0286	2.0000e-004		2.5800e-003	2.5800e-003		2.5800e-003	2.5800e-003		40.7794	40.7794	7.8000e-004	7.5000e-004	41.0217
Strip Mall	167.096	1.8000e-003	0.0164	0.0138	1.0000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		19.6583	19.6583	3.8000e-004	3.6000e-004	19.7752
Total		**0.0685**	**0.6230**	**0.5233**	**3.7400e-003**		**0.0474**	**0.0474**		**0.0474**	**0.0474**		**747.5720**	**747.5720**	**0.0143**	**0.0137**	**752.0144**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	5.84064	0.0630	0.5726	0.4810	3.4400e-003		0.0435	0.0435		0.0435	0.0435		687.1343	687.1343	0.0132	0.0126	691.2176
Medical Office Building	0.346625	3.7400e-003	0.0340	0.0286	2.0000e-004		2.5800e-003	2.5800e-003		2.5800e-003	2.5800e-003		40.7794	40.7794	7.8000e-004	7.5000e-004	41.0217
Strip Mall	0.167096	1.8000e-003	0.0164	0.0138	1.0000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		19.6583	19.6583	3.8000e-004	3.6000e-004	19.7752
Total		**0.0685**	**0.6230**	**0.5233**	**3.7400e-003**		**0.0474**	**0.0474**		**0.0474**	**0.0474**		**747.5720**	**747.5720**	**0.0143**	**0.0137**	**752.0144**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.6019	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Unmitigated	21.6019	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.4548					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.1377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3400e-003	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Total	**21.6019**	**9.2000e-004**	**0.0993**	**1.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**		**0.2115**	**0.2115**	**5.7000e-004**		**0.2257**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.4548					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.1377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3400e-003	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Total	**21.6019**	**9.2000e-004**	**0.0993**	**1.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**		**0.2115**	**0.2115**	**5.7000e-004**		**0.2257**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

12928 Sun Lakes Village North Specific Plan Amendment No. 6 Proposed 2020 Operational Run

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Medical Office Building	52.06	1000sqft	4.00	52,065.00	0
Industrial Park	877.30	1000sqft	40.28	877,298.00	0
Strip Mall	37.19	1000sqft	2.83	37,189.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per land use plan

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Off-road Equipment - Operations only

Trips and VMT - Operations only

On-road Fugitive Dust - Operations only

Grading - Operations only

Architectural Coating - Operations

Vehicle Trips - ITE 10th Generation

Energy Use - 2019 Title 24 Standards

Fleet Mix - Only cars and trucks present on site

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	483,276.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,449,828.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblArchitecturalCoating	EF_Residential_Exterior	50.00	0.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	3.66	2.56
tblEnergyUse	LightingElect	5.61	3.92

tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	3.07	2.15
tblEnergyUse	T24E	4.58	3.20
tblEnergyUse	T24NG	3.47	2.43
tblEnergyUse	T24NG	3.47	2.43
tblEnergyUse	T24NG	1.92	1.34
tblFleetMix	HHD	0.07	0.07
tblFleetMix	HHD	0.07	0.07
tblFleetMix	HHD	0.07	0.07
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDA	0.54	0.54
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD1	0.02	0.02
tblFleetMix	LHD2	5.3390e-003	7.0000e-003
tblFleetMix	LHD2	5.3390e-003	7.0000e-003
tblFleetMix	LHD2	5.3390e-003	7.0000e-003
tblFleetMix	MCY	4.6290e-003	0.00
tblFleetMix	MCY	4.6290e-003	0.00
tblFleetMix	MCY	4.6290e-003	0.00

tblFleetMix	MDV	0.12	0.12
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MDV	0.12	0.12
tblFleetMix	MH	1.1200e-003	0.00
tblFleetMix	MH	1.1200e-003	0.00
tblFleetMix	MH	1.1200e-003	0.00
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	MHD	0.02	0.02
tblFleetMix	OBUS	1.3650e-003	0.00
tblFleetMix	OBUS	1.3650e-003	0.00
tblFleetMix	OBUS	1.3650e-003	0.00
tblFleetMix	SBUS	9.5900e-004	0.00
tblFleetMix	SBUS	9.5900e-004	0.00
tblFleetMix	SBUS	9.5900e-004	0.00
tblFleetMix	UBUS	1.2130e-003	0.00
tblFleetMix	UBUS	1.2130e-003	0.00
tblFleetMix	UBUS	1.2130e-003	0.00
tblGrading	MeanVehicleSpeed	7.10	0.00
tblGrading	MeanVehicleSpeed	7.10	0.00
tblLandUse	LandUseSquareFeet	52,060.00	52,065.00
tblLandUse	LandUseSquareFeet	877,300.00	877,298.00
tblLandUse	LandUseSquareFeet	37,190.00	37,189.00
tblLandUse	LotAcreage	1.20	4.00
tblLandUse	LotAcreage	20.14	40.28
tblLandUse	LotAcreage	0.85	2.83
tblOffRoadEquipment	UsageHours	6.00	0.00

tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
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tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblOnRoadDust	MeanVehicleSpeed	40.00	0.00
tblTripsAndVMT	VendorTripNumber	158.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	0.00

tblTripsAndVMT	WorkerTripNumber	20.00	0.00
tblTripsAndVMT	WorkerTripNumber	397.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblTripsAndVMT	WorkerTripNumber	79.00	0.00
tblVehicleEF	HHD	1.50	0.03
tblVehicleEF	HHD	0.03	0.09
tblVehicleEF	HHD	0.11	4.6629e-007
tblVehicleEF	HHD	3.46	5.53
tblVehicleEF	HHD	0.46	0.76
tblVehicleEF	HHD	1.51	9.4864e-003
tblVehicleEF	HHD	6,555.40	1,119.65
tblVehicleEF	HHD	1,477.34	1,531.38
tblVehicleEF	HHD	4.68	0.09
tblVehicleEF	HHD	27.96	6.29
tblVehicleEF	HHD	3.07	4.45
tblVehicleEF	HHD	20.33	1.79
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	0.02	0.06
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tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.8586e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.9942e-006
tblVehicleEF	HHD	9.2000e-005	8.7614e-006

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tblVehicleEF	HHD	1.9500e-004	1.7747e-003
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tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	8.9814e-007
tblVehicleEF	HHD	9.2000e-005	8.7614e-006
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tblVehicleEF	HHD	0.03	0.09
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tblVehicleEF	HHD	0.02	0.06
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tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.8586e-003
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tblVehicleEF	HHD	2.0100e-004	1.7655e-003

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tblVehicleEF	HHD	0.03	6.4690e-003
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tblVehicleEF	HHD	1,477.34	1,476.92
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tblVehicleEF	HHD	26.74	6.35
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tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	4.0000e-005	2.1559e-006
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tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8710e-003	8.7195e-003
tblVehicleEF	HHD	0.02	0.06
tblVehicleEF	HHD	3.7000e-005	1.9942e-006
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tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	7.2000e-005	8.9908e-007
tblVehicleEF	HHD	7.4000e-005	9.2695e-006
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tblVehicleEF	HHD	0.06	2.7013e-006
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tblVehicleEF	LDA	2.2790e-003	2.0517e-003
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tblVehicleEF	LDA	2.0000e-003	2.0000e-003

tblVehicleEF	LDA	1.5150e-003	1.7542e-003
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tblVehicleEF	LDA	0.11	0.11
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.23
tblVehicleEF	LDA	0.08	0.27
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tblVehicleEF	LDA	0.04	0.06
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tblVehicleEF	LDA	0.13	0.12
tblVehicleEF	LDA	0.08	0.08
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.22
tblVehicleEF	LDA	0.08	0.26
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tblVehicleEF	LDA	0.09	0.21

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tblVehicleEF	LDA	2.2790e-003	2.0517e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.5150e-003	1.7542e-003
tblVehicleEF	LDA	2.0950e-003	1.8866e-003
tblVehicleEF	LDA	0.05	0.06
tblVehicleEF	LDA	0.12	0.12
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.04	0.26
tblVehicleEF	LDA	0.09	0.27
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tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.04	0.26
tblVehicleEF	LDA	0.10	0.30
tblVehicleEF	LDT1	0.01	9.4839e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.62	1.75
tblVehicleEF	LDT1	3.78	2.46
tblVehicleEF	LDT1	325.17	331.55

tblVehicleEF	LDT1	74.01	67.29
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
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tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.27	0.45
tblVehicleEF	LDT1	3.2720e-003	3.2808e-003
tblVehicleEF	LDT1	8.0700e-004	6.6594e-004
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tblVehicleEF	LDT1	0.37	0.24
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.22	0.83
tblVehicleEF	LDT1	0.30	0.49
tblVehicleEF	LDT1	0.02	0.01
tblVehicleEF	LDT1	0.02	0.08

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tblVehicleEF	LDT1	353.10	345.86
tblVehicleEF	LDT1	74.01	66.53
tblVehicleEF	LDT1	0.15	0.13
tblVehicleEF	LDT1	0.22	0.29
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.04	0.05
tblVehicleEF	LDT1	0.22	0.77
tblVehicleEF	LDT1	0.23	0.39
tblVehicleEF	LDT1	3.5570e-003	3.4225e-003
tblVehicleEF	LDT1	7.9900e-004	6.5837e-004
tblVehicleEF	LDT1	0.44	0.26
tblVehicleEF	LDT1	0.46	0.26
tblVehicleEF	LDT1	0.29	0.19
tblVehicleEF	LDT1	0.06	0.07
tblVehicleEF	LDT1	0.22	0.77

tblVehicleEF	LDT1	0.26	0.43
tblVehicleEF	LDT1	0.01	9.3109e-003
tblVehicleEF	LDT1	0.02	0.09
tblVehicleEF	LDT1	1.52	1.70
tblVehicleEF	LDT1	3.84	2.53
tblVehicleEF	LDT1	316.88	326.99
tblVehicleEF	LDT1	74.01	67.43
tblVehicleEF	LDT1	0.16	0.15
tblVehicleEF	LDT1	0.23	0.31
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	2.6810e-003	2.9968e-003
tblVehicleEF	LDT1	3.8960e-003	3.0637e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.4680e-003	2.7581e-003
tblVehicleEF	LDT1	3.5830e-003	2.8173e-003
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28
tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.28	0.46
tblVehicleEF	LDT1	3.1880e-003	3.2357e-003
tblVehicleEF	LDT1	8.0800e-004	6.6731e-004
tblVehicleEF	LDT1	0.19	0.16
tblVehicleEF	LDT1	0.41	0.28

tblVehicleEF	LDT1	0.13	0.12
tblVehicleEF	LDT1	0.05	0.06
tblVehicleEF	LDT1	0.25	0.98
tblVehicleEF	LDT1	0.30	0.50
tblVehicleEF	LDT2	6.1110e-003	5.7338e-003
tblVehicleEF	LDT2	8.2750e-003	0.08
tblVehicleEF	LDT2	0.82	1.16
tblVehicleEF	LDT2	1.71	2.85
tblVehicleEF	LDT2	366.61	361.86
tblVehicleEF	LDT2	83.75	73.87
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.11	0.37
tblVehicleEF	LDT2	3.6730e-003	3.5801e-003

tblVehicleEF	LDT2	8.6600e-004	7.3103e-004
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.13	0.14
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.02	0.04
tblVehicleEF	LDT2	0.07	0.44
tblVehicleEF	LDT2	0.12	0.41
tblVehicleEF	LDT2	6.9350e-003	6.1404e-003
tblVehicleEF	LDT2	7.1890e-003	0.07
tblVehicleEF	LDT2	1.00	1.29
tblVehicleEF	LDT2	1.51	2.43
tblVehicleEF	LDT2	398.95	376.16
tblVehicleEF	LDT2	83.75	73.06
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.15	0.32
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.02	0.03

tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.10	0.33
tblVehicleEF	LDT2	3.9980e-003	3.7215e-003
tblVehicleEF	LDT2	8.6300e-004	7.2299e-004
tblVehicleEF	LDT2	0.14	0.13
tblVehicleEF	LDT2	0.15	0.15
tblVehicleEF	LDT2	0.11	0.12
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.07	0.41
tblVehicleEF	LDT2	0.11	0.36
tblVehicleEF	LDT2	5.8750e-003	5.6213e-003
tblVehicleEF	LDT2	8.5090e-003	0.08
tblVehicleEF	LDT2	0.76	1.12
tblVehicleEF	LDT2	1.74	2.93
tblVehicleEF	LDT2	356.95	357.31
tblVehicleEF	LDT2	83.75	74.02
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.15	0.34
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	1.6030e-003	1.9687e-003
tblVehicleEF	LDT2	2.3200e-003	2.0527e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	1.4740e-003	1.8118e-003
tblVehicleEF	LDT2	2.1330e-003	1.8875e-003
tblVehicleEF	LDT2	0.06	0.08

tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.11	0.38
tblVehicleEF	LDT2	3.5750e-003	3.5351e-003
tblVehicleEF	LDT2	8.6700e-004	7.3252e-004
tblVehicleEF	LDT2	0.06	0.08
tblVehicleEF	LDT2	0.14	0.15
tblVehicleEF	LDT2	0.05	0.08
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.08	0.51
tblVehicleEF	LDT2	0.13	0.42
tblVehicleEF	LHD1	5.6490e-003	5.8817e-003
tblVehicleEF	LHD1	0.01	6.7552e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.81
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.81
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.35	0.99
tblVehicleEF	LHD1	1.02	0.36
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08

tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
tblVehicleEF	LHD1	8.5100e-004	2.8391e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2675e-004
tblVehicleEF	LHD1	3.9460e-003	2.8668e-003
tblVehicleEF	LHD1	0.10	0.09
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.9130e-003	1.6620e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.31	0.59
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD1	5.6490e-003	5.8948e-003
tblVehicleEF	LHD1	0.01	6.8828e-003

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.05	0.82
tblVehicleEF	LHD1	2.42	1.14
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.92
tblVehicleEF	LHD1	30.90	12.71
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.21	0.93
tblVehicleEF	LHD1	0.98	0.35
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
tblVehicleEF	LHD1	0.01	7.9104e-003
tblVehicleEF	LHD1	9.2500e-004	3.0835e-004
tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
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tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
tblVehicleEF	LHD1	0.12	0.09
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	3.6890e-003	2.4883e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.27	0.09

tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6820e-003
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tblVehicleEF	LHD1	7.3960e-003	4.3926e-003
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tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.31	0.58
tblVehicleEF	LHD1	0.29	0.10
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tblVehicleEF	LHD1	0.01	6.7279e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.15	0.19
tblVehicleEF	LHD1	1.03	0.80
tblVehicleEF	LHD1	2.54	1.20
tblVehicleEF	LHD1	9.27	9.09
tblVehicleEF	LHD1	612.92	683.90
tblVehicleEF	LHD1	30.90	12.82
tblVehicleEF	LHD1	0.09	0.06
tblVehicleEF	LHD1	2.32	0.98
tblVehicleEF	LHD1	1.01	0.37
tblVehicleEF	LHD1	9.6900e-004	7.3831e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.6122e-003
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tblVehicleEF	LHD1	9.2700e-004	7.0637e-004
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tblVehicleEF	LHD1	2.5280e-003	2.4030e-003
tblVehicleEF	LHD1	0.01	7.5385e-003
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tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.08	0.06
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.28	0.09
tblVehicleEF	LHD1	9.3000e-005	8.8350e-005
tblVehicleEF	LHD1	6.0140e-003	6.6818e-003
tblVehicleEF	LHD1	3.5800e-004	1.2686e-004
tblVehicleEF	LHD1	3.5540e-003	3.0437e-003
tblVehicleEF	LHD1	0.12	0.10
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7480e-003	1.6710e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.33	0.64
tblVehicleEF	LHD1	0.30	0.10
tblVehicleEF	LHD2	3.8330e-003	4.1865e-003
tblVehicleEF	LHD2	5.1000e-003	4.7023e-003
tblVehicleEF	LHD2	9.1950e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55

tblVehicleEF	LHD2	1.23	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41
tblVehicleEF	LHD2	23.90	9.98
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.94	1.23
tblVehicleEF	LHD2	0.56	0.25
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6672e-003
tblVehicleEF	LHD2	2.6200e-004	9.8743e-005

tblVehicleEF	LHD2	1.5990e-003	1.7535e-003
tblVehicleEF	LHD2	0.04	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.1500e-004	1.0288e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.38
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1958e-003
tblVehicleEF	LHD2	5.1600e-003	4.7587e-003
tblVehicleEF	LHD2	8.8690e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.18	0.78
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.42
tblVehicleEF	LHD2	23.90	9.91
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.83	1.16
tblVehicleEF	LHD2	0.54	0.24
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	4.1000e-004	1.7139e-004
tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003

tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6673e-003
tblVehicleEF	LHD2	2.6100e-004	9.8090e-005
tblVehicleEF	LHD2	3.0260e-003	2.6685e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5540e-003	1.5255e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.09	0.37
tblVehicleEF	LHD2	0.13	0.07
tblVehicleEF	LHD2	3.8330e-003	4.1853e-003
tblVehicleEF	LHD2	5.0860e-003	4.6903e-003
tblVehicleEF	LHD2	9.2490e-003	0.01
tblVehicleEF	LHD2	0.12	0.15
tblVehicleEF	LHD2	0.56	0.55
tblVehicleEF	LHD2	1.24	0.82
tblVehicleEF	LHD2	14.53	13.75
tblVehicleEF	LHD2	609.83	688.41

tblVehicleEF	LHD2	23.90	9.99
tblVehicleEF	LHD2	0.12	0.10
tblVehicleEF	LHD2	1.92	1.21
tblVehicleEF	LHD2	0.56	0.26
tblVehicleEF	LHD2	1.3510e-003	1.2196e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
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tblVehicleEF	LHD2	1.2930e-003	1.1669e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6930e-003	2.6175e-003
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tblVehicleEF	LHD2	3.7700e-004	1.5759e-004
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.06	0.06
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.12	0.06
tblVehicleEF	LHD2	1.4200e-004	1.3193e-004
tblVehicleEF	LHD2	5.9300e-003	6.6671e-003
tblVehicleEF	LHD2	2.6200e-004	9.8819e-005
tblVehicleEF	LHD2	1.2860e-003	1.8367e-003
tblVehicleEF	LHD2	0.04	0.07
tblVehicleEF	LHD2	0.02	0.03

tblVehicleEF	LHD2	6.9100e-004	1.0189e-003
tblVehicleEF	LHD2	0.07	0.07
tblVehicleEF	LHD2	0.10	0.42
tblVehicleEF	LHD2	0.14	0.07
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.93	19.66
tblVehicleEF	MCY	9.66	8.48
tblVehicleEF	MCY	164.88	218.98
tblVehicleEF	MCY	46.70	60.53
tblVehicleEF	MCY	1.13	1.13
tblVehicleEF	MCY	0.31	0.26
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.17	2.53
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.09	1.84
tblVehicleEF	MCY	2.0370e-003	2.1670e-003

tblVehicleEF	MCY	6.8600e-004	5.9901e-004
tblVehicleEF	MCY	1.68	1.17
tblVehicleEF	MCY	0.86	0.72
tblVehicleEF	MCY	0.93	0.71
tblVehicleEF	MCY	2.66	3.12
tblVehicleEF	MCY	0.58	2.13
tblVehicleEF	MCY	2.27	2.00
tblVehicleEF	MCY	0.41	0.36
tblVehicleEF	MCY	0.14	0.21
tblVehicleEF	MCY	20.66	19.00
tblVehicleEF	MCY	9.11	7.76
tblVehicleEF	MCY	164.88	217.72
tblVehicleEF	MCY	46.70	58.69
tblVehicleEF	MCY	0.98	0.99
tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.15	2.46

tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	1.87	1.63
tblVehicleEF	MCY	2.0470e-003	2.1545e-003
tblVehicleEF	MCY	6.7100e-004	5.8079e-004
tblVehicleEF	MCY	3.35	1.93
tblVehicleEF	MCY	1.25	0.82
tblVehicleEF	MCY	2.10	1.23
tblVehicleEF	MCY	2.63	3.04
tblVehicleEF	MCY	0.58	2.01
tblVehicleEF	MCY	2.03	1.77
tblVehicleEF	MCY	0.41	0.37
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	19.43	19.68
tblVehicleEF	MCY	9.60	8.55
tblVehicleEF	MCY	164.88	219.04
tblVehicleEF	MCY	46.70	60.74
tblVehicleEF	MCY	1.13	1.10
tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	1.7160e-003	2.1582e-003
tblVehicleEF	MCY	3.4600e-003	3.3391e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	1.6070e-003	2.0200e-003
tblVehicleEF	MCY	3.2650e-003	3.1505e-003
tblVehicleEF	MCY	1.60	1.29

tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.17	2.54
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.10	1.87
tblVehicleEF	MCY	2.0290e-003	2.1676e-003
tblVehicleEF	MCY	6.8600e-004	6.0106e-004
tblVehicleEF	MCY	1.60	1.29
tblVehicleEF	MCY	1.06	0.93
tblVehicleEF	MCY	0.75	0.70
tblVehicleEF	MCY	2.66	3.13
tblVehicleEF	MCY	0.66	2.43
tblVehicleEF	MCY	2.28	2.03
tblVehicleEF	MDV	0.01	8.1275e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.58	1.49
tblVehicleEF	MDV	3.47	3.45
tblVehicleEF	MDV	501.88	442.94
tblVehicleEF	MDV	112.78	90.12
tblVehicleEF	MDV	0.19	0.15
tblVehicleEF	MDV	0.34	0.42
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003

tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.27	0.49
tblVehicleEF	MDV	5.0330e-003	4.3797e-003
tblVehicleEF	MDV	1.1890e-003	8.9179e-004
tblVehicleEF	MDV	0.11	0.10
tblVehicleEF	MDV	0.21	0.16
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.11	0.47
tblVehicleEF	MDV	0.30	0.53
tblVehicleEF	MDV	0.02	8.6153e-003
tblVehicleEF	MDV	0.02	0.09
tblVehicleEF	MDV	1.91	1.63
tblVehicleEF	MDV	3.08	2.93
tblVehicleEF	MDV	544.80	458.44
tblVehicleEF	MDV	112.78	89.12
tblVehicleEF	MDV	0.18	0.13
tblVehicleEF	MDV	0.33	0.39
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003

tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.24	0.43
tblVehicleEF	MDV	5.4670e-003	4.5332e-003
tblVehicleEF	MDV	1.1820e-003	8.8191e-004
tblVehicleEF	MDV	0.22	0.15
tblVehicleEF	MDV	0.24	0.17
tblVehicleEF	MDV	0.17	0.14
tblVehicleEF	MDV	0.06	0.06
tblVehicleEF	MDV	0.11	0.44
tblVehicleEF	MDV	0.26	0.47
tblVehicleEF	MDV	0.01	7.9891e-003
tblVehicleEF	MDV	0.02	0.10
tblVehicleEF	MDV	1.48	1.45
tblVehicleEF	MDV	3.54	3.54
tblVehicleEF	MDV	489.12	438.16
tblVehicleEF	MDV	112.78	90.29
tblVehicleEF	MDV	0.18	0.14
tblVehicleEF	MDV	0.34	0.42

tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	1.7360e-003	2.1447e-003
tblVehicleEF	MDV	2.5110e-003	2.2597e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	1.6010e-003	1.9788e-003
tblVehicleEF	MDV	2.3110e-003	2.0799e-003
tblVehicleEF	MDV	0.09	0.09
tblVehicleEF	MDV	0.22	0.17
tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.28	0.50
tblVehicleEF	MDV	4.9040e-003	4.3324e-003
tblVehicleEF	MDV	1.1910e-003	8.9352e-004
tblVehicleEF	MDV	0.09	0.09
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tblVehicleEF	MDV	0.08	0.09
tblVehicleEF	MDV	0.05	0.05
tblVehicleEF	MDV	0.13	0.54
tblVehicleEF	MDV	0.31	0.54
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.14	0.32
tblVehicleEF	MH	6.37	0.00
tblVehicleEF	MH	1,005.77	983.97

tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.76	4.09
tblVehicleEF	MH	0.89	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9900e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.64	0.00
tblVehicleEF	MH	0.09	0.00
tblVehicleEF	MH	0.56	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00

tblVehicleEF	MH	3.24	0.32
tblVehicleEF	MH	5.95	0.00
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tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.63	3.87
tblVehicleEF	MH	0.86	0.00
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.37	0.00
tblVehicleEF	MH	9.9910e-003	9.3020e-003
tblVehicleEF	MH	6.9300e-004	0.00
tblVehicleEF	MH	3.01	0.00
tblVehicleEF	MH	0.10	0.00
tblVehicleEF	MH	1.11	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00

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tblVehicleEF	MH	0.03	3.4654e-003
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	3.12	0.32
tblVehicleEF	MH	6.40	0.00
tblVehicleEF	MH	1,005.77	983.97
tblVehicleEF	MH	58.82	0.00
tblVehicleEF	MH	1.74	4.02
tblVehicleEF	MH	0.89	0.00
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tblVehicleEF	MH	0.01	0.02
tblVehicleEF	MH	0.05	0.11
tblVehicleEF	MH	1.2480e-003	0.00
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2450e-003	4.0000e-003
tblVehicleEF	MH	0.04	0.10
tblVehicleEF	MH	1.1520e-003	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00
tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.11	0.07
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.39	0.00
tblVehicleEF	MH	9.9890e-003	9.3020e-003
tblVehicleEF	MH	7.0000e-004	0.00
tblVehicleEF	MH	1.67	0.00
tblVehicleEF	MH	0.11	0.00

tblVehicleEF	MH	0.55	0.00
tblVehicleEF	MH	0.15	0.08
tblVehicleEF	MH	0.03	0.00
tblVehicleEF	MH	0.42	0.00
tblVehicleEF	MHD	0.02	4.2934e-003
tblVehicleEF	MHD	6.1240e-003	8.3332e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.43	0.38
tblVehicleEF	MHD	0.47	0.75
tblVehicleEF	MHD	6.54	1.42
tblVehicleEF	MHD	156.54	67.47
tblVehicleEF	MHD	1,067.94	1,101.43
tblVehicleEF	MHD	55.18	11.84
tblVehicleEF	MHD	1.06	0.60
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tblVehicleEF	MHD	11.65	1.02
tblVehicleEF	MHD	3.7720e-003	2.2012e-003
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.6080e-003	2.1060e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004

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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.40	0.07
tblVehicleEF	MHD	1.5050e-003	6.4116e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6700e-004	1.1717e-004
tblVehicleEF	MHD	1.8750e-003	6.7885e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	9.0500e-004	4.1295e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.14
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	MHD	0.02	4.0641e-003
tblVehicleEF	MHD	6.1890e-003	8.3939e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.31	0.30
tblVehicleEF	MHD	0.47	0.76
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tblVehicleEF	MHD	1,067.94	1,101.45
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tblVehicleEF	MHD	11.62	1.02
tblVehicleEF	MHD	3.1790e-003	1.8578e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	3.0420e-003	1.7774e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
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tblVehicleEF	MHD	0.02	0.13
tblVehicleEF	MHD	0.38	0.06
tblVehicleEF	MHD	1.5920e-003	6.5574e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6100e-004	1.1597e-004
tblVehicleEF	MHD	3.6340e-003	1.0371e-003
tblVehicleEF	MHD	0.06	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	1.7950e-003	6.1744e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.13

tblVehicleEF	MHD	0.42	0.07
tblVehicleEF	MHD	0.02	4.6225e-003
tblVehicleEF	MHD	6.0850e-003	8.3163e-003
tblVehicleEF	MHD	0.06	0.01
tblVehicleEF	MHD	0.60	0.49
tblVehicleEF	MHD	0.47	0.75
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tblVehicleEF	MHD	143.73	65.36
tblVehicleEF	MHD	1,067.94	1,101.43
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tblVehicleEF	MHD	11.66	1.02
tblVehicleEF	MHD	4.5890e-003	2.6754e-003
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	0.06	0.08
tblVehicleEF	MHD	8.1800e-004	1.3381e-004
tblVehicleEF	MHD	4.3910e-003	2.5596e-003
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	0.05	0.07
tblVehicleEF	MHD	7.5200e-004	1.2303e-004
tblVehicleEF	MHD	1.4650e-003	7.1674e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004

tblVehicleEF	MHD	0.07	0.14
tblVehicleEF	MHD	0.02	0.15
tblVehicleEF	MHD	0.40	0.07
tblVehicleEF	MHD	1.3840e-003	6.2095e-004
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	6.6800e-004	1.1736e-004
tblVehicleEF	MHD	1.4650e-003	7.1674e-004
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	0.05	0.03
tblVehicleEF	MHD	7.2400e-004	4.1297e-004
tblVehicleEF	MHD	0.08	0.16
tblVehicleEF	MHD	0.02	0.15
tblVehicleEF	MHD	0.44	0.07
tblVehicleEF	OBUS	0.01	9.0789e-003
tblVehicleEF	OBUS	9.4560e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.28	0.58
tblVehicleEF	OBUS	0.63	1.23
tblVehicleEF	OBUS	6.57	2.56
tblVehicleEF	OBUS	74.57	92.99
tblVehicleEF	OBUS	1,103.17	1,454.83
tblVehicleEF	OBUS	70.73	20.25
tblVehicleEF	OBUS	0.39	0.66
tblVehicleEF	OBUS	1.35	2.43
tblVehicleEF	OBUS	2.21	0.60
tblVehicleEF	OBUS	1.7700e-004	3.1503e-003
tblVehicleEF	OBUS	0.13	0.13

tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004
tblVehicleEF	OBUS	1.6900e-004	3.0140e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	2.2350e-003	1.9757e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	9.4600e-004	9.6790e-004
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.26
tblVehicleEF	OBUS	0.41	0.12
tblVehicleEF	OBUS	7.2400e-004	8.8498e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2300e-004	2.0041e-004
tblVehicleEF	OBUS	2.2350e-003	1.9757e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	9.4600e-004	9.6790e-004
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.26
tblVehicleEF	OBUS	0.45	0.14
tblVehicleEF	OBUS	0.01	9.0761e-003
tblVehicleEF	OBUS	9.6420e-003	0.01

tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.55
tblVehicleEF	OBUS	0.65	1.25
tblVehicleEF	OBUS	6.15	2.42
tblVehicleEF	OBUS	77.97	94.12
tblVehicleEF	OBUS	1,103.17	1,454.86
tblVehicleEF	OBUS	70.73	20.01
tblVehicleEF	OBUS	0.40	0.67
tblVehicleEF	OBUS	1.26	2.28
tblVehicleEF	OBUS	2.17	0.59
tblVehicleEF	OBUS	1.4900e-004	2.6601e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004
tblVehicleEF	OBUS	1.4300e-004	2.5450e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	4.1760e-003	2.9545e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	1.8320e-003	1.4406e-003
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.25
tblVehicleEF	OBUS	0.39	0.12

tblVehicleEF	OBUS	7.5600e-004	8.9558e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.1600e-004	1.9799e-004
tblVehicleEF	OBUS	4.1760e-003	2.9545e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	1.8320e-003	1.4406e-003
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.25
tblVehicleEF	OBUS	0.43	0.13
tblVehicleEF	OBUS	0.01	9.1031e-003
tblVehicleEF	OBUS	9.4220e-003	0.01
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.29	0.63
tblVehicleEF	OBUS	0.63	1.23
tblVehicleEF	OBUS	6.63	2.58
tblVehicleEF	OBUS	69.87	91.44
tblVehicleEF	OBUS	1,103.17	1,454.82
tblVehicleEF	OBUS	70.73	20.29
tblVehicleEF	OBUS	0.37	0.66
tblVehicleEF	OBUS	1.34	2.38
tblVehicleEF	OBUS	2.21	0.60
tblVehicleEF	OBUS	2.1500e-004	3.8273e-003
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.1510e-003	0.05
tblVehicleEF	OBUS	8.2800e-004	2.0334e-004

tblVehicleEF	OBUS	2.0600e-004	3.6617e-003
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	6.8270e-003	0.05
tblVehicleEF	OBUS	7.6200e-004	1.8723e-004
tblVehicleEF	OBUS	1.9540e-003	2.0891e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004
tblVehicleEF	OBUS	0.04	0.14
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.42	0.13
tblVehicleEF	OBUS	6.7900e-004	8.7034e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	8.2400e-004	2.0080e-004
tblVehicleEF	OBUS	1.9540e-003	2.0891e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.08
tblVehicleEF	OBUS	8.7300e-004	9.7037e-004
tblVehicleEF	OBUS	0.06	0.17
tblVehicleEF	OBUS	0.05	0.28
tblVehicleEF	OBUS	0.45	0.14
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0558e-003
tblVehicleEF	SBUS	0.06	6.4940e-003
tblVehicleEF	SBUS	7.81	2.72
tblVehicleEF	SBUS	0.66	0.79

tblVehicleEF	SBUS	6.73	0.92
tblVehicleEF	SBUS	1,154.91	356.52
tblVehicleEF	SBUS	1,108.94	1,135.70
tblVehicleEF	SBUS	53.24	5.46
tblVehicleEF	SBUS	10.58	3.53
tblVehicleEF	SBUS	4.99	5.58
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	5.3126e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	5.0828e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.5410e-003	1.0878e-003
tblVehicleEF	SBUS	0.03	8.9941e-003
tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.01	3.4013e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.4900e-004	5.4047e-005

tblVehicleEF	SBUS	4.5410e-003	1.0878e-003
tblVehicleEF	SBUS	0.03	8.9941e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	2.0600e-003	5.3214e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	0.40	0.04
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.1649e-003
tblVehicleEF	SBUS	0.05	5.7028e-003
tblVehicleEF	SBUS	7.67	2.68
tblVehicleEF	SBUS	0.67	0.80
tblVehicleEF	SBUS	4.88	0.73
tblVehicleEF	SBUS	1,207.92	366.39
tblVehicleEF	SBUS	1,108.94	1,135.72
tblVehicleEF	SBUS	53.24	5.15
tblVehicleEF	SBUS	10.92	3.62
tblVehicleEF	SBUS	4.69	5.26
tblVehicleEF	SBUS	12.56	0.70
tblVehicleEF	SBUS	0.01	4.4850e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	9.8070e-003	4.2910e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003

tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	0.93	0.32
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.11	0.12
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.31	0.03
tblVehicleEF	SBUS	0.01	3.4945e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.1800e-004	5.0916e-005
tblVehicleEF	SBUS	8.2250e-003	1.6536e-003
tblVehicleEF	SBUS	0.03	9.1914e-003
tblVehicleEF	SBUS	1.35	0.46
tblVehicleEF	SBUS	3.8990e-003	8.1500e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.01	0.06
tblVehicleEF	SBUS	0.34	0.04
tblVehicleEF	SBUS	0.85	0.07
tblVehicleEF	SBUS	0.01	9.0312e-003
tblVehicleEF	SBUS	0.07	6.6366e-003
tblVehicleEF	SBUS	7.99	2.78
tblVehicleEF	SBUS	0.66	0.78
tblVehicleEF	SBUS	7.09	0.94
tblVehicleEF	SBUS	1,081.70	342.89
tblVehicleEF	SBUS	1,108.94	1,135.69

tblVehicleEF	SBUS	53.24	5.51
tblVehicleEF	SBUS	10.11	3.41
tblVehicleEF	SBUS	4.94	5.49
tblVehicleEF	SBUS	12.59	0.70
tblVehicleEF	SBUS	0.01	6.4556e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.03	0.04
tblVehicleEF	SBUS	4.4200e-004	4.8524e-005
tblVehicleEF	SBUS	0.01	6.1763e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.7000e-003	2.6797e-003
tblVehicleEF	SBUS	0.03	0.03
tblVehicleEF	SBUS	4.0600e-004	4.4616e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	0.94	0.32
tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.2726e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.5500e-004	5.4498e-005
tblVehicleEF	SBUS	4.1410e-003	1.1224e-003
tblVehicleEF	SBUS	0.03	9.8000e-003
tblVehicleEF	SBUS	1.35	0.46

tblVehicleEF	SBUS	1.9980e-003	5.3138e-004
tblVehicleEF	SBUS	0.13	0.14
tblVehicleEF	SBUS	0.02	0.08
tblVehicleEF	SBUS	0.42	0.04
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.35	38.44
tblVehicleEF	UBUS	16.43	0.97
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.92
tblVehicleEF	UBUS	5.46	1.54
tblVehicleEF	UBUS	12.53	0.12
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003

tblVehicleEF	UBUS	1.8570e-003	1.1798e-004
tblVehicleEF	UBUS	0.01	9.5872e-004
tblVehicleEF	UBUS	0.13	0.01
tblVehicleEF	UBUS	5.4970e-003	6.5436e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.07
tblVehicleEF	UBUS	1.40	0.07
tblVehicleEF	UBUS	1.61	6.04
tblVehicleEF	UBUS	0.09	0.01
tblVehicleEF	UBUS	10.64	38.44
tblVehicleEF	UBUS	14.18	0.85
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.72
tblVehicleEF	UBUS	5.09	1.54
tblVehicleEF	UBUS	12.44	0.11
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	0.65	0.14

tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.17	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8170e-003	1.1596e-004
tblVehicleEF	UBUS	0.02	1.4178e-003
tblVehicleEF	UBUS	0.17	0.01
tblVehicleEF	UBUS	0.01	9.4757e-004
tblVehicleEF	UBUS	2.31	6.22
tblVehicleEF	UBUS	0.03	0.06
tblVehicleEF	UBUS	1.28	0.06
tblVehicleEF	UBUS	1.60	6.04
tblVehicleEF	UBUS	0.10	0.02
tblVehicleEF	UBUS	10.37	38.44
tblVehicleEF	UBUS	16.61	0.98
tblVehicleEF	UBUS	1,836.48	1,950.83
tblVehicleEF	UBUS	155.92	11.95
tblVehicleEF	UBUS	5.42	1.54
tblVehicleEF	UBUS	12.54	0.12
tblVehicleEF	UBUS	0.50	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.06	3.7716e-003
tblVehicleEF	UBUS	1.6630e-003	5.1939e-005
tblVehicleEF	UBUS	0.21	0.03
tblVehicleEF	UBUS	3.0000e-003	7.6074e-003
tblVehicleEF	UBUS	0.06	3.6040e-003
tblVehicleEF	UBUS	1.5380e-003	4.7756e-005
tblVehicleEF	UBUS	0.01	9.4530e-004

tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	0.64	0.14
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.29	0.06
tblVehicleEF	UBUS	0.01	2.3968e-003
tblVehicleEF	UBUS	1.8600e-003	1.1829e-004
tblVehicleEF	UBUS	0.01	9.4530e-004
tblVehicleEF	UBUS	0.16	0.01
tblVehicleEF	UBUS	4.7660e-003	6.2920e-004
tblVehicleEF	UBUS	2.30	6.22
tblVehicleEF	UBUS	0.03	0.08
tblVehicleEF	UBUS	1.42	0.07
tblVehicleTrips	ST_TR	2.49	2.54
tblVehicleTrips	ST_TR	8.96	8.57
tblVehicleTrips	ST_TR	42.04	46.12
tblVehicleTrips	SU_TR	0.73	1.24
tblVehicleTrips	SU_TR	1.55	1.42
tblVehicleTrips	SU_TR	20.43	21.10
tblVehicleTrips	WD_TR	6.83	3.37
tblVehicleTrips	WD_TR	36.13	34.80
tblVehicleTrips	WD_TR	44.32	37.75

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	21.6019	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Energy	0.0685	0.6230	0.5233	3.7400e-003		0.0474	0.0474		0.0474	0.0474		747.5720	747.5720	0.0143	0.0137	752.0144
Mobile	17.2572	65.1327	152.9926	0.5120	41.9208	0.9570	42.8779	11.1947	0.9070	12.1017		52,468.1353	52,468.1353	1.5250		52,506.2610
Total	**38.9276**	**65.7566**	**153.6152**	**0.5157**	**41.9208**	**1.0047**	**42.9256**	**11.1947**	**0.9547**	**12.1494**		**53,215.9188**	**53,215.9188**	**1.5399**	**0.0137**	**53,258.5011**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	21.6019	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Energy	0.0685	0.6230	0.5233	3.7400e-003		0.0474	0.0474		0.0474	0.0474		747.5720	747.5720	0.0143	0.0137	752.0144
Mobile	17.2572	65.1327	152.9926	0.5120	41.9208	0.9570	42.8779	11.1947	0.9070	12.1017		52,468.1353	52,468.1353	1.5250		52,506.2610
Total	**38.9276**	**65.7566**	**153.6152**	**0.5157**	**41.9208**	**1.0047**	**42.9256**	**11.1947**	**0.9547**	**12.1494**		**53,215.9188**	**53,215.9188**	**1.5399**	**0.0137**	**53,258.5011**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/30/2019	9/6/2019	5	50	
2	Site Preparation	Site Preparation	9/7/2019	10/18/2019	5	30	
3	Grading	Grading	10/19/2019	1/31/2020	5	75	
4	Building Construction	Building Construction	2/1/2020	12/2/2022	5	740	
5	Paving	Paving	12/3/2022	2/17/2023	5	55	
6	Architectural Coating	Architectural Coating	2/18/2023	5/5/2023	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	0.00	81	0.73
Demolition	Excavators	3	0.00	158	0.38
Demolition	Rubber Tired Dozers	2	0.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	0.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	0.00	97	0.37
Grading	Excavators	2	0.00	158	0.38
Grading	Graders	1	0.00	187	0.41
Grading	Rubber Tired Dozers	1	0.00	247	0.40
Grading	Scrapers	2	0.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	0.00	97	0.37
Building Construction	Cranes	1	0.00	231	0.29
Building Construction	Forklifts	3	0.00	89	0.20
Building Construction	Generator Sets	1	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	0.00	97	0.37
Building Construction	Welders	1	0.00	46	0.45
Paving	Pavers	2	0.00	130	0.42
Paving	Paving Equipment	2	0.00	132	0.36
Paving	Rollers	2	0.00	80	0.38
Architectural Coating	Air Compressors	1	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.2572	65.1327	152.9926	0.5120	41.9208	0.9570	42.8779	11.1947	0.9070	12.1017		52,468.1353	52,468.1353	1.5250		52,506.2610
Unmitigated	17.2572	65.1327	152.9926	0.5120	41.9208	0.9570	42.8779	11.1947	0.9070	12.1017		52,468.1353	52,468.1353	1.5250		52,506.2610

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	2,956.50	2,228.34	1087.85	10,282,353	10,282,353
Medical Office Building	1,811.69	446.15	73.93	3,549,332	3,549,332
Strip Mall	1,403.92	1,715.20	784.71	2,587,400	2,587,400
Total	6,172.11	4,389.70	1,946.49	16,419,086	16,419,086

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Medical Office Building	16.60	8.40	6.90	29.60	51.40	19.00	60	30	10
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000
Medical Office Building	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000
Strip Mall	0.539000	0.040000	0.185000	0.123000	0.018000	0.007000	0.018000	0.070000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0685	0.6230	0.5233	3.7400e-003		0.0474	0.0474		0.0474	0.0474		747.5720	747.5720	0.0143	0.0137	752.0144
NaturalGas Unmitigated	0.0685	0.6230	0.5233	3.7400e-003		0.0474	0.0474		0.0474	0.0474		747.5720	747.5720	0.0143	0.0137	752.0144

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	5840.64	0.0630	0.5726	0.4810	3.4400e-003		0.0435	0.0435		0.0435	0.0435		687.1343	687.1343	0.0132	0.0126	691.2176
Medical Office Building	346.625	3.7400e-003	0.0340	0.0286	2.0000e-004		2.5800e-003	2.5800e-003		2.5800e-003	2.5800e-003		40.7794	40.7794	7.8000e-004	7.5000e-004	41.0217
Strip Mall	167.096	1.8000e-003	0.0164	0.0138	1.0000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		19.6583	19.6583	3.8000e-004	3.6000e-004	19.7752
Total		**0.0685**	**0.6230**	**0.5233**	**3.7400e-003**		**0.0474**	**0.0474**		**0.0474**	**0.0474**		**747.5720**	**747.5720**	**0.0143**	**0.0137**	**752.0144**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	5.84064	0.0630	0.5726	0.4810	3.4400e-003		0.0435	0.0435		0.0435	0.0435		687.1343	687.1343	0.0132	0.0126	691.2176
Medical Office Building	0.346625	3.7400e-003	0.0340	0.0286	2.0000e-004		2.5800e-003	2.5800e-003		2.5800e-003	2.5800e-003		40.7794	40.7794	7.8000e-004	7.5000e-004	41.0217
Strip Mall	0.167096	1.8000e-003	0.0164	0.0138	1.0000e-004		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		19.6583	19.6583	3.8000e-004	3.6000e-004	19.7752
Total		**0.0685**	**0.6230**	**0.5233**	**3.7400e-003**		**0.0474**	**0.0474**		**0.0474**	**0.0474**		**747.5720**	**747.5720**	**0.0143**	**0.0137**	**752.0144**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.6019	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Unmitigated	21.6019	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.4548					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.1377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3400e-003	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Total	**21.6019**	**9.2000e-004**	**0.0993**	**1.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**		**0.2115**	**0.2115**	**5.7000e-004**		**0.2257**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.4548					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.1377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	9.3400e-003	9.2000e-004	0.0993	1.0000e-005		3.6000e-004	3.6000e-004		3.6000e-004	3.6000e-004		0.2115	0.2115	5.7000e-004		0.2257
Total	**21.6019**	**9.2000e-004**	**0.0993**	**1.0000e-005**		**3.6000e-004**	**3.6000e-004**		**3.6000e-004**	**3.6000e-004**		**0.2115**	**0.2115**	**5.7000e-004**		**0.2257**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Emissions from Alternatives

Car Dealership						
GHG						
	CO2	CH4	N2O	tCO2e		
Area	0.00	0.00	0.00	0.00		
Energy	634.73	0.02	0.01	637.53		
Mobile (Passenger Cars)	2,068.88	0.16	0.00	2,073.00		
Waste	116.31	6.87	0.00	288.16		
Water Usage	93.64	0.46	0.01	108.69		
Total	2,913.57	7.52	0.02	**3,107.39**		
Operational AQ Summer						
Area	3.35	0.00	0.02	0.00	0.00	0.00
Energy Source	0.12	1.12	0.94	0.01	0.09	0.09
Mobile (Passenger Car)	8.64	18.75	53.73	0.13	10.39	2.94
Total Max. Daily Emissions	**12.12**	**19.87**	**54.69**	**0.14**	**10.48**	**3.03**
Operational AQ Winter						
Area	3.35	0.00	0.02	0.00	0.00	0.00
Energy Source	0.12	1.12	0.94	0.01	0.09	0.09
Mobile (Passenger Car)	8.83	19.51	53.10	0.13	10.39	2.94
Total Max. Daily Emissions	**12.31**	**20.63**	**54.06**	**0.14**	**10.48**	**3.03**

Medical Office						
GHG						
	CO2	CH4	N2O	tCO2e		
Area	0.00	0.00	0.00	0.00		
Energy	313.20	0.01	0.00	313.83		
Mobile (Passenger Cars)	2,068.86	0.13	0.00	2,072.17		
Waste	147.98	8.75	0.00	366.62		
Water Usage	79.78	0.28	0.01	88.77		
Total	2,609.82	9.16	0.01	**2,841.39**		
Operational AQ Summer						
Area	1.51	0.00	0.01	0.00	0.00	0.00
Energy Source	0.00	0.04	0.04	0.00	0.00	0.00
Mobile (Passenger Car)	6.51	20.08	57.21	0.16	13.27	3.75
Total Max. Daily Emissions	**8.03**	**20.12**	**57.25**	**0.16**	**13.28**	**3.75**
Operational AQ Winter						
Area	1.51	0.00	0.01	0.00	0.00	0.00
Energy Source	0.00	0.04	0.04	0.00	0.00	0.00
Mobile (Passenger Car)	6.61	20.88	54.36	0.16	13.27	3.75
Total Max. Daily Emissions	**9.54**	**20.12**	**57.26**	**0.16**	**13.28**	**3.75**

High Turnover (Sit Down Restaurant)						
GHG						
	CO2	CH4	N2O	tCO2e		
Area	0.00	0.00	0.00	0.00		
Energy	559.87	0.02	0.01	562.53		
Mobile (Passenger Cars)	1,576.24	0.12	0.00	1,579.36		
Waste	50.73	3.00	0.00	125.68		
Water Usage	29.91	0.21	0.01	36.66		
Total	2,216.75	3.35	0.01	**2,304.24**		
Operational AQ Summer						
Area	0.47	0.00	0.00	0.00	0.00	0.00
Energy Source	0.16	1.41	1.19	0.01	0.11	0.11
Mobile (Passenger Car)	7.30	15.96	45.75	0.11	8.90	2.52
Total Max. Daily Emissions	**7.92**	**17.38**	**46.94**	**0.12**	**9.01**	**2.63**
Operational AQ Winter						
Area	0.47	0.00	0.00	0.00	0.00	0.00
Energy Source	0.16	1.41	1.19	0.01	0.11	0.11
Mobile (Passenger Car)	7.46	16.61	45.16	0.11	8.90	2.52
Total Max. Daily Emissions	**8.39**	**17.38**	**46.94**	**0.12**	**9.01**	**2.63**

Bank (With Drive Through)						
GHG						
	CO2	CH4	N2O	tCO2e		
Area	0.00	0.00	0.00	0.00		
Energy	21.16	0.00	0.00	21.25		
Mobile (Passenger Cars)	225.88	0.02	0.00	226.38		
Waste	0.95	0.06	0.00	2.35		
Water Usage	1.31	0.01	0.00	1.53		
Total	249.30	0.08	0.00	**251.50**		
Operational AQ Summer						
Area	0.11	0.00	0.00	0.00	0.00	0.00
Energy Source	0.00	0.04	0.03	0.00	0.00	0.00
Mobile (Passenger Car)	1.18	2.29	6.57	0.02	1.17	0.33
Total Max. Daily Emissions	**1.29**	**2.32**	**6.60**	**0.02**	**1.17**	**0.33**
Operational AQ Winter						
Area	0.11	0.00	0.00	0.00	0.00	0.00
Energy Source	0.00	0.04	0.03	0.00	0.00	0.00
Mobile (Passenger Car)	1.21	2.38	6.59	0.01	1.17	0.33
Total Max. Daily Emissions	**1.32**	**2.42**	**6.62**	**0.02**	**1.17**	**0.33**

General Office						
GHG						
	CO2	CH4	N2O	tCO2e		
Area	0.00	0.00	0.00	0.00		
Energy	12.84	0.00	0.00	12.89		
Mobile (Passenger Cars)	55.52	0.00	0.00	55.60		
Waste	0.94	0.06	0.00	2.34		
Water Usage	5.90	0.03	0.00	6.84		
Total	75.20	0.09	0.00	**77.67**		
Operational AQ Summer						
Area	0.11	0.00	0.00	0.00	0.00	0.00
Energy Source	0.00	0.00	0.00	0.00	0.00	0.00
Mobile (Passenger Car)	0.15	0.52	1.47	0.00	0.36	0.10
Total Max. Daily Emissions	**0.26**	**0.52**	**1.47**	**0.00**	**0.36**	**0.10**
Operational AQ Winter						
Area	0.11	0.00	0.00	0.00	0.00	0.00
Energy Source	0.00	0.00	0.00	0.00	0.00	0.00
Mobile (Passenger Car)	0.15	0.54	1.38	0.00	0.36	0.10
Total Max. Daily Emissions	**0.26**	**0.54**	**1.38**	**0.00**	**0.36**	**0.10**

L&L ENVIRONMENTAL, INC.
REGULATORY SERVICES
BIOLOGICAL & CULTURAL INVESTIGATIONS & MONITORING

HABITAT ASSESSMENT FOR APN 419-140-057
SUN LAKES BOULEVARD, CITY OF BANNING, RIVERSIDE COUNTY, CALIFORNIA

±47.02 Acre Property, ±47.02 Acres Surveyed

APN 419-140-057, City of Banning, Section 12, Township 3 South,
Range 1 West, USGS *Beaumont* 7.5' Topographic Quadrangle Map

Prepared For:
Ernest Perea
Romo Planning Group
9431 Haven Avenue, Suite 232
Rancho Cucamonga, CA 91730
951-823-0432
eperea@romoplanninggroup.com

Prepared By:

Leslie Irish, Principal	lirish@llenviroinc.com
Guy Bruyea, Field Biologist	gbruyea@llenviroinc.com
Carla Wakeman, Senior Biologist	cwakeman@llenviroinc.com
Jeffrey Sonnentag, Technical Editor	jsonnentag@llenviroinc.com

Report Summary:

The site is mostly non-native annual grassland with small areas of willow thickets and California buckwheat scrub. The willow habitat is insufficient to support riparian birds. There are ornamental trees along the western, southern, and part of the eastern boundary. Habitat to support narrow endemic plants Marvin's onion and many-stemmed dudleya is absent. Other special status plants are either absent, not expected to occur, or have low potential for occurrence. There are no vernal pools or evidence of ponding, but tire ruts are present. No fairy shrimp or fairy shrimp habitat was observed. There is potentially suitable habitat for burrowing owl, but no owls or owl sign were observed. A preconstruction clearance survey will be required. There is suitable habitat for nesting birds (including raptors) and a nesting bird clearance survey is recommended prior to the start of vegetation or ground disturbance during the nesting season. No special status wildlife species were observed and most are either absent, not expected to occur, or have low potential for occurrence. A few have moderate or low to moderate potential to occur, most of which are covered under the MSHCP and considered adequately conserved. MSHCP Riparian habitat and an area of state wetland may be present onsite. If so, a DBESP (under the MSHCP) and regulatory permitting would be required for impacts.

Surveys Conducted By: Guy Bruyea
Surveys Conducted On: January 27, 2020
Report Date: March 30, 2020

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MANAGEMENT SUMMARY

L&L Environmental, Inc. conducted a biological survey for Romo Planning Group on Assessor's Parcel Number (APN) 419-140-057, a ±47.02-acre proposed development site in the City of Banning, California. The purpose of this study was to examine the subject property for the presence/absence of biological resources and habitat for special status species.

The site is within the area covered by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) but is not within MSHCP Criteria Area. The MSHCP requires a habitat assessment to address riparian/riverine and vernal pool habitats, fairy shrimp, burrowing owl (*Athene cunicularia*), and narrow endemic plant species. The narrow endemic plant species requiring habitat assessments are Marvin's (Yucaipa) onion (*Allium marvinii*) and many-stemmed dudleya (*Dudleya multicaulis*).

The site is generally located south of Interstate Highway 10 and north of Sun Lakes Boulevard, between Highland Springs Avenue to the west and Northwood Avenue to the east, in Banning, Riverside County, California. Active railroad tracks are located just to the north of the site.

Most of the site is non-native annual grassland. There are small areas of willow thickets and California buckwheat scrub. There are no sensitive vegetation communities present. The site has been previously disturbed and remnants of that disturbance are present. Ongoing disturbance includes regular mowing and/or disking.

Based on the habitat and soils present and disturbances associated with current and past land use, habitat to support narrow endemic plants Marvin's onion and many-stemmed dudleya is absent. Other special status plants are either absent, not expected to occur, or have a low potential for occurrence onsite.

There are no vernal pools onsite and no evidence of ponding. Tire ruts are present, but soils onsite are sandy to coarse sandy loam and all areas were dry at the time of the survey. No fairy shrimp or potential fairy shrimp habitat was observed.

There is potentially suitable habitat for burrowing owl across much of the site and adjacent areas to the north between the site and I-10 freeway. No burrowing owl, occupied burrows, or burrowing owl sign (pellets, scat, feathers, etc.) were observed on or adjacent to the site during the survey. A preconstruction clearance survey is required within 30 days prior to the start of site disturbance.

There is suitable habitat for nesting birds, including raptors, onsite. A nesting bird clearance survey is recommended within three (3) days prior to the start of vegetation clearing or ground disturbance if it will begin during the nesting season (February 1 to September 15). If nesting birds are present, avoidance of nest sites is required and a buffer of 300 to 500 feet (or as determined by a biologist) is recommended until juvenile birds are no longer dependent on the nest and/or a biologist has verified that the nest is inactive.

No special status wildlife species were observed during the survey. Most special status wildlife known from the region are either absent, not expected to occur, or have low potential for occurrence onsite. A few species have moderate or low to moderate potential to occur, most of which are covered species under the MSHCP and considered adequately conserved. Riparian vegetation onsite is insufficient to provide habitat for riparian birds.

The Project site is surrounded by major roadways and residential developments and does not function as part of a wildlife corridor.

State jurisdictional waters subject to regulation under the California Fish and Game Code may be present. If present, any impacts would require regulatory permitting. MSHCP Riparian habitat may be present. If so, any impact would require the development and processing of a Determination of Biologically Equivalent or Superior Preservation (DBESP). A jurisdictional delineation survey and report is recommended in order to clarify presence or absence of jurisdictional features onsite.

1.0) INTRODUCTION

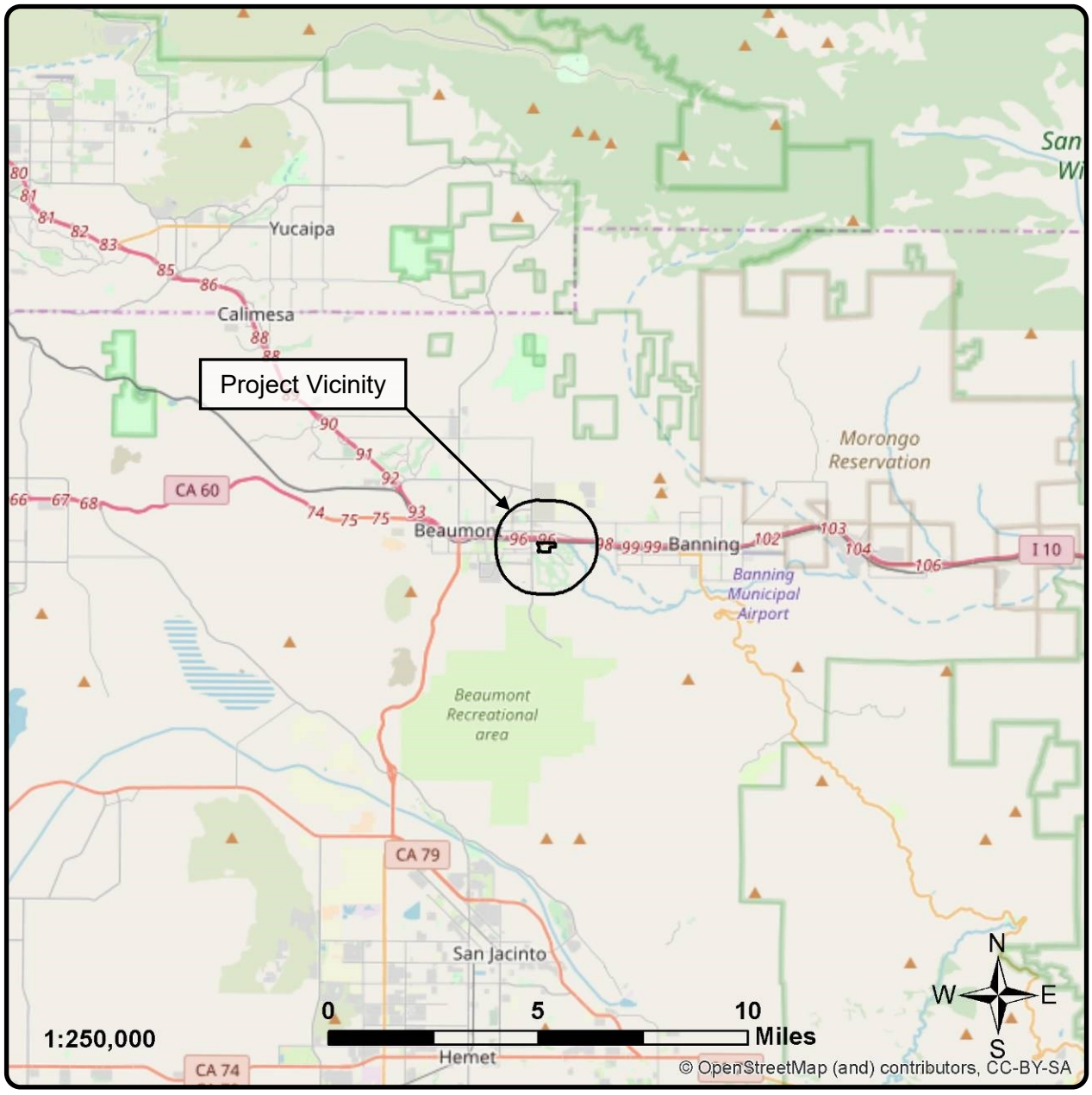
The following report was prepared by L&L Environmental, Inc. (L&L) for Romo Planning Group. It describes the results of biological surveys, including habitat assessments for burrowing owl and narrow endemic plants, on a proposed development site in the City of Banning in Riverside County, California. The Project site consists of Assessor's Parcel Number (APN) 419-140-057, totaling ±47.02 acres.

The assessment consisted of (1) a records search and literature review, conducted to determine the species of concern in the project area and proximity to documented special status species occurrences, and (2) field reconnaissance, intended to identify plants and animals on the property and presence/absence of habitat for species of concern, including burrowing owl and narrow endemic plants.

1.1) Location

The site is located in the City of Banning in Riverside County, California (Figure 1). Specifically, the site is located just south of Interstate 10 (I-10) and north of Sun Lakes Boulevard, about 0.2 mile east of the intersection of Highland Springs Boulevard and Sun Lakes Boulevard. The parcel is located in Section 12 of Township 3 South, Range 1 West, on the U. S. Geological Survey (USGS) *Beaumont, CA* topographic quadrangle (Figure 2). The parcel can be accessed by taking Interstate 10 to Banning, exiting on Highland Springs Boulevard and heading south, and then going east on Sun Lakes Boulevard for approximately 0.2 mile to reach the westernmost parcel boundary.

The site is generally bounded as follows: to the west by a shopping center, with Highland Springs Avenue beyond; to the east by a retirement community and residential/country club development, with vacant land beyond; to the north by active railroad tracks and I-10, with scattered commercial development and vacant lots beyond; and to the south by residential/country club development, with vacant land and federal land (Bureau of Land Management) beyond (Figure 3).



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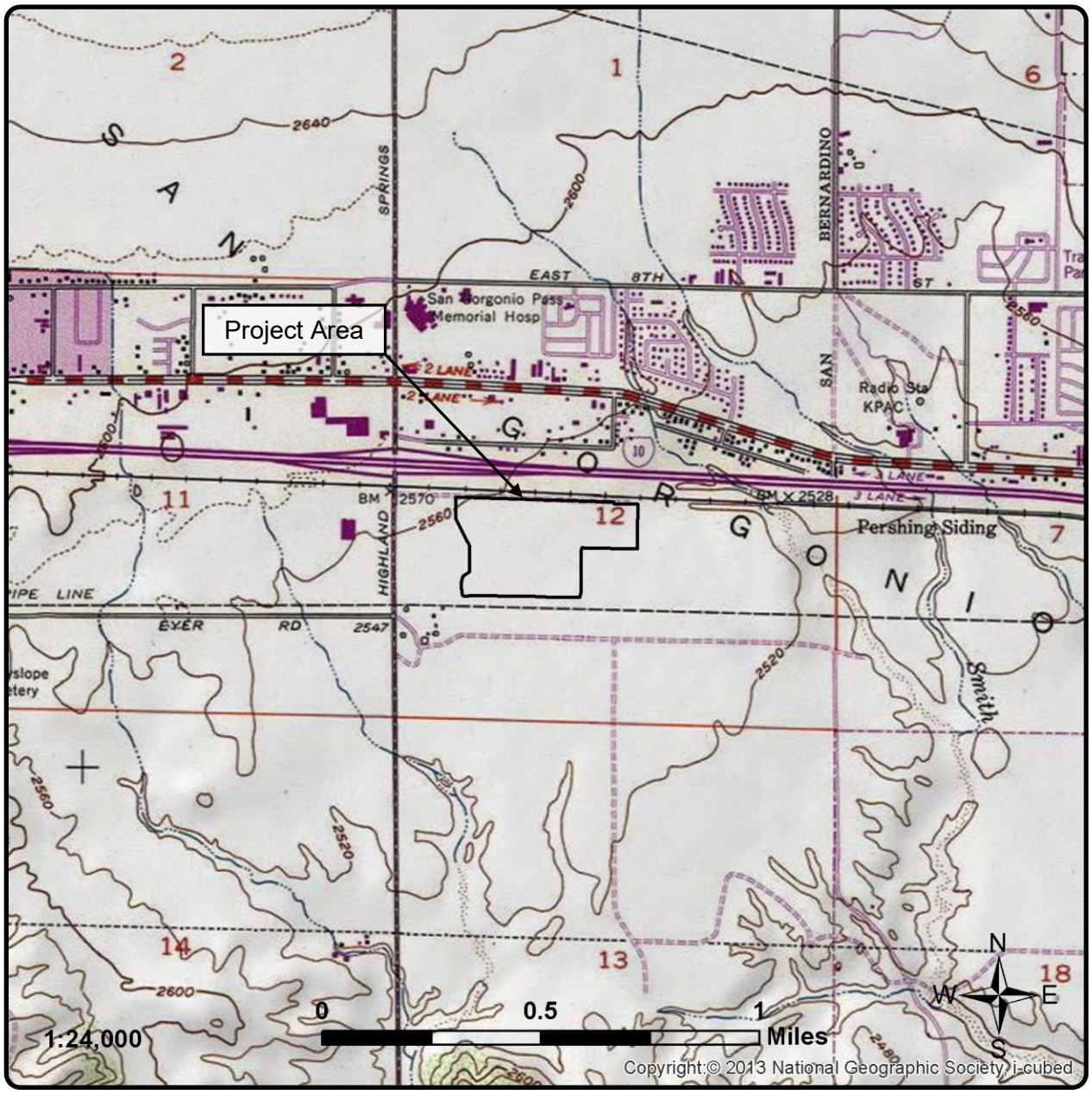
BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

RPGX-19-730
March 2020

Figure 1

Project Vicinity Map

APN 419-140-057, City of Banning
County of Riverside, California



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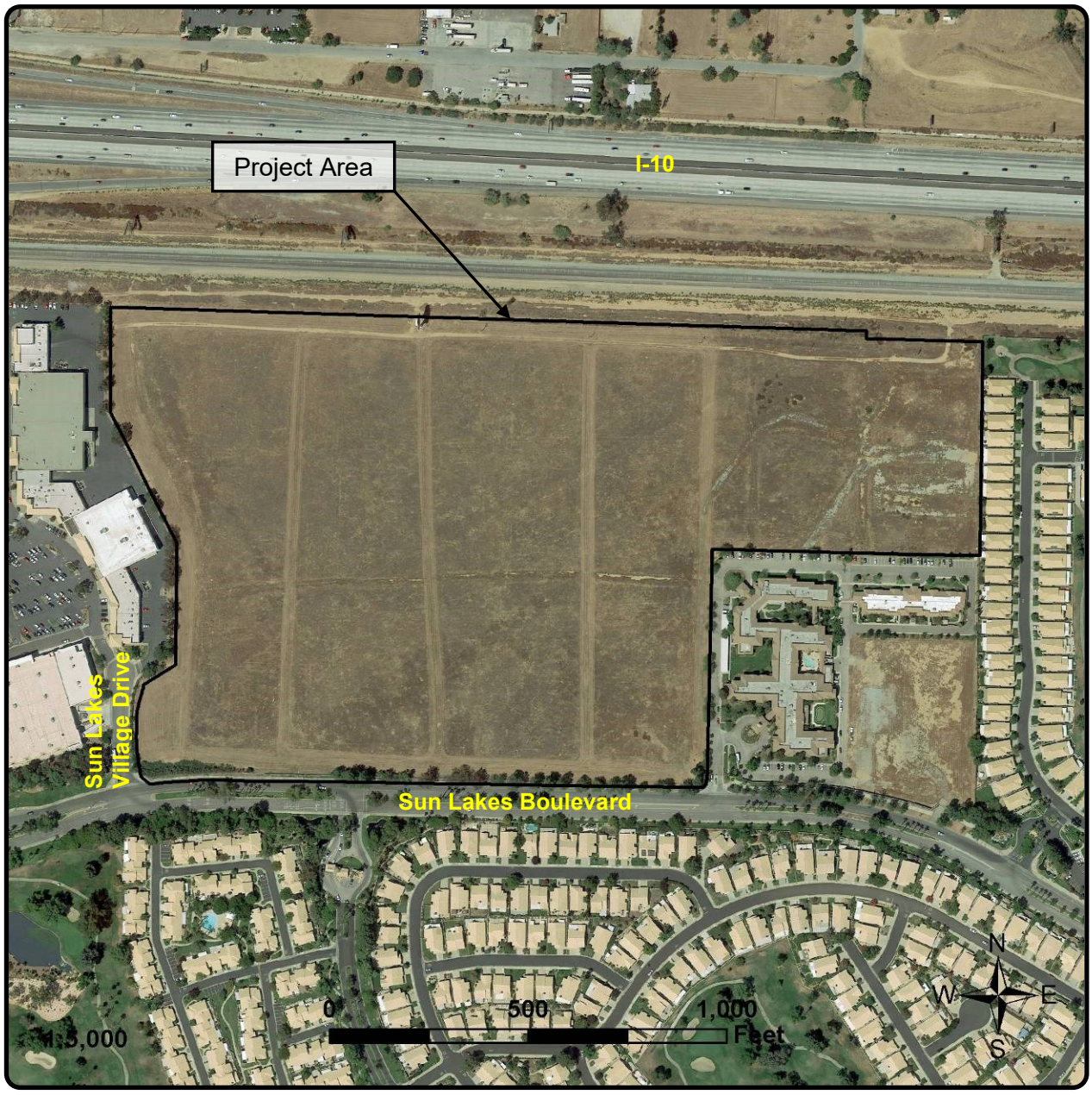
BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

RPGX-19-730
March 2020

Figure 2

Project Location Map
(USGS Beaumont [1988] quadrangle,
Section 12 of Township 3 South, Range 1 West)

APN 419-140-057, City of Banning
County of Riverside, California



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BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

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Figure 3

Aerial Photograph
(Aerial obtained from Google Earth, August 2018)

APN 419-140-057, City of Banning
County of Riverside, California

1.2) Vegetation and Setting

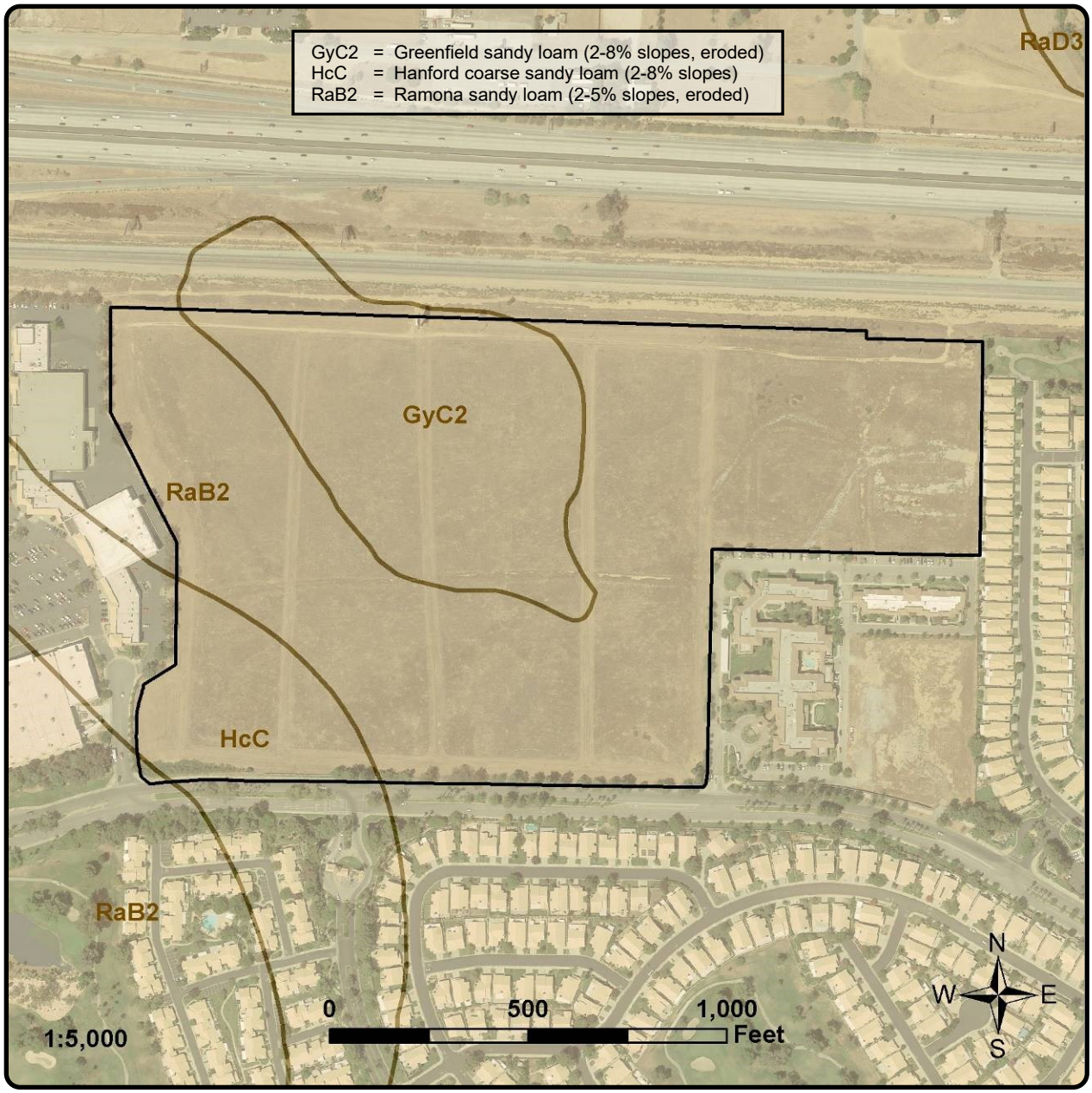
The site is a disturbed vacant lot and appears to be regularly disked or mown. Most of the site is non-native grassland. A small area of riparian vegetation is present in the southwest corner of the site. Ornamental trees are present along the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard. Two sets of active railroad tracks run east-west just north of the site, with the I-10 freeway beyond. A large advertising sign is present along the north-central boundary of the site.

1.3) Soils and Topography

Topographically, the site is generally flat with elevation increasing gradually from southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet above mean sea level. Soils onsite are mapped as Greenfield sandy loam (2-8% slopes, eroded), Hanford coarse sandy loam (2-8% slopes), and Ramona sandy loam (2-5% slopes, eroded) (NRCS 2020) (Figure 4). A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site.

There are no USGS mapped blue-line streams onsite. A shallow trench is present along the site's southern boundary along Sun Lakes Boulevard and trends from west to east. A double culvert is present at the southeast corner of the site. Another shallow trench is present within the central portion of the site and trends from west to east. The trenches appear to be remnants of past disturbance and do not have connectivity with any natural waterway.

A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, remnants of which are still visible.



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Figure 4

Soils Map
(Aerial obtained from Google Earth, August 2018, USDA Nat. Res. Cons. Serv. SSURGO Data)

APN 419-140-057, City of Banning
County of Riverside, California

2.0) METHODS AND PERSONNEL

2.1) Literature Review

Certain plants and animals have been listed as threatened or endangered under state or federal Endangered Species Acts. Other species have not been formally listed, but declining populations or habitat availability are reasons for concern regarding their long-term viability. These species are included in lists compiled by resource management agencies or private conservation organizations. In this report, the term "special status species" refers to all species included in one or more compendia or formal lists of rare, threatened, or endangered species.

In this report, the "Project" or "Project site" refers to the entire ±47.02-acre parcel. No offsite areas are included.

Pertinent literature was reviewed to identify local occurrences and habitat requirements of special status species and communities occurring in the region. Literature reviewed included compendia provided by resource agencies (CDFW 2019, 2020a), the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP; Dudek 2003), and a search of the California Natural Diversity Database (CNDDB; CDFW 2020b) and California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2020) for the Beaumont topographic quadrangle and adjacent quadrangles (Yucaipa, Forest Falls, San Gorgonio Mountain, El Casco, Cabazon, Lakeview, San Jacinto, and Fulmor) and U. S. Fish and Wildlife Service Information for Planning and Consultation (IPaC; USFWS 2020) for the Project site.

The biological resources section of a CEQA document (MND ca. 2005) was also reviewed. This document cites data from a habitat assessment conducted on the parcel by BonTerra Consulting in 2005; however, the full CEQA document and the habitat assessment were not available for review.

Scientific names of plants follow Baldwin et al. (2012) with updates from the online Jepson eFlora (Jepson 2020). Scientific names of animals follow Stebbins (1985), Jameson and Peeters (1988), Cornell Laboratory of Ornithology (2020), and Arnett (2000), with updates from academic sources. Current conservation status of plant and wildlife species determined from CDFW (2019, 2020a). Vegetation community classifications follow Sawyer et al. (2009) with updates from CDFW (2018). State ranks (S ranks) for vegetation communities are from CDFW (2018). MSHCP conservation status from Dudek (2003) and RCA (2019). Documented occurrences are from CDFW (2020b) unless otherwise indicated.

Precipitation data was obtained from the Beaumont Remote Automated Weather Station (RAWS) (WRCC 2020). The Beaumont RAWS is located approximately 0.5 mile northwest of the Project site at an elevation of 2,604 feet.

2.2) Habitat Assessment Survey

L&L biologist Guy Bruyea visited the project area on January 27, 2020 to describe vegetation and habitat and evaluate the site for the presence of suitable habitat for special status wildlife and plant species, including burrowing owl and narrow endemic plants (Table 1).

Table 1. Survey dates, times, and weather conditions.

Date	Time	Weather	Wind (mph)
1-27-2020	1130-1430	Mostly clear, 68-73ºF	2-7

A total of about 3.0 person-hours were spent onsite. All habitat types onsite were visited on foot. The site was surveyed by conducting a series of meandering transects across the subject property where possible, stopping periodically for observations and notations. A general habitat map and field notes were completed at the time of the survey. All field surveys were conducted during daylight hours. Digital photographs were taken to record condition of the site during the survey.

Plants of uncertain identity were collected and subsequently identified from keys, descriptions, and illustrations in Abrams (1923, 1944, and 1951), Abrams and Ferris (1960), Munz (1974), and Parker (1999).

2.3) Burrowing Owl Habitat Assessment

During the habitat assessment, the site was examined for potential burrowing owl habitat, including open areas onsite and areas where California ground squirrel (*Spermophilus beechyi*) activity was expected (i.e., potentially suitable burrows). A search for potentially suitable burrows within dirt, wood, and rock debris piles, artificially created berms, and other locations was conducted during the surveys. The site was also examined for signs of occupation by burrowing owl, including pellets, feathers, whitewash, prey remains, and eggshell fragments, as well as individual owls, but a focused protocol survey was not conducted.

The survey included all areas of the site with potential burrowing owl habitat. An additional 150-meter (500-foot) buffer area surrounding the site was visually inspected, where possible, in areas identified as potential burrowing owl habitat. Any developed areas were visually surveyed with binoculars due to trespassing concerns on private property.

3.0) RESULTS

3.1) Literature Review Results

The site is not located within the MSHCP Criteria Area. Surveys required by the MSHCP are a habitat assessment to address riparian/riverine and vernal pool habitats, fairy shrimp, burrowing owl, and narrow endemic plant species. The narrow endemic plant species are Marvin's (Yucaipa) onion (*Allium marvinii*) and many-stemmed dudleya (*Dudleya multicaulis*).

3.1.1) Precipitation Data

Table 2 provides the precipitation data from the Beaumont RAWS for the year preceding the survey (WRCC 2020). The total precipitation recorded by this RAWS for the 2019 water year (October 2018 through September 2019) is 19.76 inches. Average annual precipitation for this area is 15 to 20 inches (WRCC 2018).

Table 2. Precipitation data.

Month	Beaumont RAWS Precipitation (inches)
10.2018	0.66
11.2018	1.82
12.2018	1.52
01.2019	4.03
02.2019	6.83
03.2019	1.62
04.2019	0.48
05.2019	2.78
06.2019	0.00
07.2019	0.00
08.2019	0.00
09.2019	0.02
10.2019	0.00
11.2019	3.38
12.2019	2.74

3.1.2) 2005 Survey Results

A habitat assessment was conducted on the parcel by BonTerra Consulting in 2005, as cited in the Mitigated Negative Declaration (MND ca. 2005). The habitat assessment included burrowing owl, Marvin's onion, and many-stemmed dudleya. The assessment found that the site consists primarily of annual grasslands, with areas of southern willow scrub and ornamental vegetation. The site has been disturbed by off-road traffic and construction activities on adjacent properties.

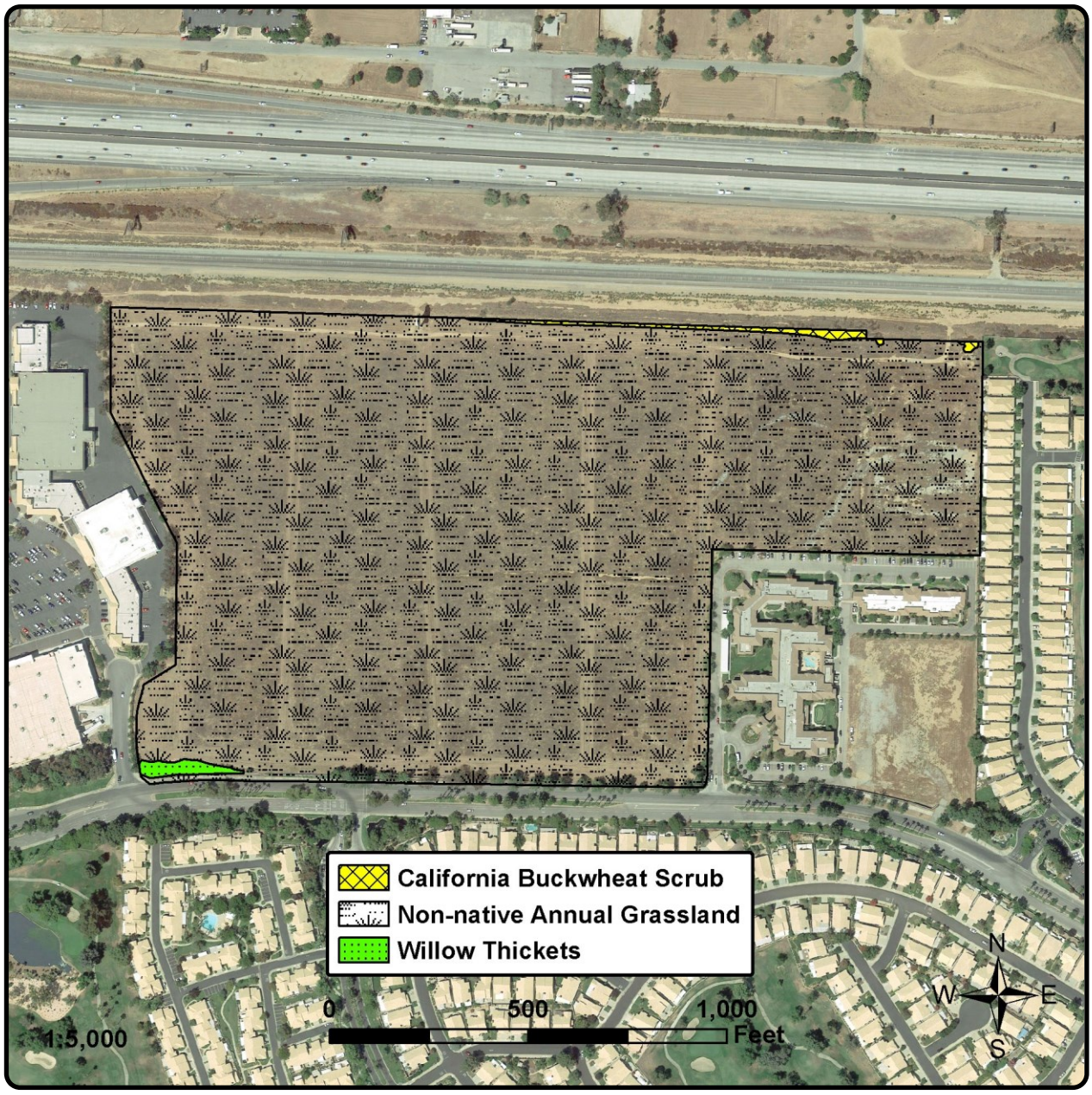
Habitat for burrowing owl was identified onsite, but no owls were found. Habitat for nesting raptors was present, but no raptor nests were identified. The assessment determined that there was no habitat for Marvin's onion or many-stemmed dudleya. Trapping for Stephens' kangaroo rat was also conducted with negative results. Data were not provided for other special status small mammals that may have been incidentally trapped.

3.2) Vegetation Communities

Vegetation communities onsite are summarized in Table 3 and shown in Figure 5. Representative photos are included in Appendix C. The majority of the site is non-native annual grassland, with a small patch of southern willow scrub at the southwest corner and a narrow strip of California buckwheat scrub along the northeastern site boundary. Ornamental trees line the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard.

Table 3. Vegetation communities within survey area.

Vegetation Community	**Area (acres)**
Non-native Grassland	46.56
Willow Thickets	0.18
California Buckwheat Scrub	0.28
Total	**47.02**



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Figure 5

Vegetation Communities
(Aerial obtained from Google Earth, August 2018)

APN 419-140-057, City of Banning
County of Riverside, California

3.2.1) Non-native Annual Grassland

There majority of the site consists of disturbed non-native annual grassland dominated by Mediterranean grass (*Schismus barbatus*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), and cheatgrass (*Bromus tectorum*). Other non-native species present include Russian thistle (*Salsola tragus*), shortpod mustard (*Hirschfeldia incana*), redstem filaree (*Erodium cicutarium*), and tocalote (*Centaurea melitensis*).

Native annuals that are tolerant of disturbed areas and were observed onsite include large flower rancher's fiddleneck (*Amsinckia intermedia*), California aster (*Corethrogyne filaginifolia*), western sunflower (*Helianthus annuus*), horseweed (*Erigeron canadensis*), doveweed (*Croton setiger*), telegraph weed (*Heterotheca grandiflora*), and annual bur-weed (*Ambrosia acanthicarpa*).

Other plants less commonly observed include non-native tree tobacco (*Nicotiana glauca*) and native vinegar weed (*Trichostemma lanceolatum*), nightshade (*Solanum species*), and western jimsonweed (*Datura wrightii*).

This vegetation community is classified by Sawyer et al. (2009) as brome or Mediterranean grass grasslands (*Bromus species – Schismus barbatus* Herbaceous Semi-Natural Alliance). It is not considered a sensitive vegetation community.

3.2.2) California Buckwheat Scrub

A narrow strip of coastal scrub dominated by California buckwheat (*Eriogonum fasciculatum*) is present along portions of the northeastern site boundary. This vegetation community is classified by Sawyer et al. (2009) as California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance). CDFW ranks California buckwheat scrub as S5 (common, widespread, and abundant) and not considered sensitive.

3.2.3) Willow Thickets

A small area of small to medium-sized willows (*Salix* species) is present at the southwest corner of the site. The willows could not be identified due to season. These willows are likely supported by irrigation runoff and associated with a shallow trench that runs along the southern site boundary. This vegetation community is classified by Sawyer et al. (2009) as willow thickets and is synonymous with the southern willow scrub community noted in the 2005 survey

(MND ca. 2005). CDFW ranks willow thickets as S4 (apparently secure) and not considered sensitive.

3.3) Plant Species

A total of 36 plant species were identified during the survey. Of the 36 species, 19 (53 percent) are non-native. Additional annual plant species may occur, but were not detected due to timing of the survey. A list of observed plant species is included in Appendix A.

No federal or state-listed plants or special status plants were observed. The site is not within U. S. Fish and Wildlife Service (USFWS) designated critical habitat for any listed plant species. Listed and special status plants known from the region are either absent, not expected to occur, or have low potential for occurrence onsite (see Appendix B).

3.3.1) Narrow Endemic Plants

Based upon habitat and soils present, non-native plant growth, and disturbances associated with current and past land use, habitat to support Marvin's onion and many-stemmed dudleya is absent from the site.

<u>Marvin's Onion</u>

Marvin's (Yucaipa) onion (*Allium marvinii*) is a perennial bulb-forming herb in the Alliaceae (Onion) family. It flowers from April through May and is found within openings in chaparral on clay soils. The species' elevation range is 2,500 to 3,500 feet. It is found only in Riverside and San Bernardino Counties (CNPS 2020). Marvin's onion may not flower in dry years; without flowers, the plant is difficult to locate and identify (Dudek 2003).

The species is not state or federally listed; it has a California Rare Plant Rank (CRPR) of 1B.2 (rare, threatened, or endangered in California and elsewhere; moderately threatened in California). Under the MSHCP, Marvin's onion is considered adequately conserved, but surveys are required in certain areas.

There is one (1) documented occurrence of Marvin's onion in the CNDDB within five (5) miles of the Project site. It is from the general area of Banning, but the exact location is unknown and the species has not been documented from that area since the original discovery in 1921. The occurrence is mapped about 3.8 miles northeast of the site, but has a five-mile radius buffer that includes the site. An additional location was reported in SCE (2013) but is not in the CNDDB.

This location is about four (4) miles northeast of the site along an electrical transmission line right-of-way.

Marvin's onion was not observed during surveys, but the surveys were not conducted during the flowering period for this species. Suitable clay soils have not been mapped onsite and were not detected during the survey. There is very little native habitat remaining onsite. Based upon soils, disturbances associated with current and past land use, and the thick growth of non-native plants onsite, suitable habitat to support Marvin's onion is absent from the Project site.

Many-stemmed Dudleya

Many-stemmed dudleya (*Dudleya multicaulis*) is a perennial herb in the Crassulaceae (Stonecrop) family. It flowers from April through July and is found in chaparral, coastal scrub, and valley and foothill grassland, often on clay soils. The species elevation range is 50 to 2,600 feet. It is found in coastal southern California (CNPS 2020).

Many-stemmed dudleya is associated with openings and thinly vegetated areas in chaparral, coastal sage scrub, and grasslands underlain by clay and cobbly clay soils of the Altamont, Auld, Bosanko, Claypit, and Porterville series. In western Riverside County, the majority of the known populations are from the Temescal Canyon, Gavilan Hills, and Alberhill areas and the Santa Ana Mountains (Dudek 2003).

Many-stemmed dudleya is typically associated with clay soils in barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands on clay soils. Most populations are associated with coastal sage scrub (Dudek 2003).

The species is not state or federally listed; it has a CRPR of 1B.2 (rare, threatened, or endangered in California and elsewhere; moderately threatened in California). Under the MSHCP, many-stemmed dudleya is considered adequately conserved, but surveys are required in certain areas.

There are no CNDDB documented occurrences of many-stemmed dudleya within five (5) miles of the site. The nearest occurrence is about 28 miles to the southwest.

Many-stemmed dudleya was not observed during surveys, but the surveys were not conducted during the flowering period for this species. Suitable clay soils have not been mapped onsite and were not detected during the survey. There is very little native habitat remaining onsite.

Based upon soils, disturbances associated with current and past land use, and the thick growth of non-native plants onsite, suitable habitat to support many-stemmed dudleya is absent from the Project site.

3.3.2) Special Status Plants

No special status plant species were identified during the survey, but the survey was not conducted during the flowering season for most species.

The site has long-term and ongoing anthropogenic disturbance and undisturbed natural habitat capable of supporting special status plants is not present. Most special status plants known from the region are either absent or not expected to occur onsite. A few have low potential for occurrence. No special status plants have moderate or high potential to occur onsite (see Appendix B).

3.4) Wildlife Species

A total of 15 wildlife species (mostly birds) were detected during the survey. A list of all observed species is included in Appendix A.

No federal or state-listed endangered or threatened species were observed. The site is not within USFWS designated critical habitat for any listed wildlife species. No special status wildlife species were observed. Most listed or special status species are not expected to occur or have low potential for occurrence (see Appendix B), except as described below.

3.4.1) Fairy Shrimp

Soil types mapped onsite are not consistent with an alkali playa or vernal pool complex (Bauder et al 2011). Pools or depressions characteristic of vernal pool habitat were not observed onsite. No evidence of ponding or fairy shrimp habitat was observed. No MSHCP species listed for protection associated with riparian/riverine areas or vernal pools, including fairy shrimp, were observed. Tire ruts are present on an access road along the northern site boundary, but the ruts were dry at the time of the survey and soils onsite are sandy to coarse sandy loam (i.e., well drained).

3.4.2) Burrowing Owl

Burrowing owl (*Athene cunicularia*) is protected under the federal Migratory Bird Treaty Act and California Fish and Game Code and is a CDFW Species of Special Concern. It is a small,

ground-dwelling owl found in open dry grassland, desert, or shrubland areas and in uncultivated agricultural areas, rangelands, and other open areas with low-growing vegetation.

Burrows are an essential element of burrowing owl habitat. Although burrowing owl is capable of excavating its own burrows in soft soils, it typically modifies and inhabits abandoned burrows of small burrowing mammals, such as ground squirrels and pocket gophers. Burrowing owl has also been known to use man-made structures such as cement culverts, debris piles, and other artificial burrows.

Occupancy of burrowing owl habitat can be verified at a site by observation of at least one (1) owl or owl sign (molted feathers, cast pellets, prey remains, eggshell fragments, or excrement) at or near a burrow entrance. A site is considered occupied if at least one (1) owl has been identified onsite in the past three (3) years, because (if undisturbed) burrowing owls exhibit high site fidelity (CDFG 2012, CBOC 1993).

There are three (3) CNDDB documented occurrences of burrowing owl within five (5) miles of the site. The closest is about 3.3 miles to the south in the Badlands. The other two (2) are further to the southwest. There are three (3) records of burrowing owl in eBird. EBird observations are submitted by "citizen scientists" and should be interpreted with caution. These observations are about 1.7 miles northeast of the site in a field near the Banning Substation (from March 2012), about 3.1 miles southeast of the site (from July 2018), and about 2.7 miles east-southeast of the site in a field adjacent to a neighborhood park. This last record includes clear photographs of a pair of burrowing owls with three (3) juveniles and is from April 2018 (eBird 2020).

Potentially suitable habitat and small mammal burrows are present onsite and within the buffer area to the north, between the site and the I-10 freeway. No burrowing owls, occupied burrows, or owl sign was observed during the survey.

A preconstruction clearance survey will be required within 30 days prior to the start of site disturbance.

3.4.3) Nesting Birds

There is suitable habitat for nesting birds on and adjacent to the site. Nesting birds may utilize trees and other vegetation, structures, idle vehicles/equipment, and open ground. However, given the level of ongoing disturbance on and adjacent to the site, nesting is likely to be limited to more common species that are tolerant of human presence.

Ornamental trees are present along the western, southern, and parts of the eastern boundaries of the parcel and surrounding areas and provide potential raptor nesting sites. Although some of the trees are of adequate height for nesting raptors, no raptor nests were observed during this survey or the 2005 survey (MND ca. 2005).

A large advertising sign is present along the north-central border of the site. The upper portion of the sign has either been removed or fallen into disrepair and the interior structure, as well as the exterior surfaces, of the sign are accessible to nesting birds. The sign was inspected from the ground with binoculars and no evidence of raptor nesting was observed.

3.4.4) Other Special Status Wildlife

No federal or state-listed endangered or threatened wildlife species or special status wildlife species were observed during the survey. The 2005 small mammal trapping data for species other than Stephens' kangaroo rat was not available.

Due to long-term and ongoing anthropogenic disturbance, undisturbed natural habitat capable of supporting most special status wildlife is generally lacking onsite. Most special status wildlife known from the region are either absent, not expected to occur, or have low potential for occurrence onsite, except as described below (see Appendix B).

Cooper's hawk (*Accipiter cooperii*; CDFW Watch List Species) forages in various habitats including open areas and scrublands. It has one (1) CNDDB documented occurrence of nesting about 3.7 miles west of the site. There are multiple eBird records of this species in the region, including one (1) in the golf course just south of the site. There is potentially suitable foraging habitat onsite. Based on available evidence, Cooper's hawk has low to moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Ferruginous hawk (*Buteo regalis*; CDFW Watch List Species) forages in various habitats including open grasslands. It has one (1) CNDDB documented occurrence about 4.3 miles south of the site. There are some eBird records in the vicinity, including one (1) within a residential development along Potrero Creek about 0.8 mile southwest. Based on available evidence, ferruginous hawk has low to moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Costa's hummingbird (*Calypte costae*; USFWS Bird of Conservation Concern) is found in desert scrub, coastal scrub, chaparral, and adjacent meadows and gardens. There are no CNDDB documented occurrences of nesting within five (5) miles. There are multiple eBird records in the

vicinity, including two (2) immediately adjacent to the site. There is limited potentially suitable native habitat on the Project site, but this species may also utilize ornamental plants for foraging and nesting. Based on available evidence, Costa's hummingbird has low to moderate potential to forage and nest onsite. It is not a covered species under the MSHCP.

California horned lark (*Eremophila alpestris actia*; CDFW Watch List Species) forages and nests in open grassland habitats. There is one (1) CNDDB documented occurrence of nesting about four (4) miles west of the site and several eBird records in the area. There is potentially suitable foraging habitat onsite, but ongoing disturbance reduces the potential for nesting. Based on available evidence, California horned lark has moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Loggerhead shrike (*Lanius ludovicianus*; CDFW Species of Special Concern, USFWS Bird of Conservation Concern) forages in open areas with fences or shrubs for perching. There are several eBird records from the Project vicinity and two (2) CNDDB documented occurrences of nesting in the Badlands to the south and southwest. The closest is about 2.5 miles from the site. There is potentially suitable foraging habitat and this species has low to moderate potential to forage onsite. It is a covered species under the MSHCP and considered adequately conserved.

Dulzura pocket mouse (*Chaetodipus californicus femoralis*; CDFW Species of Special Concern) is found in a variety of habitats, including coastal scrub and grassland. There is one (1) CNDDB documented occurrence about 2.9 miles to the southeast. Data on this species from the trapping survey in 2005 is not available. Based on available evidence, it has low to moderate potential for occurrence on the Project site. It is not a covered species under the MSHCP.

Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*; CDFW Species of Special Concern) is found in coastal scrub, chaparral, and grasslands in sandy, herbaceous areas, usually in association with rocks or coarse gravel. It has multiple CNDDB documented occurrences within five (5) miles of the Project site. There is potentially suitable habitat on the Project site. Data on this species from the trapping survey in 2005 is not available. Based on available evidence, this species has moderate potential for occurrence. It is a covered species under the MSHCP and considered adequately conserved.

Los Angeles pocket mouse (*Perognathus longimembris brevinasus*; CDFW Species of Special Concern) is found in grassland, sage scrub, and alluvial sage scrub habitats. It has multiple CNDDB documented occurrences within five (5) miles of the Project site; the closest is 2.3 miles

to the east. There is potentially marginal habitat on the Project site. Data on this species from the trapping survey in 2005 is not available. Based on available evidence, this species has moderate potential for occurrence. It is a covered species under the MSHCP and considered adequately conserved.

3.4.5) Wildlife Corridor

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas, because movement barriers prohibit the infusion of new individuals and genetic information.

Wildlife movement activities usually fall into one of three movement categories: dispersal (e.g., juvenile animals dispersing from natal areas or individuals extending their range), seasonal migration, and movements related to home range activities (e.g., foraging for food or water, defending territories, or searching for mates, breeding areas, or cover).

The site is entirely surrounded by major roadways and residential developments and does not function as part of a wildlife corridor.

3.5) MSHCP Riparian/Riverine and Vernal Pool Habitat

Under MSHCP Volume 1 Section 6.1.2 areas associated with wetland and streambed systems must be evaluated for consideration as riparian/riverine or vernal pool habitat. Riparian/riverine areas are defined within the MSHCP as:

> ". . . lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year." MSHCP Vol. 1, Section 6.1.2.

Vernal pools are defined within the MSHCP as:

> ". . . seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of

> hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. . . ." MSHCP Vol. 1, Section 6.1.2.

There is no vernal pool habitat onsite. Soil types mapped (and observed) onsite are not consistent with an alkali playa or vernal pool complex (Bauder et al 2011). Pools or depressions characteristic of vernal pool habitat were not observed onsite. No MSHCP species listed for protection associated with riparian/riverine areas or vernal pools were observed. No evidence of ponding was observed onsite. Tire ruts are present on an access road along the northern site boundary, but the ruts were dry at the time of the survey and soils onsite are sandy to coarse sandy loam (i.e., well drained).

There are no USGS mapped blue-line streams onsite. A shallow trench is present along the site's southern boundary (along Sun Lakes Boulevard) and trends from west to east. A double culvert is present at the southeast corner of the site. A small area of willow thicket is present in the southwest corner of the site in association with a trench. Another shallow trench is present within the central portion of the site and trends from west to east. No water or evidence of flow was observed in these trenches during the survey. The trenches appear to be remnants of past disturbance involving water quality or flood control measures and do not have connectivity with any natural waterway.

4.0) SUMMARY AND RECOMMENDATIONS

The purpose of this study was to identify biological resources present or potentially present onsite. The MSHCP requires a habitat assessment to address riparian/riverine and vernal pool habitats, fairy shrimp, narrow endemic plants (Marvin's [Yucaipa] onion and many-stemmed dudleya), and burrowing owl. L&L also analyzed the potential for impacts to special status species and sensitive vegetation communities. The recommendations are based on the literature review, L&L's knowledge of species and habitats in the region, and the biological field survey.

The site is largely composed of non-native grassland. Native vegetation onsite consists of small areas of willow thicket and California buckwheat scrub and these are not sensitive vegetation communities.

Narrow endemic plant species, Marvin's onion and many-stemmed dudleya, were not observed and habitat to support these species is absent from the site. Other special status plants are either absent, not expected to occur, or have low potential for occurrence onsite.

There are no vernal pools onsite. No evidence of ponding was observed. Tire ruts are present but were dry at the time of the survey and soils present are sandy to coarse sandy loam (i.e., well drained). No MSHCP species listed for protection associated with riparian/riverine areas or vernal pools, including fairy shrimp, were observed.

Potentially suitable habitat and small mammal burrows are present onsite, but no burrowing owls or owl sign were observed. A preconstruction clearance survey for burrowing owl will be required within 30 days prior to the start of site disturbance.

There is suitable habitat for nesting birds, including raptors, onsite. A nesting bird clearance survey is recommended within three (3) days prior to the start of vegetation clearing or ground disturbance if clearing will begin within the nesting season (February 1 to September 15). If nesting birds are present, avoidance of nest sites is required and a buffer of 300 to 500 feet (or as determined by a biologist) is recommended until juvenile birds are no longer dependent on the nest and/or a biologist has verified that the nest is inactive.

Undisturbed natural habitat capable of supporting most special status wildlife is generally lacking onsite. Most special status wildlife known from the region are either absent, not expected to occur, or have low potential for occurrence onsite. A few species have moderate or

low to moderate potential to occur, most of which are covered species under the MSHCP and considered adequately conserved. Riparian vegetation onsite is insufficient to provide habitat for riparian birds.

The Project site is surrounded by major roadways and residential developments and does not function as part of a wildlife corridor.

MSHCP Riparian habitat may be present and any impacts, if present, would require development and processing of a Determination of Biologically Equivalent or Superior Preservation (DBESP). State jurisdictional wetland may be present, if so, any impacts would require regulatory permitting. A jurisdictional delineation survey and report is recommended in order to clarify presence or absence of jurisdictional features onsite.

5.0) REGULATORY ENVIRONMENT

5.1) Federal Endangered Species Act

By law, it is a requirement of the federal Endangered Species Act (FESA), 1973 (as amended) at Section 7(a)(2) that federal agencies ensure that any action authorized, funded, or carried out by a federal agency is not likely to jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of critical habitat. In order to comply with this requirement, the federal agency must conduct a Biological Assessment (BA), in which effects to listed species are analyzed and disclosed in the form of an "effects determination."

Section 7 requires federal agencies to consult with the U. S. Fish and Wildlife Service (USFWS) should it be determined that their actions may affect federally listed threatened or endangered species. Section 9 of FESA prohibits "take" (e.g., harm, harassment, pursuit, injury, kill) of federally listed wildlife. "Harm" is further defined to include habitat modification or degradation where it kills or injures wildlife by impairing essential behavioral patterns such including breeding, feeding, or sheltering. Take that is incidental to otherwise lawful activities can be authorized under Section 7 of FESA.

Procedures for obtaining a permit for incidental take are identified under Section 7 of FESA for federal properties or where federal actions are involved and are identified under Section 10 of FESA for non-federal actions. During the Section 7 process, measures to avoid and minimize project effects to listed species and their habitat will be identified and incorporated into a Biological Opinion (prepared by the USFWS) that includes an incidental take by the federal agency and applicant.

The County of Riverside has been issued a Section 10(a) permit for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). This project falls within the area covered by the MSHCP.

5.2) Jurisdictional Waters and Wetlands

Three (3) agencies generally regulate activities within streams, wetlands, and riparian areas in California: (1) the U. S. Army Corps of Engineers (USACE) regulates activities under Section 404 of the federal Clean Water Act; (2) the Regional Water Quality Control Board (RWQCB) regulates activities under Section 401 of the federal Clean Water Act and the State Porter-

Cologne Water Quality Control Act; and (3) the California Department of Fish and Wildlife (CDFW) regulates activities under California Fish and Game Code Sections 1600-1616.

5.2.1) Federal Clean Water Act, Section 404

Section 404 of the federal Clean Water Act applies to "Waters of the United States" (WoUS). By definition these include waterways that could be used for interstate commerce and their tributaries, including any waters with a nexus with (ultimately flow into) traditional navigable waters. In non-tidal waters, the limits of jurisdiction are "ordinary high water marks" (OHWM) such as stream banks. Where wetlands occur above high water marks, they are considered "adjacent wetlands" and are included within USACE jurisdiction. USACE jurisdiction has often been extended to wetlands not adjacent to WoUS ("isolated wetlands"), such as vernal pools. Under the current administration, there have been recent changes to the definition of USACE jurisdictional waters.

Final determination and delineation of federal jurisdiction is made by the USACE and not by the project biologists. Therefore, fieldwork and documentation of the site conditions are done as a preliminary delineation until the USACE reviews and concurs with the results.

5.2.2) Federal Clean Water Act, Section 401

The RWQCB has jurisdiction over wetlands, WoUS, and Waters of the State under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne) under the California Water Code (§ 13000, et seq.) Permitting is required for activities that will result in a discharge of soils, nutrients, chemicals, detrital materials, or other pollutants into WoUS, Waters of the State, or adjacent wetlands that will affect the water quality of those bodies and the watershed.

5.2.3) California Fish and Game Code, Section 1600

The CDFW, through provisions of the California Fish and Game Code (Sections 1600-1616), is empowered to issue agreements (“Lake and Streambed Alteration Agreements”) for projects that will adversely affect wildlife habitat associated with any river, stream, or lake edges. The Lake and Streambed Alteration Agreement will typically include required measures to mitigate impacts.

5.3) California Endangered Species Act

California Endangered Species Act (CESA) definitions of endangered and threatened species parallel those defined in the FESA. The CESA defines an endangered species as ". . . a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes including loss of habitat, change in habitat, overexploitation, predation, competition or disease." Endangered species are in serious danger of becoming extinct and threatened species are likely to become endangered species in the foreseeable future (according to Sections 2062 and 2067, respectively, of the California Fish and Game Code). Candidate species are those under formal review by the CDFW for listing as endangered or threatened (Section 2067). Prior to being considered for protected status, the CDFW designates a species as being of special concern. Species of Special Concern are wildlife species for which the CDFW has information indicating population decline. Plant species of concern are designated by California Rare Plant Ranks, described below.

5.4) California Environmental Quality Act

The California Environmental Quality Act (CEQA) and CEQA Guidelines (§ 15000 et seq.) require identification of environmental effects from discretionary projects. Significant effects are to be mitigated by avoidance, minimization, rectification, or compensation whenever possible.

Effects to all state and federal listed species are considered significant under CEQA. In addition to formally listed species, CEQA considers effects to species that are demonstrably endangered or rare as important or significant. These definitions can include state designated species of special concern, federal candidate and proposed species, CNDDB tracked species, and CRPR list 1B and list 2 plants.

Appendix G of the CEQA Guidelines specifically addresses biological resources and encompasses a broad range of resources to be considered.

5.5) California Natural Diversity Database

The California Natural Diversity Database (CNDDB) includes documented occurrences of special status species that have been reported to the CDFW. It also includes ranks of overall condition of sensitive species and vegetation communities on global (throughout its range) and state (within California) levels. State ranking is numerical, ranging from one to five (S1 to S5),

with one indicating very few remaining individuals or little remaining habitat and five indicating a demonstrably secure to ineradicable population condition.

5.6) California Rare Plant Rank

The California Native Plant Society (CNPS) Inventory of Rare and Endangered Species includes documented occurrences of special status plant species that are available through the Consortium of California Herbaria and other sources. The CNPS, in coordination with CDFW, has cataloged California's rare and endangered plants into lists according to population distributions and viability. These lists are numbered and indicate the following California Rare Plant Ranks (CRPR): (1A) presumed extinct in California; (1B) rare, threatened, or endangered throughout their range; (2A) presumed extirpated in California, but more common in other states; (2B) threatened or endangered in California, but more common in other states; (3) more information is needed to establish rarity; and (4) plants of limited distribution in California (i.e., naturally rare in the wild), but whose populations do not appear to be susceptible to threat. A CRPR may also have an extension (e.g., 1B.x) that indicates current level of threat: seriously threatened (x.1), moderately threatened (x.2), or not very threatened (x.3).

5.7) Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) is an international treaty that makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Executive Order 13186 ensures that environmental analyses of federal actions required by the National Environmental Policy Act (NEPA) or other established environmental review processes evaluate the effects of actions on migratory birds, with emphasis on species of concern. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or loss of habitat upon which the birds depend could be considered “take” and constitute a violation of the MBTA.

5.8) California Fish and Game Code, Sections 3503 and 3513

California Fish and Game Code Section 3503 prohibits take, possession, or needless destruction of bird nests or eggs except as otherwise provided by the Code; Section 3503.5 prohibits take or possession of birds of prey or their eggs except as otherwise provided by the Code; and Section 3513 provides for the adoption of the provisions of the federal Migratory Bird Treaty Act, described above.

5.9) Western Riverside County Multiple Species Habitat Conservation Plan

The County of Riverside, including eight (8) additional land jurisdictions and 14 cities, have prepared a Multiple Species Habitat Conservation Plan (MSHCP) for western Riverside County. The MSHCP will build upon existing preserves and provide connectivity and wildlife corridors throughout the region. The MSHCP proposes to conserve approximately 500,000 acres and 146 different species.

The MSHCP was approved by the county on June 17, 2003 and an Implementation Agreement (IA) between the USFWS, the CDFW, and the County was executed and an associated USFWS Section 10(a)(1)(B) Permit (No. TE-088609) was issued on June 22, 2004. The permit grants take authorization for certain species identified in the permit as "Covered Species Adequately Conserved."

The MSHCP establishes seven (7) core reserve areas and associated linkages between proposed and existing core areas. The MSHCP divides areas into Cells using USGS coordinates. Conservation efforts for the project site will be evaluated with regard to sensitive species identified as not adequately conserved and observed onsite, riverine/riparian or vernal pool habitat and their associated sensitive species (if located onsite), fairy shrimp, jurisdictional areas, and sage scrub.

Focused surveys are required for species identified as not adequately conserved under the MSHCP if suitable habitat is present onsite. If focused surveys are determined necessary and species identified as not adequately conserved under the MSHCP occur onsite, the proponent may be required to undergo a Habitat Acquisition and Negotiation Strategy (HANS) determination with the County of Riverside. If a single-family home or mobile home is to be placed on an existing legal lot, permitting will be reviewed according to the procedures outlined in MSHCP Section 6.1.1, *Expedited Review Process for Single-Family Homes or Mobile Homes to Be Located on an Existing Lot within the Criteria Area*.

MSHCP Section 6.1.2 (Riparian/Riverine Habitat)

Section 6.1.2 of the MSHCP requires an assessment of the potentially significant effects of the proposed project on Riparian/Riverine areas, and vernal pools as currently required by CEQA using available information augmented by project-specific mapping. Riparian/Riverine areas and vernal pools are defined as follows:

- Riparian/Riverine Areas are lands that have flow for all or a portion of the year and which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.

- Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses, to which it has been subjected, and weather and hydrologic records.

With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.

MSHCP Section 6.1.3 (Narrow Endemic Plants)

Per Section 6.1.3 of the MSHCP, surveys are required for narrow endemic plants within the identified survey areas. If suitable habitat and appropriate soils are present, site-specific focused surveys are required. Focused surveys must be conducted during the appropriate season in accordance with established protocols. If the survey finds that narrow endemic plants are present, any projects with the potential to impact narrow endemic plants is subject to avoidance, minimization, and mitigation requirements.

Prior to conducting surveys for narrow endemic plant species within the, a habitat suitability assessment may be undertaken by a biologist/botanist with expertise in the plant species of concern to determine whether focused surveys for individual species are required and to focus the species-specific survey efforts. In general, habitat suitability assessments may be undertaken year-round, with the exception of vernal pool species for which habitat suitability assessments must be conducted during the rainy season.

Burrowing Owl

Section B (Species Accounts) of Volume 2 of the MSHCP lists the following objectives for burrowing owl conservation/protection:

Objective 1

Include within the MSHCP Conservation Area at least 27,470 acres of suitable primary habitat for the burrowing owl including grasslands.

Objective 2

Include within the MSHCP Conservation Area at least 5 Core Areas and interconnecting linkages. Core areas may include the following: (1) Lake Skinner/Diamond Valley Lake area (Existing Core C plus Proposed Extension of Existing Cores 5, 6, 7; 29,060 acres); (2) playa west of Hemet (Proposed Noncontiguous Habitat Block 7; 1,250 acres); (3) San Jacinto Wildlife Area/Mystic Lake area including Lake Perris area (Existing Core H; 17,470 acres); (4) Lake Mathews (Existing Core C plus Proposed Extension of Existing Cores 2; 23,710 acres); and (5) along the Santa Ana River (9,670 acres). The Core Areas should support a combined total breeding population of approximately 120 burrowing owls with no fewer than five pairs in any one Core area.

Objective 3

Include within the MSHCP Conservation Area at least 22,120 acres of suitable secondary habitat for the burrowing owl including playas and vernal pools, and agriculture outside of the Core Areas identified above. Areas where additional suitable habitat could be conserved include west of the Jurupa Mountains, near Temescal Wash (i.e., vicinity of Alberhill), near Temecula Creek, within the Lakeview Mountains, Banning, the Badlands, Gavilan Hills, and Quail Valley.

Objective 4

Include within the MSHCP Conservation Area the known nesting locations of the burrowing owl at Lake Perris, Mystic Lake/San Jacinto Wildlife area, Lake Skinner area, the area around Diamond Valley Lake, playa west of Hemet, Lakeview Mountains, Lake Mathews/Estelle Mountain Reserve and Sycamore Canyon Regional Park.

Objective 5

Surveys for burrowing owl will be conducted as part of the project review process for public and private projects within the burrowing owl survey area where suitable habitat is present (see Burrowing Owl Survey Area Map, Figure 6-4 of the MSHCP, Volume I). The locations of this species determined as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.3.2, MSHCP, Volume I and the guidance provided below:

Burrowing owl surveys shall be conducted utilizing accepted protocols as follows. If burrowing owls are detected on the project site then the action(s) taken will be as follows:

If the site is within the Criteria Area, then at least 90 percent of the area with long-term conservation value will be included in the MSHCP Conservation Area. Otherwise:

1) If the site contains, or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the on-site burrowing owls will be passively or actively relocated following accepted protocols.

2) If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.

The survey and conservation requirements stated in this objective will be eliminated when it is demonstrated that Objectives 1 – 4 have been met.

Objective 6

Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one way doors and collapse of burrows) will occur when owls are present outside the nesting season.

Objective 7

Translocation sites for the burrowing owl will be created in the MSHCP Conservation Area for the establishment of new colonies. Translocation sites will be identified, taking into consideration unoccupied habitat areas, presence of burrowing mammals to provide suitable burrow sites, existing colonies and effects to other Covered Species. Reserve Managers will consult with the Wildlife Agencies regarding site selection prior to translocation site development.

5.10) City of Banning General Plan

The City of Banning General Plan incorporates goals, policies, and programs to protect biological resources. These include the following:

Goal. A pattern of community development that supports a functional, productive, harmonious and balanced relationship between the built and natural environment.

Policy 1 The City shall continue to participate in the preservation of habitat for endangered, threatened and sensitive species.

Program 1.A Through the Western Riverside MSHCP, maintain an accurate and regularly updated map of sensitive plant and animal species and habitat in Banning and its planning area.

Program 1.B The City shall participate in the Western Riverside County Multiple Species Habitat Conservation Plan.

Program 1.C City staff shall continue to request biological resource surveys for new development.

Policy 2 As part of the development review process, the City shall evaluate projects based on their impact on existing habitat and wildlife, and for the land's value as viable open space.

Program 2.A The City shall encourage developers to recover native and drought tolerant plant materials, and incorporate them into project landscaping, to provide or enhance habitat for local species.

Program 2.B The City shall make available at City Hall a listing of planting materials that emphasizes native vegetation, but may also include non-native, plants that are compatible with the local environment.

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APPENDIX A: PLANT AND WILDLIFE SPECIES

List of plant and vertebrate animal species identified on the site during the survey. One asterisk (*) indicates a non-native species; two asterisks (**) indicates a special status species.

Scientific Name	**Common Name**
VASCULAR PLANTS	
DICOTYLEDONS	
Gymnosperms	
PINACEAE	PINE FAMILY
* *Pinus species*	Unid. ornamental pine
Angiosperms	
ANACARDIACEAE	SUMAC or CASHEW FAMILY
* *Schinus molle*	Peruvian pepper tree
ASTERACEAE	ASTER FAMILY
Ambrosia acanthicarpa	Annual bur-sage, annual sandbur
Baccharis salicifolia (B. glutinosa)	Mulefat
Baccharis species (pilularis?)	Unid. baccharis
* *Centaurea melitensis*	Tocalote
Corethrogyne filaginifolia var. filaginifolia (Lessingia filaginifolia)	California-aster, sand-aster
Erigeron canadensis (Conyza canadensis)	Horseweed, mare's tail
Helianthus annuus	Western sunflower
Heterotheca grandiflora	Telegraph weed
* *Sonchus oleraceus*	Common sow thistle
BORAGINACEAE	BORAGE OR WATERLEAF FAMILY
Amsinckia intermedia (A. menziesii var. intermedia)	Large flower rancher's fiddleneck
BRASSICACEAE	MUSTARD FAMILY
* *Hirschfeldia incana (Brassica geniculata)*	Shortpod mustard
CHENOPODIACEAE	GOOSEFOOT FAMILY
* *Salsola tragus*	Russian thistle
EUPHORBIACEAE	SPURGE FAMILY
Croton setiger (C. setigerus, Eremocarpus setiger, E. setigerus)	Turkey-mullein, doveweed
FABACEAE	LEGUME FAMILY, PEA FAMILY
* *Acacia longifolia*	Sydney golden wattle

Scientific Name	**Common Name**
Lupinus bicolor	Miniature lupine, dove lupine
Parkinsonia microphylla (Cercidium microphyllum)	Little-leaved palo verde
* *Vicia villosa*	Winter vetch
GERANIACEAE	GERANIUM FAMILY
* *Erodium cicutarium*	Redstem filaree
LAMIACEAE	MINT FAMILY
* *Marrubium vulgare*	Horehound
Trichostema lanceolatum	Vinegar weed
MYRTACEAE	MYRTLE FAMILY, EUCALYPTUS FAMILY
* *Eucalyptus species*	Ornamental eucalyptus, gumtree
POLYGONACEAE	BUCKWHEAT FAMILY
Eriogonum elongatum	Long-stem wild buckwheat, wand buckwheat
Eriogonum fasciculatum	California buckwheat
ROSACEAE	ROSE FAMILY
* *Pyracantha coccinea*	Firethorn
SALICACEAE	WILLOW FAMILY
Salix species	Unid. willow
SOLANACEAE	NIGHTSHADE FAMILY
Datura wrightii (D. meteloides)	Jimsonweed, tolguacha
* *Nicotiana glauca*	Tree tobacco
Solanum species	Nightshade
MONOCOTYLEDONS	
ARECACEAE	PALM FAMILY
* *Washingtonia robusta*	Mexican fan palm, ornamental fan palm
POACEAE	GRASS FAMILY
* *Avena species*	Unid. wild oat
* *Bromus diandrus (B. rigidus)*	Ripgut brome
* *Bromus madritensis ssp. rubens (B. rubens)*	Red brome
* *Bromus tectorum*	Cheatgrass
* *Schismus barbatus*	Mediterranean grass

Scientific Name	**Common Name**
VERTEBRATES	
Reptiles	
Iguanidae	Iguanid Lizards
Uta stansburiana	Side-blotched lizard
Birds	
Accipitridae	Hawks, Eagles, and Harriers
Buteo jamaicensis	Red-tailed hawk
Columbidae	Pigeons and Doves
* *Columba livia*	Rock dove, common pigeon
Zenaida macroura	Mourning dove
Corvidae	Crows and Jays
Corvus corax	Common raven
Fringillidae	Finches
Spinus (Carduelis) psaltria	Lesser goldfinch
Haemorhous (Carpodacus) mexicanus	House finch
Icteridae	Blackbirds
Sturnella neglecta	Western meadowlark
Passerellidae	New World Sparrows
Passerculus sandwichensis	Savannah sparrow
Zonotrichia leucophrys	White-crowned sparrow
Trochilidae	Hummingbirds
Calypte anna	Anna's hummingbird
Tyrannidae	Tyrant Flycatchers
Sayornis saya	Say's phoebe
Mammals	
Geomyidae	Pocket Gophers
Thomomys bottae	Botta's pocket gopher (sign)
Leporidae	Rabbits
Sylvilagus audubonii	Audubon's cottontail
Sciuridae	Squirrels
Spermophilus beecheyi	California ground squirrel

Documented occurrences refers to species occurrences in the California Natural Diversity Database (CNDDB) unless otherwise noted. For plant species that are not tracked in the CNDDB, records from the Consortium of California Herbaria (CCH) may be used. eBird (eBird.org) records of bird observations from 'citizen scientists' are noted but should be interpreted with caution.

Federal designations: (Federal Endangered Species Act, U. S. Fish and Wildlife Service):

- END: Federally listed, endangered; an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
- THR: Federally listed, threatened; an animal or plant which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.
- Cand Candidate for federal listing as threatened or endangered; species that has been studied by the U.S. Fish and Wildlife Service, and the Service has concluded that it should be proposed for addition to the Federal Endangered and Threatened species list.
- Prop Proposed for federal listing as Endangered or Threatened under Section 4 of the Endangered Species Act.
- Delisted: Previously federally listed as endangered or threatened, but is no longer listed (e.g., due to recovery).
- None: The species has no federal conservation status.
- BGEPA: Federal Bald and Golden Eagle Protection Act; protects bald and golden eagles.
- BCC: USFWS Bird of Conservation Concern; migratory and non-migratory bird species (beyond those already designated as Federally threatened or endangered) that represent USFWS highest conservation priorities.

State designations: (California Endangered Species Act, California Dept. of Fish and Wildlife)

- END: State listed, endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
- CanE: Candidate Endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered species.
- CanF: Candidate Threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of threatened species.
- THR: State listed, threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.
- RARE: State listed as rare: a native plant species, subspecies, or variety when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (Native Plant Protection Act of 1977).
- SSC: CDFW Species of Special Concern; vertebrate species of concern due to declining population levels, limited ranges, and/or continuing threats that have made them vulnerable to extinction.
- FP: Fully Protected; California Fish and Game Code states that Fully Protected species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research.
- Delisted: Previously state listed as threatened or endangered, but no longer listed (e.g., due to recovery).
- SA: CDFW Special Animal; wildlife of state conservation concern.
- SH: All California sites are historical.
- None: The species has no state conservation status.

State Rank (S Rank): A reflection of the condition and imperilment of an element (plant, animal, vegetation community) throughout its range within the state. The S ranks are determined through a combination of rarity, threat, and trend factors, weighted more heavily on the rarity factors. Where correct category is uncertain, the S rank includes two categories or a question mark. Older ranks, which need to be updated, may still contain a decimal "threat" rank of .1, .2, or .3, where .1 indicates very threatened status, .2 indicates moderate threat, and .3 indicates few or no current known threats.

S1: Critically imperiled; imperiled in the state because of extreme rarity or some factor(s) making it especially vulnerable to extirpation from the state.
S2: Imperiled; imperiled in the state because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from the state or nation.
S3: Vulnerable; vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation. S4: Apparently secure; uncommon but not rare, some cause for long-term concern due to declines or other factors.
S5: Secure; common, widespread, and abundant in the state.
SH: Possibly extirpated; species or community occurred historically in the state, and there is some possibility that it may be rediscovered. The element has not been seen for at least 20 years, but suitable habitat still exists.
SX: Presumed extirpated; species or community is believed to be extirpated from the state.

California Rare Plant Rank (CRPR): The *California Rare Plant Ranks* are a ranking system originally developed by the California Native Plant Society (CNPS) to better define and categorize rarity in California's plants. These ranks were previously known as the CNPS lists but were renamed to the *California Rare Plant Ranks* to better reflect the joint effort among the CNPS, the CDFW, and a wide range of botanical experts, who work together to assign a rarity ranking.

1A: Plants presumed extinct in California and rare/extinct elsewhere.
1B: Plants rare, threatened, or endangered in California and elsewhere.
2A: Plants presumed extirpated in California, but more common elsewhere.
2B: Plants rare, threatened, or endangered in California but more common elsewhere.
3: Plants about which we need more information.
4: Plants of limited distribution.
X.1: Extension to CRPR (e.g., 1B.1); seriously threatened in California.
X.2: Extension to CRPR (e.g., 1B.2); fairly threatened in California.
X.3: Extension to CRPR (e.g., 1B.3); not very threatened in California.
CBR: Considered but rejected.

Western Riverside County Multiple Species Habitat Conservation Plan: Applied to species that are covered under state and federal permits for the MSHCP.

NAC: Species Not Adequately Conserved
AC: Species Adequately Conserved
(a): Surveys may be required for these species as part of wetlands mapping as described in Section 6.1.2 of the MSHCP.
(b): Surveys may be required for these species within Narrow Endemic Plant Species survey area as described in Section 6.1.3 of the MSHCP.
(c): Surveys may be required for these species within locations shown on survey maps as described in Section 6.3.2 of the MSHCP.
(d): Surveys may be required for these species within Criteria Area as described in Section 6.3.2 of the MSHCP.
(e): These Covered Species will be considered Adequately Conserved when conservation requirements identified in species-specific conservation objectives have been met. Species-specific conservation objectives for these species are presented in Section 9.0 of the MSHCP. Please refer to Table 9-3 of the MSHCP for specific conservation objectives that must be met for these species prior to including them on the list of Covered Species Adequately Conserved.
(f): These Covered Species will be considered Adequately Conserved when a Memorandum of Understanding is executed with the U.S. Forest Service that addresses management for these species on Forest Service Land. Refer to Table 9-3 of the MSHCP.
No entry: Not a Covered Species

Definitions of occurrence probability:

These definitions provide general guidance. Classifications for individual species may be modified based on biologists' experience and expert opinion.

Occurs: Species was detected during surveys or previously documented on the Project site or adjacent areas.
High: Species documented in the vicinity (i.e., within 5 miles) of the Project site and suitable habitat is present, but species not detected during surveys.
Moderate: Species documented in the vicinity of the Project site or suitable habitat present and site is within

geographic and elevational range of the species.

Low:	Species not documented in the vicinity of the Project site or suitable habitat is marginal.
Not Expected:	Species not documented in the vicinity of the Project site and suitable habitat marginal or absent, or site is not within geographic and elevational range of the species.
Absent:	No potential for the species to occur due to lack of habitat, geographic or elevation range, species life history, survey results, etc.
Unknown:	No focused surveys have been performed in the region, and the species' distribution and habitat are poorly known.

APPENDIX B: POTENTIALS FOR OCCURRENCE

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Plants				
Abronia villosa var. aurita Chaparral sand-verbena	Annual herb. Sandy soils in chaparral, coastal scrub, desert dunes at 75-1600m elevation. Southern CA, Arizona, Baja.	(Jan)Mar-Sep	Fed: None Calif: S2 CRPR: 1B.1	Not expected; no or marginal suitable habitat. One documented occurrence within 5 mi.
Allium marvinii Yucaipa onion	Perennial bulbiferous herb. Clay soils in openings in chaparral at 760-1065m. Riverside and San Bernardino Cos.	Apr-May	Fed: None Calif: S1 CRPR: 1B.2 MSHCP: AC b	Absent; no suitable habitat. One documented occurrence within 5 mi. in CNDDB and one in published report for another project.
Antennaria marginata White-margined everlasting	Perennial stoloniferous herb. Upper and lower montane coniferous forest at 2120-3353m elevation. San Bernardino Co., W US, Sonora, Mexico.	May-Aug	Fed: None Calif: S1 CRPR: 2B.3	Absent; outside elevation range, no suitable habitat.
Arenaria lanuginosa var. saxosa Rock sandwort	Perennial herb. Mesic, sandy soils in upper montane coniferous forest, subalpine coniferous forest at 1455-2600m elevation. San Bernardino Co., western US and Baja.	Jul-Aug	Fed: None Calif: S2 CRPR: 2B.3	Absent; outside elevation range, no suitable habitat.
Astragalus hornii var. *hornii* Horn's milk-vetch	Annual herb. Alkaline soils along lake margins, meadows and seeps and playas at 60-850m elevation. San Bernardino, Inyo, Kern, Tulare(?) Co and Nevada. San Joaquin Valley, South Coast, Western Transverse Ranges, W edge of the Mojave Desert.	May-Oct	Fed: None Calif: S1 CRPR: 1B.1	Not expected; no suitable habitat. One documented occurrence within 5 mi.
Astragalus lentiginosus var. borreganus *Borrego milk-vetch*	Annual herb. Sandy soils in Mojavean and Sonoran desert scrub at 30-895m elevation. Imperial, Riverside, San Bernardino, San Diego Cos., AZ, NV, Baja and Sonora. Not tracked in CNDDB.	Feb-May	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat.
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	Annual/perennial herb. Sandy soils in Sonoran desert scrub, desert dunes at 40-655m elevation. Riverside Co.	Feb-May	Fed: END Calif: S1 CRPR: 1B.2	Not expected; no suitable habitat. One documented occurrence within 5 mi.
Astragalus pachypus var. jaegeri Jaeger's milk-vetch	Perennial shrub. Sandy or rocky soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland at 365-975m elevation. Riverside and San Diego Cos.	Dec-Jun	Fed: None Calif: S1 CRPR: 1B.1 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance, not observed during survey. Five documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Atriplex coronata var. notatior San Jacinto Valley crownscale	Annual herb. Alkaline soils in playas, mesic areas of valley and foothill grassland, vernal pools at 139-500m elevation. Western Riverside Co., Kern Co.	Apr-Aug	Fed: END Calif: S1 CRPR: 1B.1 MSHCP: AC d	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Atriplex pacifica South Coast saltscale	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub, playas at sea level to 140m elevation. LA, Orange, Riverside, Santa Barbara, San Diego, Ventura Cos. and Channel Islands.	Mar-Oct	Fed: None Calif: S2 CRPR: 1B.2	Not expected; no suitable habitat, above elevation range. No documented occurrences within 5 mi.
Atriplex parishii Parish's brittlescale	Annual herb. Floodplains with alkali scrub, alkali playas, vernal pools, and alkali grasslands; southern California and Baja; 25-1900m elevation.	Jun - Oct	Fed: None Calif: S1 CRPR: 1B.1 MSHCP: AC d	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Atriplex serenana var. davidsonii Davidson's saltscale	Annual herb. Alkaline soils in coastal bluff scrub, coastal scrub, floodplains with alkali scrub, alkali playas, vernal pools, and alkali grasslands; Channel Islands, coastal and cismontane southern California; 10-200m elevation.	Apr - Oct	Fed: None Calif: S1 CRPR: 1B.2 MSHCP: AC d	Not expected; no suitable habitat, above elevation range. No documented occurrences within 5 mi.
Boechera parishii Parish's rockcress	Perennial herb. Rocky areas, quartzite on clay or sometimes carbonate soils in pebble plains, pinyon and juniper woodland, and upper montane coniferous forest at 1770-2990m elevation. San Bernardino Co.	Apr-May	Fed: None Calif: S2 CRPR: 1B.2	Not expected; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Boechera peirsonii San Bernardino rockcress	Perennial herb. Rocky areas in subalpine coniferous forest at 2700-3200m elevation. San Gorgonio Mt. in San Bernardino Co.	Mar-Aug	Fed: None Calif: S1 CRPR: 1B.2	Absent; well below elevation range, no suitable habitat. No documented occurrences within 5 mi.
Botrychium crenalutum Scalloped moonwort	Perennial rhizomatous herb. Bogs and fens, meadows and seeps, freshwater marshes and swamps, upper and lower montane coniferous forest at 1268-3280m elevation. N and S CA, western US.	Jun-Sep	Fed: None Calif: S3 CRPR: 2B.2	Absent; well below elevation range, no suitable habitat. No documented occurrences within 5 mi.
Brodiaea filifolia Thread-leaved brodiaea	Perennial bulbiferous herb. Often on clay soils in chaparral openings, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools at 25-1120m elevation. LA, Orange, Riverside, San Bernardino, and San Diego Co; scattered in Southern CA foothills & valleys.	Mar-Jun	Fed: THR Calif: END, S2 CRPR: 1B.1 MSHCP: AC d	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Calochortus palmeri var. palmeri Palmer's mariposa-lily	Perennial bulbiferous herb. Mesic soils in chaparral, lower montane coniferous forest, meadows and seeps at 710-2390m elevation. Kern, LA, Riverside, Santa Barbara, San Bernardino, San Luis Obispo, Ventura Co.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
Calochortus plummerae Plummer's mariposa lily	Perennial bulbiferous herb. Granitic rocky soils in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland at 100-1700m elevation. LA, Orange, Riverside, San Bernardino, Ventura Co.	May-Jul	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance. Seven documented occurrences within 5 mi., six in the Badlands, one near Banning from 1926 and not found during surveys in 1989-1991, possibly extirpated by development.
Castilleja lasiorhyncha San Bernardino Mountain's owl's-clover	Hemiparasitic annual herb. Mesic areas in chaparral, montane meadows, pebble plains, riparian woodland, upper montane coniferous forest at 1300-2390m elevation. Moist edges of springs/seeps on clay soil, wet meadows, openings in coniferous forest. Riverside, San Diego, San Bernardino Co.; San Bernardino Mts, San Jacinto Mts.	May-Aug	Fed: None Calif: S2? CRPR: 1B.2	Absent; well below elevation range, no suitable habitat. No documented occurrences within 5 mi.
Castilleja montigena Heckard's paintbrush	Hemiparasitic perennial herb. Pinyon and juniper woodland, upper and lower montane coniferous forest at 1950-2800m elevation. San Bernardino Mts. Not tracked in CNDDB.	May-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent; well below elevation range, no suitable habitat.
Caulanthus simulans Payson's jewelflower	Annual herb. Chaparral, coastal scrub, pinyon-juniper woodland at 90-2200m elevation. North-facing slopes and ridgelines on sandy-granitic soils, frequently on steep rocky slopes, in burned areas, or disturbed sites such as streambeds. Western Riverside Co., San Diego Co.	(Feb)Mar-May(Jun)	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Not expected; no or marginal suitable habitat with ongoing disturbance. One documented occurrence within 5 mi. from 1968 in burned chaparral in foothills of San Jacinto Mts.
Centromadia pungens ssp. *laevis* Smooth tarplant	Annual herb. Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland at 0-1170m elevation. Also fallow fields, drainage ditches; mainly in SW Riverside Co., a few sites in interior valleys of LA, San Bernardino, San Diego Co.	Apr-Sep	Fed: None Calif: S2 CRPR: 1B.1 MSHCP: AC d	Low; no or marginal suitable habitat with ongoing disturbance. No senesced plants observed during survey. Four documented occurrences within 5 mi., in the Badlands and along Potrero Creek.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Chorizanthe leptotheca Peninsular spineflower	Annual herb. Granitic soils and alluvial fans in chaparral, coastal scrub, lower montane coniferous forest at 300-1900m elevation. Riverside, San Bernardino, San Diego Co., Baja. Not tracked in the CNDDB.	May-Aug	Fed: None Calif: S3 CRPR: 4.2 MSHCP: AC	Not expected; no or marginal suitable habitat with ongoing disturbance.
Chorizanthe parryi var. *parryi* Parry's spineflower	Annual herb. Sandy or rocky soils and openings in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland at 275-1220m elev. LA, Riverside, San Bernardino Co.	Apr-Jun	Fed: None Calif: S2 CRPR: 1B.1 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance. Seven documented occurrences within 5 mi., closest is about 2 mi. south in the Badlands.
Chorizanthe xanti var. *leucotheca* White-bracted spineflower	Annual herb. Sandy or gravelly soil in coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodlands at 300-1300m elevation. LA, Riverside, San Bernardino, San Diego Co.	Apr-Jun	Fed: None Calif: S3 CRPR: 1B.2	Not expected; no suitable habitat. One documented occurrence within 5 mi. along San Gorgonio River wash.
Deinandra mohavensis Mojave tarplant	Annual herb. Mesic areas in chaparral, coastal scrub, riparian scrub at 640-1600m. Inyo, Kern, Riverside, San Diego, Tulare Cos. Presumed extirpated in San Bernardino Co.	(May)Jun-Oct (Jan)	Fed: None Calif: END, S2 CRPR: 1B.3 MSHCP: NAC e	Not expected; no suitable habitat. Two documented occurrences within 5 mi. in foothills of San Jacinto Mts.
Deinandra (Hemizonia) paniculata Paniculate tarplant	Annual herb. Usually vernally mesic areas, sometimes sandy. Coastal scrub, valley and foothill grassland, vernal pools at 25-940m elevation. Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo Co., Baja. Not tracked in the CNDDB.	(Mar) Apr-Nov	Fed: None Calif: S4 CRPR: 4.2	Low; no or marginal suitable habitat with ongoing disturbance.
Delphinium parishii ssp. subglobosum Colorado Desert larkspur	Perennial herb. Chaparral, cismontane woodland, pinyon and juniper woodland, Sonoran desert scrub at 600-1800m elevation. Imperial, Riverside, San Diego Cos. and Baja. Not tracked in the CNDDB.	Mar-Jun	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat.
Delphinium parryi ssp. purpureum Mt. Pinos larkspur	Perennial herb. Chaparral, Mojavean desert scrub, pinyon and juniper woodland at 1000-2600m elevation. Kern, Santa Barbara, Ventura, Riverside, San Bernardino Cos. Not tracked in the CNDDB.	May-Jun	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat, below elevation range

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Diplacus johnstonii Johnston's monkeyflower	Annual herb. Disturbed areas, scree, rocky or gravelly soils, roadsides in lower montane coniferous forest at 975-2920m elevation. LA and San Bernardino Co. Not tracked in CNDDB.	(Apr)May-Aug	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat, below elevation range
Dodecahema leptoceras Slender-horned spineflower	Annual herb. Open, sandy alluvial benches in valleys & canyons. Chaparral, coastal scrub, alluvial scrub, cismontane woodland at 200-760m elevation. LA, Riverside, San Bernardino Co. San Fernando Valley, Santa Ana River Valley, W Riverside Co.	Apr-Jun	Fed: END Calif: END, S1 CRPR: 1B.1 MSHCP: AC b	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Dudleya multicaulis Many-stemmed dudleya	Perennial herb. Often on clay soils in chaparral, coastal scrub, valley and foothill grassland at 15-790m elevation. LA, Orange, Riverside, San Bernardino, San Diego Co.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2 MSHCP: AC b	Absent; no suitable habitat. No documented occurrences within 5 mi.
Eriastrum densifolium ssp. *sanctorum* Santa Ana River woollystar	Perennial herb. Sandy or gravelly soils in chaparral, coastal scrub (alluvial fans and plains) at 91-610m elevation. Orange, Riverside, San Bernardino Co., endemic to Santa Ana River watershed.	Apr-Sep	Fed: END Calif: END, S1 CRPR: 1B.1 MSHCP: AC	Not expected; no suitable habitat, above elevation range. No documented occurrences within 5 mi.
Eriogonum kennedyi var. alpigenum Southern alpine buckwheat	Perennial herb. Granitic, gravelly soils in alpine boulder and rock field, subalpine coniferous forest at 2600-3500m elevation. LA, Ventura, San Bernardino Cos.	Jul-Sep	Fed: None Calif: S3 CRPR: 1B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Erythranthe purpurea Little purple monkeyflower	Annual herb. Meadows and seeps, pebble plain, upper montane coniferous forest at 1900-2300m elevation. Riverside and San Bernardino Cos., Baja.	May-Jun	Fed: None Calif: S2 CRPR: 1B.2	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Galium angustifolium ssp. jacinticum San Jacinto Mountains bedstraw	Perennial herb. Partially shady or open lower montane mixed and coniferous forest at 1350-2100m. Riverside Co. (San Jacinto and Santa Rosa Mts) and San Diego Co. (Laguna and Volcan Mts).	Jun-Aug	Fed: None Calif: S2? CRPR: 1B.3 MSHCP: AC b	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Galium californicum ssp. *primum* Alvin meadow bedstraw	Perennial herb. Granitic, sandy soil in chaparral, lower montane coniferous forest at 1350-1700m elevation. Riverside, San Bernardino Co.	May-Jul	Fed: None Calif: S2 CRPR: 1B.2 MSHCP: NAC f	Not expected; no suitable habitat, below elevation range. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Galium johnstonii Johnston's bedstraw	Perennial herb. Chaparral, lower montane coniferous forest, pinyon and juniper woodland, riparian woodland at 1220-2300m elevation. LA, Riverside, San Bernardino, San Diego Co. Not tracked in CNDDB.	Jun-Jul	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat, below elevation range
Gentiana fremontii Fremont's gentian	Annual herb. Mesic meadows and seeps, upper montane coniferous forest at 2400-2700m elevation. San Bernardino and San Diego Cos., SW US, central NW US.	Jun-Aug	Fed: None Calif: S2 CRPR: 2B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Gilia leptantha ssp. leptantha San Bernardino gilia	Annual herb. Sandy or gravelly soils in lower montane coniferous forest at 1500-2560m elevation. San Bernardino Co.	Jun-Aug	Fed: None Calif: S2 CRPR: 1B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Heuchera parishii Parish's alumroot	Perennial rhizomatous herb. Rocky, sometimes carbonate soils in alpine boulder and rock field, subalpine and montane coniferous forest at 1500-3800m elevation. Riverside and San Bernardino Cos.	Jun-Aug	Fed: None Calif: S3 CRPR: 1B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Hordeum intercedens Vernal barley	Annual grass. Saline flats and depressions in valley and foothill grassland, vernal pools at 5-1000m elevation. Southern, Central CA, Channel Islands. Not tracked in CNDDB.	Mar-Jun	Fed: None Calif: S3S4 CRPR: 3.2 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance.
Horkelia cuneata ssp. *puberula* Mesa horkelia	Perennial herb. Sandy or gravelly soils in maritime chaparral, cismontane woodland, coastal scrub at 70-810m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, Ventura Co.	Feb-Jul(Sep)	Fed: None Calif: S1 CRPR: 1B.1	Not expected; no suitable habitat. One documented occurrence within 5 mi. from 1921 mapped near Banning, possibly extirpated.
Hulsea vestita ssp. callicarpha Beautiful hulsea	Perennial herb. Rocky or gravelly granitic soils in chaparral and lower montane coniferous forest at 915-3050m elevation. Riverside and San Diego Cos. Not tracked in the CNDDB.	May-Oct	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Not expected; no suitable habitat.
Hulsea vestita ssp. parryi Parry's sunflower	Perennial herb. Granitic or carbonate soils, rocky areas, openings in pinyon and juniper woodlands, upper and lower montane coniferous forest at 1370-2895m elevation. Kern, LA, Mono, San Bernardino, Ventura Cos. Not tracked in CNDDB.	Apr-Aug	Fed: None Calif: S4 CRPR: 4.3	Absent; no suitable habitat, well below elevation range.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Hulsea vestita ssp. pygmaea Pygmy hulsea	Perennial herb. Granitic, gravelly soils in alpine boulder and rock field and subalpine coniferous forest at 2835 to 3900m elevation. San Bernardino and Tulare Cos.	Jun-Oct	Fed: None Calif: S1 CRPR: 1B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Imperata brevifolia California satintail	Perennial rhizomatous herb. Mesic areas in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), riparian scrub at 0-1215m elevation. Scattered location throughout CA, SW US, Baja.	Sep-May	Fed: None Calif: S3 CRPR: 2B.1	Not expected; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
Juglans californica Southern California black walnut	Perennial deciduous tree. Alluvial soils in chaparral, cismontane woodland, coastal scrub, riparian woodland at 50-900m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co. Not tracked in CNDDB.	Mar-Aug	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Absent; no suitable habitat, conspicuous tree not observed during surveys.
Juncus duranii Duran's rush	Perennial rhizomatous herb. Mesic areas in lower montane coniferous forest, meadows and seeps, upper montane coniferous forest at 1769-2804m elevation. LA, Riverside, San Bernardino Co. Not tracked in CNDDB.	Jul-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent; no or marginal suitable habitat, well below elevation range, not observed during survey.
Lasthenia glabrata spp. coulteri Coulter's goldfields	Annual herb. Coastal salt marshes and swamps, playas, vernal pools at 1-1220m elevation. Scattered locations in CA, Baja.	Feb-Jun	Fed: None Calif: S2 CRPR: 1B.1 MSHCP: AC d	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Lepechinia cardiophylla Heart-leaved pitcher sage	Perennial shrub, fire follower. Closed-cone coniferous forest, chaparral, cismontane woodland, oak woodland at 520-1370m elevation. Santa Ana Mts of Orange and Riverside Co., Iron Mt. in San Diego Co., and coastal mts. of Baja. Most (possible all) pops. in CA are in Cleveland National Forest.	Apr-Jul	Fed: None Calif: S2S3 CRPR: 1B.2 MSHCP: AC d	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	Annual herb. Chaparral, coastal scrub at 1-885m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co., Santa Cruz Island.	Jan-Jul	Fed: None Calif: S3 CRPR: 4.3	Not expected; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Lilium humboldtii ssp. ocellatum Ocellated Humboldt lily	Perennial bulbiferous herb. Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland at 30-1800m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co, some Channel Islands. Lower stream benches in riparian corridors in lower montane coniferous forest and coastal chaparral or shaded, dry slopes beneath a dense oak or conifer canopy. Not tracked in CNDDB.	Mar-Jul(Aug)	Fed: None Calif: S4? CRPR: 4.2 MSHCP: NAC f	Not expected; no suitable habitat.
Lilium parryi Lemon lily	Perennial bulbiferous herb. Mesic soils in upper and lower montane coniferous forest, riparian forest, meadows and seeps at 1220-2745m elevation. LA, Riverside, San Bernardino, San Diego Co, Arizona, Sonora Mex.	Jul-Aug	Fed: None Calif: S3 CRPR: 1B.2 MSHCP: NAC f	Not expected; no or marginal suitable habitat with ongoing disturbance, below elevation range. No documented occurrences within 5 mi.
Lycium torreyi Torrey's box-thorn	Perennial shrub. Sandy, rocky, washes, streambanks, desert valleys in Mojavean and Sonoran desert scrub from below sea level to 1220m elevation. S CA, SW US, Sonora, Mexico. Not tracked in CNDDB.	(Jan-Feb)Mar-Jun(Sep-Nov)	Fed: None Calif: S3 CRPR: 4.2	Not expected; no suitable habitat, not observed during survey.
Malaxis monophyllos var. brachypoda White bog adder's-mouth	Perennial bulbiferous herb. Mesic areas in bogs and fens, meadows and seeps, and upper montane coniferous forest at 2200-2743m elevation. Riverside and San Bernardino Cos., presumed extirpated in Riverside Co. Eastern, central, southwest US and Alaska.	Jun, Aug	Fed: None Calif: S1 CRPR: 2B.1	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Mentzelia tricuspis Spiny-hair blazing star	Annual herb. Sandy, gravelly slopes and washes in Mojavean desert scrub at 150-1280m elevation. San Bernardino, San Diego, Inyo, and possibly Riverside Co., AZ, NV, UT.	Mar-May	Fed: None Calif: S2 CRPR: 2B.1	Not expected; no suitable habitat. One documented occurrence within 5 mi. from 1886, exact location unknown.
Monardella macrantha ssp. hallii Hall's monardella	Perennial rhizomatous herb. Broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland at 730-2195m elevation. LA, Orange, Riverside, San Bernardino, San Diego Co.	Jun-Oct	Fed: None Calif: S3 CRPR: 1B.3 MSHCP: AC	Not expected; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Monardella nana ssp. leptosiphon San Felipe monardella	Perennial rhizomatous herb. Chaparral, lower montane coniferous forest at 1200-1855m elevation. Riverside and San Diego Cos., Baja	Jun-Jul	Fed: None Calif: S2 CRPR: 1B.2	Not expected; no suitable habitat, below elevation range. No documented occurrences within 5 mi.
Muilla coronata Crowned muilla	Perennial bulbiferous herb. Chenopod scrub, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland at 670-1960m elevation. Inyo, Kern, LA, San Bernardino, Tulare Cos., Nevada. Not tracked in CNDDB.	Mar-Apr(May)	Fed: None Calif: S3 CRPR: 4.2	Not expected; no suitable habitat.
Myosurus minimus ssp. apus Little mousetail	Annual herb. Valley and foothill grasslands, alkaline vernal pools at 20-640m elevation. Locations in northern, central, and southern CA, Oregon, Baja.	Mar-Jun	Fed: None Calif: S2 CRPR: 3.1 MSHCP: AC d	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
Nama stenocarpa Mud nama	Annual/perennial herb. Found in marshy habitat on lake margins and riverbanks at 5-500m elevation. S CA, San Clemente Island, central CA, AZ, TX, Baja, Sonora.	Mar-Oct	Fed: None Calif: S1S2 CRPR: 2B.2 MSHCP: AC d	Not expected; no suitable habitat, above elevation range. No documented occurrences within 5 mi.
Navarretia fossalis Spreading navarretia	Annual herb. Chenopod scrub, shallow freshwater marshes and swamps, playas, vernal pools at 30-655m elevation. LA, Riverside, San Diego, San Luis Obispo Co., Baja.	Apr-Jun	Fed: THR Calif: S2 CRPR: 1B.1 MSHCP: AC b	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Oreonana vestita Woolly mountain parsley	Perennial herb. Gravel or talus soils in lower and upper montane and subalpine coniferous forest at 1615-3500m elevation. Kern, LA, San Bernardino Co. Endemic to San Bernardino, San Gabriel, and Scodie Mts.	Mar-Sep	Fed: None Calif: S3 CRPR: 1B.3	Absent; no suitable habitat, below elevation range. No documented occurrences within 5 mi.
Oxytropis oreophila var. oreophila Rock-loving oxytrope	Perennial herb. Gravelly or rocky soils in alpine boulder and rock field, subalpine coniferous forest at 3400-3800m elevation. LA and San Bernardino Cos., AZ, NM, NV, UT.	Jun-Sep	Fed: None Calif: S2 CRPR: 2B.3	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Parnassia cirrata var. *cirrata* San Bernardino grass-of-Parnassus	Perennial herb. Mesic areas, streamsides, sometimes calcareous soils in lower and upper montane coniferous forest, meadows and seeps at 1250-2440m elevation. San Gabriel Mts, San Bernardino Mts, Mexico.	Aug-Sep	Fed: None Calif: S2 CRPR: 1B.3	Absent; no suitable habitat, below elevation range. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Petalonyx linearis Narrow-leaf sandpaper-plant	Perennial shrub. Sandy or rocky canyons in Mojavean and Sonoran desert scrub at 25-1115m elevation. Riverside, San Bernardino, San Diego, and Imperial Cos., Arizona, Sonora and Baja Mexico.	(Jan-Feb)Mar-May(Jun-Dec)	Fed: None Calif: S3? CRPR: 2B.3	Not expected; no suitable habitat. One documented occurrence within 5 mi. from 1879, exact location unknown.
Piperia leptopetala Narrow-petaled rein orchid	Perennial herb. Cismontane woodland, upper and lower montane coniferous forest at 380-2225m elevation. Not tracked in CNDDB.	May-Jul	Fed: None Calif: S4 CRPR: 4.3	Not expected; no suitable habitat.
Pseudognaphalium leucocephalum White rabbit-tobacco	Perennial herb. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, riparian woodland at 0-2100m elevation. LA, Orange, Riverside, San Bernardino, San Diego, Ventura Co, Arizona, New Mexico, Texas, Baja and Sonora Mex.	(Jul)Aug-Nov(Dec)	Fed: None Calif: S2 CRPR: 2B.2	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Rupertia rigida Parish's rupertia	Perennial herb. Chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, pebble plain, valley and foothill grassland at 700-2500m elevation. LA, Riverside, San Bernardino, San Diego Cos., Baja. Not tracked in the CNDDB.	Jun-Aug	Fed: None Calif: S4 CRPR: 4.3	Low; no or marginal suitable habitat with ongoing disturbance.
Sedum niveum Davidson's stonecrop	Perennial rhizomatous herb. Rocky soils in lower and upper montane and subalpine coniferous forest at 2075-3000m elevation. Riverside and San Bernardino Cos., Baja. Not tracked in CNDDB.	Jun-Aug	Fed: None Calif: S3 CRPR: 4.2	Absent; no suitable habitat, well below elevation range.
Senecio astephanus San Gabriel ragwort	Perennial herb. Rocky slopes in coastal bluff scrub, chaparral at 400-1500m elevation. Kern, LA, Monterey, Santa Barbara, San Bernardino, San Diego, San Luis Obispo Co. Not tracked in CNDDB.	May-Jul	Fed: None Calif: S3 CRPR: 4.3	Not expected; no suitable habitat.
Sidalcea hickmanii ssp. parishii Parish's checkerbloom	Perennial herb. Chaparral, cismontane woodland, lower montane coniferous forest at 1000-2499m elevation. Kern, Santa Barbara, San Bernardino, San Luis Obispo Cos. San Bernardino Mts.	(May)Jun-Aug	Fed: None Calif: Rare, S1 CRPR: 1B.2	Not expected; no suitable habitat, below elevation range. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Sidalcea malviflora ssp. dolosa Bear Valley checkerbloom	Perennial herb. Meadows and seeps, riparian woodland, meadows and seeps in upper and lower montane coniferous forest at 1495-2685m elevation. San Bernardino Mts.	May-Aug	Fed: None Calif: S2 CRPR: 1B.2	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Sidalcea neomexicana Salt Spring checkerbloom	Perennial herb. Alkaline, mesic soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas at 15-1530m elevation. Kern, LA, Orange, Riverside, San Bernardino, San Diego, Ventura Co, western US, Sonora Mex.	Mar-Jun	Fed: None Calif: S2 CRPR: 2B.2	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Sidotheca caryophylloides Chickweed oxytheca	Annual herb. Sandy soils in lower montane coniferous forest at 1114-2600m elevation. LA, Riverside, San Bernardino, Tulare, Ventura Co. Not tracked in CNDDB.	Jul-Sep(Oct)	Fed: None Calif: S4 CRPR: 4.3 MSHCP: NAC e	Absent; no suitable habitat, below elevation range. No documented occurrences within 5 mi.
Silene krantzii Krantz's catchfly	Perennial herb. Usually sandy or gravelly, sometimes rocky, soils in alpine dwarf scrub at 3235-3510m elevation. San Gorgonio Mt. in San Bernardino Co.	Apr-Sep	Fed: None Calif: S1 CRPR: 1B.2	Absent; no suitable habitat, well below elevation range. No documented occurrences within 5 mi.
Streptanthus bernardinus Laguna Mountains jewelflower	Perennial herb. Chaparral, lower montane coniferous forest at 670-2500m elevation. Riverside, San Bernardino, San Diego Co.	May-Aug	Fed: None Calif: S3S4 CRPR: 4.3	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Streptanthus campestris Southern jewelflower	Perennial herb. Rocky soils in chaparral, lower montane coniferous forest, pinyon and juniper woodland at 900-2300m elevation. Imperial, Santa Barbara, Ventura, San Bernardino, Riverside, San Diego Co, Baja.	(Apr)May-Jul	Fed: None Calif: S3 CRPR: 1B.3	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Symphyotrichum defoliatum San Bernardino aster	Perennial rhizomatous herb. Near ditches, streams, springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grasslands (vernally mesic) at 2-2040m elevation. Southern and Central California.	Jul-Nov	Fed: None Calif: S2 CRPR: 1B.2	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
Taraxacum californicum California dandelion	Perennial herb. Mesic meadows and seeps at 1620-2800m elevation. San Bernardino Co.	May-Aug	Fed: END Calif: S1S2 CRPR: 1B.1	Not expected; no or marginal suitable habitat with ongoing disturbance, below elevation range. No documented occurrences within 5 mi.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Tortula californica California screw-moss	Moss. Sandy soil in chenopod scrub, valley and foothill grassland at 10-1460m elevation. Scattered occurrences in Southern and Central CA, Channel Islands.	Not applicable	Fed: None Calif: S2? CRPR: 1B.2	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
Trichocoronis wrightii var wrightii Wright's trichocoronis	Annual herb. Alkaline soils in meadows and seeps, marshes and swamps, riparian forest, vernal pools at 5-435m elevation. Riverside Co., Central Valley, Texas, Baja.	May-Sep	Fed: None Calif: S1 CRPR: 2B.1 MSHCP: AC b	Not expected; no or marginal suitable habitat with ongoing disturbance, above elevation range. No documented occurrences within 5 mi.
References: CDFW (2020a, 2020b), USFWS (2020), CNPS (2020), Dudek (2003), RCA (2019)				

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Invertebrates			
Bombus crotchii Crotch bumble bee	Coastal CA E to Sierra-Cascade crest & S into Mexico. Open grassland and scrub habitats. Food plant genera include *Antirrhinum, Asclepias, Chaenactis, Lupinus, Medicago, Salvia, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum*. Lives in colonies that may be underground in rodent holes or above ground in rock piles, tree cavities, etc.	Fed: None Calif: CanE, S1S2	Not expected; native food plants limited or lacking. One documented occurrence within 5 mi. from 1952 near Banning, exact location unknown.
Halictus harmonius Harmonius halictid bee	Known only from the foothills of the San Bernardino Mts and possibly also the San Jacinto Mts.	Fed: None Calif: SA, S1	Not expected; outside of known geographic range. No documented occurrences within 5 mi.
Stenopelmatus cahuilaensis Coachella Valley Jerusalem cricket	Desert dunes. Found in the large, undulating dunes piled up at the north base of Mt. San Jacinto. Inhabits a small segment of the sand and dune area of the Coachella Valley in the vicinity of Palm Springs.	Fed: None Calif: SA, S1S2	Absent; no suitable habitat, outside of geographic range.
Streptocephalus woottoni Riverside fairy shrimp	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Coastal scrub, valley & foothill grassland, vernal pool, wetland. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season. Generally restricted to pools greater than 12 inches deep.	Fed: END Calif: SA, S1S2 MSHCP; AC a	Absent; no vernal pools or ponding areas present. Site is not within designated critical habitat.
Fish			
Oncorhynchus mykiss irideus pop. 10 Steelhead – southern California DPS	South coast flowing waters. Fed listing refers to pops from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego Co.)	Fed: END Calif: SA, S1	Absent; no aquatic habitat present.
Rhinichthys osculus "subspecies 3" Santa Ana speckled dace	Endemic to Santa Ana & San Gabriel River watersheds, historic in Big Tujunga Cyn. Santa Ana River populations in lower San Bernardino Mtn. foothills & washes.	Fed: None Calif: SSC, S1	Absent; no aquatic habitat present.
Amphibians			
Rana muscosa Southern mountain yellow-legged frog	Always encountered within a few feet of water. Tadpoles may require up to 2 years to complete development.	Fed: END Calif: END, WL, S1 MSHCP: AC c	Absent; no aquatic habitat present.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Spea hammondii Western spadefoot toad	Cismontane woodland, coastal scrub, valley & foothill grassland, vernal pool. Breeds in quiet streams & vernal pools, burrows beneath sand during dry season. W CA, Central Valley to Baja California. From near sea level up to 4,500 ft elev.	Fed: None Calif: SSC, S3 MSHCP: AC	Low; no streams, vernal pools, or ponding areas present. Nine documented occurrences within 5 mi. Closest is about 0.4 mi. E of the site, near Montgomery/Smith Creek from 1990.
Reptiles			
Anniella stebbinsi (Anniella pulchra pulchra) Southern California legless lizard	Various habitats, mainly shrublands, <6500 ft. elev. Coast Ranges from Bay area to N Baja CA, SW Sierra Nevada, parts of the Central Valley, Transverse & Peninsular Ranges.	Fed: None Calif: SSC, S3	Low; no or marginal suitable habitat with ongoing disturbance. Four documented occurrences within 5 mi. Closest are about 2.8 mi. SW in Badlands and 3.4 mi. SE along Smith Creek.
Arizona elegans occidentalis California glossy snake	Arid scrub, rocky washes, grasslands, chaparral, often with loose or sandy soils. Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular Ranges, south to Baja California. Sea level to 7200' elev.	Fed: None Calif: SSC, S2	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
Aspidoscelis hyperythra Orange-throated whiptail	Low-elevation coastal scrub, chaparral, valley-foothill hardwood, sea level to 1040m. Sandy areas, patches of rock. S CA, west of desert to tip of Baja CA.	Fed: None Calif: WL, S2S3 MSHCP: AC	Not expected; no suitable habitat. One documented occurrence within 5 mi. from 1912 near Beaumont, exact location unknown, possibly extirpated.
Aspidoscelis tigris stejnegeri Coastal whiptail	Primarily hot, dry open areas with sparse foliage, chaparral, woodland, riparian; coastal So CA, mostly west of Peninsular Ranges and south of Transverse Ranges, north into Ventura County, below ±7000' elev. and into Baja.	Fed: None Calif: SSC, S3 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance. Four documented occurrences within 5 mi. Closest is about 1.2 mi. S along Highland Springs Road in coastal sage scrub habitat in Badlands.
Charina umbratica Southern rubber boa	Found in a few locales in San Bernardino & San Jacinto Mtn. ranges. Moist coniferous forest and woodlands from about 5000-9000 ft. elev. Fossorial, nocturnal, sometimes crepuscular. Hibernates in rock outcrops, rotting logs, or other underground refuges. Active April-October. Thick duff and downed logs important for cover. Usually found within several hundred meters of water.	Fed: None Calif: THR, S2S3 MSHCP: NAC f	Absent; no suitable habitat, well below elevation range.
Crotalus ruber Red-diamond rattlesnake	Desert scrub, thorn scrub, chaparral below 4,000ft. San Bernardino County S through most of Baja California, Mexico.	Fed: None Calif: SSC, S3 MSHCP: AC	Not expected; no suitable habitat. One documented occurrence within 5 mi,. about 4.4 mi. SW in Badlands.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Diadophis punctatus modestus San Bernardino ringneck snake	Open relatively rocky areas within valley-foothill locales, mixed chaparral/annual grasslands. Prefers moist habitats. W San Diego & Riv. Cos., SW San Bern., Vent. & LA Cos., NW Baja CA.	Fed: None Calif: SA, S2?	Low; no or marginal suitable habitat with ongoing disturbance. No documented occurrences within 5 mi.
Phrynosoma blainvillii Coast horned lizard	Coastal sage scrub, low elevation chaparral, annual grassland, oak & riparian woodlands, coniferous forest. SW California to NW Baja California, Mexico.	Fed: None Calif: SSC, S3S4 MSHCP: AC	Low; no or marginal suitable habitat with ongoing disturbance. Eight documented occurrences within 5 mi., most in Badlands.
Salvadora hexalepis virgultea Coast patch-nosed snake	Shrublands, washes, sandy flats, rocky areas; Santa Barbara county through southwest Calif., to northwest Baja Calif.	Fed: None Calif: SSC, S2S3	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Thamnophis hammondii Two-striped gartersnake	Usually in or near perennial fresh water & adjacent riparian habitat, pools in streams. SW CA & NW Baja California.	Fed: None Calif: SSC, S3S4	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Birds			
Accipiter cooperii Cooper's hawk	Cismontane woodland, riparian forest, riparian woodland, upper montane coniferous forest. Forages in open areas over scrublands; California, Mexico, Central America. Nests in trees, often in dense woods. Year-round resident in most of southern California range. CNDDB only tracks nesting.	Fed: None Calif: WL, S4 MSHCP: AC	Low-moderate (foraging), low (nesting); potentially suitable foraging habitat with ongoing disturbance, potentially suitable nesting habitat but reduced potential due to adjacent development/disturbance. One documented occurrence within 5 mi. (nesting) about 3.7 mi. W in riparian woodland. Multiple eBird observations in region including just to S in golf course.
Agelaius tricolor Tricolored blackbird	Breeds colonially in freshwater marshes, nomadic among marshes and fields in winter; almost completely endemic to Calif. Year-round resident in southern California range. CNDDB only tracks nesting.	Fed: BCC Calif: THR, SSC, S1S2 MSHCP: AC	Low (foraging), not expected (nesting); no or marginal suitable foraging habitat, no suitable nesting habitat. One documented occurrence within 5 mi. (nesting) along Potrero Creek. No eBird records in project vicinity.
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	Sparse, mixed chaparral, scrub, rocky, brushy slopes. Central California to Baja California. Year-round resident in southern California range.	Fed: None Calif: WL, S3 MSHCP: AC	Low (foraging and nesting). No or marginal suitable habitat. Five documented occurrences within 5 mi., 2 in Badlands, one about 3 mi. NE in patch chaparral, rest along San Gorgonio River. Multiple eBird records in Badlands or foothills.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Aquila chrysaetos Golden eagle	Found in a variety of habitats from sea level to 11,500 feet, rugged open habitats preferred. Large platform nests constructed on secluded cliffs, large trees, and occasionally structures (i.e., electrical transmission towers). CNDDB tracks nesting and wintering.	Fed: BGEPA, BCC Calif: FP, WL, S3 MSHCP: AC	Not expected (foraging); absent (nesting). No suitable nesting habitat, potential foraging habitat likely avoided due to adjacent development. One documented occurrence within 5 mi. in San Jacinto Wildlife Area; a few eBird records in region.
Artemisiospiza belli belli Bell's sage sparrow	Sage scrub and chaparral communities. Nests mainly in shrubs, also in grass, and occasionally on ground under shrub. Found in coastal sage scrub in south of range. Central Washington southward to Baja California, Mexico. Year-round resident in southern CA.	Fed: BCC Calif: WL, S3 MSHCP: AC	Not expected (foraging and nesting); no or marginal suitable habitat. No documented occurrences within 5 mi.; a few eBird records in foothills.
Athene cunicularia Burrowing owl	Nests in rodent burrows, usually in grasslands. Forages in open habitat; increasingly uncomm. in S CA. Occurs through W US/Mex. Sparse in desert scrub but common around irrigated lands.	Fed: BCC Calif: SSC, S3 MSHCP: AC c	Low; potentially suitable habitat with ongoing disturbance, no owls or owl sign observed during survey. Three documented occurrences within 5 mi., one in Badlands, remainder further SW. Three eBird records in vicinity – about 1.7 mi. NE in field near Banning Substation (03.2012); 2.7 mi. NW in field near park 2 adult and 5 juveniles (04.2018); 3.1 mi. SE (07.2018).
Baeolophus inornatus Oak titmouse	Open pine or mixed oak-pine forest, juniper woodland, pinyon or juniper mixed with Joshua trees. Not migratory. CNDDB only tracks nesting.	Fed: BCC Calif: SA, S4	Low (foraging and nesting). No or marginal suitable habitat. No documented occurrences within 5 mi. (nesting). Multiple eBird records in region.
Buteo regalis Ferruginous hawk	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Great Basin grassland and scrub, pinyon and juniper woodlands, valley and foothill grassland. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles. Does not breed in southern CA.	Fed: BCC Calif: WL, S3S4 MSHCP: AC	Low-moderate (foraging), absent (nesting); potentially suitable foraging habitat with ongoing disturbance, does not nest in area. One documented occurrence within 5 mi. in Badlands. Some eBird observations in region.
Buteo swainsoni Swainson's hawk	Grassland/agricultural, large trees for nesting, desert scrub with Joshua tree & Fremont cottonwood overstory, near streams & open fields. Breeds overwhelmingly in Great Basin & Central Valley of California. Seen in migration in southern California. CNDDB only tracks nesting.	Fed: BCC Calif: THR, S3 MSHCP: AC	Low (foraging), absent (nesting). Marginal foraging habitat, outside current breeding range, may be seen in Project vicinity in migration. A few eBird observations in region.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Calypte costae Costa's hummingbird	Desert and coastal scrub and chaparral in desert, semi-desert and mountain foothills and seasonally in mountains, adjacent open meadows and gardens. Found in NV, UT, AZ, CA and Mexico. Year-round resident in southern CA. CNDDB only tracks nesting.	Fed: BCC Calif: SA, S4	Low-moderate (foraging and nesting); potentially suitable or marginal habitat. No documented occurrences within 5 mi. Multiple eBird records in region, including two immediately adjacent to site.
Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren	Desert scrub and coastal sage scrub with cactus patches; Southern CA and northwestern Baja. Non-migratory. Pairs defend territories throughout the year. CNDDB only tracks this species in San Diego and Orange Cos.	Fed: BCC Calif: SSC, S3 MSHCP: AC	Not expected (foraging and nesting); no suitable habitat and no cactus patches. No eBird records in Project vicinity.
Chamaea fasciata Wrentit	Chaparral, oak woodland, shrublands, western CA, northwestern Baja, western Oregon. Year-round resident in southern CA range. CNDDB does not track this species.	Fed: BCC Calif: None	Low (foraging and nesting); no or marginal suitable habitat with ongoing disturbance. Multiple eBird records in region.
Coccyzus americanus occidentalis Western yellow-billed cuckoo	Valley foothill and desert riparian. Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, and which abut on slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation. Most of the United States (excluding the NW states) & into Baja California & northern Mexico.	Fed: THR, BCC Calif: END, S1 MSHCP: AC a	Absent (foraging and nesting); small area of willows on site not adequate to provide suitable habitat. No documented occurrences within 5 mi. No eBird records in vicinity.
Cypseloides niger Black swift	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely. CNDDB only tracks nesting.	Fed: BCC Calif: SSC, S2 MSHCP: AC	Low (foraging), absent (nesting); no or marginal foraging habitat, no nesting habitat. No documented occurrences within 5 mi. (nesting). No eBird records in vicinity.
Dryobates (Picoides) nuttallii Nuttall's woodpecker	Found in low elevation riparian and oak woodlands; rarely in conifers. Central Valley, Transverse and Peninsular Ranges, Coast Ranges north to Sonoma Co., lower portions of the Cascade Range and Sierra Nevada. Year-round resident throughout coastal mountains of CA. Not tracked in CNDDB.	Fed: BCC Calif: None	Low (foraging and nesting); no or marginal habitat. Multiple eBird records in region.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Elanus leucurus White-tailed kite	Breeds in woodlands and riparian forests, forages over open terrain; Pacific Coast (Calif, northern Baja, Oregon), other scattered localities. Year-round resident in southern CA range. CNDDB only tracks nesting.	Fed: None Calif: FP, S3S4 MSHCP: AC	Low (foraging), not expected (nesting); marginal foraging habitat with ongoing disturbance, potentially marginal nesting habitat but adjacent development/disturbance reduces potential. No documented occurrences within 5 mi. (nesting). Several eBird records in region.
Empidonax traillii extimus Southwestern willow flycatcher	Dense riparian forests, wet mountain meadow systems with standing water for at least part of the breeding season (May to July) & with ample numbers of willow & other associated trees & shrubs. Rare & local is S CA. SW US & N Baja California. CNDDB only tracks nesting.	Fed: END Calif: END, S1 MSHCP: AC a	Absent (foraging and nesting); small area of willows on site not adequate to provide suitable habitat. Site is not within designated critical habitat. Two documented occurrences within 5 mi. in San Timoteo Canyon.
Eremophila alpestris actia California horned lark	Variety of open habitats with low growing vegetation or bare ground, grasslands, rangelands, "bald" hills, mtn. meadows, open coastal plains, fallow fields, alkali flats. Within coastal Sonoma Co. to San Diego Co., San Joaquin Valley & E to foothills.	Fed: None Calif: WL, S4 MSHCP: AC	Moderate (foraging), low (nesting). Potentially suitable foraging habitat, ongoing disturbance reduces potential for nesting. One documented occurrence within 5 mi., about 4 mi. W. Several eBird records in region.
Icteria virens Yellow-breasted chat	Summer resident, inhabits riparian thickets of willow near watercourses, low dense riparian willow. Migrant and summer resident in CA, northern CA, central coast, eastern Central Valley, coastal southern CA, Colorado River, western US, Canada, Mexico, Central America. CNDDB only tracks nesting.	Fed: None Calif: SSC, S3 MSHCP: AC	Not expected (foraging and nesting); small area of willows on site not adequate to provide suitable habitat. No documented occurrences within 5 mi. (nesting). Few eBird records in region.
Lanius ludovicianus Loggerhead shrike	Open areas where small trees, shrubs, and fences can provide suitable perches. Nests in small trees and large shrubs. Throughout much of North America. CNDDB only tracks nesting.	Fed: BCC Calif: SSC, S4 MSHCP: AC	Low-moderate (foraging), low (nesting); potentially suitable or marginal habitat with ongoing disturbance. Two documented occurrences within 5 mi. (nesting) in Badlands. Several eBird records in region.
Plegadis chihi White-faced ibis	Freshwater wetlands, shallow lakes, wet meadows, flooded pastures and croplands. Nests in dense, fresh emergent wetland. Salton Sea, local winter visitor along coast, uncommon elsewhere in southern CA and Central Valley. CNDDB only tracks nesting colonies.	Fed: None Calif: WL, S3S4 MSHCP: AC	Not expected (foraging); absent (nesting); no suitable habitat. No documented occurrences within 5 mi. (nesting colony). No eBird records in Project vicinity.
Polioptila californica californica Coastal California gnatcatcher	Sage scrub, also chaparral, grasslands, riparian adjacent to or mixed with sage scrub. S Ventura Co. to LA, Orange, Riv., San Bern., San D. Cos into Baja CA, Mexico.	Fed: THR Calif: SSC, S2 MSHCP: AC	Absent (foraging and nesting); no suitable habitat. No documented occurrences within 5 mi. Site is not within designated critical habitat.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Progne subis Purple martin	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag. Broadleaved upland forest, lower montane coniferous forest.	Fed: None Calif: SSC, S3 MSHCP: AC	Not expected (foraging and nesting); no suitable habitat. One documented occurrence within 5 mi. from 1910, Beaumont area, exact location unknown. Few eBird records in region.
Setophaga petechia Yellow warbler	Migrant and summer resident in southern CA. Riparian, including willow, cottonwood, sycamore, alder, aspen for nesting & foraging, also conifer forest. CNDDB only tracks nesting.	Fed: BCC Calif: SSC, S3S4	Not expected (foraging and nesting); small area of willows on site likely not adequate to provide suitable habitat. Two documented occurrences within 5 mi., one along San Gorgonio River, one from 2016 about a mile S of site along Potrero Creek in riparian woodland area.
Spinus lawrencei Lawrence's goldfinch	Summer breeder, may overwinter. Coastal side of southern and central CA, western edge of southern deserts, east side of Central Valley into northern CA, Colorado River, SW US and northern Mex. Valley foothill hardwood and hardwood-conifer, desert riparian, pinyon juniper, palm oasis, lower montane. CNDDB only tracks nesting.	Fed: BCC Calif: SA, S3S4	Low (foraging and nesting); no or marginal suitable habitat. No documented occurrences within 5 mi. (nesting). Few eBird records in vicinity.
Spizella atrogularis Black-chinned sparrow	Chaparral, sagebrush, arid scrublands, and brushy hillsides. Not tracked in the CNDDB.	Fed: BCC Calif: None	Low (foraging and nesting); no or marginal suitable habitat. A few eBird records in foothills and adjacent residential areas to the south of the site.
Toxostoma lecontei Le Conte's thrasher	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Fed: BCC Calif: SSC*, S3 *San Joaquin population only	Not expected (foraging and nesting); no suitable habitat. No documented occurrences within 5 mi. No eBird records in region.
Vireo bellii pusillus Least Bell's vireo	Riparian woodlands, bottomlands. N Mex. & Baja CA into S CA & the S mid-western US. CNDDB only tracks nesting.	Fed: END Calif: END, S2 MSHCP: AC a	Absent (foraging and nesting); small area of willows on site not adequate to provide suitable habitat. Four documented occurrences within 5 mi., one along San Timoteo Canyon, three along Potrero Creek (closest is 0.8 mi. SSW). Site is not within designated critical habitat.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Xanthocephalus xanthocephalus Yellow-headed blackbird	Marsh, swamp, wetland. Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects are abundant. CNDDB only tracks nesting.	Fed: None Calif: SSC, S3	Not expected (foraging and nesting); no suitable habitat. No documented occurrences within 5 mi. (nesting). Few eBird records in region.
Mammals			
Antrozous pallidus Pallid bat	Rock outcrops of shrublands, ≤ 6000' elevation; southwest North America to interior Oregon and Washington; hibernates in winter. Locally common at low elevations in grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground. Roosts in caves, crevices, mines, hollow trees, buildings. Very sensitive to disturbance of roosting sites.	Fed: None Calif: SSC, S3	Low (foraging), not expected (roosting); potentially marginal foraging habitat, development and ongoing disturbances in area reduce potential for roosting. One documented occurrence within 5 mi., about 1.8 mi. S in Badlands.
Chaetodipus californicus femoralis Dulzura pocket mouse	Variety of habitats including coastal scrub, chaparral & grassland. Attracted to grass-chaparral edges. Chaparral, coastal scrub, valley and foothill grassland.	Fed: None Calif: SSC, S3	Low-moderate; potentially marginal suitable habitat. One documented occurrence within 5 mi., about 2.9 mi. SE. Data from 2005 trapping survey not available.
Chaetodipus (Perognathus) fallax fallax Northwestern San Diego pocket mouse	Sandy herbaceous areas, usually in association with rocks or coarse gravel, chaparral, coastal scrub, grasslands. SW CA & NW Baja California (inland to San Bernardino Valley).	Fed: None Calif: SSC, S3S4 MSHCP: AC	Moderate; potentially suitable habitat. Ten documented occurrences within 5 mi. SE. Data from 2005 trapping survey not available.
Chaetodipus fallax pallidus Pallid San Diego pocket mouse	Sandy, herbaceous areas, usually in association with rocks or coarse gravel, desert wash, desert scrub, pinyon juniper, chaparral. San Diego, Riv, Imperial, LA, San Bern cos.	Fed: None Calif: SSC, S3S4	Low; potentially marginal habitat. No documented occurrences within 5 mi. Data from 2005 trapping survey not available.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Corynorhinus townsendii Townsend's big-eared bat	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance. Broadleaved upland forest, chaparral, chenopod scrub, Joshua tree woodland, lower and upper montane coniferous forest, meadow and seep, Mojavean and Sonoran desert scrub, riparian forest/woodland, Sonoran thorn woodland, valley and foothill grassland.	Fed: None Calif: SSC, S2	Low (foraging), not expected (roosting); potentially marginal foraging habitat, development and ongoing disturbances in area reduce potential for roosting. One documented occurrence within 5 mi. near Potrero Creek in Badlands.
Dipodomys merriami parvus San Bernardino kangaroo rat	Alluvial floodplains and adjacent upland habitats within the San Bernardino, Menifee, and San Jacinto valleys, Riversidean alluvial fan sage scrub.	Fed: END Calif: CanE, SSC, S1 MSHCP: AC c	Not expected; no suitable habitat. No documented occurrences within 5 mi. Site is not within designated critical habitat. Data from 2005 trapping survey not available.
Dipodomys stephensi Stephens' kangaroo rat	Sparse, gently sloping grassland, sometimes at margins of cultivated or disturbed lands; prefers grassland dominated by forbs rather than annual grasses, prefers sparse perennial vegetation; firm soil for burrowing (not too hard or too sandy); may use abandoned gopher burrows; W Riverside Co. and adjacent San Diego Co. San Bernardino County occurrences extirpated.	Fed: END Calif: THR, S2 MSHCP: AC	Low; potentially marginal suitable habitat. Five documented occurrences within 5 mi. Not found during trapping survey in 2005.
Glaucomys oregonensis (sabrinus)californicus San Bernardino flying squirrel	Mature mixed conifer forest (white fir, Jeffrey pine, & black oak) with large trees & snags, closed canopy, downed woody debris, & riparian areas. 4000-8500 ft. elev. San Bernardino & San Jacinto Mt. Ranges (may be extirpated in the San Jacinto Mts.).	Fed: None Calif: SSC, S1S2 MSHCP: NAC e	Absent; no suitable habitat, well below elevation range, outside of geographic range. No documented occurrences within 5 mi.
Lasiurus xanthinus Western yellow bat	Valley foothill riparian, desert riparian, desert wash, palm oasis. Roosts in trees, particularly palms. Forages over water and among trees. Desert regions of the SW US. Distributed in S CA, AZ, NM, & TX, into Mexico.	Fed: None Calif: SSC, S3	Low (foraging and roosting); no or marginal suitable habitat. One documented occurrence within 5 mi. from 1989, in foothills to the N.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Leptonycteris (curasoae) yerbabuenae Lesser long-nosed bat	Nectar, pollen, fruit eating bat; primarily feeding on agaves, saguaro, organ pipe cactus. Mojavean and Sonoran desert scrub, Upper Sonoran scrub. Caves, mines used as day roosts. Caves, mines, rock crevices, trees and shrubs, abandoned buildings used as night roosts. No maternity roosts known from CA.	Fed: Delisted Calif: SSC, S1	Not expected (foraging and roosting). No suitable habitat or food plants. No documented occurrences within 5 mi.
Lepus californicus bennettii San Diego black-tailed jackrabbit	Chaparral, coastal, or Riversidean sage scrub with adjacent open grassland. Los Angeles Co. S to San Quintin, Baja California, Mexico.	Fed: None Calif: SSC, S3S4 MSHCP: AC	Low; no or marginal suitable habitat. Three documented occurrences within 5 mi. in Badlands.
Myotis yumanensis Yuma myotis	Variety of habitats, optimal habitat is open forest with water sources over which to feed. Widespread in CA except for deserts. Elev. 0-11,000 ft but rare over 8,000 ft. Feeds over ponds and streams. Roosts in buildings, mines, caves, or crevices, under bridges. Hibernates in winter.	Fed: None Calif: SA, S4	Low (foraging), not expected (roosting); no or marginal suitable foraging habitat, roosting habitat lacking. No documented occurrences within 5 mi.
Neotamias speciosus speciosus Lodgepole chipmunk	Summits of isolated Piute, San Bernardino, & San Jacinto mountains. Usually found in open-canopy forests. Habitat is usually lodgepole pine forests in the San Bernardino Mts & chinquapin slopes in the San Jacinto Mts.	Fed: None Calif: SA, S2S3	Absent; no suitable habitat, well below elevation range, outside of geographic range.
Neotoma lepida intermedia San Diego desert woodrat	Arid shrublands, rocky outcrops, & crevices. Cismontane CA., San Luis Obispo to San Diego Co. & NW Baja California. 0-7000 ft. elev. Variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Constructs elaborate middens of sticks and other materials.	Fed: None Calif: SSC, S3S4 MSHCP: AC	Not expected; no suitable habitat. No middens observed during survey. Three documented occurrences within 5 mi., two in Badlands, one near San Gorgonio River.
Onychomys torridus ramona Southern grasshopper mouse	Nocturnal, active year-round. Desert scrub, coastal scrub, mixed chaparral, sagebrush, especially scrub habitats with friable soil, prefers low to moderate shrub cover. LA through San Diego counties and northwest Baja.	Fed: None Calif: SSC, S3	Not expected; no suitable habitat. No documented occurrences within 5 mi.
Perognathus longimembris brevinasus Los Angeles pocket mouse	Nocturnal, active Apr-Aug. Annual grassland, sage scrub, alluvial sage scrub. S California from Rancho Cucamonga (W boundary), San Gorgonio (E), Aguanga & Oak Grove, San Diego (S). Open ground with fine, sandy soils.	Fed: None Calif: SSC, S1S2 MSHCP: AC c	Low-moderate; marginal suitable habitat. Eight documented occurrences within 5 mi., closest about 2.3 mi. Data from 2005 trapping survey not available.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Taxidea taxus American badger	Mountains, deserts, interior valleys where burrowing animals are available as prey & soil permits digging. Throughout Central & W North America.	Fed: None Calif: SSC, S3	Not expected; no or marginal suitable habitat, no dens or diggings observed during survey. One documented occurrence within 5 mi. from 1908 near Banning.
Xerospermophilus tereticaudus chlorus Palm Springs round-tailed ground squirrel	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees. Prefers open, flat, grassy areas in fine-textured, sandy soil. Density correlated with winter rainfall. Chenopod scrub, Sonoran desert scrub	Fed: None Calif: SSC, S2	Absent; no suitable habitat, outside geographic range.

References: CDFW (2019, 2020b), USFWS (2020), Dudek (2003), RCA (2019); BNA (2020)

Documented occurrences refer to CNDDB records, unless otherwise indicated. EBird reports are submitted by citizen scientists and should be interpreted with caution.

Federal designations: (Federal Endangered Species Act, U. S. Fish and Wildlife Service):

END:	Federally listed, endangered; an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
THR:	Federally listed, threatened; an animal or plant which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.
Cand	Candidate for federal listing as threatened or endangered; species that has been studied by the U.S. Fish and Wildlife Service, and the Service has concluded that it should be proposed for addition to the Federal Endangered and Threatened species list.
Prop	Proposed for federal listing as Endangered or Threatened under Section 4 of the Endangered Species Act.
Delisted:	Previously federally listed as endangered or threatened, but is no longer listed (e.g., due to recovery).
None:	The species has no federal conservation status.
BGEPA:	Federal Bald and Golden Eagle Protection Act; protects bald and golden eagles.
BCC:	USFWS Bird of Conservation Concern; migratory and non-migratory bird species (beyond those already designated as Federally threatened or endangered) that represent USFWS highest conservation priorities.

State designations: (California Endangered Species Act, California Dept. of Fish and Wildlife)

END:	State listed, endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
CanE:	Candidate Endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered species.
CanF:	Candidate Threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of threatened species.
THR:	State listed, threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.
RARE:	State listed as rare: a native plant species, subspecies, or variety when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (Native Plant Protection Act of 1977).
SSC:	CDFW Species of Special Concern; vertebrate species of concern due to declining population levels, limited ranges, and/or continuing threats that have made them vulnerable to extinction.
FP:	Fully Protected; California Fish and Game Code states that Fully Protected species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research.
Delisted:	Previously state listed as threatened or endangered, but no longer listed (e.g., due to recovery).
SA:	CDFW Special Animal; wildlife of state conservation concern.
SH:	All California sites are historical.
None:	The species has no state conservation status.

State Rank (S Rank): A reflection of the condition and imperilment of an element (plant, animal, vegetation community) throughout its range within the state. The S ranks are determined through a combination of rarity, threat, and trend factors, weighted more heavily on the rarity factors. Where correct category is uncertain, the S rank includes two categories or a question mark. Older ranks, which need to be updated, may still contain a decimal "threat" rank of .1, .2, or .3, where .1 indicates very threatened status, .2 indicates moderate threat, and .3 indicates few or no current known threats.

S1: Critically imperiled; imperiled in the state because of extreme rarity or some factor(s) making it especially vulnerable to extirpation from the state.
S2: Imperiled; imperiled in the state because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from the state or nation.
S3: Vulnerable; vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation. S4: Apparently secure; uncommon but not rare, some cause for long-term concern due to declines or other factors.
S5: Secure; common, widespread, and abundant in the state.
SH: Possibly extirpated; species or community occurred historically in the state, and there is some possibility that it may be rediscovered. The element has not been seen for at least 20 years, but suitable habitat still exists.
SX: Presumed extirpated; species or community is believed to be extirpated from the state.

California Rare Plant Rank (CRPR): The *California Rare Plant Ranks* are a ranking system originally developed by the California Native Plant Society (CNPS) to better define and categorize rarity in California's plants. These ranks were previously known as the CNPS lists but were renamed to the *California Rare Plant Ranks* to better reflect the joint effort among the CNPS, the CDFW, and a wide range of botanical experts, who work together to assign a rarity ranking.

1A: Plants presumed extinct in California and rare/extinct elsewhere.
1B: Plants rare, threatened, or endangered in California and elsewhere.
2A: Plants presumed extirpated in California, but more common elsewhere.
2B: Plants rare, threatened, or endangered in California but more common elsewhere.
3: Plants about which we need more information.
4: Plants of limited distribution.
X.1: Extension to CRPR (e.g., 1B.1); seriously threatened in California.
X.2: Extension to CRPR (e.g., 1B.2); fairly threatened in California.
X.3: Extension to CRPR (e.g., 1B.3); not very threatened in California.
CBR: Considered but rejected.

Western Riverside County Multiple Species Habitat Conservation Plan: Applied to species that are covered under state and federal permits for the MSHCP.

NAC: Species Not Adequately Conserved
AC: Species Adequately Conserved
(a): Surveys may be required for these species as part of wetlands mapping as described in Section 6.1.2 of the MSHCP.
(b): Surveys may be required for these species within Narrow Endemic Plant Species survey area as described in Section 6.1.3 of the MSHCP.
(c): Surveys may be required for these species within locations shown on survey maps as described in Section 6.3.2 of the MSHCP.
(d): Surveys may be required for these species within Criteria Area as described in Section 6.3.2 of the MSHCP.
(e): These Covered Species will be considered Adequately Conserved when conservation requirements identified in species-specific conservation objectives have been met. Species-specific conservation objectives for these species are presented in Section 9.0 of the MSHCP. Please refer to Table 9-3 of the MSHCP for specific conservation objectives that must be met for these species prior to including them on the list of Covered Species Adequately Conserved.
(f): These Covered Species will be considered Adequately Conserved when a Memorandum of Understanding is executed with the U.S. Forest Service that addresses

management for these species on Forest Service Land. Refer to Table 9-3 of the MSHCP.
- : Not a Covered Species

Definitions of occurrence probability:

These definitions provide general guidance. Classifications for individual species may be modified based on biologists' experience and expert opinion.

Occurs:	Species was detected during surveys or previously documented on the Project site or adjacent areas.
High:	Species documented in the vicinity (i.e., within 5 miles) of the Project site and suitable habitat is present, but species not detected during surveys.
Moderate:	Species documented in the vicinity of the Project site or suitable habitat present and site is within geographic and elevational range of the species.
Low:	Species not documented in the vicinity of the Project site or suitable habitat is marginal.
Not Expected:	Species not documented in the vicinity of the Project site and suitable habitat marginal or absent, or site is not within geographic and elevational range of the species.
Absent:	No potential for the species to occur due to lack of habitat, geographic or elevation range, species life history, survey results, etc.
Unknown:	No focused surveys have been performed in the region, and the species' distribution and habitat are poorly known.

Documented occurrences refers to species occurrences in the California Natural Diversity Database (CNDDB) unless otherwise noted. For plant species that are not tracked in the CNDDB, records from the Consortium of California Herbaria (CCH) may be used. eBird (eBird.org) records of bird observations are noted but should be interpreted with caution.

APPENDIX C: SITE PHOTOGRAPHS



Non-native annual grassland in the north-central portion of the site, facing south (01.27.2020).



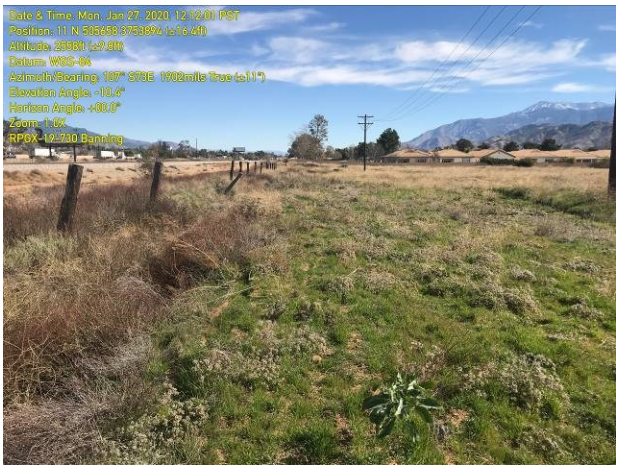
Non-native grassland in the northeast corner, facing south. Adjacent residential development visible in background (01.27.2020).



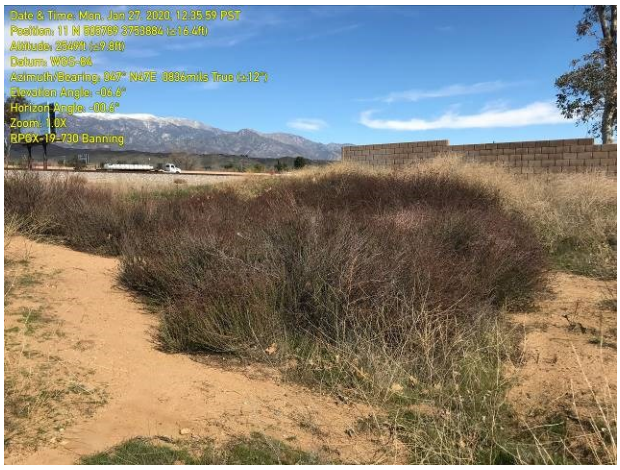
Non-native grassland in northern portion of site, facing southwest. Street trees visible in background (01.27.2020).



Non-native grassland in central portion of site, facing west. Adjacent shopping center visible in background (01.27.2020).



California buckwheat scrub along northeastern boundary of site (left side of photo), facing east (01.27.2020).



California buckwheat scrub in northeastern corner of site, facing northeast (01.27.2020).



Willow thickets in southwest corner of site, facing southwest. Willows are leafless due to season (01.27.2020).



Willow thickets in southwest corner of site, facing east. Shallow trench is visible at base of willows (01.27.2020).



Large advertising sign at north-central boundary of site, facing east. The sign could be utilized by nesting birds, including raptors (01.27.2020).



Small mammal burrows in the northeastern corner of the site. The site has potentially suitable habitat for burrowing owl, but no owls or owl sign was observed (01.27.2020).



Southern boundary of site (white fence) with street trees beyond, facing west. Shallow trench is visible just inside the fence (01.27.2020).



Double culvert in southeast corner of site, facing east (01.27.2020).

APPENDIX D: RIVERSIDE COUNTY DOCUMENTATION

Certification

Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: March 30, 2020 SIGNED: _____

Leslie Irish, Principal, L&L Environmental, Inc.
909-335-9897

1) Fieldwork Performed By:

Guy Bruyea
Name

2) Fieldwork Performed By:

_____
Name

3) Fieldwork Performed By:

_____
Name

4) Fieldwork Performed By:

_____
Name

5) Fieldwork Performed By:

_____
Name

6) Fieldwork Performed By:

_____
Name

Check here __ if adding any additional names/signatures below or on other side of page.

BIOLOGICAL REPORT SUMMARY SHEET

Applicant Name: Romo Planning Group
Assessor's Parcel Number(s): 419-140-057
Section, Township and Range: Section 12, Township 3 South, Range 1 West
Building and Safety Log Number:
Case Number: Lot/Parcel EA Number

MARK ITEM(S) SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE of CONCERN	*(Mark Yes, No, or N/A regarding species findings on the referenced site)*		
		Yes	**No**	**n/a**
	Arroyo Southwestern Toad	Yes	No	n/a
	Blue-line Stream(s)	Yes	No	n/a
X	Burrowing Owl (potential habitat)	Yes	No	n/a
	Coachella Valley Fringed-toed Lizard	Yes	No	n/a
	Coastal California Gnatcatcher	Yes	No	n/a
X	Coastal Sage Scrub	Yes	No	n/a
	Delhi Sands Flower-loving Fly	Yes	No	n/a
	Desert Pupfish	Yes	No	n/a
	Desert Slender Salamander	Yes	No	n/a
	Desert Tortoise	Yes	No	n/a
	Flat-tailed Horned Lizard	Yes	No	n/a
	Least Bell's Vireo	Yes	No	n/a
	Oak Woodlands	Yes	No	n/a
	Quino Checkerspot Butterfly	Yes	No	n/a
X	Riverside Fairy Shrimp (potential habitat)	Yes	No	n/a
	Santa Ana River Woolystar	Yes	No	n/a
	San Bernardino Kangaroo Rat	Yes	No	n/a
	Slender-horned Spineflower	Yes	No	n/a
	Stephens' Kangaroo Rat	Yes	No	n/a
X	Vernal Pools	Yes	No	n/a
X	Wetlands (MSHCP Riparian/Riverine)	Yes	No	n/a

MARK ITEM(S) SURVEYED FOR	SPECIES or ENVIRONMENTAL ISSUE of CONCERN	*(Mark Yes, No, or N/A regarding species findings on the referenced site)*		
X	Marvin's onion (potential habitat)	Yes	No	n/a
X	Many-stemmed dudleya (potential habitat)	Yes	No	n/a
	Other	Yes	No	n/a

Species of concern shall be any unique, rare, endangered, or threatened species. It shall include species used to delineate wetlands and riparian corridors. It shall also include any hosts, perching, or food plants used by any animals listed as rare, endangered, threatened, or candidate species by either state, or federal regulations, or for Riverside County as listed by the California Department of Fish and Game Natural Diversity Data Base (CNDDB).

I declare under penalty of perjury that the information provided on this summary sheet is in accordance with the information provided in the biological report or habitat assessment.

L & L Environmental, Inc. — Signature and Company Name

March 30, 2020 — Date

_____ — 10(a) Permit Number (if applicable)

_____ — Permit Expiration Date

County Use Only

Received By: _____ Date: _____

PD-B# _____

Attachment E-4

LEVEL OF SIGNIFICANCE CHECKLIST
For Biological Resources

Case Number: _____ Lot/Parcel No. _____ EA Number _____

Assessor's Parcel Number(s): 419-140-057

Date: March 30, 2020

Biological Resources: (Check the level of impact that applies to the following questions.)

Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?

☐ ■ ☐ ☐

b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?

☐ ☐ ■ ☐

c) 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. Wildlife Service?

☐ ■ ☐ ☐

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

☐ ☐ ☐ ■

e) 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 the U. S. Fish and Wildlife Service?

☐ ☐ ■ ☐

LEVEL OF SIGNIFICANCE CHECKLIST
For Biological Resources

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

☐ ☐ ☐ ■

g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

☐ ☐ ☐ ■

Findings of Fact:
-There are no sensitive vegetation communities present. Most of the site is non-native grassland.
-Habitat to support narrow endemic plant species Marvin's onion and many-stemmed dudleya is absent from the site.
-Special status plants are either absent, not expected to occur, or have low potential for occurrence onsite.
-No vernal pools or evidence of ponding was observed. Tire ruts are present but were dry at the time of the survey and soils are well drained (sandy to coarse sandy loam).
-Potentially suitable habitat for burrowing owl is present; no burrowing owls or owl sign observed.
-No species status wildlife species observed.
-There is suitable habitat for nesting birds, including raptors.
-Most special status wildlife species are either absent, not expected to occur, or have a low potential for occurrence on the site. A few have moderate or low to moderate potential to occur.
-There is a small area of willow scrub, but insufficient to provide habitat for riparian birds.
-MSHCP riparian habitat may be present. If so, a DBESP would be required for impacts.
Jurisdictional state wetland may be present. If so, regulatory permitting would be required for impacts. A jurisdictional delineation is recommended.

Proposed Mitigation:
-Burrowing owl clearance survey prior to the start of any vegetation or ground disturbance.
-Nesting bird clearance survey prior to the start of any vegetation or ground disturbance during nesting season.

Monitoring Recommended:
None.

Source: CGP Fig. VI.36-VI.40
Revised October 1999
CEQA checklist update December 2018

L&L ENVIRONMENTAL, INC.
REGULATORY SERVICES
BIOLOGICAL & CULTURAL INVESTIGATIONS & MONITORING

February 27, 2020

Ernest Perea
Romo Planning Group
9431 Haven Avenue, Suite 232
Rancho Cucamonga, CA 91730

REGARDING: CULTURAL RESOURCES RECORDS SEARCH RESULTS AND RECOMMENDATIONS, SUN LAKES BOULEVARD PROJECT (APN 419-140-057), CITY OF BANNING, COUNTY OF RIVERSIDE, CALIFORNIA

L&L Environmental, Inc. (L&L) completed a California Historical Resources Information System (CHRIS) records search for the Sun Lakes Boulevard Project (APN 419-140-057), in the City of Banning, County of Riverside, California. L&L completed this work to address the anticipated need for California Environmental Quality Act (CEQA) compliance associated with future residential development in the project area. This submittal is intended to summarize the results of L&L's research and to outline recommendations for additional work required to demonstrate compliance with CEQA for cultural resources.

Sincerely,
L&L Environmental, Inc.

Jennifer M. Sanka, M.A., RPA
Principal Investigator

Leslie Nay Irish
CEO

Enclosures:
Enclosure 1. Project Area Location Maps
Enclosure 2. EIC Records Search Form

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Mailing Address: 700 East Redlands Blvd, Suite U, PMB#351, Redlands CA 92373
Delivery Address: 721 Nevada Street, Suite 307, Redlands, CA 92373
Webpage: llenviroinc.com | Phone: 909-335-9897 | FAX: 909-335-9893

Purpose of this Document

L&L Environmental, Inc. (L&L) completed a California Historical Resources Information System (CHRIS) records search at the Eastern Information Center (EIC) located at the University of California, Riverside. Based on the results of the records search, L&L developed recommendations for additional work, where necessary, to demonstrate compliance with CEQA for cultural resources. This document is intended to summarize the results of the records search and present L&L's recommendations.

Project Location and Description

The project area is in western Riverside County, California and is situated south of Interstate 10 and east of Highway 79 (Enclosure 1: Figure 1). Specifically, it is within Section 12 of Township 3 South, Range 1 West as shown on the U.S. Geological Survey (USGS) *Beaumont, CA* 7.5' topographic quadrangle map (Enclosure 1: Figure 2). The project is immediately northeast of the intersection of Sun Lakes Village Drive and Sun Lakes Boulevard in the City of Banning (Enclosure 1: Figure 3). The project site includes Assessor's Parcel Number (APN) 419-140-057 and totals ±47.74 acres. The project proposes developing the property into residential housing.

California Historical Resources Information System (CHRIS) Records Search

The CHRIS records search was completed at the EIC on February 5, 2020 by L&L Archaeologist William R. Gillean, B.S., working under the supervision of L&L Principal Investigator Jennifer M. Sanka, M.A., RPA (Enclosure 2). The records search included a review of previously recorded cultural resource sites and isolates, recorded built-environment resources, and previous cultural resources studies on or within a one-mile radius of the project area. In addition, the records search included a review of the National Register of Historic Places (NRHP), Archaeological Determinations of Eligibility (ADOE), and the Built Environment Resources Directory (BERD) for the City of Banning. The results indicate that no previously recorded cultural resources are in the project area while three (3) cultural resources were recorded in the one-mile search radius. Of these previously recorded resources, one (1) is within 0.25 mile, one (1) is within 0.50 mile, and one (1) is between 0.50 and one mile of the project area.

All the previously recorded resources are historic age and they consist of the Union Pacific Railroad (UPRR)/Southern Pacific Railroad (SPR) and two (2) sites comprised of water

conveyance systems. These previously recorded resources and their locations relative to the project area are outlined below in Table 1.

Table 1. Previously Recorded Cultural Resources Located Within One Mile of the Project Area

Resource Number	Recorder Name and Date	Resource Description	Within ~One to 0.50 Mile Radius	Within ~0.50 to 0.25 Mile Radius	Within ~0.25 Mile Radius	Within Project Area?
33-9498/ CA-RIV-6381H/CA-IMP-3424H	Originally recorded by S. Ashkar of Jones & Stokes, 1999 Segments of this linear resource were updated by C. Chasteen of Myra L. Frank & Associates, 2003; C. Taniguchi of Galvin and Associates, 2005; S. Wilson and K. Chimel of ICF Jones & Stokes, 2009; S. Kremkau, 2012; T. Baurley and J. Sanka of L&L, 2015; D. Leonard of HDR, 2016; and P. Moloney, R. Elder, and W. Blodgett of Applied Earth Works, 2017	Historic: The UPRR/SPR. This resource consists of a segment of the UPRR (historically the SPR) that extends across California. The alignment includes several smaller railroad lines that were acquired and consolidated into the SPR in 1884. The lines were later acquired by the UPRR in the 1990s.	●	●	●	No; however, this resource is located to the north of the project area.
33-13779/CA-RIV-7544	P. Messick and M. Dice of Michael Brandman Associates (MBA), 2004	Historic: A series of water conveyance features. The site was recommended not eligible for inclusion in the NRHP or the California Register of Historical Resources (CRHR).	●	—	—	No
33-15033/CA-RIV-7997	Originally recorded by D. Brunzell of LSA Associates, Inc. (LSA), 2006 Updated by J. Miller, C. Morgan, R. Goodwin, and J. Hall, 2013; S. Justus, B. Wilson, A.	Historic: A water conveyance system consisting of a channelized ditch created from Smith Creek. This resource was recommended not eligible for inclusion in the NRHP and the CRHR in 2014 and the State Historic Preservation Officer (SHPO) concurred with this recommendation in 2016.	●	●	—	No

Resource Number	Recorder Name and Date	Resource Description	Within ~One to 0.50 Mile Radius	Within ~0.50 to 0.25 Mile Radius	Within ~0.25 Mile Radius	Within Project Area?
	Giacinto of ASM Affiliates (ASM), 2010; A. Williams of Southern California Edison (SCE), 2014; and M. DeCarlo of ASM and Doug Mengers of PanGIS, 2018					

The EIC records search also indicated that 27 area-specific cultural resource reports are on file for the project area and the one-mile search radius. Two (2) of these studies addressed the project area in 1981 and 2004 (RI-1434/SRS 1981; RI-8449/CRM Tech 2004). The 1981 survey encompassed a total of 900 acres and reported no known cultural resources within current project area. However, information regarding field survey transect spacing or the percentage of land covered during the survey was not provided in the report so the level of survey coverage within the current project area is unknown. Cultural resources were identified about 0.15 mile to the southwest of the project area. Specifically, the survey detected numerous buildings, structures, and features, including a residence, agricultural outbuildings, barns, a well, and a refuse dump associated with the Old Stewart Ranch. While these resources were not recorded as a site, they do reflect patters of historic age land use in the immediate vicinity of the project area (RI-1434/SRS 1981).

The 2004 study was conducted in support of the City of Banning General Plan. This study included an inventory of cultural resources located in the City and the sphere of influence, as well as a reconnaissance style survey that visited previously recorded sites and addressed areas with a high potential for containing resources. This work resulted in the assessment of a project area that measured approximately 37 square miles. While this study addressed the current project area and the surrounding acreage via research and a records search, it did not include an intensive pedestrian survey for the subject property (RI-8449/CRM Tech 2004). As such, the EIC results indicate that the project area has been previously surveyed once for the presence or absence of cultural resources in 1981 (RI-1434/SRS 1981).

Collectively, the 27 previous studies cover approximately 90 percent of total surface area within the records search radius via research and field surveys. The report coverage is generally similar throughout the search radius with the lands within 0.25 mile, between 0.25 and 0.50

mile, and between 0.50 and one mile exhibiting about 90 percent coverage. The details of these reports are summarized below in Table 2.

Table 2. Previous Cultural Resources Studies Within One Mile of the Project Area

Report #	Date	Rsrcs	Report	Author
RI-1432	1986	No	Archaeological Report on Grading Monitoring Activities at Stewart Ranch, Riverside County, California	Scientific Resource Surveys, Inc. (SRS)
RI-1433	1985	No	An Historical Study of Stewart Ranch in Riverside County, California	SRS
RI-1434	1981	Yes	Cultural Resources Report on 900 +/- Acre Parcel (Portion of the Old Stewart Ranch), Located in the Banning-Beaumont Area, Riverside County, California	SRS
RI-1830	1984	No	An Archaeological Assessment of Parcel 18132, Beaumont Area of Riverside County, California	Archaeological Research Unit
RI-2203	1987	No	An Archaeological Assessment of the Hovchild Property, Riverside County, California	C. E. Drover
RI-2350	1988	Yes	MCI Rialto to El Paso Fiber Optics Project - Intensive Cultural Resource Survey - San Bernardino and Riverside Counties, California	Dames & Moore
RI-3039	1990	No	An Archaeological Assessment of the “Sunset Crossing” Project, a 294.8 Acre Parcel as shown on TPM 25541, Located Immediately South of the I-10 Freeway at Sunset Avenue in Banning, Riverside County, California	Archaeological Associates
RI-4720	2004	Yes	Phase I Cultural Resource Survey and Historic Site Significance Evaluations for the Sunset Crossing Project Footprint, South Banning Area, County of Riverside, California	MBA
RI-4840	2002	No	Report of Phase I Archaeological Assessment of a 23-Acre Parcel in Beaumont, Riverside County	Archaeological Resource Management Corporation (ARMC)
RI-4841	2002	No	Addendum: Report of Phase I Archaeological Assessment of a 23-Acre Parcel in Beaumont, Riverside County	ARMC
RI-5136	2003	No	Cultural Resource Inventory and Paleontologic Assessment, Hovchild Property, City of Beaumont, County of Riverside, California	The Keith Companies
RI-6722	2006	Yes	Cultural Resources Assessment and Historic Evaluations: Deutsch Property Specific Plan, City of Banning, Riverside County, California	LSA
RI-7052	2006	No	A Cultural Resources Investigation of the Proposed San Gorgonio Village Project Area, Approximately 23 Acres of Land in the City of Beaumont, Riverside County, California	McKenna, et al.
RI-7055	2007	No	Historical/Archaeological Resources Survey Report: Assessor's Parcel Number 419-170-031, in the City of Beaumont, Riverside County, California	CRM Tech

Report #	Date	Rsrcs	Report	Author
RI-7339	2007	Yes	Identification and Evaluation of Historic Properties: Wastewater Treatment Plant Expansion and Recycled Water System, City of Banning, Riverside, California	CRM Tech
RI-7364	2007	No	Archaeological and Paleontologic Monitoring of a 29.7-Acre Project Area at the Northwest Corner of First Street and Commerce Way, Beaumont, Riverside County, California	Chambers Group
RI-7970	2006	Yes	A Study of the Past in San Timoteo Canyon and San Gorgonio Pass: Cultural Resource Assessment, Oak Valley Substation Project, Riverside County	LSA
RI-8011	2008	No	Final Cultural Resources Assessment, Study of the Past in San Timoteo Canyon and San Gorgonio Pass: Oak Valley Substation Project, Riverside County	LSA
RI-8027	2009	No	Letter Report: Proposed Cellular Tower Project(s) in Riverside County, California, Site Number(s)/Name(s): IE-04965A/Beaumont Health Center TCNS# 47154	Earth Touch
RI-8449	2004	No	Cultural Resources Technical Report: City of Banning General Plan	CRM Tech
RI-9167	2013	Yes	Cultural Resources Assessment and Class III Inventory: Volume I West of Devers Project, San Bernardino and Riverside Counties, California	LSA
RI-10157	2014	Yes	Archival Research Evaluation Results of 33 Cultural Resources for Southern California Edison Company's West of Devers Upgrade Project, Riverside and San Bernardino Counties, California, Volume 1	SCE
RI-10219	2015	No	Letter Report: Cultural Resources Summary for the Proposed Verizon Wireless, Inc. Property at the Potrero Site, 81 Highland Springs Avenue, Beaumont, Riverside County, California 92223	Tetra Tech
RI-10461	2015	Yes	Archaeological Investigations and Monitoring for the Construction of the Devers-Palo Verde No. 2 Transmission Line Project, Riverside County, California	ASM
RI-10478	2018	Yes	A Phase I CEQA/Class III NEPA (NHPA Section 106) Investigation for the 6th/Maple Septic Conversion Project in the City of Beaumont, Riverside Co., California	McKenna, et al.
RI-10754	2019	Yes	A Class III Historic Resource Study for Phase 3 of the Atwell Project for Section 106 Compliance, SPL-Banning, California	Brian F. Smith and Associates (BFSA)
RI-10766	2018	Yes	A Class III Historic Resource Study for Phase 2 of the Atwell Project for Section 106 Compliance, SPL-Banning, California	BFSA

Summary and Recommendations

Summary

The results of the CHRIS records search indicate that no previously recorded cultural resources are in the project area and that the project area was included in two (2) previous studies in 1981 and 2004 (RI-1434/SRS 1981; RI-8449/CRM Tech 2004). The 1981 study included a field

survey of the project area; however, the intensity of the surface survey is unknown, as no information is provided about transect spacing or the percentage of coverage (RI-1434/SRS 1981). The 2004 study addressed the current project area and the surrounding acreage via research and a records search, but it did not include an intensive pedestrian survey for the subject property (RI-8449/CRM Tech 2004). As such, the records search results indicate that the project area was previously surveyed once for the presence or absence of cultural resources more than 35 years ago (RI-1434/SRS 1981).

Additionally, the records search showed that 27 area-specific technical reports are on file for the project area and the one-mile search radius. These reports identified three (3) cultural resources. All resources are historic age and include a segment of the UPRR/SPR and two (2) sites comprised of water conveyance systems. The closest previously recorded resource to the project area is the UPRR/SPR, which trends east-west immediately to the north of the project area (33-9498/CA-RIV-6381H/CA-IMP-3424H). The other two resources are more than 0.25 mile from the project area.

Based on the results of L&L's research, no previously recorded cultural resources are in the project area. However, the most recent pedestrian survey was completed more than 35 years ago and the intensity of the survey is unknown. Thus, an intensive pedestrian survey of the project area is recommended to determine the presence or absence of cultural resources using current methods and standards. The results of the pedestrian survey and an assessment of the project area's sensitivity for prehistoric and historic age cultural resources would assist in determining the project's potential impact to historical and archaeological resources under CEQA and make recommendations for additional technical studies or field efforts (e.g., resource documentation, evaluation, and/or mitigation), should they be required. The assessment should also include Native American coordination. Specifically, a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) database search and information scoping efforts should be initiated with the contacts identified by the NAHC. This work would assist in determining the project's potential to impact Native American resources, including any possible Tribal Cultural Resources (TCRs). This coordination would also determine the need for related fieldwork, including Tribal site visits and/or Native American mitigation monitoring. Thus, L&L recommends additional fieldwork, reporting, and Native American coordination to demonstrate compliance with CEQA for cultural resources.

Recommendations

L&L recommends additional work to determine the impact of the proposed project on cultural resources, including historical and archaeological resources pursuant to CEQA. These recommendations are outlined below.

1. **Conduct a Phase I Cultural Resources Assessment**. This study should be completed by an archaeologist who meets the Secretary of the Interior's (SOI) professional qualifications standards for archaeology and should include a review of the records search information included in this report; the results of an NAHC SLF database search; information scoping efforts with the contacts named by the NAHC as having knowledge about the presence or absence of Native American cultural resources in the project area and vicinity, including TCRs; and an intensive pedestrian survey. The Phase I study should also include a cultural context and information about methods employed and the following elements:

    a. Recordation of any detected archaeological resources (if present);

    b. Evaluation of any potentially impacted archaeological resources (if present);

    c. An assessment of project area sensitivity for prehistoric and historic age cultural resources;

    d. Notes on the sensitivity of the project area for Native American resources and/or a summary of the results of Native American information scoping efforts;

    e. Recommendations for additional work to complete evaluative efforts (if needed).

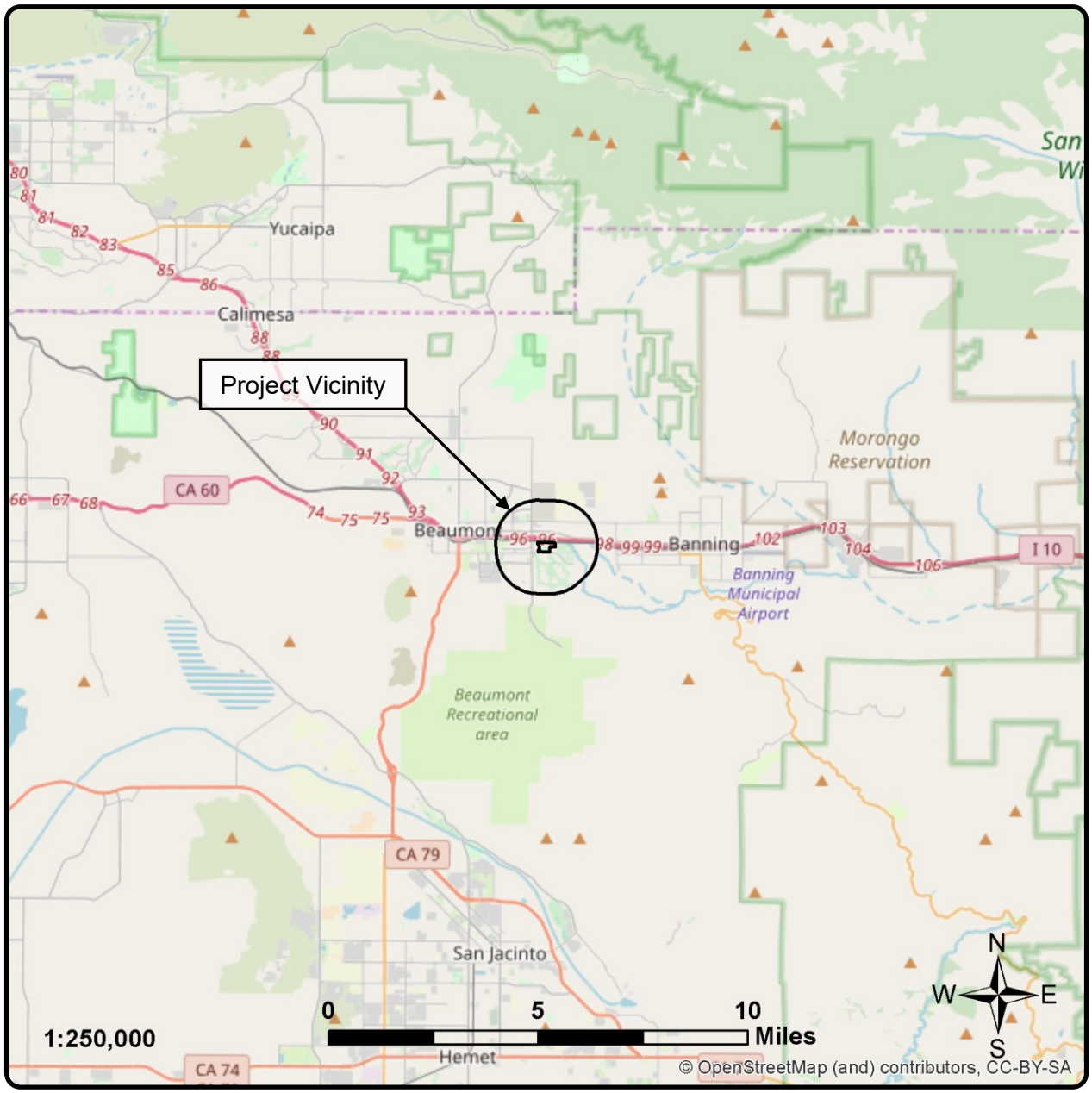
    The Phase I study should also include recommendations for additional studies or field efforts (as appropriate), such as (but not limited to) additional research, Phase II testing, Phase III data recovery, archaeological mitigation monitoring, and/or Native American monitoring.

References

CRM Tech. 2004. Cultural Resources Technical Report: City of Banning General Plan. RI-8449. Report on-file at the Eastern Information Center, University of California, Riverside.

Scientific Resource Surveys, Inc. (SRS). 1981. Cultural Resources Report on 900 +/- Acre Parcel (Portion of the Old Stewart Ranch), Located in the Banning-Beaumont Area, Riverside County, California. RI-1434. Report on-file at the Eastern Information Center, University of California, Riverside.

Enclosure 1. Project Area Location Maps



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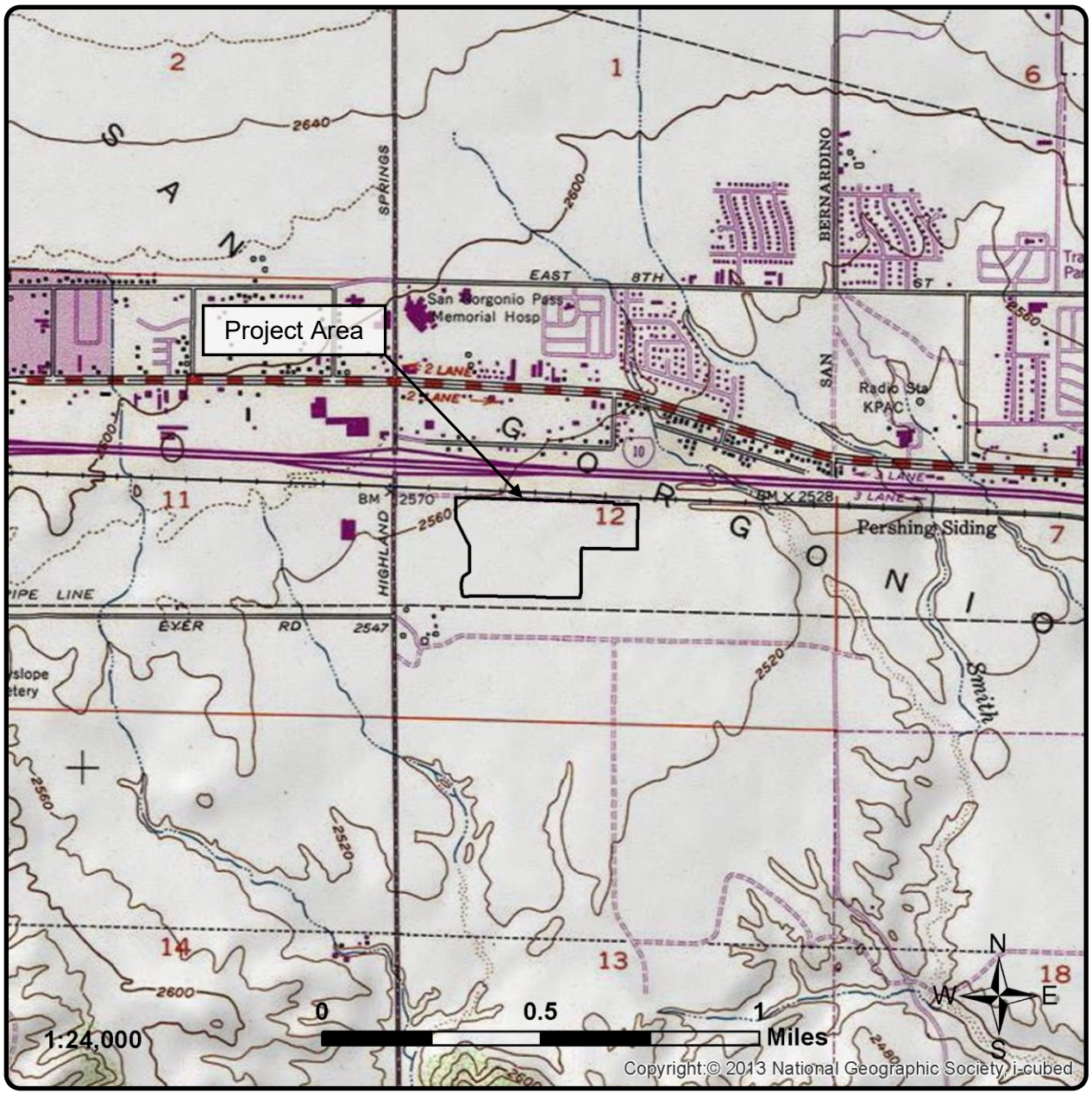
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Figure 1

Project Vicinity Map

Sun Lakes Boulevard Project
APN 419-140-057, City of Banning
County of Riverside, California



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BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

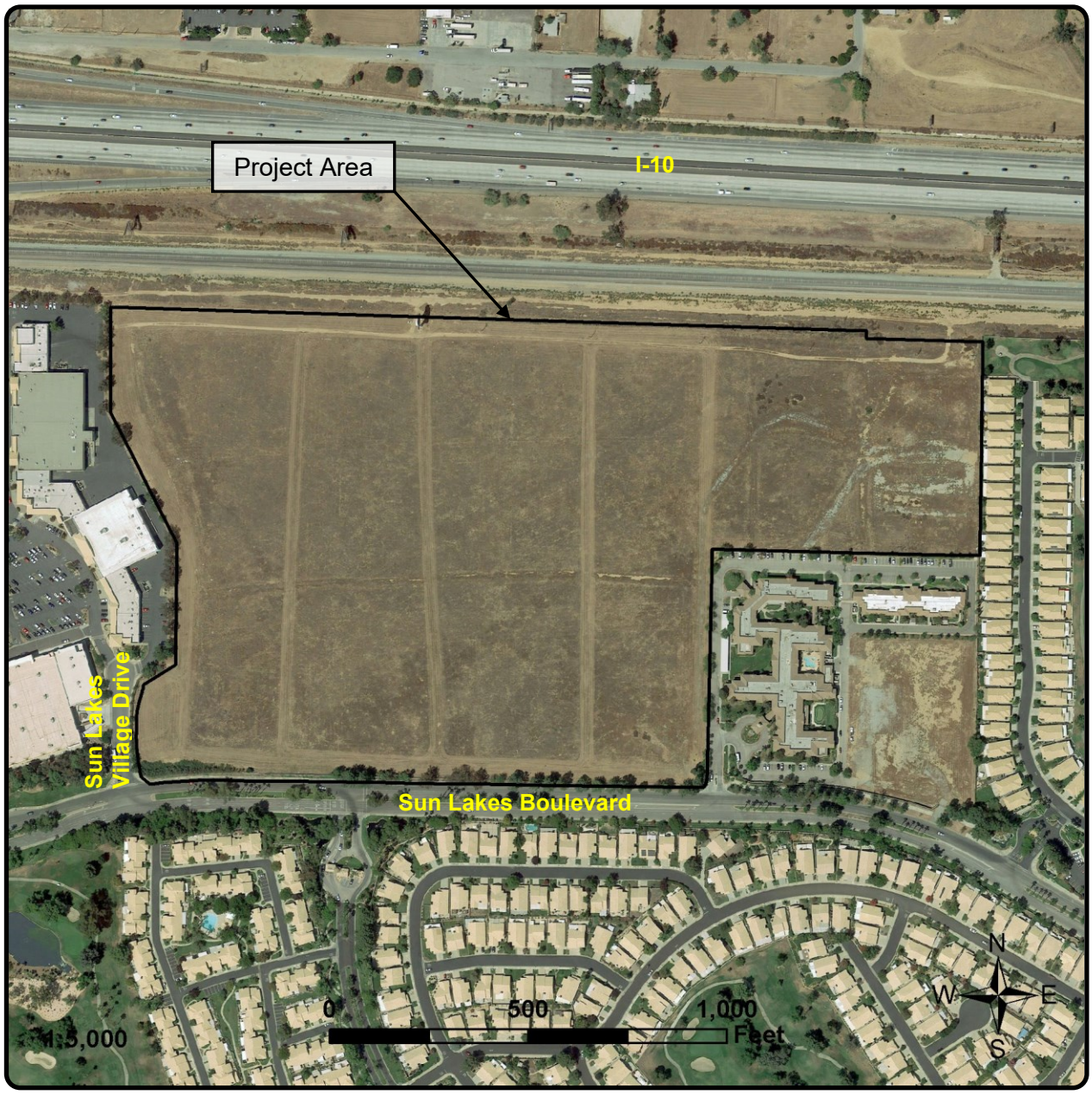
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Figure 2

Project Location Map

(USGS Beaumont [1988] quadrangle,
Section 12 of Township 3 South, Range 1 West)

Sun Lakes Boulevard Project
APN 419-140-057, City of Banning
County of Riverside, California



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Figure 3

Aerial Photograph
(Aerial obtained from Google Earth, August 2018)

Sun Lakes Boulevard Project
APN 419-140-057, City of Banning
County of Riverside, California

Enclosure 2. EIC Records Search Form

EIC DIY Worksheet

CHRIS Access and Use Agreement Number: _____

EIC Tracking Number: _____

Print Name: Bill Gillean Date: 02-05-2020

Affiliation: L&L Environmental, Inc.

Address: 720 E. Redlands Blvd. Suite U-351 City/State/Zip: Redlands, CA 92373

Telephone: 909 335 9897 Fax: 909 335-9893 Email: wgillean@llenviro.com

Billing Address (if different from above): N/A

Billing Email: bmengum@llenvironc.com

Purpose of Access: Archaeological records search

Reference (project name or number, title of study, and street address if applicable): RPGX-19-730 (City of Banning)

County: RIV Township/Range/Section or UTMs: T3S; R1W; Sec. 12

USGS 7.5' Quad(s): Beaumont

TIME IN: 8:45
TIME OUT: 11:30

Copies: _____

Biblio: Yes/No: _____

Circle if applicable

Excel Spreadsheet: Yes/No

PDFs: Reports and/or Resources

****IC staff shall charge $40 per hour minimum, plus $20.00 per one-half after the first hour per each request for one or more bibliographic (list or detail), spreadsheet, and PDF copies.**

L&L ENVIRONMENTAL, INC.
REGULATORY SERVICES
BIOLOGICAL & CULTURAL INVESTIGATIONS & MONITORING

PHASE 1 CULTURAL RESOURCES ASSESSMENT FOR THE SUN LAKES BOULEVARD PROJECT APN 419-140-057, ±47.02 ACRES IN THE CITY OF BANNING, RIVERSIDE COUNTY, CALIFORNIA

Banning, CA USGS 7.5-Minute Topographic Quadrangle Maps
Township 3 South, Range 1 West, Section 12

Prepared on Behalf of:
Ernest Perea
Romo Planning Group
9431 Haven Avenue, Suite 232
Rancho Cucamonga, CA 91730
eperea@romoplanninggroup.com
951.823.0432

Prepared For:
City of Banning Community Development Department
Planning Division
P.O. Box 998
Banning, CA 92220
951.922.3190

Prepared By:
John J. Eddy, M.A., RPA, Principal Investigator
William R. Gillean, B.S., Archaeologist
Leslie Irish, CEO/Principal
L&L Environmental, Inc.

Fieldwork Date(s):
June 30, 2020

Report Date:
August 26, 2020

Keywords:
±47.02 Acres, Historic Linear Feature, RPGX-1H, Bermed Ditch, Earthen Berm, Water Control, Water Conveyance, Stewart Ranch, City of Banning, Riverside County, *Banning, CA* 7.5-minute topographic quadrangle

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MANAGEMENT SUMMARY

L&L Environmental (L&L), at the request of Romo Planning Group, completed a Phase I Cultural Resources Assessment on ±47.02 acres of land (APN 419-140-057) for the Sun Lakes Boulevard Project ("Project") in City of Banning, Riverside County, California. Romo Planning Group proposes construction of a multi-residential housing development on the property. The Project area is on the northeast corner of the Sun Lakes Boulevard and Sun Lakes Village Drive intersection in Township 3 South, Range 1 West, Section 12 as shown on the USGS *Banning,* CA 7.5-Minute Topographic Quadrangle Map.

This technical study documents efforts to identify historical resources, as defined in Public Resources Code (PRC) §5020.1(j), and complies with provisions of the California Environmental Quality Act (CEQA) to assess a Project's potential to impact historical resources during Project construction, operation, and/or maintenance. These efforts include a cultural resources records search, background research, coordination with the Native American Heritage Commission and local Native American tribes and organizations, and an intensive pedestrian survey of the entire Project area.

The Project area was once part of Stewart Ranch, owned and operated by Reznor P. Stewart between 1883 and 1933 and his daughters Laura May and Clara between 1933 and 1967. L&L identified a linear resource (RPGX-1H) in the Project area consisting of an earthen bermed ditch constructed by bulldozer sometime before 1953 and associated with water control/conveyance efforts instituted on the ranch along Portereo Creek and Smith Creek. RPGX-1H was evaluated and recommended not eligible for the CRHR and therefore does not qualify as a historic resource under CEQA and requires no further consideration. In addition, the Project area appears to have a low sensitivity for prehistoric archaeological resources and it is unlikely that intact, subsurface prehistoric archaeological deposits will be uncovered during Project construction. Sensitivity for encountering historic-age archaeological resources is considered low-to-moderate. The Project area lies within Stewart Ranch; however, the land within the Project area was utilized for grazing, agricultural, and water control/conveyance purposes. This suggests that historic artifacts and/or deposits that may be present in subsurface context would most likely reflect those activities (e.g., horse shoes, tacks, barbed wire, sparse occurrences of tin cans and glass bottles, other water conveyance/control features, etc.) and would most likely not be considered historically significant. Thus, additional cultural resource technical studies are not recommended prior to Project construction.

In the event that previously unknown resources are encountered during any Project-related ground disturbance, ground-disturbing activity should cease within 100 feet of the resource and a professional archaeologist shall be consulted to assess the find and to determine whether the resource requires further study. The qualified archeological personnel shall assist the County of Riverside by drafting measures to protect the discovered resources commensurate with their significance.

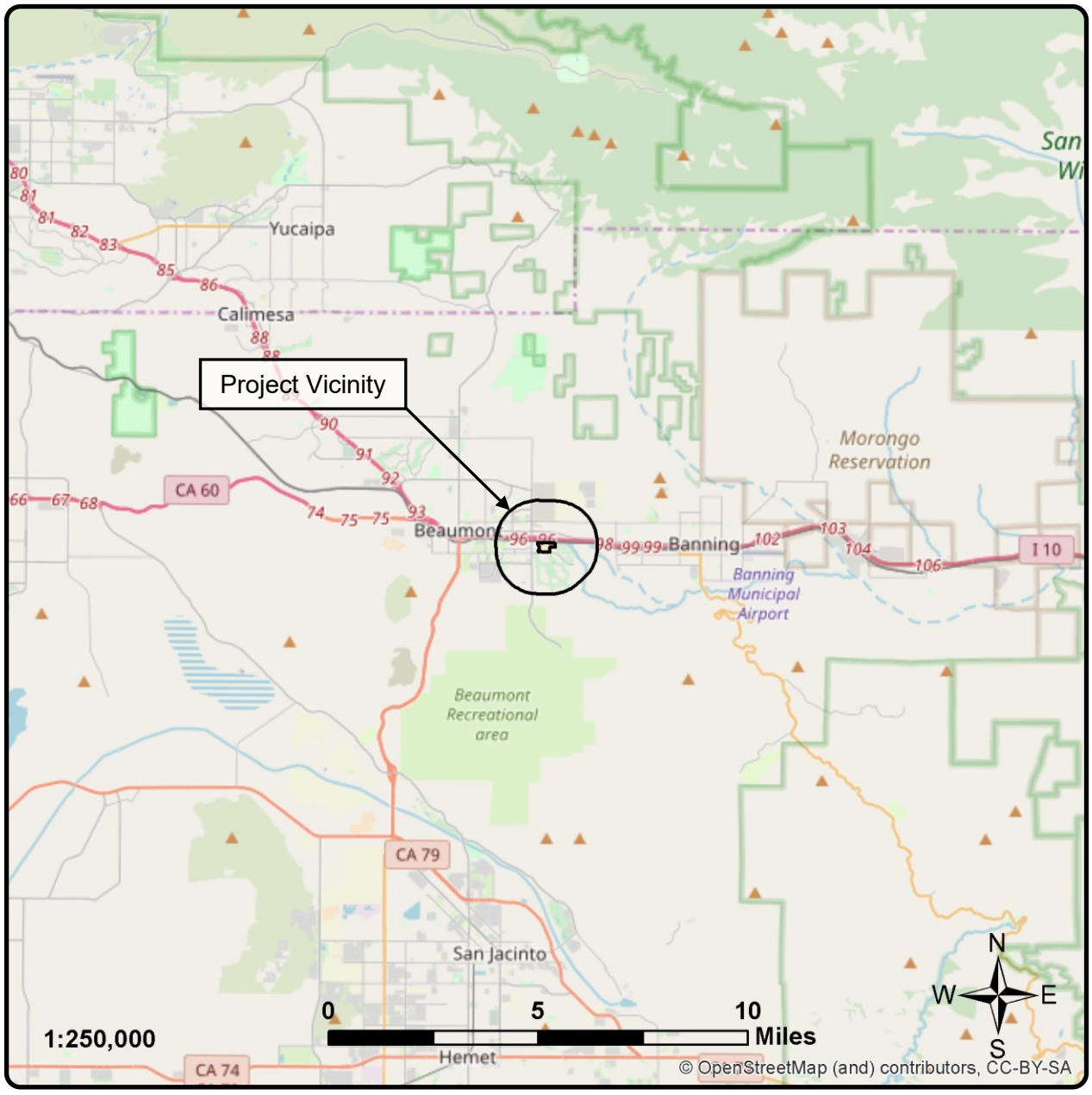
1.0) INTRODUCTION AND ENVIRONMENTAL SETTING

1.1) Introduction

L&L Environmental (L&L), at the request of Romo Planning Group, completed a Phase I Cultural Resources Assessment on ±47.02 acres of land (APN 419-140-057) for the Sun Lakes Boulevard Project ("Project") in the City of Banning, Riverside County, California. Romo Planning Group proposes construction of a multi-residential housing development on the property. The purpose of this technical report is to provide the City of Banning with information necessary to determine whether the Project would cause an adverse change to historical resources, as defined in PRC §5020.1(j), and therefore result in a significant impact to the environment under CEQA. To accomplish this objective, L&L completed a cultural resource records search, historical and geoarchaeological background research, coordinated with the Native American Heritage Commission (NAHC) and local Native American tribes, organizations, and individuals, and performed a systematic survey of the entire Project area.

1.2) Project Location and Description

The proposed Project includes ±47.02 acres of land within APN 419-140-057 and is generally situated in the west-central portion of Riverside County, California, south of Interstate 10 and east of Highway 79 (Figure 1). Specifically, it lies within Section 12 of Township 3 South, Range 1 West as shown on the USGS *Banning, CA* 7.5' topographic quadrangle map (Figure 2). The Project area is within the City of Banning and is immediately adjacent to Sun Lakes Boulevard (which lies to the south) and Sun Lakes Village Drive (to the west, see Figure 3). The Project proposes construction and operation of a multi-residential housing complex. The vertical limits of the Project, as it relates to the maximum depth of subsurface excavations, are not currently defined.



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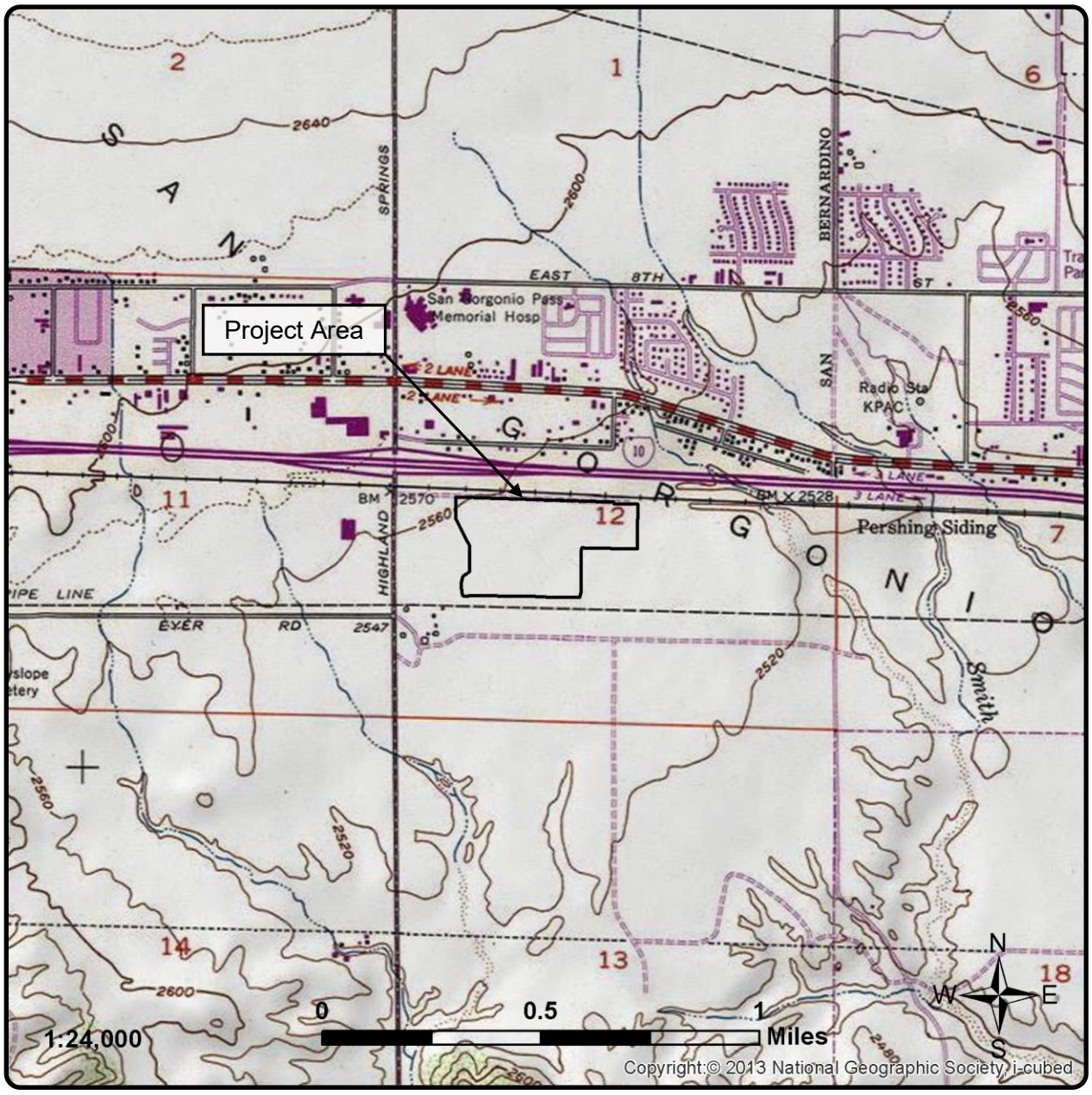
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August 2020

Figure 1

Project Vicinity Map

APN 419-140-057, City of Banning
County of Riverside, California



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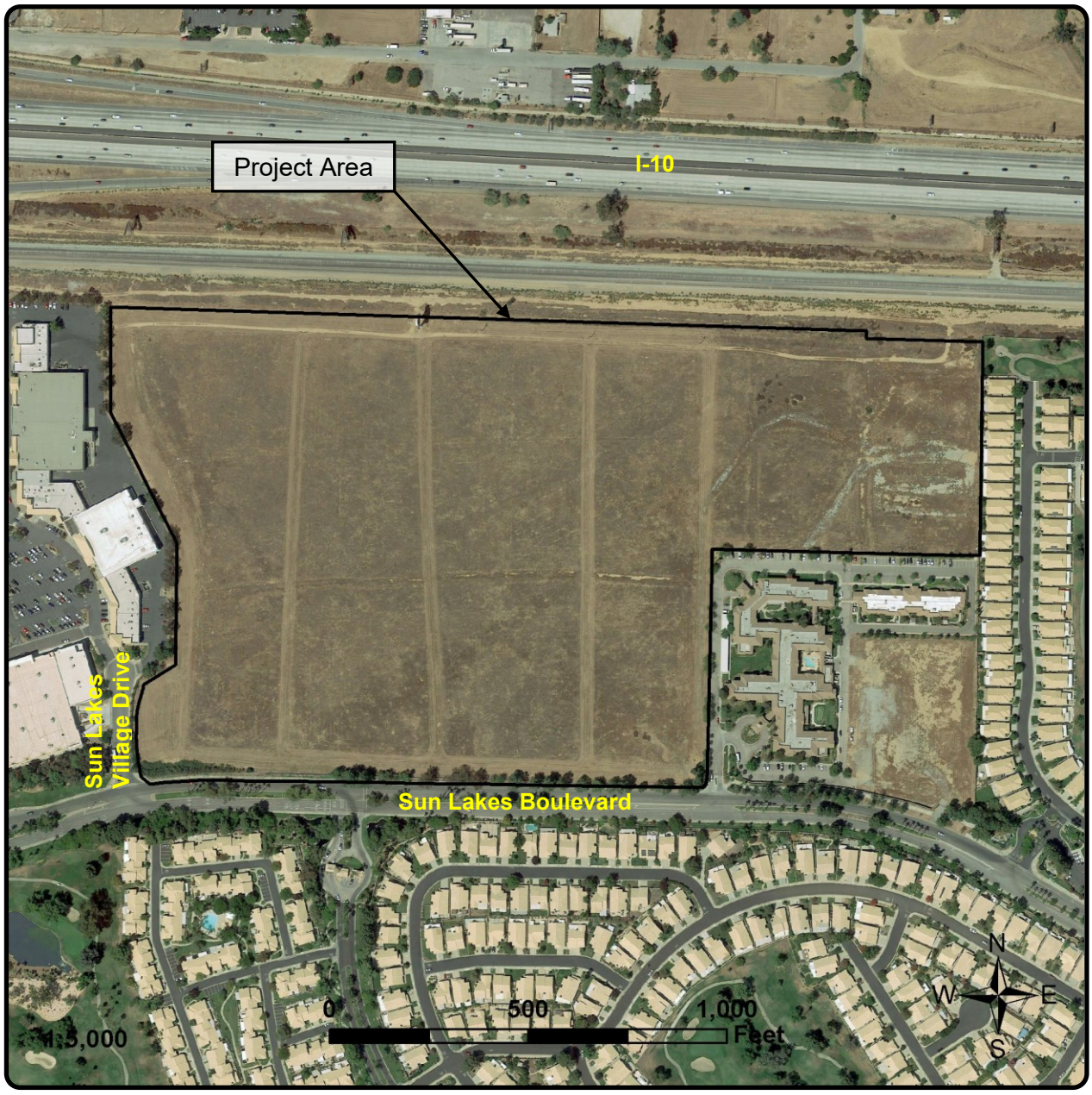
BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

RPGX-19-730
August 2020

Figure 2

Project Location Map
(USGS Beaumont [1988] quadrangle,
Section 12 of Township 3 South, Range 1 West)

APN 419-140-057, City of Banning
County of Riverside, California



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Figure 3

Aerial Photograph
(Aerial obtained from Google Earth, August 2018)

APN 419-140-057, City of Banning
County of Riverside, California

1.3) Cultural Resources Staff

The cultural resources records search at the Eastern Information Center EIC) was completed by L&L archaeologist William R. Gillean. Mr. Gillean reviewed maps, records, reports, and directories on February 5, 2020. Mr. Gillean also performed the pedestrian survey of the Project area on June 30, 2020. All work was completed under the direct supervision of L&L Principal Investigators Jennifer M. Sanka, M.A., RPA, and John Eddy, M.A., RPA. Mr. Eddy authored the report with contributions from William Gillean (Field Methods and Results), Jennifer Sanka (Record Search Methods and Results), and Guy Bruyea (Environmental Setting). L&L CEO/Principal Leslie Irish provided quality control oversight. Professional qualifications for key personnel are provided in Appendix A.

1.4) Environmental Setting

1.4.1) Existing Land Use and Topography

The Project area is in the San Gorgonio Pass, or Banning Pass, which lies along the border between the Peninsular Ranges and Transverse Ranges Geomorphic Provinces. The pass was formed by the San Andreas Fault, which runs along the pass between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south.

Land surrounding the Project area is generally characterized as mixed residential and commercial, with a few vacant lots as well as major transportation corridors (i.e., Interstate 10 and the Union Pacific Railroad). Topographically, much of the Project area is flat, but gradually increases in elevation as it trends southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet above mean sea level (AMSL).

The Project area is within a disturbed vacant lot and appears to be regularly disked or mown. A large advertising sign is present along the north-central boundary of the site. A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site. A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, remnants of which are still visible (Appendix C: Photographs 1, 2, 3, 4, 5, 6, 7, 8).

1.4.2) Soils and Geology

Surface soils within the Project area consist of various types of sand consistent with alluvial deposits. Soils onsite are mapped as Greenfield sandy loam (2-8% slopes, eroded), Hanford

coarse sandy loam (2-8% slopes), and Ramona sandy loam (2-5% slopes, eroded) (NRCS 2020) (Figure 4). The Project area is underlain by Late to Middle Pleistocene Quaternary alluvial deposits (Qof; California Geologic Survey 2020).

1.4.3) Vegetation and Wildlife

Vegetation communities onsite are summarized in Table 1. The majority of the site is covered by non-native annual grassland, with a small patch of southern willow scrub at the southwest corner and a narrow strip of California buckwheat scrub along the northeastern site boundary. Ornamental trees line the southern and western boundaries and part of the eastern boundary. These trees are either on adjacent properties or along Sun Lakes Boulevard.

Table 1. Vegetation communities within the survey area.

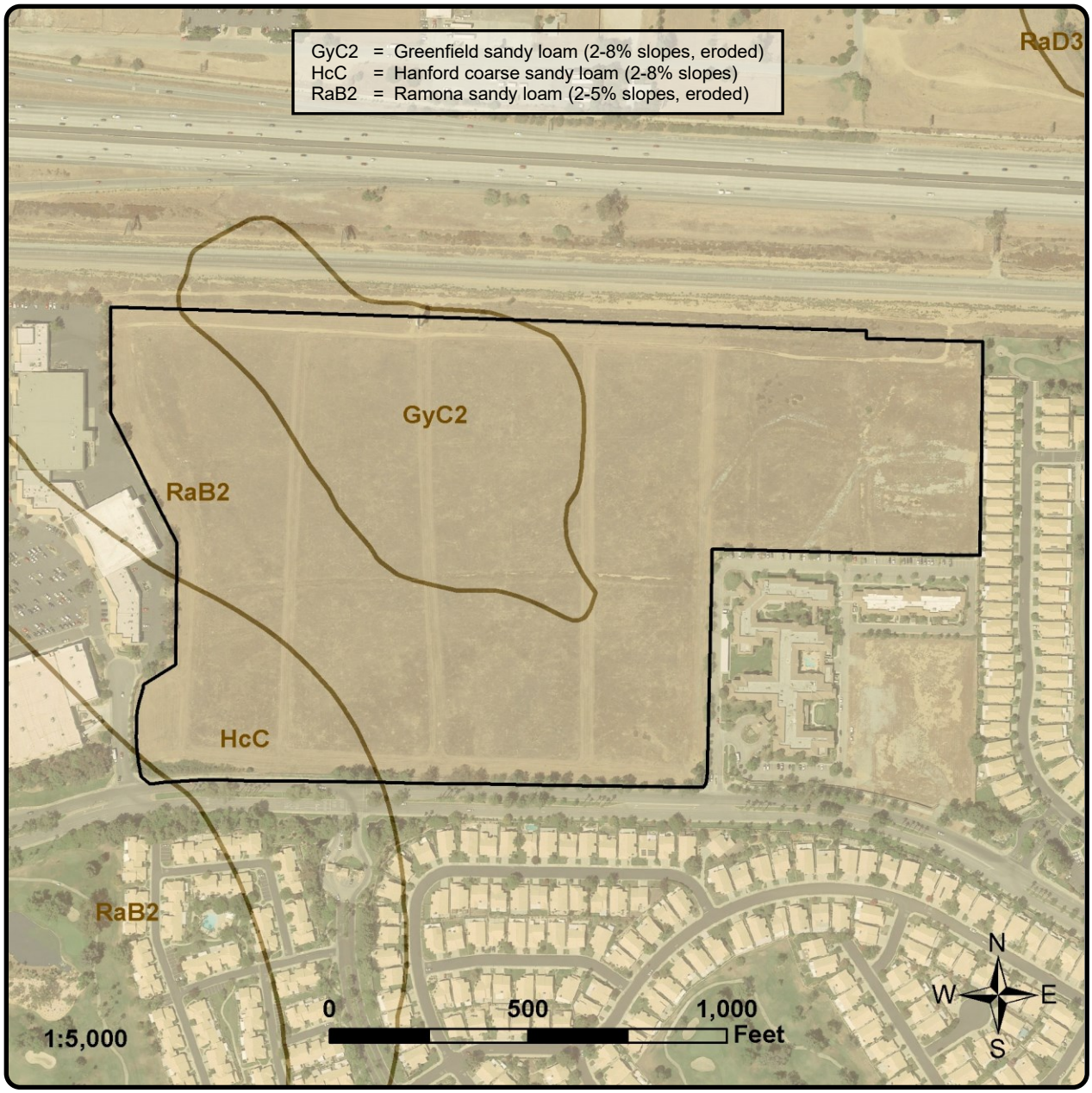
Vegetation Community	**Area (acres)**
Non-native Grassland	46.56
Willow Thickets	0.18
California Buckwheat Scrub	0.28
Total	**47.02**

Non-native Annual Grassland

The majority of the site consists of disturbed non-native annual grassland dominated by Mediterranean grass (*Schismus barbatus*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), and cheatgrass (*Bromus tectorum*). Other non-native species present include Russian thistle (*Salsola tragus*), shortpod mustard (*Hirschfeldia incana*), redstem filaree (*Erodium cicutarium*), and tocalote (*Centaurea melitensis*).

Native annuals that are tolerant of disturbed areas and were observed onsite include large flower rancher's fiddleneck (*Amsinckia intermedia*), California aster (*Corethrogyne filaginifolia*), western sunflower (*Helianthus annuus*), horseweed (*Erigeron canadensis*), doveweed (*Croton setiger*), telegraph weed (*Heterotheca grandiflora*), and annual bur-weed (*Ambrosia acanthicarpa*).

Other plants less commonly observed include non-native tree tobacco (*Nicotiana glauca*) and native vinegar weed (*Trichostemma lanceolatum*), nightshade (*Solanum species*), and western jimsonweed (*Datura wrightii*).



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Figure 4

Soils Map
(Aerial obtained from Google Earth, August 2018, USDA Nat. Res. Cons. Serv. SSURGO Data)

APN 419-140-057, City of Banning
County of Riverside, California

This vegetation community is classified by Sawyer et al. (2009) as brome or Mediterranean grass grasslands (*Bromus* species – *Schismus barbatus* Herbaceous Semi-Natural Alliance). It is not considered a sensitive vegetation community.

California Buckwheat Scrub

A narrow strip of coastal scrub dominated by California buckwheat (*Eriogonum fasciculatum*) is present along portions of the northeastern site boundary. This vegetation community is classified by Sawyer et al. (2009) as California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance).

Willow Thickets

A small area of small to medium-sized willows (*Salix* species) is present at the southwest corner of the site. The willows could not be identified due to season. These willows are likely supported by irrigation runoff and associated with a shallow trench that runs along the southern site boundary. This vegetation community is classified by Sawyer et al. (2009) as willow thickets and is synonymous with the southern willow scrub community noted in the 2005 survey (MND ca. 2005).

Animals

The Project area is home to numerous birds, reptilian, and mammalian species. Wildlife identified within the Project area included eight (8) bird species, one (1) species of reptile, and three (3) mammal species. These included the red-tailed hawk (*Buteo jamaicensis*), rock dove (*Columba livia*), side-blotched lizard (*Uta stansburiana*), Audobon's cottontail (*Sylvilagus audubonii*), and California ground squirrel (*Spermophilus beecheyi*), among others.

1.4.4) Water Resources

There are no USGS mapped blue-line streams within the Project area. Smith Creek trending southeast by north-northwest lies approximately 0.25 mile east of the Project area. A shallow trench is present along the site's southern boundary (along Sun Lakes Boulevard) and trends from west to east. A double culvert is present at the southeast corner of the site. A small area of willow thicket is present in the southwest corner of the site in association with a trench. Another shallow trench is present within the central portion of the site and trends from west to east. No water or evidence of flow was observed in these trenches during the survey. The

trenches appear to be remnants of past disturbance involving water quality or flood control measures and do not have connectivity with any natural waterway.

2.0) CULTURAL SETTING

Prehistoric Setting

The following regional chronology is presented as a combined cultural history for the Mojave and Colorado Deserts and based largely on the work of Schaefer and Laylander (2007) and Sutton et al. (2007). There is a scarcity of data prior to the Late Prehistoric for the Colorado Desert that may be due to site preservation potential, a harsher drier climate – less hospitable for human settlement, or simply the difference in the amount of research in each region (Sutton et al. 2007). Archaeological interest in the eastern desert areas of California began at the beginning of the twentieth century with the work of Elizabeth and William Campbell and Malcolm Rogers. With the start of Cultural Resource Management and the expansion of military bases during the Cold War Era, research and information has increased enormously. In 1984, Claude Warren wrote the first synthesis of research done in the region. Since that time additional work has been done, resulting in a tremendous surge in information (Sutton 1996, Sutton et al. 2007, Schaefer 1994 and Schaefer and Laylander 2007).

Both Sutton and Schaefer prefer to use climatic periods to define cultural responses and see changes in archaeological assemblages as responses to changes in climate. Sutton suggests using temporal periods of Pleistocene, Early Holocene, Middle Holocene, and Late Holocene.

The APE falls within the Colorado River region of the Colorado Desert. Biologically, ethnographically, as well as geographically, this APE is consistent with the Colorado River and Colorado Desert.

2.1) Pleistocene

2.1.1) Pre Clovis (pre-10,000 cal B.C.)

Several archaeologists have suggested possible pre-Paleo Indian occupations for both the Mojave and Colorado Deserts. At present there is no undisputed evidence for either area. There is growing evidence for pre-Clovis occupation in the Americas, and early researchers thought they had artifacts and evidence from this period; however, improved dating techniques and better understanding of geomorphologic processes have not supported their claims. While human occupation is a possibility, presently there is no irrefutable evidence from the desert regions of California.

2.1.2) Paleo-Indian (10,000-8,000 cal B.C.)

The Paleo-Indian Complex in the Mojave Desert is represented by the Western Clovis Tradition, marked by the fluted projectile point. Most of these finds are surface finds and associated with diminishing Pluvial Lakes. While still a somewhat wet and cool period, lakes cycled between alternately drying and then recharging. Most Clovis finds are from Pleistocene Lake drainage basins like China Lake, Thompson Lake, and Koehn Lake (Sutton et al. 2007). Simons suggests that Clovis point types have been identified in Pinto Basin, Ocotillo Wells, Cuyamaca Pass, and the Yuha Desert, but there is a certain amount of contention among archaeologists regarding whether these finds represent actual Clovis projectile points, are points that are similar, or perhaps are Clovis points that have been modified and still show the attributes of their original form. This would have been a period requiring high mobility on the part of Paleo Indian groups. Camps would be small and temporary, with small populations living near permanent water sources.

2.2) Early Holocene

2.2.1) Lake Mojave (8,000-6,000 cal. B.C.)

This period is characterized by a post-glacial warming trend further diminishing pluvial lakes. This too is a period better represented from the Mojave Desert than the Colorado Desert (Sutton et al. 2007 and Schaeffer and Laylander 2007). The Lake Mojave Complex is typified by projectile points of the Great Basin Series, known as Lake Mojave and Silver Lake points. Bifaces, steep-edged unifaces, crescents, and cobble-core tools are common. Ground stone implements for processing and pulping plants and animals begin to appear in the archaeological record on a regular basis. Most of these finds are on the surface and lack associated radiometric dating. Settlement patterns indicate small foraging groups and short-term occupations. Basin drainages, rather than changing internal drainage lakes, seem to have been the preferred settlement choice. Lack of certainty and unpredictability in resources would require a high degree of mobility in the population.

2.3) Middle Holocene

2.3.1) Pinto Complex (8,000-3,000-cal. B.C.)

A temporal overlap exists between the Lake Mojave Complex and the Pinto Complex. Toward the end of the Early Holocene Pinto-type projectile points begin to appear. Occasionally the Great Basin Series and Pinto Series show up at the same sites, but according to Sutton et al.

(2007) they have consistently divergent site distributions.

Pinto Series Projectile Points are characterized by stemmed and indented bases and show blade reworking, which may reflect a shift from using atlatl darts to thrusting spears. Overall there is continuity in the stone technology of Lake Mojave and Pinto Complexes. Changes are reflected in a switch from cryptocrystalline materials like obsidian and chert to material like rhyolites and basalts. There is a switch to the use of bifacial and unifacial core-tool forms. While there is less diversity in lithic tool materials there is an increase in interaction with coastal groups, as evidenced by lopped-end *Olivella* shell beads. Faunal remains show a decrease in large mammals (artiodactyl) and more reliance on smaller animals. There is an increase in ground stone material in the earlier part of the Middle Holocene, indicating a greater reliance on plant materials. During this period, settlement patterns favor the remnant pluvial lake basins with fossil stream channels and springs and seeps in upland areas. Settlements are large in well-watered areas where middens are larger. These settlements were residential bases from which smaller foraging groups would be sent out to exploit seasonal resources.

The late mid-Holocene (5,000-3,000 cal. B.C.) was one of the warmest and driest periods of the entire Holocene. In the past it has been suggested that some areas were abandoned all-together, but it may be that larger groups split into smaller more mobile groups, leaving a smaller human imprint.

2.4) Late Holocene

Between 3,000-2,000 B.C., the climate became hotter and drier, which is reflected in low population densities. It appears that some regions of the Eastern Mojave were abandoned altogether. In general the Late Holocene is a period plagued by severe climatic episodes that had cultural repercussions over the entire globe. The Medieval Climate Anomaly (A.D. 800-1,350) was an exceedingly hot and dry period that saw declines in large villages and abandonment of the Mojave, while the Little Ice Age (A.D. 1,400-1,875) is associated with cold conditions and an increase in winter precipitation.

2.4.1) Gypsum Complex (2,000 cal. B.C.-cal. A.D. 200)

The climate during the Gypsum Complex was wetter and cooler. Settlements are found near streams but are smaller and more numerous. There was an increase in trade. The marker artifacts for the Gypsum Complex are corner-notched projectile points known as the Elko Series, the Humboldt Series with a concave base, and the concave base Gypsum Series.

Bifaces, manos, and metates are common and quartz crystals, paint, and rock art occur. These items point to an increase in trade and cultural complexity.

2.4.2) Rose Springs Complex (cal. A.D. 200 – 1,100)

The cultural systems changed dramatically sometime between 200-500 A.D., when the bow and arrow were introduced in the Mojave Desert Region. With the introduction of the bow and arrow came a need for a different projectile point type, one smaller and easily hafted. The Rose Springs and Eastgate series projectile points reflect this necessity. Along with the new projectile point, stone knives, drills, pipes, bone awls, various milling implements and an increase in obsidian use (from the Coso Mountain area) become common. Rose Springs sites are found near springs, washes, and lakeshores and show a dramatic increase in population. Wickiups and pit houses (along with other structures) were being used, indicating more intensive occupations. Sites also have well-developed middens.

During the middle of the Rose Spring Complex a dramatic climate shift, the Medieval Climate Anomaly (MCA) occurred (A.D. 800-1,350). Sutton suggests the drier, hotter climate, increased population, and new hunting technology caused an already stressed resource base to collapse and brought an end to the Rose Springs Complex.

During this period, particularly in the northeastern Mojave Desert, influences from the nearby Muddy and Virgin River Anasazi groups begin to appear in the archaeological record. The Anasazi were interested in the turquoise mines near Halloran Springs and trade with the coast. There is some evidence of agricultural practices being introduced.

2.4.3) Late Prehistoric Complex (cal. A.D. 1,100-Contact)

While the climate continued to deteriorate, population density decreased and new technologies appeared. Cultural Complexes appeared that have modern ethnographic counterparts. Occupation sites consist of some major villages with cemeteries, as well as “special purpose” and seasonal sites. Desert series projectile points, buffware and brownware ceramics, shell, steatite beads, slate pendants, incised stones, and milling tools constitute the tool assemblage. Regional differences, such as Cottonwood Projectile Points, are common and use of obsidian increased in some areas and decreased in others.

Late period sites are found over much of the Colorado Desert region. These range from villages to small scatters and are typically characterized by all of the following: pottery sherds, chipped stone tools, ground stone manos and metates, mortars and pestles, shaft straighteners, shell,

bone, Olivella and other beads, and stone pendants (Warren 1984: 403-406). Pottery appears to have been introduced into the Colorado Desert region from the Lower Colorado River area. Tizon Brownware predominates, with Lower Colorado Buffwares and Red on Buff added in later periods. Typical projectile points include Cottonwood Triangular and Desert Side-notched points. The Cahuilla traditionally cremated their dead. Cremation sites, consisting of burned human bone and ash, burned pottery fragments, and sometimes other artifacts, commonly have been found in the region.

Wilke (1978) provides one of the most extensive studies of occupation and resource use in the area of the north end of Lake Cahuilla. He finds a lacustrine adaptation around the ancient shoreline, supplemented with resources from other ecological zones. He suggests that lake sites include permanent villages, interspersed with seasonal campsites focused on specific resources in different environmental zones. The desiccation of Lake Cahuilla led to significant out-migration into the mountains, and changes in adaptation, including the adoption of a limited corn, bean, squash, and melon agriculture from the Lower Colorado River area. Weide (1975: 90-92), in contrast, has suggested that Lake Cahuilla may have only existed intermittently, for no more than 50 years at a time. In this interpretation, the lake sites are all non-sedentary sites occupied by populations exploiting the local resources. Thus, the desiccation of the lake did not have as dramatic effect on population movements, which adjusted through changes in the resource base, including the adoption of agriculture.

2.4.4) Protohistoric Period (410 to 150 BP)

The Protohistoric Period marks the arrival of the Spanish in Alta California and the impact of European influence on native populations. Although the Spanish did not formally enter the San Jacinto Mountains until centuries later, Native Americans in the area were aware of Europeans and even acquired some European goods through trade networks, well before European colonization began. Such influences may be found when European- and Mexican-made materials are encountered in Protohistoric archaeological deposits, and such discoveries may contribute to analyses of trade networks, political relationships between groups, and shifts in emphasis on subsistence resources.

The Protohistoric Period witnessed an increase in usage of obsidian from the Obsidian Butte source near the southern end of the Salton Sea, which was exposed between high stand intervals of Lake Cahuilla sometime between 350 and 300 B.P. and again between 250 to 150 B.P. Furthermore, Desert Side-notched points spread further inland where they are often found

in Protohistoric archaeological deposits along with the more common Cottonwood Triangular points. Late in the period, European trade goods (i.e., glass trade beads) were added to the cultural assemblages (Meighan 1954).

The Hakataya influence in coastal and inland Southern California regions appears to have diminished during the late Protohistoric when the extensive trade networks along the Mojave River and in Antelope Valley apparently broke down and large village sites were abandoned (Warren 1984:427). Warren (1984: 428) suggests that disruption in trade networks may have resulted from the movement of the Colorado River basin Chemehuevi populations southward across the trade routes.

2.5) Ethnohistoric Context

The ethnohistory of the Cahuilla Indians is documented in several ethnographic studies, mission records, and major published sources including Kroeber (1908, 1925), Hooper (1920), Strong (1929), Bean (1972, 1978), Heizer (1978), and Bean et al. (1991). The following is a brief summary of Cahuilla ethnohistory summarized from Bean et al. (1991).

The San Gorgonio Pass, Coachella Valley, and Santa Rosa and San Jacinto Mountains were occupied by the Cahuilla people at the time of Spanish arrival in 1769. The Cahuilla were organized into at least 12 differed patrilineal clans, which owned large spans of territory that included multiple ecological zones at high and low elevations. This allowed the Cahuilla people to exploit a wide range of plant and animal resources in different seasons (Bean 1972). Cahuilla groups are often distinguished by the topographic region (i.e., desert, mountain, and pass) in which they established permanent settlements (Bean 1972).

Desert Cahuilla settlements congregated around the shoreline of ancient Lake Cahuilla as well as near the mouth of canyons and valleys in areas that could supply many of their food resources within a 5-mile area (Bean 1972: 73-74). As the lake receded, the Cahuilla moved their villages and adapted their subsistence practices (Wilke 1976). Pass Cahuilla also established settlements in or near the mouth of canyons and valleys in areas. Mountain Cahuilla occupied settlements between 3,000 and 5,000 feet in the San Jacinto and Santa Rosa Mountains.

The San Gorgonio Pass and neighboring canyons were home to various lineages of the Wanakik Cahuilla Clan (Bean et al. 1991: 11), which are provided in Table 2 below.

Table 2. Cahuilla Village Names and Locations as Reported by Bean et al. (1991).

Lineage Name	Village Territory	Cahuilla Village Name
Ackit Wankik	Canyon area north of Beaumont	-
Pisata Wanakik	Banning Water Canyon	Pīhatapa
Waksishe Wanakik	Near Cabazon	-
Palunka Wanakik	Stubbe Canyon	-
Wanakik Wanakik	White Water Canyon	Wanup
Teshana Wanakik	Snow Creek	-
Wakina Wanakik	Blaisdell Canyon	-
Havina Wanakik	Palm Springs Station	-
Huvana Wanakik	Hall's Grade	-
Amnaa Vitcem	Unidentified area northwest of Palm Springs	-

The San Gorgonio Pass also contains numerous named Cahuilla places, of which several are documented by Bean et al. (1991). These are named places are included in Table 3 below.

Table 3. Named Cahuilla Places in the San Gorgonio Pass Area.

Place Name	Location	Description
Mal-ki	Morongo Indian Reservation	Territory of Wankik Wanakik who previously occupied White Water Canyon.
Hunavatikiktum Village	Hall's Grade	-
Tep ush la	Between Banning and Beaumont	Sharp hill once owned by Mexican named Miguel Hagaria.
Kow wish so kalet	Rock on Cabazon Peak	A rock sign where Evo ga net, the fox, lives. It is an enormous rock near the summit of Cabezon Peak, resembling a big head, which is just south of Cabazon.
Īvawakik	Cabazon Hill	Sharp hill south of town of Cabazon. Great ner named the place and went inside of hill and became the rock on top. This marks the northeastern boundary of the Kauisik Cahuilla.
Kekliva	North of Soboba	Mountain north of Soboba where Kausiktum left part of their ceremonial bundle.

Cahuilla clans operated within a hierarchical politico-religious structure, each with one or more ceremonial units that served as a "symbolic representation of the sociopolitical reality of the group" (Bean et al. 1991: 5). These groups were part of a ritual congregation connecting

autonomous groups to the broader socio-political, religious, and economic networks.

The Cahuilla were hunter-gatherers for the most part and may have incorporated agriculture into their subsistence foci prior to European contact. Among the animals the Cahuilla hunted were Pronghorn sheep, mule deer, rabbits, squirrels, chipmunks, desert tortoise, rats, and mice. The Cahuilla often organized communal rabbit hunts prior to ceremonial gatherings to provide food for guests and participants. When available, the Cahuilla also hunted fish and birds along the shoreline of ancient Lake Cahuilla.

Cahuilla material culture included an array of utilitarian and ceremonial objects. Cahuilla were well known for their woven baskets. They were also expert potters and used ceramics to craft many different items for storage, cooking, and other uses. Stone and wood implements were integral to daily Cahuilla life. Wooden mortars and pestles were used to process mesquite beans and other seeds and plant materials as were stone manos and pestles used with stone mortars, metates, and bedrock slicks. Cryptocrystalline and microcrystalline silicates, metavolcanics, and obsidian, among other stone materials, were worked into knives, blades, scrappers, and projectile points to tip wood arrows. Wood was utilized for bow construction, pestles and mortars, arrow shafts, throwing sticks, digging sticks, and flutes. The Cahuilla also utilized various parts of animals (e.g., bone and tendons) and plants (e.g., mescal fiber sandals) in everyday life. Ceremonial objects included shell beads, feathers, gourd rattles, crystals, wands, and various items that made up the ceremonial bundle.

2.6) Euro-American Historic Context

The following historic context statement for the San Gorgonio Pass area was originally included in the historical and archaeological resources section of the City of Banning General Plan (2006: IV-59-IV-61).

> By the late 18th century, Spanish explorers sought to colonize California before other European nations and established religious missions and military strongholds along the California coast. Spanish and Mexican explorers traveled through the San Gorgonio Pass in search of easily passable supply routes from Mexico to colonies on the northern Monterey Peninsula of California. In 1822, Mexico secured its independence from Spain under the Treaty of Cordova, and Spanish forces were driven out of Mexico and California. In 1823-1825, Jose Romero, Jose Maria Estudillo, and Romualdo Pacheco led an expedition in search of a route to Yuma, Arizona and became the first noted European explorers to travel through the San Gorgonio Pass.

In about 1824, friars of the San Gabriel Mission established a mission outpost in the Pass named in honor of St. Gorgonious, and Powell "Paulino" Weaver, a native of Tennessee. During that period, the area was known as Rancho San Gorgonio, one of the 24 principal cattle ranches under the control of the San Gabriel Mission. In 1845, Weaver and Isaac "Julian" Williams petitioned the Mexican authorities for a land grant of the 48,400-acre Rancho San Gorgonio, which stretched from Yucaipa to the eastern edge of the Pass. The grant was never issued, but Weaver and Williams took possession of the land under assumed ownership.

The United States defeated Mexico in 1848 in the Mexican-American War and gained control of California. At the same time, the discovery of gold and the appeal of cattle ranching led to an influx of new settlers to the state. California was admitted to the Union in 1850. The first U. S. Government surveys were conducted in the San Gorgonio Pass in 1853, and noted a number of trails and roads crossing the area, as well as an Indian village at the mouth of the Banning Canyon. These surveys were part of a potential railroad route from Mississippi to the California coast, although train service would not be available until nearly 25 years later. In the meantime, Banning was developing as a transportation hub on the Bradshaw Trail, playing host to a convergence of stagecoach lines, including Alexander and Company of Los Angeles.

In Banning, the earliest European structures were the adobe houses built by Isaac W. Smith and José Pope in 1854. Pope's house, at what is now the Gilman Ranch, served as a stage station on the Bradshaw Trail under the later owners of the property, Newton Noble and James M. Gilman. Smith's ranch, also known to have been a stage stop, later became the site of the Highland Springs Resort.

Non-Indian settlement in the San Gorgonio Pass expanded during the 1870s and 1880s, with the establishment of railroad stations along the Southern Pacific line and the implementation of the Homestead Act and Desert Land Act, which opened public land for claims. With the completion of the Southern Pacific Railway in 1877, the focal point of local growth shifted from the northern foothills to the present-day downtown area.

After the founding of Banning in 1884, the town became the unmistakable center of population and community growth in the area. During the 20th century, Banning continued to benefit from its strategic location at the nexus of the various transportation arteries, including the original Ocean-to-Ocean Highway (U. S. Route 60, 70, 99, now Ramsey Street) and today's Interstate 10, roughly halfway between the Riverside-San Bernardino area and the growing desert resort communities in the Coachella Valley.

In 1930, as part of the Colorado River Aqueduct project, the Metropolitan Water District provided a considerable boost to the Banning economy and population when it chose the City as its headquarters for the tunneling operations through the San Jacinto Mountains. As a result, road improvements, schools, and parks were completed during this time, including Repplier Park. Growth in the City slowed considerably during World War II, but rebounded afterward. Building

> permits issued in 1945 totaled $13,481,682.50, representing 163 new businesses and 1,350 residences.
>
> By the early 1940s Banning's downtown area stretched from Eighth Street on the west to Hathaway Avenue on the east, and the City extended as far north as the mouth of Banning Canyon. The downtown had been fully urbanized and a suburban neighborhood had emerged on the western edge of the town, between Sunrise and Sunset Avenues. Scattered buildings were also located between these two areas, mostly to the north of present-day Ramsey Street. While other buildings dotted the outlying areas, with many of them surrounded by orchards, including those on the Banning Bench. During the next ten years, the undeveloped area between Banning's downtown and the westerly neighborhood was essentially filled in amid the post-WWII boom.
>
> In contrast, the areas beyond the core and the Ramsey Street and San Gorgonio Avenue corridors remained largely rural in character until the most recent decades, when large-scale residential developments, such as the Sun Lakes subdivision and the accompanying commercial districts, began to turn vacant land on the western edge of the City into a new population center.

The City of Banning was incorporated February 6, 1913. The population at the time was more than 500 residents (Hughes 1938). The City was named for General Phineas T. Banning, a freighter who transported goods over the Mormon Trail from Salt Lake City to San Bernardino and Los Angeles. Gen. Banning was also known for the creation of Wilmington and transporting goods between San Pedro and Los Angeles (City of Banning 2020). In the early 1900s, Banning was famous for its agreeable weather and as a burgeoning health resort. As put by W. Dwight Pierce, Banning is, "[h]igh, but not too high; dry, but not too dry; warm, but not too hot, and never too cold" (n.d.). Many people visited or resided in Banning for the health-restoring weather. In 1925, Banning was "well-equipped to care for tuberculosis patients…" as several sanitariums and private residences were available for use by the ill (Deutsch 1925). Banning was also well-known for its orchards of apricots, almonds, olives, plums, and grapes.

While the railroads replaced the need for stages, Banning never lost its nickname as "Stagecoach Town USA". Today, the town is known for its Annual Stagecoach Days Celebration which hosts a parade, carnival, mock shoot-outs, a barbeque, and a rodeo (City of Banning 2020). The annual Cherry harvest, usually held in early spring, is also a widely-attended annual event, relished by both residents and non-residents alike.

3.0) REGULATORY SETTING AND METHODS

3.1) Regulatory Setting

Under CEQA, public agencies must consider the effects of their actions on both historical resources and unique archaeological resources. Pursuant to 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. Section 21083.2 requires agencies to determine whether proposed projects would have effects on unique archaeological resources.

Historical resource is a term with a defined statutory meaning (see PRC, Section 21084.1 and CEQA Guidelines, Section 15064.5(a) and (b)). The term embraces any resource listed in or determined to be eligible for listing on the CRHR. The CRHR includes resources listed in or formally determined eligible for listing in the National Register of Historic Places (NRHP), as well as some California Historical Landmarks (CHLs) and Points of Historical Interest (CPHIs).

Properties of local significance designated under a local preservation ordinance (local landmarks or landmark districts) or identified in a local historical resources inventory may be eligible for listing in the CRHR and are, therefore, presumed historical resources for purposes of CEQA (PRC, Section 5024.1 and California Code of Regulations, Title 14, Section 4850). A lead agency should consider such resources potentially eligible for the CRHR unless the resource was demolished, lost substantial integrity, or if a preponderance of evidence exists demonstrating the resource is not eligible for listing.

Lead agencies also have a responsibility to evaluate potential historical resources not previously designated under a local preservation ordinance or identified in a historical resources inventory against the CRHR criteria prior to determining the project's overall effect on the environment under CEQA (PRC, Section 21084.1 and CEQA Guidelines, Section 15064(a)(3)). The following criteria are used to evaluate the significance of potential historical resources for the proposed project. An effect is considered significant if the proposed project impacts the specific qualities that render a resource eligible for listing in the NRHP and/or the CRHR.

3.1.1) State Significance Criteria

Generally, a resource is considered significant under CEQA if it possesses sufficient integrity and demonstrates eligibility under at least one (1) of the following criteria (California Code of

Regulations 15064.5):

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. Is associated with the lives of persons important in our past;

3. 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

4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

As noted above, lead agencies must also consider whether a project will affect unique archaeological resources. PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that 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.

3.1.2) Local Regulations

City of Banning General Plan (2006)

The City of Banning General Plan incorporates goals, policies, and programs to protect biological resources. These include the following:

Goal Documentation, maintenance, preservation, conservation, and enhancement of archaeological and historic sites, artifacts, traditions, and other elements of the City's cultural heritage.

Policy 1 The City shall exercise its responsibility to identify, document and evaluate archaeological, historical and cultural resources that may be affected by proposed development projects and other activities.

Program 1.A All new development proposals…shall submit a records search for historic and cultural resources as part of the planning process.

Program 1.B Development of land use proposals which have the potential to disturb or destroy sensitive cultural resources shall be evaluated by a qualified professional and, if necessary, comprehensive Phase I studies and appropriate mitigation measures shall be incorporated into project approvals.

Program 1.C The City shall implement the requirements of state law relating to cultural resources, including Government Code 65352.3, an any subsequent amendments or additions.

3.2) Methods

The purpose of this technical report is to provide the City of Banning with information necessary to determine whether the Project would cause an adverse change to a historical resource, as defined in PRC §5020.1(j) and, therefore, result in significant impact to the environment under CEQA. To accomplish this objective, L&L completed a historical resources records search, historical and geoarchaeological background research, coordinated with the Native American Heritage Commission (NAHC) and local Native American tribes, organizations, and individuals, and performed a systematic survey of the entire Project area.

This investigation included the following tasks:

- Review of regional history and previous cultural resource sites and studies within the Project area and the vicinity.
- Examination of archival topographic maps and aerial photographs for the Project area and the general vicinity.
- Request of an NAHC SLS for the Project area and contact with Tribal groups and individuals as named by the NAHC.
- Non-collection Phase I pedestrian survey of the Project area.
- Evaluate the potential for the proposed project to result in significant impacts to cultural resources including the potential to impact buried cultural resources with no surface expression.
- Develop recommendations associated with impacts to cultural resources following the guidelines as outlined in the Regulatory Setting.

3.2.1) Cultural Resources Records Search

The cultural resources records search of the Project area was completed on February 5, 2020 by L&L archaeologist William R. Gillean at the Eastern Information Center (EIC) located on the campus of the University of California, Riverside. The records search included a review of EIC maps (Appendix B) and previously recorded cultural resource records and reports within a one-

mile radius of the Project area. In addition, the records search included a review of the National Register of Historic Places (NRHP), Archaeological Determinations of Eligibility (ADOE), and the Built Environment Resources Directory (BERD) for the City of Banning.

3.2.2) Historic Records Review

L&L reviewed pertinent General Land Office (GLO) maps and records on file with the BLM (BLM 2020). Archival topographic maps and aerial photographs of the Project area were also reviewed (NETR 2020). In addition, parcel records, and maps available through the County of Riverside County Assessors Website and previous cultural resource reports obtained from the EIC were also reviewed.

3.2.3) Native American Coordination

L&L notified the NAHC of the Project and requested a records search of the Sacred Lands File (SLS) on June 29, 2020. The NAHC responded in writing on June 29, 2020 with a list of local Native American tribes, organizations, and individuals to contact regarding the Project (Appendix D). L&L contacted the tribes, organizations, and individuals in the NAHC response with a letter dated June 29, 2020 (Appendix D). The letters included a description of the Project, identified its location, and requested information regarding Native American resources within or near the Project area. All correspondence completed to date is included Appendix D.

3.2.4) Pedestrian Survey

The primary purpose of a cultural resource pedestrian survey is to assess the condition of previously recorded resources, identify historic resources and/or unique archaeological resources, and to assess the Project's potential to impact historic resources. The Project area was surveyed on June 20, 2020 by L&L archaeologist William Gillean utilizing the block-transect method with north-south trending transects. Transect intervals measured no more than 15 meters and the Project area was surveyed in its entirety (100 percent). During the survey, digital photographs were taken to document current conditions.

In the event cultural resources 50 years of age or older are detected during the survey, efforts were made to measure, photograph, and map resources in the field. Resource locational data were recorded using a GPS device using Universal Transverse Mercator (UTM), North American Datum of 1983 (NAD83). All data obtained in the field were recorded onto appropriate DPR 523 Forms.

4.0) RESULTS

4.1) Cultural Resources Records Search

The records search at the EIC revealed that the Project area was previously inventoried for cultural resources in its entirety prior to the current investigation (RI-1434/SRS 1981). In addition, the entire Project area lies within the 37 square mile City of Banning General Plan area (CRM TECH 2004); however, the Project area was not systematically surveyed for cultural resources during the investigation.

Outside the Project area, at least 25 additional area-specific cultural resource investigations were completed within a one-mile radius of the Project area. Collectively, these reports cover approximately 70 percent of the total surface area within the scope of the records search. The details of these previous studies are summarized below in Table 4.

Table 4. Previous Cultural Resources Studies Within One Mile of the Project Area

Report #	Date	Rsrcs	Report	Author
RI-1432	1986	No	Archaeological Report on Grading Monitoring Activities at Stewart Ranch, Riverside County, California	Scientific Resource Surveys, Inc. (SRS)
RI-1433	1985	No	An Historical Study of Stewart Ranch in Riverside County, California	SRS
RI-1434	1981	Yes	Cultural Resources Report on 900 +/- Acre Parcel (Portion of the Old Stewart Ranch), Located in the Banning-Beaumont Area, Riverside County, California	SRS
RI-1830	1984	No	An Archaeological Assessment of Parcel 18132, Beaumont Area of Riverside County, California	Archaeological Research Unit
RI-2203	1987	No	An Archaeological Assessment of the Hovchild Property, Riverside County, California	C. E. Drover
RI-2350	1988	Yes	MCI Rialto to El Paso Fiber Optics Project - Intensive Cultural Resource Survey - San Bernardino and Riverside Counties, California	Dames & Moore
RI-3039	1990	No	An Archaeological Assessment of the “Sunset Crossing” Project, a 294.8 Acre Parcel as shown on TPM 25541, Located Immediately South of the I-10 Freeway at Sunset Avenue in Banning, Riverside County, California	Archaeological Associates
RI-4720	2004	Yes	Phase I Cultural Resource Survey and Historic Site Significance Evaluations for the Sunset Crossing Project Footprint, South Banning Area, County of Riverside, California	MBA
RI-4840	2002	No	Report of Phase I Archaeological Assessment of a 23-Acre Parcel in Beaumont, Riverside County	Archaeological Resource Management Corporation (ARMC)

Report #	Date	Rsrcs	Report	Author
RI-4841	2002	No	Addendum: Report of Phase I Archaeological Assessment of a 23-Acre Parcel in Beaumont, Riverside County	ARMC
RI-5136	2003	No	Cultural Resource Inventory and Paleontologic Assessment, Hovchild Property, City of Beaumont, County of Riverside, California	The Keith Companies
RI-6722	2006	Yes	Cultural Resources Assessment and Historic Evaluations: Deutsch Property Specific Plan, City of Banning, Riverside County, California	LSA
RI-7052	2006	No	A Cultural Resources Investigation of the Proposed San Gorgonio Village Project Area, Approximately 23 Acres of Land in the City of Beaumont, Riverside County, California	McKenna, et al.
RI-7055	2007	No	Historical/Archaeological Resources Survey Report: Assessor's Parcel Number 419-170-031, in the City of Beaumont, Riverside County, California	CRM Tech
RI-7339	2007	Yes	Identification and Evaluation of Historic Properties: Wastewater Treatment Plant Expansion and Recycled Water System, City of Banning, Riverside, California	CRM Tech
RI-7364	2007	No	Archaeological and Paleontologic Monitoring of a 29.7-Acre Project Area at the Northwest Corner of First Street and Commerce Way, Beaumont, Riverside County, California	Chambers Group
RI-7970	2006	Yes	A Study of the Past in San Timoteo Canyon and San Gorgonio Pass: Cultural Resource Assessment, Oak Valley Substation Project, Riverside County	LSA
RI-8011	2008	No	Final Cultural Resources Assessment, Study of the Past in San Timoteo Canyon and San Gorgonio Pass: Oak Valley Substation Project, Riverside County	LSA
RI-8027	2009	No	Letter Report: Proposed Cellular Tower Project(s) in Riverside County, California, Site Number(s)/Name(s): IE-04965A/Beaumont Health Center TCNS# 47154	Earth Touch
RI-8449	2004	No	Cultural Resources Technical Report: City of Banning General Plan	CRM Tech
RI-9167	2013	Yes	Cultural Resources Assessment and Class III Inventory: Volume I West of Devers Project, San Bernardino and Riverside Counties, California	LSA
RI-10157	2014	Yes	Archival Research Evaluation Results of 33 Cultural Resources for Southern California Edison Company's West of Devers Upgrade Project, Riverside and San Bernardino Counties, California, Volume 1	SCE
RI-10219	2015	No	Letter Report: Cultural Resources Summary for the Proposed Verizon Wireless, Inc. Property at the Potrero Site, 81 Highland Springs Avenue, Beaumont, Riverside County, California 92223	Tetra Tech
RI-10461	2015	Yes	Archaeological Investigations and Monitoring for the Construction of the Devers-Palo Verde No. 2 Transmission Line Project, Riverside County, California	ASM
RI-10478	2018	Yes	A Phase I CEQA/Class III NEPA (NHPA Section 106) Investigation for the 6th/Maple Septic Conversion Project in the City of Beaumont, Riverside Co., California	McKenna, et al.

Report #	Date	Rsrcs	Report	Author
RI-10754	2019	Yes	A Class III Historic Resource Study for Phase 3 of the Atwell Project for Section 106 Compliance, SPL-Banning, California	Brian F. Smith and Associates (BFSA)
RI-10766	2018	Yes	A Class III Historic Resource Study for Phase 2 of the Atwell Project for Section 106 Compliance, SPL-Banning, California	BFSA

These and similar studies resulted in the identification of at least four (4) previously recorded archaeological resources within the scope of the records search (see Table 5). None of the previously recorded cultural resources were identified within the Project area.

All previously recorded cultural resources are of historic age and consist of the Union Pacific Railroad/Southern Pacific Railroad (UPRR/SPR), two (2) water conveyance systems, and the historic Stewart Ranch Complex. These previously recorded resources and their locations relative to the Project area are outlined below.

Table 5. Previously Recorded Cultural Resources Located Within One Mile of the Project Area

Resource Number	Recorder Name and Date	Resource Description	Within ~One to 0.50 Mile Radius	Within ~0.50 to 0.25 Mile Radius	Within ~0.25 Mile Radius	Within Project Area?
33-9498/ CA-RIV-6381H/CA-IMP-3424H	Originally recorded by S. Ashkar of Jones & Stokes, 1999 Segments of this linear resource were updated by C. Chasteen of Myra L. Frank & Associates, 2003; C. Taniguchi of Galvin and Associates, 2005; S. Wilson and K. Chimel of ICF Jones & Stokes, 2009; S. Kremkau, 2012; T. Baurley and J. Sanka of L&L, 2015; D. Leonard of HDR, 2016; and P. Moloney, R. Elder, and W. Blodgett of Applied Earth Works, 2017	Historic: The UPRR/SPR. This resource consists of a segment of the UPRR (historically the SPR) that extends across California. The alignment includes several smaller railroad lines that were acquired and consolidated into the SPR in 1884. The lines were later acquired by the UPRR in the 1990s.	●	●	●	No; however, this resource is adjacent to the north of the Project area.

Resource Number	Recorder Name and Date	Resource Description	Within ~One to 0.50 Mile Radius	Within ~0.50 to 0.25 Mile Radius	Within ~0.25 Mile Radius	Within Project Area?
H-1 (No primary record available)	Scientific Resource Surveys, Inc. 1985 P. Messick and M. Dice of Michael Brandman Associates (MBA), 2004	Historic: Stewart Ranch Complex. The site was recommended not eligible for inclusion in the NRHP or the California Register of Historical Resources (CRHR).	—	—	●	No
33-13779/CA-RIV-7544	P. Messick and M. Dice of Michael Brandman Associates (MBA), 2004	Historic: A series of water conveyance features associated with the Stewart Ranch. The site was recommended not eligible for inclusion in the NRHP or the California Register of Historical Resources (CRHR).	●	—	—	No
33-15033/CA-RIV-7997	Originally recorded by D. Brunzell of LSA Associates, Inc. (LSA), 2006 Updated by J. Miller, C. Morgan, R. Goodwin, and J. Hall, 2013; S. Justus, B. Wilson, A. Giacinto of ASM Affiliates (ASM), 2010; A. Williams of Southern California Edison (SCE), 2014; and M. DeCarlo of ASM and Doug Mengers of PanGIS, 2018	Historic: A water conveyance system consisting of a channelized ditch created from Smith Creek. This resource was recommended not eligible for inclusion in the NRHP and the CRHR in 2014 and the State Historic Preservation Officer (SHPO) concurred with this recommendation in 2016.	●	●	—	No

4.2) Historic Records Review

Historic documents and plat maps available from the BLM GLO website were reviewed for information about 19th century historical land use and development within the Project area and general vicinity (BLM 2020). In addition, archival topographic maps dating between 1901 and 1996 and aerial photographs dating between 1966 and 2016 were also reviewed. The following discussion summarizes the history of land use and settlement in the general Project area. For a

discussion of potential historic resources identified within the Project area during the historic records review please see Section 4.4 below.

The Project area was first surveyed in the mid-to-late 1850s. No buildings, structures, or other man-made features were recorded within the Project area, although a house was depicted in the southeast quarter of Section 12 within Township 3 South, Range 1 West, San Bernardino Baseline and Meridian (SBBM), as were at least two (2) Native American foot trails; one to the south within Section 13 and another to the west in Section 11 (GLO 1857 and 1867). By 1880, construction of the Southern Pacific Railroad had reached Beaumont extending into Section 10 of Township 3 South, Range 1 West and included the Summit Station (GLO 1880).

GLO records demonstrate that the Project area was part of a 160-acre land grant purchased by Reznor P. Stewart in 1888 for $1.25 per acre under the Land Act of 1820 (3 Stat. 566). The land grant included all land in the southwest quarter of Section 12 of Township 3 South, Range 1 West, SBBM. Stewart constructed numerous buildings on the property near the intersection of Highland Springs Avenue and Eyer Road. Some even believe he moved his original house constructed on the Banning Bench circa 1873 to the property (SRS 1981). Structures and buildings constructed between the circa 1880s and 1900 include a hay storage barn, blacksmith shop, grain storage barn, stock barn, tank house, original well shaft, and two (2) sheds. Additional construction occurred between 1910 and 1920 and included a stock/general storage barn and corrugated metal shed.

A brief history of Reznor Stewart was included in the report prepared by Brandman and Associates (2004: 12) and is provided below:

> Reznor Stewart was once known as the first farmer in the San Timoteo area (Holms 1912). After immigrating with his parents to central California during the Gold Rush, Stewart grew up near Placerville, and then came to southern California with the goal of becoming a rancher. Stewart leased 1000 acres of land from the Morongo Band on or about 1978, and dry farmed the plot and raised hogs for sale in San Bernardino. According to Mason (1985), the Stewarts held the study area as part of their ranching holdings, up to about 1967, when the parcels were sold to investors. The property was dryland farmed for many years. The ranch buildings, which were located in the central western portion of Section 12 to the west, were still standing in 1985. In 1986, the structures were razed and the property developed as a golf course-residence complex.

Scientific Resource Surveys (1981:12-15) provided a more detailed account of Reznor Stewart in their assessment of +900 acres of the Stewart Ranch, which is also provided below:

> Reznor Perry Stewart was born in Illinois on November 3, 1845. He lived in

Illinois until the age of 5 with his father John Stewart and mother Jane (Hull) Stewart. In 1850, Reznor's father, a doctor, made the decision to come to California, and set out on the journey across the plains with his wife and young son. Shortly after the Stewarts settled in the small town known as "Hangtown", later known as Placerville, Reznor's father died. Mrs. Stewart, left without a means of support opened a restaurant and boarding house. A few years later, after Mrs. Stewart remarried, Reznor was turned out to make a living on his own, (at the age of nine).

Although the gold rush was in full swing in California at this time, Reznor was little interested in mining. Instead he sought work on a stock ranch. At the age of 12, Stewart was hired as a foreman for E. W. Scott, a position he held for 21 years. It was during his years on the Scott ranch that Stewart made the acquaintance of such famous western figures as Kit Carson, "Buffalo Bill" Cody and Captain Smith. Also while working for Mr. Scott, Stewart had as one of his assistants George Donner, the sole survivor of the ill-fated Donner wagon train.

In 1878, Stewart decided to start his own ranching business. On September 18, R. P. Stewart came to Banning with Ben Smith, W. K. Dunlap, Dan Scott, and Arthur Scott, from Yolo County.

Stewart, having brought with him two carloads of horses, built a large barn in Banning, approximately where the Banning Opera house was later erected. In the following year, he and Smith leased approximately one thousand acres of land on the southern portion of the Banning Bench from the Morongo Indians.

At this point, there still remain some conflicting reports as to whether Stewart actually bought the land from the Indians, or simply leased it. At any rate, Stewart subsequently entered into a lengthy legal dispute over the possibility of acquiring title to Indian property. Stewart ultimately lost ensuing litigation. On the Banning Bench property, Stewart had been engaged in dry farming, and raising of hogs which were sold in San Bernardino. Stewart is credited with the distinction of being the first farmer in this locality (History of Riverside County, Biographical sketches [Holmes] 1912). It is on this parcel of land that Stewart built his original home, located in Water Canyon. This home was later moved away from its rock chimney to the "Valley Ranch" (the government land southeast of Beaumont) to make the nucleus of the later 11-room home (Hughes 1938).

After losing the dispute over the Indian land, Stewart pre-empted one hundred and sixty acres of government land, two miles southeast of Beaumont. Stewart later added some 1800 acres of railroad land to this parcel. Patents to this land were issued by Presidents Grover Cleveland and Benjamin Harris (subject property). Stewart moved onto the land in 1883, when he began dry farming grain and hay on a large scale. By Stewart's own innovative practices and use of modern devices, he was able to make his ranch one of the most productive in the San Gorgonio Pass area.

On December 30, 1880, Reznor P. Stewart married Mary Christenson, stepdaughter of C. E. Jost, in San Bernardino. Stewart had five children, three boys and two girls: Emery R and Laura May, both were born on the Banning

> Bench in the original home; Arthur, Clara, and R. P. Jr., were born at the ranch. Emery died at sea in 1925, Arthur at Lima Peru, in 1913, and R. P. Jr. at San Francisco in 1906 (Hughes 1938).
>
> Reznor P. Stewart was also a prominent citizen and civic leader of Beaumont, contributing much to the development and growth of the city. Stewart donated land for the first public cemetery in the 1880s, and was one of the founders of the Bank of Beaumont, which he was president of for several years. During World War I he bought heavily in war bonds, enabling Beaumont to win the service flag of the U. S. Government and the County flag for being the first city in the county to oversubscribe.
>
> Reznor P. Stewart died on November 12, 1933, at the age of 88. His daughters, Calra and Laura, who had worked alongside their father for years in running the ranch, took over management of the property after his death with continued success. In the 1960s, the Stewart sisters decided to sell the property, the first portion of the ranch being sold in 1964. The second portion was sold in 1966 to a group of investors, with the final portion of the ranch liquidated in 1967.

It is unclear what developments, if any, occurred within the Project area or nearby Stewart Ranch Complex between 1920 and 1966. Only a single structure was depicted within the Stewart Ranch Complex on the 1942 Banning 15' USGS topographic map due to the overall scale of the map. Larger scale maps a decade later depicted five (5) buildings within the complex (1953 Beaumont 7.5' USGS topographic map).

Sometime prior to 1966, a linear feature (berm?) was constructed through the Project area trending southwest by northeast. The feature started to the north of the northeast corner of the Stewart Ranch Complex and continued to the property boundary adjacent to the Union Pacific Railroad right-of-way. A smaller linear feature (mechanical trench?) connects to the linear features southeastern terminus before traversing due south adjacent to the Stewart Ranch Complex before it crosses a dirt road and bends to the west near a series of additional linear features similar in appearance. At least two (2) ravines within the Project area are visible in the 1966 aerial photograph. The ravines run roughly north to south before terminating at the linear feature.

4.3) Potential Cultural Resource Identified During the Historic Records Review

4.3.1) Linear Feature

A linear feature, possibly an earthen berm, traversing southwest by northeast bisects the Project area was identified on the 1966 aerial photo. The linear feature is also visible on the 1967, 1972, 1996, 2005, 2009, 2010, 2011, 2012, 2014, and 2016 aerial photos. Similar linear

features crisscross much of the land within Stewart Ranch and connect to Smith Creek to the east and Portrero Creek to the south.

Numerous water control and conveyance features, including earthen berms and ditches, were previously recorded at site 33-013779 (CA-RIV-7544H). This site is in Section 7 of Township 3 South, Range 1 East (SBBM) and is included in the Stewart Ranch land holdings (Mason 1985). The features are clearly visible in an aerial photo taken in 1953 and were constructed sometime before then (Brandman and Associates 2004: 28). The features were built to "…slow and control the flows of water into the main and side channels of Smith Creek…" and "…the ends of each berm and ditch exhibited water control features…" (Brandman and Associates 2004: 14).

Brandman and Associates (2004: 31) appear to distinguish two (2) types of the earthen berms at 33-013779 (CA-RIV-7544H). The first type was directly associated with the larger system of water conveyance and control features within the Smith Creek floodplain and acted as a conduit or weir "…conveying water from ditches cut into the open field, into the spouts that were placed high above the floor of the drainage.… With this system, the water would flow into the existing drainage by pouring through the mouths and off the metal spouts of each feature." The other type was referred to as "bermed ditches" that crisscrossed the surface of open fields. These berms likely represent the downside slope of a ditch cut by a bulldozer and may or may not have been linked to other water control/conveyance devices such as spouts or weirs.

4.4) Native American Coordination

L&L requested a Sacred Lands Search (SLS) from the Native American Heritage Commission (NAHC) on June 29, 2020 and a response was received later that same day (Appendix D). The NAHC SLS failed to indicate the presence of Native American cultural resources in the immediate Project area. However, the NAHC noted that the absence of specific site information does not indicate the absence of cultural resources in any project area and indicated that other resources should be consulted to obtain information regarding known and previously recorded sites. Information scoping letters were sent to the 13 tribes and 20 individuals named by the NAHC on June 29, 2020 (Appendix D).

As a result of the information scoping process, five (5) tribes responded by email and in letters including the Agua Caliente Band of Cahuilla Indians (ACBCI), the Cabazon Band of Mission Indians, the Quechan Tribe of the Fort Yuma Reservation, the Rincon Band of Luiseno Indians, and the Santa Rosa Band of Cahuilla Indians. A sample of the scoping letter, response letters, and copies of all additional correspondence are included in Appendix D and a summary of the

detail is provided below in Table 6.

Table 6. Summary of Native American Coordination.

Contact Name and Title	Contact Affiliation	Method of Contact and Date	Response	Action(s) Required?
Jeff Grubbe, Chairperson	Agua Caliente Band of Cahuilla Indians	Scoping letter sent via USPS on June 29, 2020	Patti Garcia-Plotkin responded in a letter dated June 20, 2020, that the Project area was not within the boundaries of the ACBCI Reservation but Is within the Tribe's Traditional Use Area. The Tribe requested copies of the record search including all site records and survey reports and copies of any reports and/or records generated during the current inventory. Furthermore, the ACBCI stated that the letter did not conclude consultation and the ACBCI THPO may have additional recommendations or require further mitigation measures.	Provide ACBCI with a copy of the record search results and FINAL draft of this report.
Patricia Garcia-Plotkin, Director	Agua Caliente Band of Cahuilla Indians	Scoping letter sent via email on June 30, 2020	Patti Garcia-Plotkin responded in a letter dated June 20, 2020, that the Project area was not within the boundaries of the ACBCI Reservation but Is within the Tribe's Traditional Use Area. The Tribe requested copies of the record search including all site records and survey reports and copies of any reports and/or records generated during the current inventory. Furthermore, the ACBCI stated that the letter did not conclude consultation and the ACBCI THPO may have additional recommendations or require further mitigation measures.	Provide ACBCI with a copy of the record search results and FINAL draft of this report.
Amanda Vance, Chairperson	Augustine Band of Mission Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A
Doug Welmas, Chairperson	Cabazon Band of Mission Indians	Scoping letter sent via email on June 30, 2020	Judy Stapp responded in an email dated July 11, 2020, that the tribe does not comment on Projects outside of its Traditional Use Area.	None
Daniel Salgado, Chairperson	Cahuilla Band of Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A
Shane Chapparosa, Chairperson	Los Coyotes Band of Cahuilla and Cupeño Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A
Denisa Torrez, Cultural Resources Manager	Morongo Band of Mission Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A
Robert Martin, Chairperson	Morongo Band of Mission Indians	Scoping letter sent via USPS on June 29, 2020	No response received.	N/A
Mark Macarro, Chairperson	Pechanga Band of Luiseno Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A
Paul Macarro, Cultural Resources	Pechanga Band of Luiseno Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A

Contact Name and Title	Contact Affiliation	Method of Contact and Date	Response	Action(s) Required?
Manfred Scott, Acting Chairman Kw'ts'an Cultural Committee	Quechan Tribe of Fort Yuma Reservation	Scoping letter sent via email on June 30, 2020	Jill McCormick responded in an email dated July 2, 2020, that the tribe did not wish to comment on the Project at this time and deferred to more local tribes.	None
Jill McCormick, Historic Preservation Officer	Quechan Tribe of Fort Yuma Reservation	Scoping letter sent via email on June 30, 2020	Jill McCormick responded in an email dated July 2, 2020, that the tribe did not wish to comment on the Project at this time and deferred to more local tribes.	None
Joseph Hamilton, Chairperson	Ramona Band of Cahuilla	Scoping letter sent via email on June 30, 2020	No response received.	N/A
John Gomez, Environmental Coordinator	Ramona Band of Cahuilla	Scoping letter sent via email on June 30, 2020	No response received.	N/A
Bo Mazzetti, Chairperson	Rincon Band of Luiseno Indians	Scoping letter sent via email on June 30, 2020	Deneen Pelton, Administrative Assistant II to Cheryl Madrigal, responded in a letter dated July 8, 2020, stating that the Project area is not within the tribe's Area of Historic Interest.	None
Cheryl Madrigal, Tribal Historic Preservation Officer	Rincon Band of Luiseno Indians	Scoping letter sent via email on June 30, 2020	Deneen Pelton, Administrative Assistant II to Cheryl Madrigal, responded in a letter dated July 8, 2020, stating that the Project area is not within the tribe's Area of Historic Interest.	None
Lovina Redner, Tribal Chair	Santa Rosa Band of Cahuilla Indians	Scoping letter sent via email on June 30, 2020	Vanessa Minott, Tribal Administrator, responded in an email dated July 2, 2020, stating that the tribe deferred comment to the Soboba Band of Luiseno Indians.	None
Scott Cozart, Chairperson	Soboba Band of Luiseno Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A
Joseph Ontiveros, Cultural Resource Department	Soboba Band of Luiseno Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A
Michael Mirelez, Cultural Resource Coordinator	Torres-Martinez Desert Cahuilla Indians	Scoping letter sent via email on June 30, 2020	No response received.	N/A

4.5) Pedestrian Survey

L&L Archaeologist William R. Gillean, B.S., performed the pedestrian survey within the Project area on June 30, 2020. The Project area was surveyed via the block-transect method with a transect interval of no more than 15 meters. During the survey, north-south trending transects were completed throughout ±47.02 acres (100 percent) of the Project area. Topographically, much of the Project area is flat, but gradually increases in elevation as it trends southeast to northwest. Elevation onsite ranges from 2,546 to 2,565 feet AMSL. Photographs of the Project area are included in Appendix C.

The Project area is within a disturbed vacant lot and appears to be regularly disked or mown. A large advertising sign is present along the north-central boundary of the site. A gravel surface layer (from past disturbance) is present in some areas, particularly in the northeastern portion of the site. A dirt access road is present near the northern site boundary. Other past disturbance onsite includes a grid of dirt roads or graded areas, remnants of which are still visible (Appendix C: Photographs 1, 2, 3, 4, 5, 6, 7, and 8).

Surface visibility within the Project area was poor (20-50 percent) throughout due to recent disking and dense cover of low-lying invasive grasses (Appendix C: Photographs 1, 2, 3, 4, 5, 6, 7, and 8). During the survey, remnants of a modern barbed wire fence with wood posts were noted along the northern boundary of the Project area (Appendix C: Photographs 12). The wood posts were of milled lumber and were heavily damaged by a previous fire. They were spaced approximately 15 feet apart and were 6 feet tall by 9 inches wide by 6 inches thick. The barbed wire was also modern in appearance and was consistent with the right and left twist tensile style. The fence line appeared to delineate the Project area from the Union Pacific Railroad right-of-way. The fence line may have originally been placed along the boundary by the Stewart family who owned and operated a large ranch that included the Project area between 1883 and 1966, or by the Union Pacific Railroad. Regardless, the barbed wire fence noted during the current survey is composed of modern materials and requires no further consideration during this study.

Two (2) lengths of modern steel pipe were also noted in the northeast portion of the Project area near a wall separating the Project area from a retirement community (Appendix C: Photographs 9 and 10). One of the pipe lengths measured 9 feet 9 inches and was wrapped in wire and coated with concrete. The other pipe length measured 16 feet 9 1/4 inches and appeared to be coated with a thin layer of tar. It is not known where the pipe lengths originated from, their purpose, or how the pipes came to be deposited within the Project area. Regardless, the pipe lengths appear modern and require no further consideration during this study.

A northeast by southwest trending earthen berm bisecting the central portion of the Project area was also noted (Appendix C: Photograph 11). This berm measured approximately 15 feet wide and 3 feet high and spanned a length of approximately 1,000 feet. The berm is likely part of a water conveyance/control feature associated with other Post-WWII water control efforts previously recorded on Stewart Ranch (i.e., 33-013779). The berm is clearly visible on a 1966 aerial photo and is similar in size and character as other water conveyance/control features constructed a half-mile to the east sometime between 1945 and 1953 (Messick and Dice 2004).

4.6) Resources in the Project Area

One (1) cultural resource over 50 years of age was identified within the Project area during the current study. This resource is described in detail and evaluated against CRHR criteria below.

4.6.1) Water Conveyance/Control Feature (RPGX-1H)

This resource is a linear feature consisting of a 3 ft. tall by 15 ft. wide earthen mound trending southwest by northeast for 1,000 feet and bisecting the central portion of APN 419-140-057. The feature is clearly visible on aerial photographs going back to 1966 (the earliest dated aerial photo featuring the Project area readily available) and is likely a water conveyance/control feature associated with pre-1953 water control efforts previously recorded on Stewart Ranch to the east (i.e., 33-013779/CA-RIV-7544H). Similar berm features recorded at 33-013779 were constructed by bulldozers for the purpose of channeling runoff from "…existing drainages through a linked series of devices…likely built because cattle grazing had removed vegetation groundcovers that once held topsoils in place and the lack of groundcover had sped the process of erosion" (Messick and Dice 2004). Additional earthen berms (which Brandman and Associates [2004: 31] referred to as "bermed ditches") also crisscrossed the surface of open fields. These bermed ditches may or may not have been linked to other water control/conveyance devices, such as spouts or weirs.

The 1966 aerial photo of the Project area depicts a mechanically cleared area to the north of the earthen berm, suggesting the feature represents the downside slope of a ditch cut by a bulldozer. Furthermore, no evidence of spouts, weirs, concrete and stone catchments, or other water control/conveyance devices was found in association with RPGX-1H during the pedestrian survey. Finally, the feature is within an open field a half-mile northeast of Portrero Creek and almost one mile west of Smith Creek, with no direct connection to either. This suggests that RPGX-1H is most like the bermed ditches noted by Brandman and Associates (2004).

The mechanically cleared ditch in front of the earthen berm is no longer present and the berm itself has fallen into disrepair from lack of maintenance and periodic clearing and disking of the field. As such, the feature lacks integrity and does not convey any sense of its historical character.

4.6.2) CRHR Evaluation of RPGX-1H)

RPGX-1H is a bermed ditch most likely associated with pre-1953 water control/conveyance efforts on Stewart Ranch. Similar features constructed by ranchers along Smith Creek were previously recorded at site 33-013778 (CA-RIV-7544H), which was evaluated as not eligible for the CRHR (Brandman and Associates 2004). The water control/conveyance features, including

RPGX-1H, represent some of the few remaining elements of the historic Stewart Ranch; however, RPGX-1H no longer possess sufficient integrity and the association with the Stewart Ranch is limited to its purpose, age, location, and function and it does not convey any association with an important historic event, trend, or broad pattern of history. Therefore, RPGX-1H does not appear eligible for the CRHR under Criterion 1.

The Stewart family operated the Stewart Ranch between 1883 and 1967 and are considered historically significant at the local level for operating one of the most successful and long-standing dry farming and stock ranches in the San Gorgonio Pass area. The water control/conveyance features they constructed, including RPGX-1H, in open pasture and along Smith Creek and Portrero Creek were undoubtedly important to the Stewart family and the operation of the ranch. The features, likely constructed by members of the Stewart family sometime before 1953, represent a large investment of time, resources, and money to preserve topsoil and conserve water critical to success of dry farming operations. Although built by the Stewart family and undoubtedly important to the success of the ranch, the water control/conveyance features, including RPGX-1H, do not adequately represent characteristics which convey the Stewart family's historical significance. While the direct historical association between RPGX-1H and the Stewart family is clear, the association lacks in its representation of or contribution to the historical significance of the Stewart family to the San Gorgonio Pass area. Therefore, RPGX-1H does not appear eligible for the CRHR under Criterion 2.

RPGX-1H and the associated water control/conveyance features on Stewart Ranch do not embody the distinctive characteristics of a type, period, or method of construction. They do not represent the work of a master or possess high artistic values. Furthermore, RPGX-1H does not represent a significant and distinguishable entity whose components may lack individual distinction. Therefore, RPGX-1H does not appear eligible for the CRHR under Criterion 3.

Finally, RPGX-1H has not yielded and has no potential to yield information important to the history of Stewart Ranch or the San Gorgonio Pass area. Therefore, RPGX-1H does not appear eligible for the CRHR under Criterion 4.

Therefore, RPGX-1H is not considered a historic resource for the purposes of CEQA and requires no further consideration during this study.

5.0) CONCLUSIONS AND RECOMMENDATIONS

L&L performed a Phase I cultural resources assessment to identify, evaluate, and assess the impacts of the proposed development on historical resources in compliance with CEQA. During this investigation, L&L completed a records search at the EIC, historic records background research on the subject property, and a pedestrian survey of the Project area and coordinated with the NAHC and local Native American groups regarding sacred lands and other Native American resources.

The Project area was once part of Stewart Ranch, owned and operated by Reznor P. Stewart between 1883 and 1933 and by his daughters Laura May and Clara between 1933 and 1967. L&L identified a linear resource (RPGX-1H) in the Project area consisting of an earthen bermed ditch constructed by bulldozer sometime before 1953 and associated with water control/conveyance efforts instituted on the ranch along Portereo Creek and Smith Creek. RPGX-1H was evaluated and recommended not eligible for the CRHR and does not qualify as a historic resource under CEQA.

The Project area appears to have low sensitivity for prehistoric archaeological resources, and it is unlikely that intact, subsurface prehistoric archaeological deposits would be uncovered during Project construction. Sensitivity for encountering historic-age archaeological resources is considered low-to-moderate. The Project area lies within Stewart Ranch; however, the land within the Project area was utilized for grazing, agricultural, and water control/conveyance purposes. This suggests that any historic artifacts and/or deposits that may be present in subsurface context would most likely reflect those activities (e.g., horse shoes, tacks, barbed wire, sparse occurrences of tin cans and glass bottles, other water conveyance/control features, etc.) and would most likely not be considered historically significant. Thus, additional cultural resource technical studies are not recommended prior to Project construction.

In the event that previously unknown resources are encountered during any Project-related ground disturbance, ground-disturbing activity should cease within 100 feet of the resource and a professional archaeologist should be consulted to assess the find and to determine whether the resource requires further study. The qualified archeological personnel should assist the County of Riverside by developing measures to protect the discovered resources commensurate with their significance (see Section 5.2 below).

5.1) Unanticipated Discovery of Human Remains

There is always the possibility that ground-disturbing activities during construction may uncover previously unknown buried human remains. If human remains are discovered during any phase of construction, including disarticulated or cremated remains, all ground-disturbing activities should cease within 100 feet of the remains and the County Coroner and the Lead Agency should be immediately notified.

California State Health and Safety Code 7050.5 dictates that no further disturbance shall occur until the County Coroner has made necessary findings as to origin and disposition pursuant to CEQA regulations and PRC Section 5097.98. If the County Coroner determines that the remains are Native American, the NAHC shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in treatment and disposition of the remains. The Lead Agency shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the find and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary and appropriate, the archaeologist may provide professional assistance to the Most Likely Descendant, including excavation and removal of the human remains. The Lead Agency shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of State law, as set forth in CEQA Guidelines Section 15064.5(e) and PRC Section 5097.98. The project contractor shall implement approved mitigation measure(s), to be verified by the Lead Agency, prior to resuming ground-disturbing activities within 100 feet of where the remains were discovered.

5.2) Unanticipated Discovery of Cultural Resources

It is always possible that ground-disturbing activities may uncover presently obscured or buried and previously unknown cultural resources. If buried cultural resources are discovered during construction, such resources could be damaged or destroyed, resulting in impacts to potentially significant cultural resources. If subsurface cultural resources are encountered during construction, if evidence of an archaeological site are observed, or if other suspected historic resources are encountered, it is recommended that all ground-disturbing activity cease within 100 feet of the resource. A professional archaeologist shall be consulted to assess the find and to determine whether the resource requires further study. The qualified archeological personnel shall assist the Lead Agency by generating measures to protect the discovered resources. Potentially significant cultural resources could consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including structural remains, historic dumpsites, hearths, and middens. Midden features are characterized by darkened soil and could conceal

material remains, including worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials and special attention should always be paid to uncharacteristic soil color changes. Any previously undiscovered resources found during construction should be recorded on appropriate DPR forms and evaluated for significance under all applicable regulatory criteria.

If the resources are determined to be unique historic resources as defined under §15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the Lead Agency where they would be afforded long-term preservation to allow future scientific study.

6.0) REFERENCES CITED

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United States Geological Survey (USGS). 1942. Map: Banning, Calif. (15', 1:62,500); aerial photographs taken in 1939-1941.

United States Geological Survey (USGS). 1953. Map: Beaumont, Calif. (7.5', 1:24,000); aerial photographs taken in 1949, field checked in 1953.

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Wilke, P. J. 1978. *Late Prehistoric Human Ecology at Lake Cahuilla, Coachella Valley, California*. Contributions of the University of California Archaeological Research, Facility 38. University of California, Berkeley.

7.0) CERTIFICATION

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: August 26, 2020 SIGNED: _____

PRINTED NAME: John Eddy, MA, RPA, L&L Principal Investigator

DATE: August 26, 2020 SIGNED: _____

PRINTED NAME: Leslie Nay Irish, CEO, L&L Environmental, Inc.

APPENDIX A

Personnel Qualifications

John Eddy, M.A., RPA
Principal Investigator
Cultural Resource Program Manager

John Eddy is the Cultural Resources Program Manager for L&L Environmental, Inc., is a Registered Professional Archaeologist (RPA), and meets the Secretary of Interior Standards for Principal Investigator.

Mr. Eddy has practiced cultural resource management for more than fifteen years including more than 10 years managing cultural resource projects and staff in the preparation of bids and proposals, contract negotiation and management, project development and design, budgeting, personnel management, as well as tasks related to the execution of archaeological technical studies (e.g., field survey, monitoring, testing and data recovery excavation, technical writing and editing, consultation, etc.) in compliance with Section 106 of the NHPA, NEPA, CEQA and other federal, state and local regulations. He has directed and administered professional on-call contracts with state and federal agencies including environmental on-call contracts service contracts with the California Department of Transportation (CALTRANS) District 8 and District 5 and the Riverside County Transportation Department. As a CALTRANS archaeologist, Mr. Eddy negotiated avoidance, minimization, and mitigation measures with multiple agencies and tribes. He is skilled in the development and implantation of National Register evaluations, data recovery plans, mitigation and monitoring plans, treatment plans, historic property preservation documentation reports, site protection plans, site impact reports, cultural landscape assessments, and buried site testing plans and reports.

Mr. Eddy's responsibilities include direct contact with clients/project proponents, scientists and agencies and involve him in all aspects of the project from a request for proposal to project completion. Mr. Eddy directs the cultural resources program, oversees all cultural and paleontological resource related projects and tasks, and provides QA/QC of cultural resource deliverables

PROFESSIONAL HISTORY

2020-present – Cultural resources Program Manager/Principal Investigator L&L Environmental, Inc. Redlands, CA.
2019 – Project Archaeologist, CRM TECH, Inc., Colton, CA.
2017-2018 – Lecturer, California State University, San Bernardino, Department of Anthropology.
2013-2017 – Senior Archaeologist, Applied Earthworks, Hemet, CA.
2010-2013 – Associate Archaeologist, Applied Earthworks, Hemet, CA.
2009-2010 – Associate Environmental Planner (Archaeologist), CALTRANS District 8, San Bernardino, CA.
2008-2009 – Environmental Planner (Archaeologist), CALTRANS District 8, San Bernardino,CA.
2007-2008 – Project Archaeologist/Native American Liaison, CRM TECH, Colton, CA.
2007 – Archaeologist (GS-09-01), Inyo National Forest, Bishop, CA.
2003-2007 – Project Archaeologist/Native American Liaison, CRM TECH, Riverside, CA.

CREDENTIALS AND PERMITS

- RPA Certified (990008)
- U.S. Government, ARPA Permit, Responsible Party
- Riverside County Certified Archaeologist
- CALTRANS PQS Principal Investigator (Prehistoric Archaeology)

John J. Eddy, M.A., RPA
Continued

HONORS AND AWARDS

Thesis of the Year Award: *The Early Middle Period Stone Bead Interdependence Network*. California State University, Northridge, Department of Anthropology, 2013.
Begole Archaeological Research Grant for Geochemcial Analysis of Soapstone from San Diego and Los Angeles Counties, 2008.
Phi Kappa Phi Student Scholarship Award, 2007.
Visiting Researcher, National Science Foundation Funded Program for Solid Samples Research in the Archaeological Sciences, IRMES, California State University, Long Beach, 2006-2012.
Book Prize for Academic Excellence, California State University, Northridge, Department of Anthropology, 2005 and 2006.

EDUCATION

M.A., Anthropology (Public Archaeology), California State University, Northridge, 2013.
B.A., Anthropology, California State University, San Bernardino, 2003.
B.A., History, California State University, San Bernardino, 2003.

PROFESSIONAL AFFILIATIONS

Society for California Archaeology
Coachella Valley Archaeological Society
Society for American Archaeology

PROFESSIONAL DEVELOPMENT

2014 – *Landscape Preservation: Advanced Tools for Managing Change*, National Preservation Institute. San Francisco..
2012 –Section 4(f) Compliance for Historic Properties, National Preservation Institute. San Francisco.
2010 – *Riverside County Cultural Sensitivity Training*. Riverside, CA.
2010 – *CALTRANS Environmental Academy*, CALTRANS Environmental Staff Development. Irvine, CA.
2010 – *ESRI ArcGIS II*, Caltrans District 8. San Bernardino, CA.
2009 – *Categorical Exclusions (NEPA) and Categorical Exemptions (CEQA*. CALTRANS Environmental Staff Development Los Angeles, CA.
2008 – *CALTRANS Cultural Resource Procedures and Use of the Programmatic Agreement.* Caltrans Cultural Studies Office (CSO). Sacramento, CA.
2008 – *Advanced GIS Applications*. California State University, Northridge.

PUBLICATIONS

2009 Source Characterization of Santa Cruz Island Schist and Its Role in Stone Bead Exchange Networks. In Proceedings of the 7th Channel Islands Symposium, February 4-7, 2008, Oxnard, California.
2008 The Cahuilla Indians: An Ethnological and Archaeological Literature Review. Coachella Valley Archaeological Society Occasional Papers No. 4.

Leslie Nay Irish
Principal Project Manager
Cal Trans (CT) 022889

Leslie Irish is the qualifying principal for WBE certification with CALTRANS, with both a State and Federal designation as a 100% WBE and Small Business Enterprise. Ms. Irish has multi-disciplinary experience in environmental, engineering, land development and construction management and administration.

Ms. Irish has more than 25 years of experience as a project manager on public and private NEPA / CEQA projects overseeing the areas of biology, archaeology, paleontology, regulatory services and state and federal level permit processing.

Ms. Irish is a certified to perform wetland / jurisdictional delineations and holds a responsible party permit for performing archaeological and paleontological investigations on (BLM) public lands. She has attended the desert tortoise handling class, passed the practicum and the test and was awarded a certificate. She remains an active participant in the oversight of mitigation monitoring and reporting programs, the installation and monitoring of revegetation programs and the development of project impact mitigation plans. Her principal office duties include a review of all environmental documents authored by the firm; oversight of regulatory permits, agency consultation and negotiations; impact mitigation review; and long-term permit compliance. Her field duties are more limited but include delineations / compliance monitoring and reporting (coordination), constraints analysis, plan for corrective measures and resolution of "problem projects".

Ms. Irish's responsibilities include direct contact with clients/project proponents, scientists and agencies and involve her in all aspects of the project from a request for proposal to project completion. Ms. Irish has a complex understanding of the industry from various perspectives. As a result, she uses her personal understanding of team member positions and responsibilities in her role as the principal management and quality control lead.

CREDENTIALS AND PERMITS

- ACOE, Wetlands Delineation Certification Update, 2015
- ACOE, Advanced Wetlands Delineation and Management, 2001
- ACOE, Wetlands Delineation and Management, 1999, Certificate No. 1257
- U.S. Government, Permit for Archaeology & Paleontology on Federal Lands, Responsible Party
- MOU, County of Riverside, Archaeology, Biology, Paleontology and Wetlands ID/Delineation
- CALTRANS WBE Certification
- Public Utilities Commission, WBE Certified
- WBENC, WBE Certified

EDUCATION

Certificate in Project Management, Initiating and Planning Projects, UC, Irvine, June 20, 2015
Foundations of Business Strategy, Darden School of Business, UVA, Jan 2014
Design Thinking for Business Innovation (audit), Darden School of Business, UVA, Nov 2013
Update, Storm Water Management BMPs, University of California, Riverside Extension, 2005
Certificate, Wetland Delineation & Management, ACOE, 2000 and Advanced Certificate: 2002
Certificate Program, Field Natural Environment, University of California, Riverside, 1993

Leslie Nay Irish
Continued

Certificate Program, Light Construction, Developmental Management, University of California, Riverside, 1987
Certificate Program, Construction Technologies, Administrative Management, Riverside City College, 1987
License B-General and C-Specialties (Concrete/Masonry) and General Law sections, 1986
Core Teaching and Administrative Management, Primary (K-3) and Early Childhood, Cal State, San Bernardino, Lifelong Learning Program, 1973-2005
Behavioral Sciences and Anthropology, Chaffey and Valley Jr./Community Colleges, 1973 – 1976

PROFESSIONAL HISTORY

L&L Environmental, Inc. - Principal, Project Manager / Principal in Charge: 1993 - present: Site assessments, surveys, jurisdictional delineations, permit processing, agency consultation/negotiation, impact mitigation, project management, coordination, report writing, technical editing, and quality control.
Marketing Consultant - Principal: 1990 - 1993: Engineering / architectural, environmental, and water resource management consultant.
Warmington Homes - Jr. Project Manager: 1989 - 1990: Residential development, Riverside and Los Angeles Counties.
The Buie Corporation - Processor / Coordinator: 1987 - 1990: The Corona Ranch, Master Planned Community.
Psomas & Associates - Processor / Coordinator- 1986 - 1987: Multiple civil engineering and land surveying projects.
Irish Construction Company – Builder Partner: (concurrently with above) 1979 - 1990: General construction, residential building (spec. housing), and concrete and masonry product construction.

PROFESSIONAL AFFILIATIONS

Member, Building Industry Association
Member, Southern California Botanists
Member, Archaeological Institute of America
Member, Society for California Archaeology
Member, California Chamber of Commerce
Member, CalFlora
Member, San Bernardino County Museum Associates
Member, Orange County Natural History Museum Associates
Life Member, Society of Wetland Scientists
1994-97 President, Business Development Association, Inland Empire
1993-94 Executive Vice President, Building Industry Association, Riverside County
2010 Chair of the Old House Interest Group – Redlands Area Historical Society

SYMPOSIA, SEMINARS, AND WORKSHOPS

Assembly Bill 52 Tribal Consultation Process Overview. Pechanga Band of Luiseno Indians Cultural Resources Group. Temecula, CA. October 2015
ACOE Compensatory Mitigation Workshop – Wilshire Blvd Office, July 16, 2015
May 27, 2015, CWA Rule, Update, San Diego CA, October 20-23, 2015

Leslie Nay Irish
Continued

ACOE 2 Day Workshop, Mitigation Rule & Mitigation Checklist, Carlsbad, March 20, 2015
Desert Tortoise Handling Class, update (DT Consortium / Joint Agencies USFWS/CDFG) 2013 Update
Bedrock Food Processing Centers in Riverside County, TLMA, 2009
Nexus Geology-Archaeology, Riverside County, TLMA, 2009
Desert Tortoise Handling Class, (DT Consortium / Joint Agencies USFWS/CDFG), 2008 Certificate Granted
Ecological Islands and Processes (vernal pools, alkali wetlands, etc.), Southern California Botanists, 2004
Low Impact Development, State Water Board Academy, 2004
Inland Empire Transportation Symposium, 2004
Western Riverside County MSHCP Review and Implementation Seminar, 2004
Field Botany and Taxonomy, Riverside City College, 2002
Construction Storm Water Compliance Workshop, BIA, 2002
Identifying Human Bone: Conducted by L&L Environmental, County Coroner and Page Museum, 2002
CEQA/NEPA Issues in Historic Preservation, UCLA, 2000
CEQA and Biological Resources, University of California, Riverside, 2000
CEQA Law Update 2000, UCLA
Land Use Law/Planning Conference, University of California, Riverside
CALNAT “95”, University of California, Riverside
Desert Fauna, University of California, Riverside
Habitat Restoration/Ecology, University of California, Riverside
Geology of Yosemite and Death Valley, University of California, Riverside
San Andreas Fault: San Bernardino to Palmdale, University of California, Riverside
Historic Designations and CEQA Law, UCLA

Jennifer M. Sanka, M.A., RPA
Principal Investigator
Archaeologist

Ms. Sanka has gained more than 17 years of archaeological fieldwork and project-related experience in the U.S., including projects in Alaska, Arizona, California, Indiana, Maryland, Nevada, Ohio, Oregon, and North Carolina. She has conducted all aspects of archaeological fieldwork; has authored and provided third party assessments of numerous cultural resources sections for California Environmental Quality Act (CEQA) environmental impact reports (EIR), National Environmental Policy Act (NEPA) environmental impact statements (EIS), NEPA environmental assessments (EA), constraints analyses and CEQA initial studies; and has certified more than 75 CEQA and Section 106 of the National Historic Preservation Act (NHPA)-compliant documents. She is a Registered Professional Archaeologist ([RPA] #15927, 2006), meets the Secretary of Interior (SOI) Standards for Archaeology and has served as a Principal Investigator on projects reviewed by the Bureau of Land Management (BLM), U.S. Forest Service (USFS), U.S. Army Corps of Engineers (ACOE), Bureau of Indian Affairs (BIA), U.S. Fish and Wildlife Service, U.S. Department of Veterans Affairs, and the Federal Highway Administration (FHWA). Ms. Sanka has spent over a decade working in the archaeological field in southern California. She is a Riverside County Certified Archaeologist (#103, 2007) and is a Certified San Diego County CEQA Consultant for Archaeological Resources (2010). She is also qualified as a Principal Investigator for the BLM Cultural Resources Use Permit (CRUP) for the State of California and the State of Nevada (Historic Resources).

PROFESSIONAL HISTORY

2014-present – Archaeologist, L&L Environmental, Inc. Redlands, CA. Perform field survey and site recordation for projects in southern California. Author, certify, and serve as the Principal Investigator for projects in southern California.

2014 – Cultural Resources Specialist, Burns & McDonnell. Kansas City, MO. Perform field survey and site recordation for projects in Carroll, Howard, Miami, and White Counties, IN.

2009-2014 – Associate Project Manager/Archaeologist, Atkins. San Bernardino, CA. Performed field surveys and subsurface testing programs throughout California and Alaska. Authored and certified numerous survey and testing program reports. Served as an Associate Project Manager, Principal Investigator, and Regional Cultural Lead for projects throughout California and Alaska.

2006-2009 – Project Manager/Archaeologist, Michael Brandman Associates (currently First Carbon Solutions). Irvine, CA. Performed field surveys, subsurface testing programs, and data recovery projects throughout southern California. Authored and certified numerous survey and testing program reports. Served as a Project Manager and Principal Investigator for projects throughout southern California.

2005-2006 – Archaeological Field Technician, ASM Affiliates. Pasadena, CA and Reno, NV. Performed field surveys, subsurface testing programs, and data recovery projects in Barstow (Marine Corps Air Ground Combat Center [MCAGCC]), Fontana, Hemet, Moreno Valley, Palm Springs, Ridgecrest (China Lake Naval Air Warfare Station), and Twentynine Palms (MCAGCC), CA.

2005-2006 – Archaeological Field Technician, EDAW, Inc. (currently AECOM). San Diego and Los Angeles, CA. Performed field surveys and data recovery projects in El Centro (Chocolate Mountains Aerial Gunnery Range), Los Angeles (Los Angeles Public School #9 Cemetery Relocation), and Oceanside (Camp Pendleton Marine Corps Air Station), CA.

Jennifer M. Sanka, M.A., RPA
Continued

2003-2004 – Archaeological Laboratory Technician, TRC-Garrow Associates, Inc. (currently TRC Solutions). Durham, NC. Performed subsurface testing programs and data recovery projects in Pokomoke City, MD (18-WO-183), Greensboro, NC, and Fayetteville, NC (Fort Bragg Army Airborne and Special Forces Installation). Completed artifact curation and collection management for 18-WO-183 and for various Fort Bragg collections.
2001-2003 – Teaching and Research Assistant, Duke University, Department of Religion. Durham, NC. Screened films, led group discussions, graded documents, and performed research on the Reformation Period to support faculty research projects.
2000 and 2002 – Trench Supervisor, North Carolina State University, Department of History. Aqaba, Kingdom of Jordan. Supervised up to five Jordanian archaeological technicians/laborers during trench excavations for the Roman Aqaba Project (RAP). Experience included the excavation of a probe along the Byzantine Era curtain wall and salvage archaeology within a Nabatean–Early Roman transition period domestic complex.
1999 – Student, Miami University, Department of Anthropology. Oxford, OH. Completed salvage excavation at Milford Works I.

PROFESSIONAL AFFILIATIONS

Society for California Archaeology
Register of Professional Archaeologists

PROFESSIONAL DEVELOPMENT

2015 – *Assembly Bill 52 Tribal Consultation Process Overview.* Pechanga Band of Luiseno Indians Cultural Resources Group. Temecula, CA.
2013 – *Advanced Seminar: Reaching Successful Outcomes in Section 106 Review.* Advisory Council on Historic Preservation (ACHP). Palm Springs, CA.
2010 – *The Natural and Cultural History of Ancient Lake Cahuilla.* County of Riverside Transportation and Land Management Agency Continuing Education Professional Seminar. Palm Desert, CA.
2010 – *Connecting the Dots with a Regional Perspective: Village Footprints (Pechanga Cultural Resources Department).* County of Riverside Transportation and Land Management Agency Continuing Education Professional Seminar. Palm Desert, CA.
2009 – *Geology for Archaeologists.* County of Riverside Transportation and Land Management Agency Continuing Education Professional Seminar. Palm Desert, CA.
2009 – *Riverside County History and Research Resources.* County of Riverside Transportation and Land Management Agency Continuing Education Professional Seminar. Palm Desert, CA.
2007 – *An Introduction to Professional Practice under Section 106 of the NHPA.* SWCA. Mission Viejo, CA.
2006 – *Project Management Fundamentals*. ZweigWhite AIA/CES course. Michael Brandman Associates, Irvine, CA.
2006 – *CEQA Basics: Understanding the California Environmental Process*. AEP. Chapman University, Orange, CA.
2006 – *Governor's Office of Planning and Research (OPR) Land Use Planning and the Protection of Native American Cultural Places.* AEP. Irvine, CA.

Jennifer M. Sanka, M.A., RPA
Continued

EDUCATION

M.A., Religion (Hebrew Bible and Archaeology) – 2003, Duke University, Durham, NC
Graduate Certificate, Women's Studies – 2003, Duke University, Durham, NC
B.A., Anthropology, Comparative Religion (with Honors Thesis), and Classical Humanities – 2001, Miami University, Oxford, OH

Selected Project Experience

2015-Present

Requa Avenue Sewer Interceptor Project Cultural Resources Survey and State Water Resources Control Board (SWRCB)/State Historic Preservation Officer (SHPO) Coordination, Indio, Riverside County, CA; Valley Sanitary District. Principal Investigator and author of a cultural resources assessment (CRA) addressing upgrades to the existing City of Indio sewer system. This study was completed in accordance with the SWRCB CEQA-Plus guidelines. Responsibilities included generating the technical report, supporting memorandums, SHPO cover letter, and SHPO review package in coordination with the SWRCB Cultural Resources Officer. In addition, seven previously recorded resources were addressed via DPR 523 Update Forms and one new resource was recorded. Recommendations for NRHP eligibility were provided for resources located in the project's APE.

2015-2016

6563 East Avenue Project Archaeological Resources Survey, City of Rancho Cucamonga, San Bernardino County, CA; GFR Homes. Principal Investigator and author of a Phase I CRA completed in accordance with CEQA. This project included the recordation and CRHR evaluation of the archaeological component of an NRHP eligible built-environment resource.

2015 **APN 963-010-006 Project (TR 32323) Cultural Resources Survey, French Valley Area, Riverside County, CA; Richland Communities.** Principal Investigator and author of a Phase I CRA addressing proposed residential development on 19.36 acres. The study was completed in accordance with CEQA and the County of Riverside Guidelines for Cultural Resources Review.

2012-2014

Johnson Avenue Sewer Relief Project Cultural Resources Survey and SHPO Coordination, El Cajon, San Diego County, CA; City of El Cajon. Principal Investigator responsible for a pedestrian survey and author of a CRA addressing upgrades to the existing City of El Cajon sewer system. The study was performed at the request of the City of El Cajon and was completed in accordance with the SWRCB CEQA-Plus guidelines. Responsibilities included generating the technical report, a Mitigation-Monitoring and Treatment Plan, and coordination with the SWRCB Cultural Resources Officer, local Native American groups and individuals, and SHPO.

2011 **Massachusetts Avenue and Boulevard Drive Sewer Main Improvements Project Cultural Resources Survey, La Mesa, San Diego County, CA; City of La Mesa.** Principal Investigator responsible for a pedestrian field survey and author of a CRA. The archaeological survey was completed at the request of the City of La Mesa and considered proposed improvements to an existing sewer main. The resultant study was completed in accordance with Section 106 of the NHPA to support ACOE permitting efforts for the project.

William R. Gillean, B.S.
Archaeologist

Mr. Gillean has gained more than 10 years of archaeological survey, testing, and excavation experience in Arizona, California, and Nevada. His duties at L&L include archaeological mitigation monitoring, Phase I surveys, California Historical Resources Information System (CHRIS) research, Native American Heritage Commission (NAHC) Sacred Lands Search (SLS) requests, Native American information scoping, completion of site records, and assisting senior staff with technical reports. He has experience with a wide range of GPS data collectors, photographic equipment, and software programs. He holds a Bachelor of Science in Anthropology with an emphasis in Cultural Resource Management from Cal Poly, Pomona.

PROFESSIONAL HISTORY

2015-present – Archaeologist, L&L Environmental, Inc. Redlands, CA. Performs field surveys, research, and completes site recordation for projects in southern California. Contributes to technical reports.

2013-present – Archaeologist, First Carbon Solutions. Irvine, CA. Performs archaeological mitigation monitoring in San Bernardino and Riverside Counties, California.

2010-2015 – Archaeologist, Atkins. San Bernardino, CA. Performed field surveys, research, completed site records, contributed to technical reports, assisted with Native American information scoping letters, and coordinated with the NAHC for SLS requests. Performed archaeological mitigation monitoring in San Bernardino and Riverside Counties, California.

2006-2010 – Archaeologist, U.S. Department of Agriculture (USDA) Forest Service, Skyforest, CA. Performed field surveys, subsurface testing programs, and data recovery projects throughout the San Bernardino and Angeles National Forests in southern California. Completed site records, authored and contributed to technical reports, conducted archaeological reconnaissance and inventory of fire suppression activities in support of the Butler II, Grass Valley, Slide, and Station fires. Made recommendations for minimizing impacts to archeological sites and performed mitigation monitoring in archaeologically sensitive areas during project implementation.

2004-2007 – Archaeologist, L&L Environmental, Inc. Corona, CA. Performed field surveys, research, subsurface testing programs, and data recovery projects in Riverside, San Bernardino, and Inyo Counties, California. Contributed to technical reports and performed archaeological mitigation monitoring.

2003-2004 – Field Technician, Center for Archaeological Research, California State University, Bakersfield. Bakersfield, CA. Provided technical support for the archaeological reconnaissance and inventory of over 40 miles of the Southern California Edison power line corridor located within the San Bernardino National Forest.

PROFESSIONAL DEVELOPMENT

2010 – Applied NEPA. USDA Forest Service. San Bernardino, CA.
2008 – The Section 106 Essentials. USDA Forest Service. Sacramento, CA.

EDUCATION

B.S., Anthropology (Cultural Resource Management Emphasis) – 2002, Cal Poly, Pomona, CA

APPENDIX B

Confidential Record Search Results

EIC DIY Worksheet

CHRIS Access and Use Agreement Number _____

EIC Tracking Number _____

Print Name: Bill Gallen Date: 08-05-2020

Affiliation: L&L Environmental, Inc.

Address: 720 E. Redlands Blvd. Suite U-161 City/State/Zip: Redlands, CA 92373

Telephone: 909. 335 9897 Fax: 909. 335-9893 Email: wgillen@llenviro.com

Billing Address (if different from above): N/A

Billing Email: bmengum@llenvirons.com

Purpose of Access: Archaeological records search

Reference (project name or number, title of study, and street address if applicable): RPGX-19-730 (City of Banning)

County: RIV Township/Range/Section or UTMs: T3S; R1W; Sec. 12

USGS 7.5' Quad(s): Beaumont

TIME IN: 8:45
TIME OUT: 11:30

Copies: _____

Biblio: Yes/No: _____

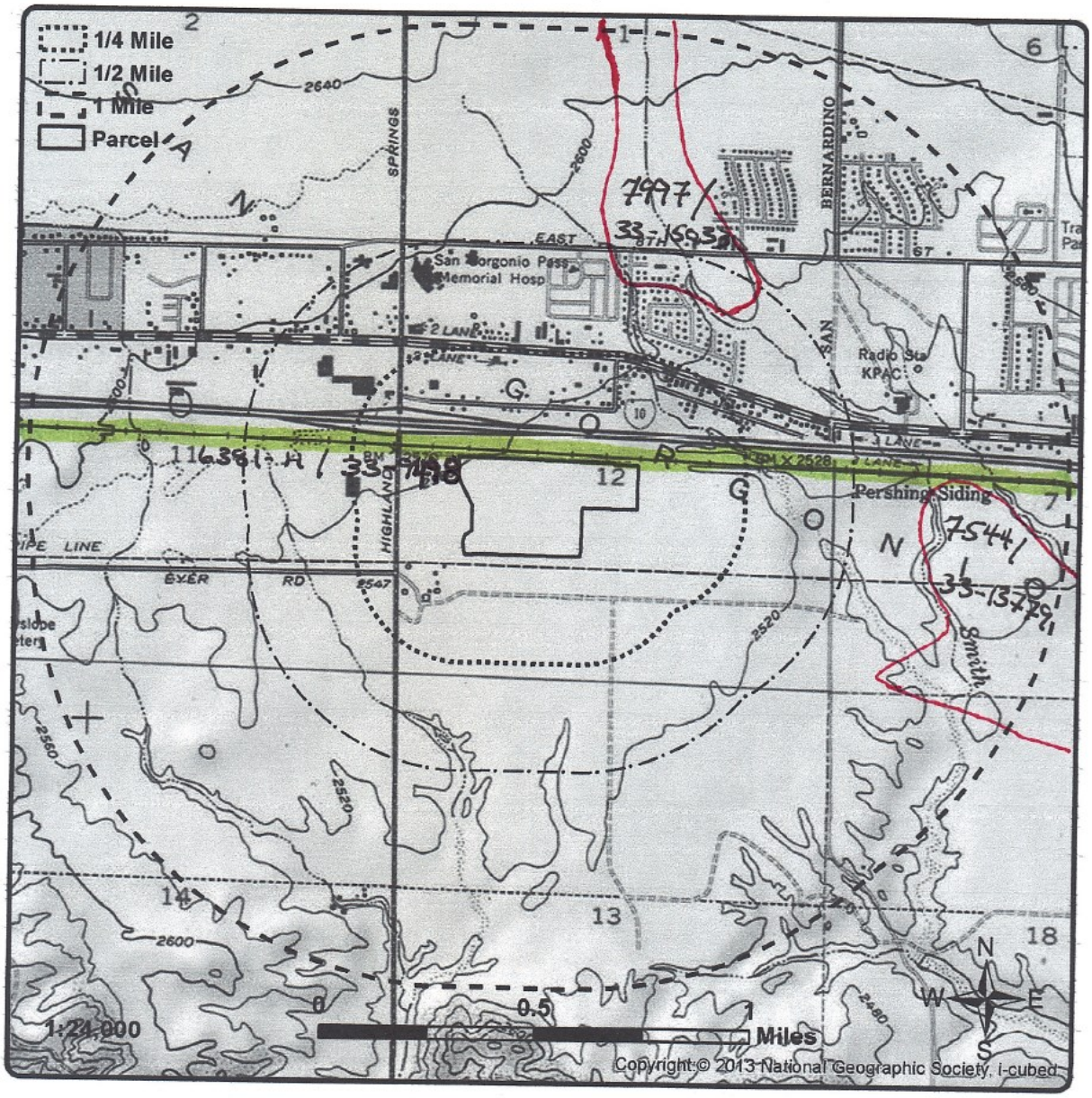
Circle if applicable

Excel Spreadsheet: Yes/No

PDFs: Reports and/or Resources

****IC staff shall charge $40 per hour minimum, plus $20.00 per one-half after the first hour per each request for one or more bibliographic (list or detail), spreadsheet, and PDF copies.**

Resources 02-05-2020



L&L Environmental, Inc.

BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

RPGX-19-730
January 2020

Figure X

Record Search Buffers
(USGS Beaumont [1988] quadrangle,
Section 12 of Township 3 South, Range 1 West)

APN 419-140-057, City of Banning
County of Riverside, California



= 7997 = 33-15033

Resources 02-05-2020

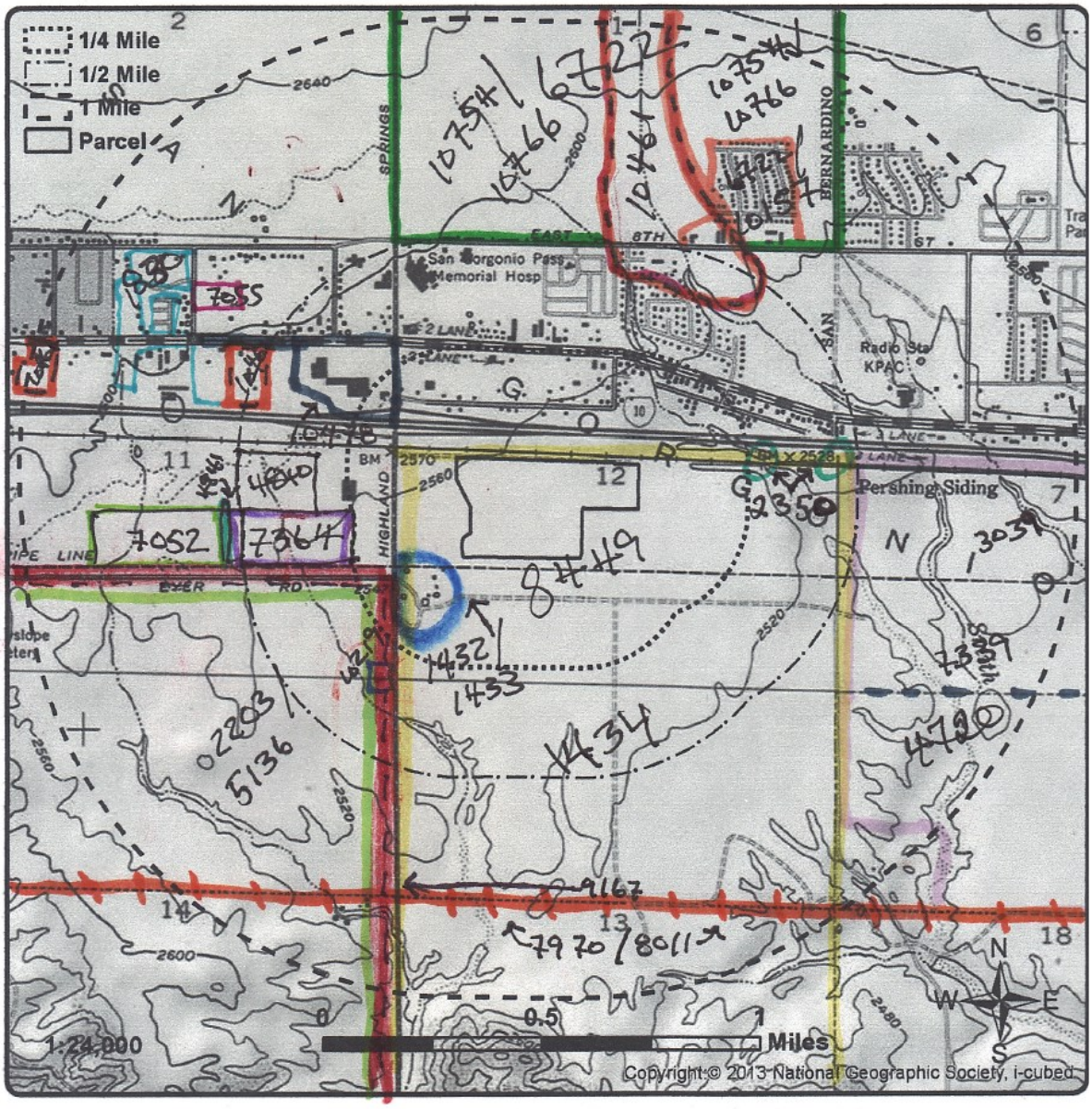
= 7544 = 33-13779



= 6381-H = 33-9498

02-05-2020

Reports



L&L Environmental, Inc.

BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

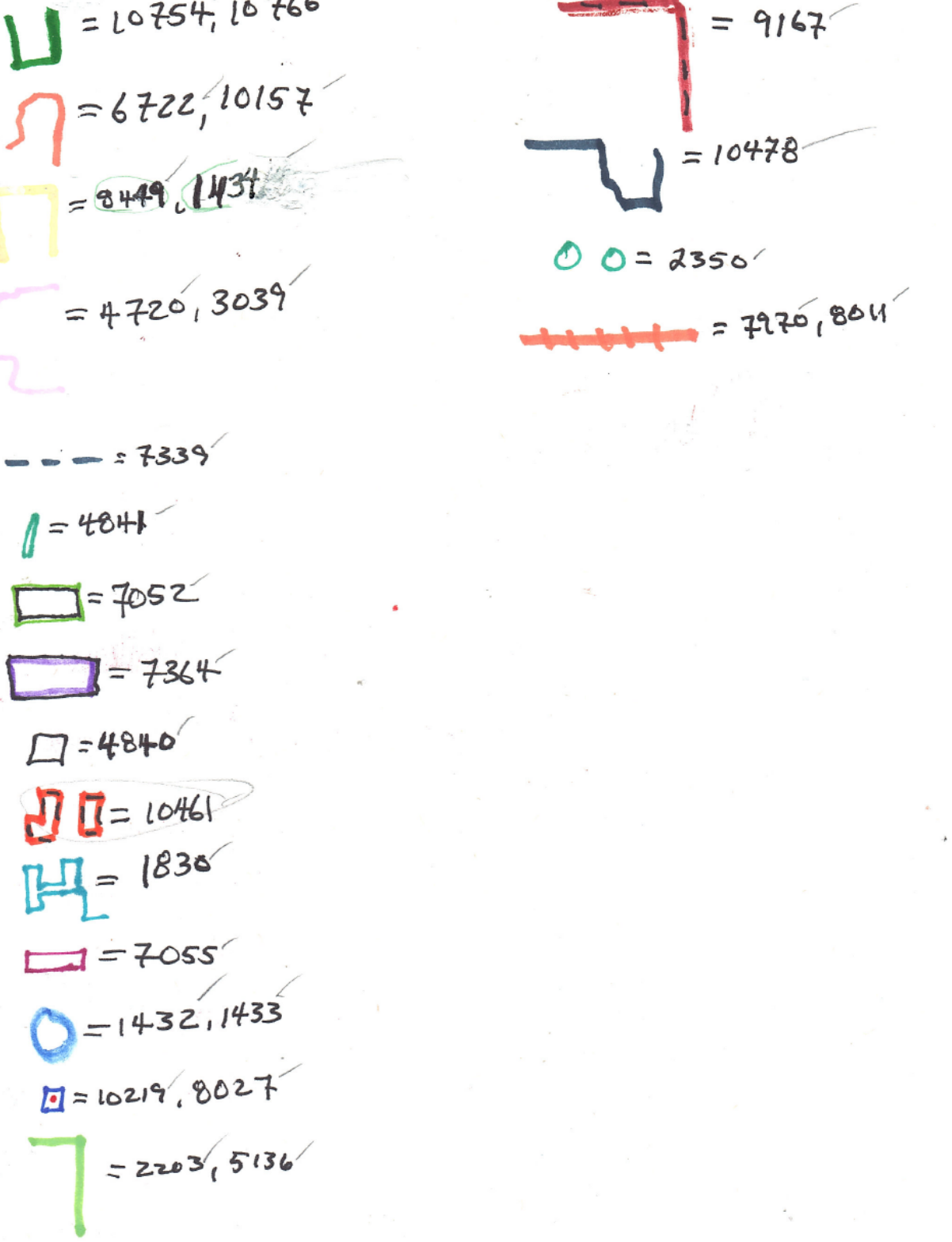
RPGX-19-730
January 2020

Figure X

Record Search Buffers
(USGS Beaumont [1988] quadrangle,
Section 12 of Township 3 South, Range 1 West)

APN 419-140-057, City of Banning
County of Riverside, California

Reports 02-05-2020



Appendix C: Photographs



Photograph 1: Overview east of Project area. From northwest corner.



Photograph 2: Overview south of Project area. From northwest corner.



Photograph 3: Overview west of Project area. From northeast corner.



Photograph 4: Overview south of Project area. From northeast corner.



Photograph 5: Overview west of Project area. From northeast corner.



Photograph 6: Overview north of Project area. From southeast corner.



Photograph 7: Overview east of Project area. From southwest corner.



Photograph 8: Close-up of sewer access.



Photograph 9: Overview southwest of pipe segments.



Photograph 10: Overview northeast of pipes.



Photograph 11: Overview of RPGX-1H.



Photograph 12: Overview east of barbed wire fence.

Appendix D: Native American Coordination

Sacred Lands File & Native American Contacts List Request

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691-3830
(916) 373-3710
(916) 373-5471 – FAX
nahc@nahc.ca.gov

Information Below is Required for a Sacred Lands File Search

Project: APN 419-140-057

County: Riverside

USGS Quadrangle Name: Beaumont

Township: 3 South Range: 1 West Section(s): 12

Company/Firm/Agency: L&L Environmental, Inc.

Contact Person: Bill Gillean

Street Address: 700 East Redlands Blvd, Suite U, PMB 351

City: Redlands, CA Zip: 92373

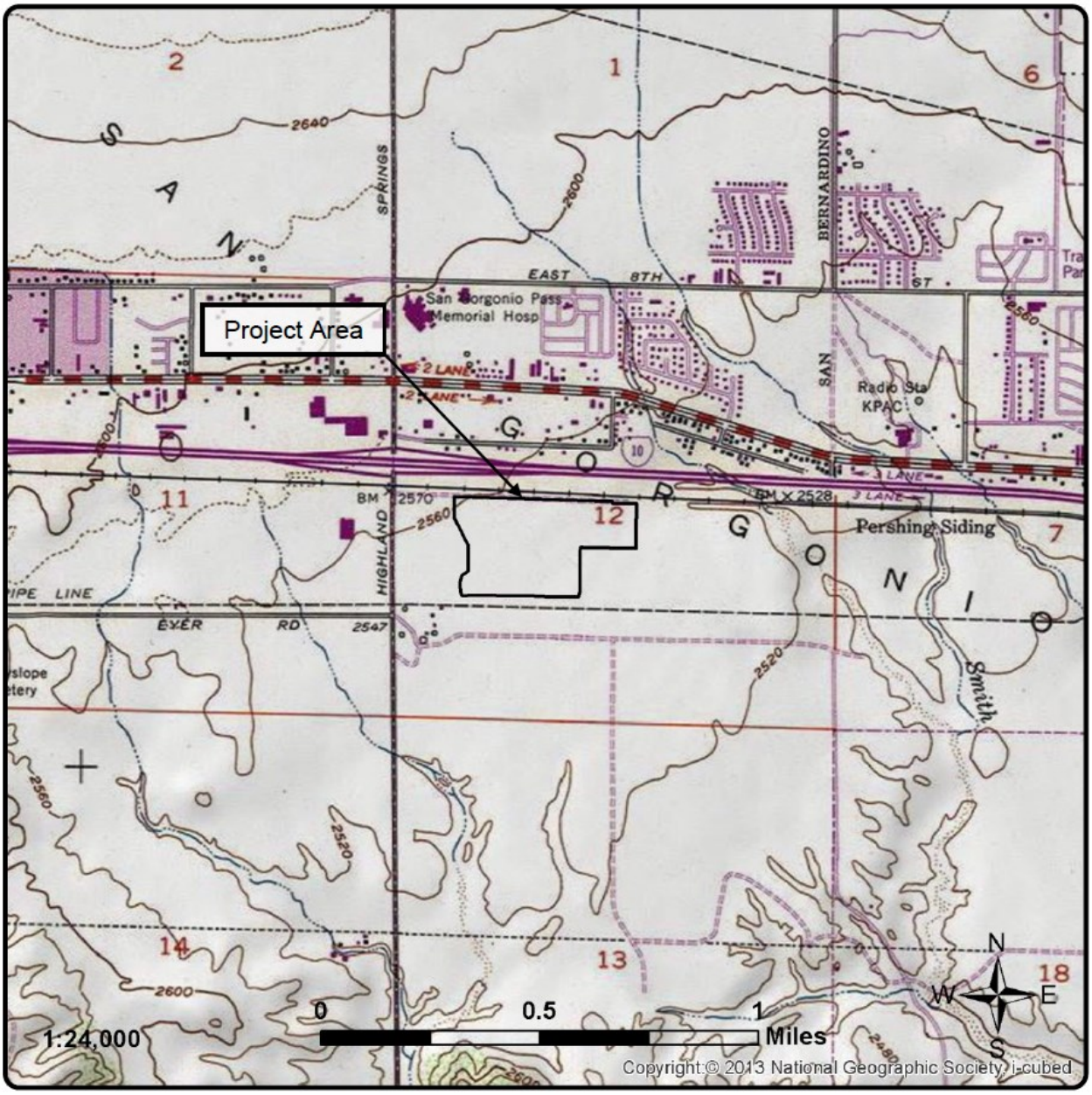
Phone: 909-335-9897

Fax: 909-335-9893

Email: WGillean@llenviroinc.com

Project Description:

The entire site (approximately 48 acres) will become a residential development.



L&L Environmental, Inc.

BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

RPGX-19-730
June 2020

Figure 2

Project Location Map
(USGS Beaumont [1988] quadrangle,
Section 12 of Township 3 South, Range 1 West)

APN 419-140-057, City of Banning
County of Riverside, California

STATE OF CALIFORNIA **Gavin Newsom, *Governor***

NATIVE AMERICAN HERITAGE COMMISSION

June 29, 2020

Bill Gillean
L&L Environmental, Inc.

Via Email to: WGillean@llenviroinc.com

Re: APN 419-140-057 Project, Riverside County

Dear Mr. Gillean:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Merri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Attebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain Apache

COMMISSIONER
Julie Tumamait-Stenslie
Chumash

COMMISSIONER
[Vacant]

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Native American Heritage Commission
Native American Contact List
Riverside County
6/29/2020

Agua Caliente Band of Cahuilla Indians
Jeff Grubbe, Chairperson
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919

Agua Caliente Band of Cahuilla Indians
Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive Cahuilla
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Augustine Band of Cahuilla Mission Indians
Amanda Vance, Chairperson
P.O. Box 846 Cahuilla
Coachella, CA, 92236
Phone: (760) 398 - 4722
Fax: (760) 369-7161
hhaines@augustinetribe.com

Cabazon Band of Mission Indians
Doug Welmas, Chairperson
84-245 Indio Springs Parkway Cahuilla
Indio, CA, 92203
Phone: (760) 342 - 2593
Fax: (760) 347-7880
jstapp@cabazonindians-nsn.gov

Cahuilla Band of Indians
Daniel Salgado, Chairperson
52701 U.S. Highway 371 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 5549
Fax: (951) 763-2808
Chairman@cahuilla.net

Los Coyotes Band of Cahuilla and Cupeño Indians
Shane Chapparosa, Chairperson
P.O. Box 189 Cahuilla
Warner Springs, CA, 92086-0189
Phone: (760) 782 - 0711
Fax: (760) 782-0712

Morongo Band of Mission Indians
Denisa Torres, Cultural Resources Manager
12700 Pumarra Road Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Morongo Band of Mission Indians
Robert Martin, Chairperson
12700 Pumarra Road Cahuilla
Banning, CA, 92220 Serrano
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Pechanga Band of Luiseno Indians
Mark Macarro, Chairperson
P.O. Box 1477 Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6000
Fax: (951) 695-1778
epreston@pechanga-nsn.gov

Pechanga Band of Luiseno Indians
Paul Macarro, Cultural Resources Coordinator
P.O. Box 1477 Luiseno
Temecula, CA, 92593
Phone: (951) 770 - 6306
Fax: (951) 506-9491
pmacarro@pechanga-nsn.gov

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed APN 419-140-057 Project, Riverside County.

PROJ-2020-003662 06/29/2020 03:41 PM 1 of 2

Native American Heritage Commission
Native American Contact List
Riverside County
6/29/2020

Quechan Tribe of the Fort Yuma Reservation
Manfred Scott, Acting Chairman
Kw'ts'an Cultural Committee
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (928) 750 - 2516
scottmanfred@yahoo.com

Quechan Tribe of the Fort Yuma Reservation
Jill McCormick, Historic Preservation Officer
P.O. Box 1899 Quechan
Yuma, AZ, 85366
Phone: (760) 572 - 2423
historicpreservation@quechantribe.com

Ramona Band of Cahuilla
Joseph Hamilton, Chairperson
P.O. Box 391670 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
admin@ramona-nsn.gov

Ramona Band of Cahuilla
John Gomez, Environmental Coordinator
P. O. Box 391670 Cahuilla
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
jgomez@ramona-nsn.gov

Rincon Band of Luiseno Indians
Bo Mazzetti, Chairperson
One Government Center Lane Luiseno
Valley Center, CA, 92082
Phone: (760) 749 - 1051
Fax: (760) 749-5144
bomazzetti@aol.com

Rincon Band of Luiseno Indians
Cheryl Madrigal, Tribal Historic Preservation Officer
One Government Center Lane Luiseno
Valley Center, CA, 92082
Phone: (760) 297 - 2635
crd@rincon-nsn.gov

Santa Rosa Band of Cahuilla Indians
Lovina Redner, Tribal Chair
P.O. Box 391820 Cahuilla
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
lsaul@santarosacahuilla-nsn.gov

Soboba Band of Luiseno Indians
Scott Cozart, Chairperson
P. O. Box 487 Cahuilla
San Jacinto, CA, 92583 Luiseno
Phone: (951) 654 - 2765
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Soboba Band of Luiseno Indians
Joseph Ontiveros, Cultural Resource Department
P.O. BOX 487 Cahuilla
San Jacinto, CA, 92581 Luiseno
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Torres-Martinez Desert Cahuilla Indians
Michael Mirelez, Cultural Resource Coordinator
P.O. Box 1160 Cahuilla
Thermal, CA, 92274
Phone: (760) 399 - 0022
Fax: (760) 397-8146
mmirelez@tmdci.org

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed APN 419-140-057 Project, Riverside County.

PROJ-2020-003662 06/29/2020 03:41 PM 2 of 2

L&L ENVIRONMENTAL, INC.
REGULATORY SERVICES
BIOLOGICAL & CULTURAL INVESTIGATIONS & MONITORING

June 29, 2020

Augustine Band of Cahuilla Mission Indians
Amanda Vance, Chairperson
P. O. Box 846
Coachella, CA 92236

hhaines@augustinetribe.com
(760)398-4722
(760)369-7161, fax

REGARDING: INFORMATION REQUEST LETTER ASSOCIATED WITH ONE CULTURAL RESOURCES ASSESSMENT PROJECT – APN 419-140-057 LOCATED ON ±47.74 ACRES IN THE CITY OF BANNING, RIVERSIDE COUNTY, CALIFORNIA (USGS *BEAUMONT, CA* 7.5-MINUTE TOPOGRAPHIC QUADRANGLE) (L&L PROJECT RPGX-19-730)

Amanda Vance:

L&L Environmental, Inc. (L&L) is in the process of completing a California Environmental Quality Act (CEQA) compliant cultural resources assessment for a project area totaling ±44.37 acres in the City of Calimesa, Riverside County, California. The proposed project includes the construction of a residential development.

Environmental regulations, including CEQA, consider the impacts a project may have on cultural resources. To determine whether the proposed project may impact any cultural resources, L&L has conducted research on the project area, including the request of a Sacred Land Search (SLS) from the Native American Heritage Commission (NAHC). The NAHC does not indicate that any NAHC-recorded Native American cultural resources are located in the project area. However, the NAHC recommends additional coordination with regard to planning and development projects in order to avoid any unanticipated discoveries. To this end, the NAHC has listed you as a contact and has indicated that you may have information about the potential for this project area to contain resources not found in the SLS. This letter is not associated with a formal consultation process, but is an information request that will be included in our cultural resources assessment document.

We have enclosed maps showing the location of the project area. Generally, the project is located in the northwestern portion of Riverside County, California and is situated south of Interstate 10 and west of South Highland Springs Avenue (Figure 1). Specifically, it is within Section 12 of Township 3 South, Range 1 West as shown on the U. S. Geological Survey (USGS) *Beaumont, CA* 7.5' topographic quadrangle map (Figure 2). The project is immediately

Celebrating 20+ Years of Service to Southern CA and the Great Basin, WBE Certified (Caltrans, CPUC, WBENC)
Mailing Address: 700 East Redlands Blvd, Suite U, PMB #351, Redlands CA 92373
Delivery Address: 721 Nevada Street, Suite 307, Redlands, CA 92373
Webpage: llenviroinc.com | Phone: 909-335-9897 | FAX: 909-335-9893

northeast of the intersection of Sun Lakes Village Drive and Sun Lakes Boulevard in the City of Banning (Figure 3).

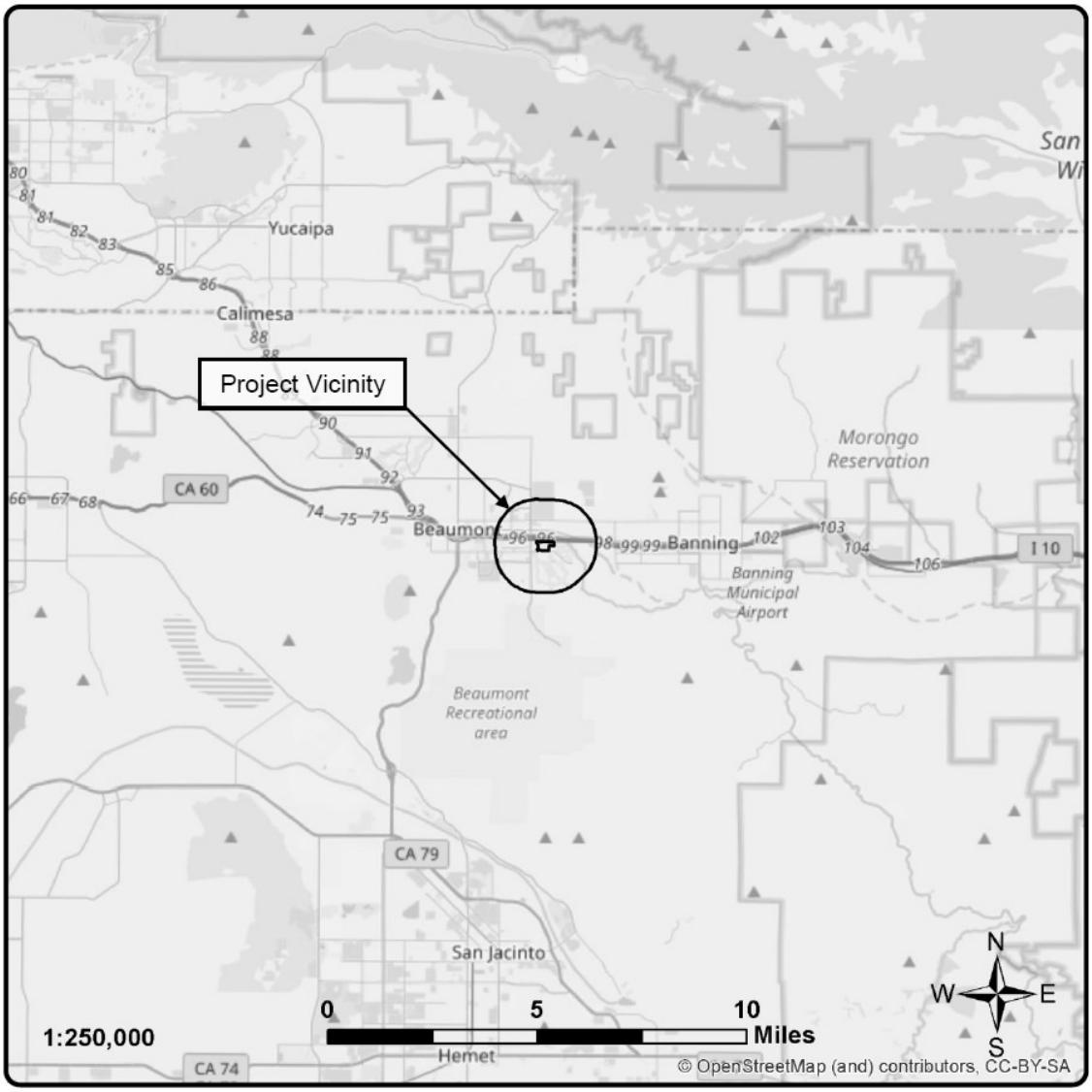
We wish to ask if you have any information or concerns about this project area and/or if the proposed project may have an impact on cultural resources that are important to you. Please feel free to contact me at **909.335.9897** or **WGillean@llenviroinc.com** if you have any questions or information or you may address and mail a response to my attention at our office.

Sincerely,
L&L Environmental, Inc.

William R. Gillean, B.S.
Archaeologist

WRG/jms/js

Encl: Figure 1: Project Vicinity Map
Figure 2: Project Location Map
Figure 3: Aerial Photograph



L&L Environmental, Inc.

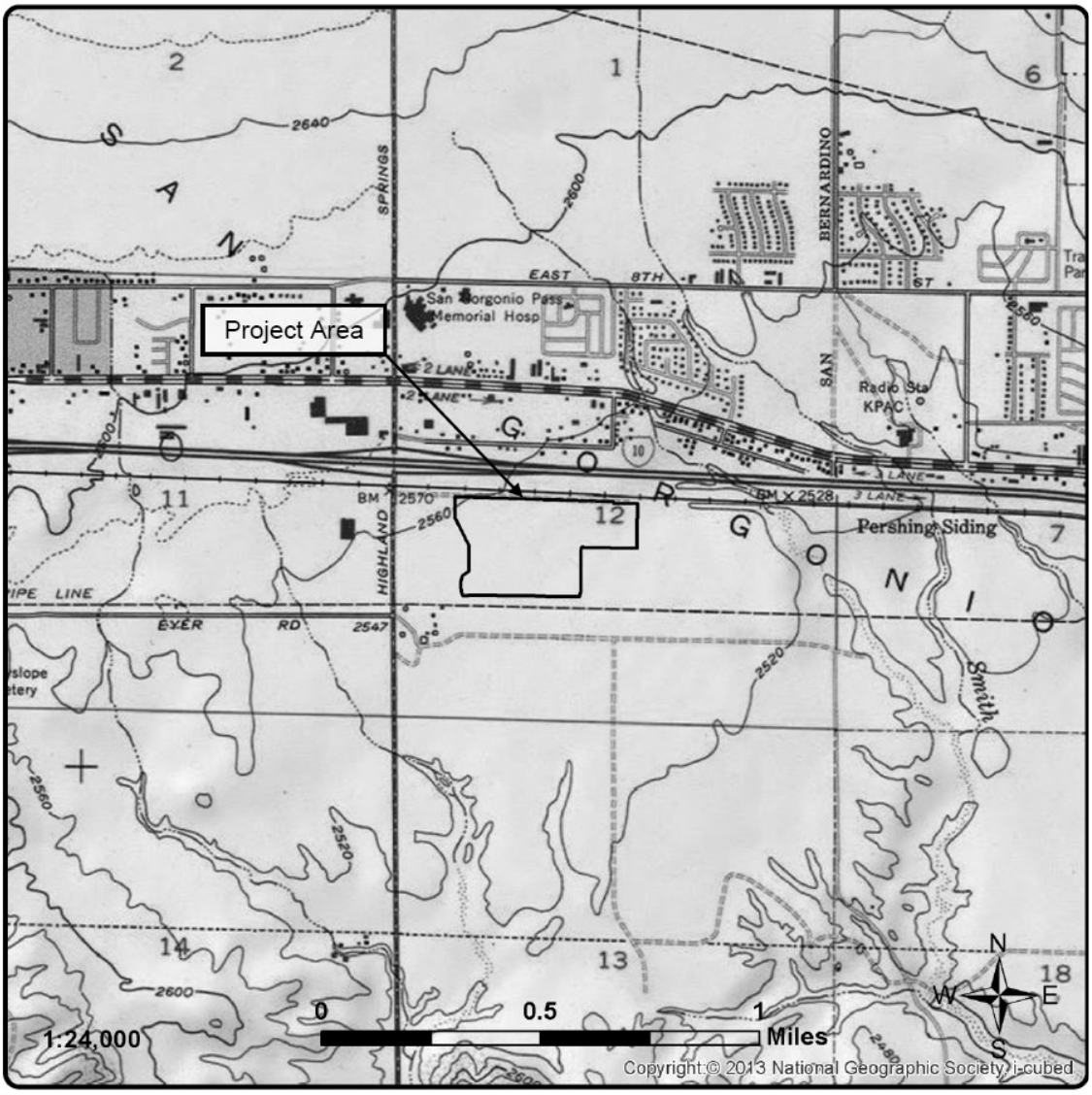
BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

RPGX-19-730
June 2020

Figure 1

Project Vicinity Map

APN 419-140-057, City of Banning
County of Riverside, California



L&L Environmental, Inc.

BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

RPGX-19-730
June 2020

Figure 2

Project Location Map
(USGS Beaumont [1988] quadrangle,
Section 12 of Township 3 South, Range 1 West)

APN 419-140-057, City of Banning
County of Riverside, California



L&L Environmental, Inc.

BIOLOGICAL AND CULTURAL INVESTIGATIONS AND MONITORING

RPGX-19-730
June 2020

Figure 3

Aerial Photograph
(Aerial obtained from Google Earth, August 2018)

APN 419-140-057, City of Banning
County of Riverside, California

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION

03-020-2020-001

June 30, 2020

[VIA EMAIL TO:wgillean@llenviroinc.com]
L&L Environmental, Inc
Mr. William Gillean
721 Nevada Street, Suite 307
Redlands, California 92373

Re: L&L RPGX-19-730

Dear Mr. William Gillean,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Sun Lakes Village North Specific Plan Amendment No. 5 project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the ACBCI THPO requests the following:

*A copy of the records search with associated survey reports and site records from the information center.

*Copies of any cultural resource documentation (report and site records) generated in connection with this project.

*This letter does not conclude consultation. Upon receipt of requested materials the ACBCI THPO may have additional recommendations or require further mitigation measures.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6907. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Pattie Garcia-Plotkin
Director
Tribal Historic Preservation Office
AGUA CALIENTE BAND
OF CAHUILLA INDIANS

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264
T 760/699/6800 F 760/699/6924 WWW.AGUACALIENTE-NSN.GOV

Jeff Sonnentag

From: Stapp, Judy <jstapp@cabazonindians-nsn.gov>
Sent: Saturday, July 11, 2020 11:06 AM
To: Jeff Sonnentag
Subject: Re: Doug Welmas - Information Request Letter for L&L Project RPGX-19-730

Follow Up Flag: Follow up
Flag Status: Flagged

Dear Mr. Sonnentag,
The Cabazon Band of Mission Indians does not comment on projects located outside of its traditional area.
Best regards,
Judy Stapp
Director of Cultural Affairs

Sent from my iPad

On Jun 30, 2020, at 6:02 PM, Jeff Sonnentag <jsonnentag@llenviroinc.com> wrote:

Hello!

Attached as a PDF is an Information Request Letter for APN 419-140-057, ±47.74 acres in the City of Banning, Riverside County, California (L&L project RPGX-19-730). The text of the letter is also copied and pasted below, but the figures showing location will need to be viewed in the PDF.

Thanks for your help.

(This is being sent for William Gillean and Anna Hoover.)

Regarding: Information Request Letter Associated with One Cultural Resources Assessment Project – APN 419-140-057 Located on ±47.74 Acres in the City of Banning, Riverside County, California (USGS Beaumont, CA 7.5-minute Topographic Quadrangle) (L&L Project RPGX-19-730)

Amanda Vance:

L&L Environmental, Inc. (L&L) is in the process of completing a California Environmental Quality Act (CEQA) compliant cultural resources assessment for a project area totaling ±44.37 acres in the City of Calimesa, Riverside County, California. The proposed project includes the construction of a residential development.

Environmental regulations, including CEQA, consider the impacts a project may have on cultural resources. To determine whether the proposed project may impact any cultural resources, L&L has conducted research on the

1

Jeff Sonnentag

From: Quechan Historic Preservation <historicpreservation@quechantribe.com>
Sent: Thursday, July 2, 2020 12:59 PM
To: Jeff Sonnentag; Bill Gillean
Subject: RE: H. Jill McCormick - Information Request Letter for L&L Project RPGX-19-730

This email is to inform you that we do not wish to comment on this project at this time, and defer to the more local Tribe(s).

From: Jeff Sonnentag [mailto:jsonnentag@llenviroinc.com]
Sent: Tuesday, June 30, 2020 6:03 PM
To: historicpreservation@quechantribe.com
Cc: Bill Gillean
Subject: H. Jill McCormick - Information Request Letter for L&L Project RPGX-19-730

Hello!

Attached as a PDF is an Information Request Letter for APN 419-140-057, ±47.74 acres in the City of Banning, Riverside County, California (L&L project RPGX-19-730). The text of the letter is also copied and pasted below, but the figures showing location will need to be viewed in the PDF.

Thanks for your help.

(This is being sent for William Gillean and Anna Hoover.)

REGARDING: **INFORMATION REQUEST LETTER ASSOCIATED WITH ONE CULTURAL RESOURCES ASSESSMENT PROJECT – APN 419-140-057 LOCATED ON ±47.74 ACRES IN THE CITY OF BANNING, RIVERSIDE COUNTY, CALIFORNIA (USGS *BEAUMONT, CA* 7.5-MINUTE TOPOGRAPHIC QUADRANGLE) (L&L PROJECT RPGX-19-730)**

Amanda Vance:

L&L Environmental, Inc. (L&L) is in the process of completing a California Environmental Quality Act (CEQA) compliant cultural resources assessment for a project area totaling ±44.37 acres in the City of Calimesa, Riverside County, California. The proposed project includes the construction of a residential development.

Environmental regulations, including CEQA, consider the impacts a project may have on cultural resources. To determine whether the proposed project may impact any cultural resources, L&L has conducted research on the project area, including the request of a Sacred Land Search (SLS) from the Native American Heritage Commission (NAHC). The NAHC does not indicate that any NAHC-recorded Native American cultural resources are located in the project area. However, the NAHC recommends additional coordination with regard to planning and development projects in order to avoid any unanticipated discoveries. To this end, the NAHC has listed you as a contact and has indicated that you may have information about the potential for this project area to contain resources not found in the SLS. This letter is not associated with a formal consultation process, but is an information request that will be included in our cultural resources assessment document.

1

Rincon Band of Luiseño Indians
CULTURAL RESOURCES DEPARTMENT

One Government Center Lane | Valley Center | CA 92082
(760) 749-1051 | Fax: (760) 749-8901 | rincon-nsn.gov

July 8, 2020

Sent via email: WGillean@llenviroinc.com
William R. Gillean
700 East Redlands Blvd., Suite U
Redlands, CA 92373

Re: APN 419-140-057, Sun Lakes Banning

Dear Mr. Gillean,

This letter is written on behalf of Rincon Band of Luiseño Indians, ("Rincon Band" or "Band"), a federally recognized Indian Tribe and sovereign government.

The Band has received the notification for the above referenced project. The location identified within project documents is not within the Band's specific Area of Historic Interest (AHI).

At this time, we have no additional information to provide. We recommend that you directly contact a Tribe that is closer to the project and may have pertinent information.

Thank you for submitting this project for Tribal review. If you have additional questions or concerns, please do not hesitate to contact our office at your convenience at (760) 297-2635 or via electronic mail at crd@rincon-nsn.gov.

Thank you for the opportunity to protect and preserve our cultural assets.

Sincerely,

Deneen Pelton

Administrative Assistant II to
Cheryl Madrigal, CRD Manager/THPO
Cultural Resources Department
Rincon Band of Luiseño Indians

Bo Mazzetti, Chairman | Tishmall Turner, Vice Chair | Laurie E. Gonzalez, Council Member | Alfonso Kolb, Sr., Council Member | John Constantino, Council Member

Jeff Sonnentag

From: Vanessa Minott <vminott@santarosacahuilla-nsn.gov>
Sent: Thursday, July 2, 2020 10:15 AM
To: Jeff Sonnentag
Subject: FW: Lovina Redner - Information Request Letter for L&L Project RPGX-19-730
Attachments: Scoping Letter - Lovina Redner.pdf

Acha'i Tamit,
Please note that the Tribe's Chairwoman Redner wishes to defer to Soboba Band of Luiseno Indians. Have a great day.

Respectfully,
Vanessa Minott,
Tribal Administrator
Santa Rosa Band of Cahuilla Indians
W - 951-659-2700 ext. 102
C – 760-668-0460
F – 951-659-2228
65199 State Hwy. 74
Mountain Center, CA 92561
P.O. Box 391820
Anza, CA 92539

From: Lovina Saul <lsaul@santarosacahuilla-nsn.gov>
Sent: Thursday, July 2, 2020 8:07 AM
To: Vanessa Minott <vminott@santarosacahuilla-nsn.gov>
Cc: Steven Estrada <SEstrada@santarosacahuilla-nsn.gov>
Subject: Fwd: Lovina Redner - Information Request Letter for L&L Project RPGX-19-730

Can you look into this for me to see what it is. Thank you

Respectfully,
Lovina Saul
Tribal Chairwoman
Santa Rosa Band of Cahuilla Indians

1

Appendix E: Primary Record RPGX-1H

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #:
HRI #:
Trinomial:
NRHP Status Code: 6z
Other Listings:
Review Code ___ Reviewer _____ Date_____

Page 1 of 3 ***Resource Name or #:** RPGX-1H

P1. Other Identifier:

P2.* Location: ___ **Not for Publication** _√_ **Unrestricted** **a.* County:** Riverside

b.* USGS Quad: Banning, CA **dated** 1988 **photorevised** **T:**3S **R:** 1W SW 1/4 **Section** 12, **SBBM**
Elevation: 2560 ft asl

c. Address: N/A **City:** Banning **Zip:** 92220

d.* UTM Zone 11N 505645 **mE**/ 3753866 AND **mN**505229 **mE**/ 3753653 **mN**
UTM Derivation: ___USGS Quad __X__ GPS
GPS UTM Corrected: ___ Yes __X__ No **GPS brand/model:**

e. Other Locational Data (e.g. parcel number, directions to resource, etc. as appropriate)**:** APN 419-140-057. The southwest terminus is approximately 320 feet north from the Sun Lakes Boulevard edge of pavement. The northeast terminus is approximately 200 feet south from the edge of the Union Pacific Rail Line.

P3a.* Description (Describe resource and its major elements; include design, materials, condition, alterations, size, setting, and boundaries)**:** This resource is a linear feature consisting a 3 ft tall by 15 ft. wide earthen mound trending southwest by northeast for a distance of 1,000 feet and bisecting the central portion of APN 419-140-057. The feature is clearly visible on aerial photographs going back to 1966, the earliest dated aerial photo readily available, and is likely a water conveyance/control feature associated with pre-1953 water control efforts on Stewart Ranch. Similar berm features were recorded at neighboring site 33-013779 constructed by bulldozers for the purpose of channeling runoff from "…existing drainages through a linked series of devices…likely built because cattle grazing had removed vegetation groundcovers that once held topsoils in place and the lack of groundcover had sped the process of erosion" (Messick and Dice 2004). *Cont'd.*

P3b.* Resource Attributes (List attributes and codes)**:** AH6. Water Conveyance Feature

P4.* Resources Present: ___ Building ___Structure __X__Object__Site__District__Element of District____ Other (Isolates, etc.

P5a. Photograph or Drawing (Required for **HRI** buildings, structures, and objects)**:**



P5b. Description of Photo (View, date, accession #)**:** Northeast/Overview of Feature/berm

P6.* Date Constructed/Age and Source:
Prehistoric __X__ Historic ____ Both

P7.* Owner and Address: N/A

P8.* Recorded by: (Name, affiliation, and address)
Bill Gillean
L&L Environmental
721 Nevada St.,
Redlands, CA 92373

P9.* Date recorded: 6/30/020

P10.* Type of Survey (Describe)**:** Intensive pedestrian survey for CEQA Phase I Cultural Resource Assessment

P11.* Report citation (Cite survey report and other sources or enter "none")**:** Eddy, John, William R. Gillean, and Leslie Irish. 2020. Phase I Cultural Resources Assessment for the Sun Lakes Boulevard Project APN 419-140-057, +47.02 Acres in the City of Banning, Riverside County, California.

Attachments: ___None __√__ Location Map ___Archaeological Site Record ___Sketch Map ____Continuation Sheet__Building, Structure, and Object Record
____ Archaeological Record ____District Record ____Linear Feature Record ____Milling Station Record ____ Rock Art Record
____ Artifact Record ____Photograph Record ____Other (list):

(1/95; updated 1/98) ***Required information**

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION **CONTINUATION SHEET**	Primary # HRI # Trinomial

Property Name: RPGX-1H
Page 2 of 3

P3a.* Description (continued) Additional earthen berms, which Brandman and Associates (2004:31) referred to as "bermed ditches," also crisscrossed the surface of open fields. These bermed ditches may or may not have been linked to other water control/conveyance devices such as spouts or weirs.

The 1966 aerial photo of the Project area depicts a mechanically cleared area to the north of the earthen berm, suggesting the feature represents the downside slope of a ditch cut by a bulldozer. Furthermore, no evidence of spouts, weirs, concrete and stone catchments, or other water control/conveyance devices was found in association with RPGX-1H during the pedestrian survey. Finally, the feature is within an open field a half-mile northeast of Portrero Creek and almost one mile west of Smith Creek with no direct connection to either. This suggests that RPGX-1H is most like the bermed ditches noted by Brandman and Associates (2004).

The mechanically cleared ditch in front of the earthen berm is no longer present and the berm itself has fallen into disrepair from the lack of maintenance and periodic clearing and disking of the field. As such the feature lacks integrity and does not convey any sense of its historical character.

CRHR Evaluation

RPGX-1H is a bermed ditch most likely associated with pre-1953 water control/conveyance efforts on Stewart Ranch. Similar features constructed by ranchers along Smith Creek were previously recorded at site 33-013778 (CA-RIV-7544H), which was evaluated as not eligible for the CRHR (Brandman and Associates 2004). The water control/conveyance features, including RPGX-1H, represent some of the few remaining elements of the historic Stewart Ranch; however, RPGX-1H no longer possess sufficient integrity and the association with the Stewart Ranch is limited to its purpose, age, location and function and it does not convey any association with an important historic event, trend or broad pattern of history. Therefore, RPGX-1H does not appear eligible under Criterion 1.

The Stewart family operated the Stewart Ranch between 1883 and 1967 and are considered historically significant at the local level for operating one of the most successful and long-standing dry farming and stock ranches in the San Gorgonio Pass area. The water control/conveyance features they constructed, including RPGX-1H, in open pasture and along Smith Creek and Portrero Creek were undoubtedly important to the Stewart family and the operation of the ranch. The features, likely constructed by members of the Stewart family sometime before 1953, represent a large investment of time, resources, and money to preserve topsoil and conserve water critical to success of dry farming operations. Although built by the Stewart family and undoubtedly important to the success of the ranch, the water control/conveyance features, including RPGX-1H, do not adequately represent characteristics which convey the Stewart family's historical significance. While the direct historical association between RPGX-1H and the Stewart family is clear, the association lacks in its representation of or contribution to the historical significance of the Stewart family to the San Gorgonio Pass area. Therefore, RPGX-1H does not appear eligible under Criterion 2.

RPGX-1H and the associated water control/conveyance features on Stewart Ranch do not embody the distinctive characteristics of a type, period, or method of construction. They do not represent the work of a master or possess high artistic values. Furthermore, RPGX-1H does not represent a significant and distinguishable entity whose components may lack individual distinction. Therefore, RPGX-1H does not appear eligible under Criterion 3.

Finally, RPGX-1H has not yielded, and has no potential to yield, information important to the history of Stewart Ranch or the San Gorgonio Pass area. Therefore, RPGX-1H does not appear eligible under Criterion 4.

Therefore, RPGX-1H is not considered a historic resource for the purposes of CEQA and therefore requires no further consideration during this study.

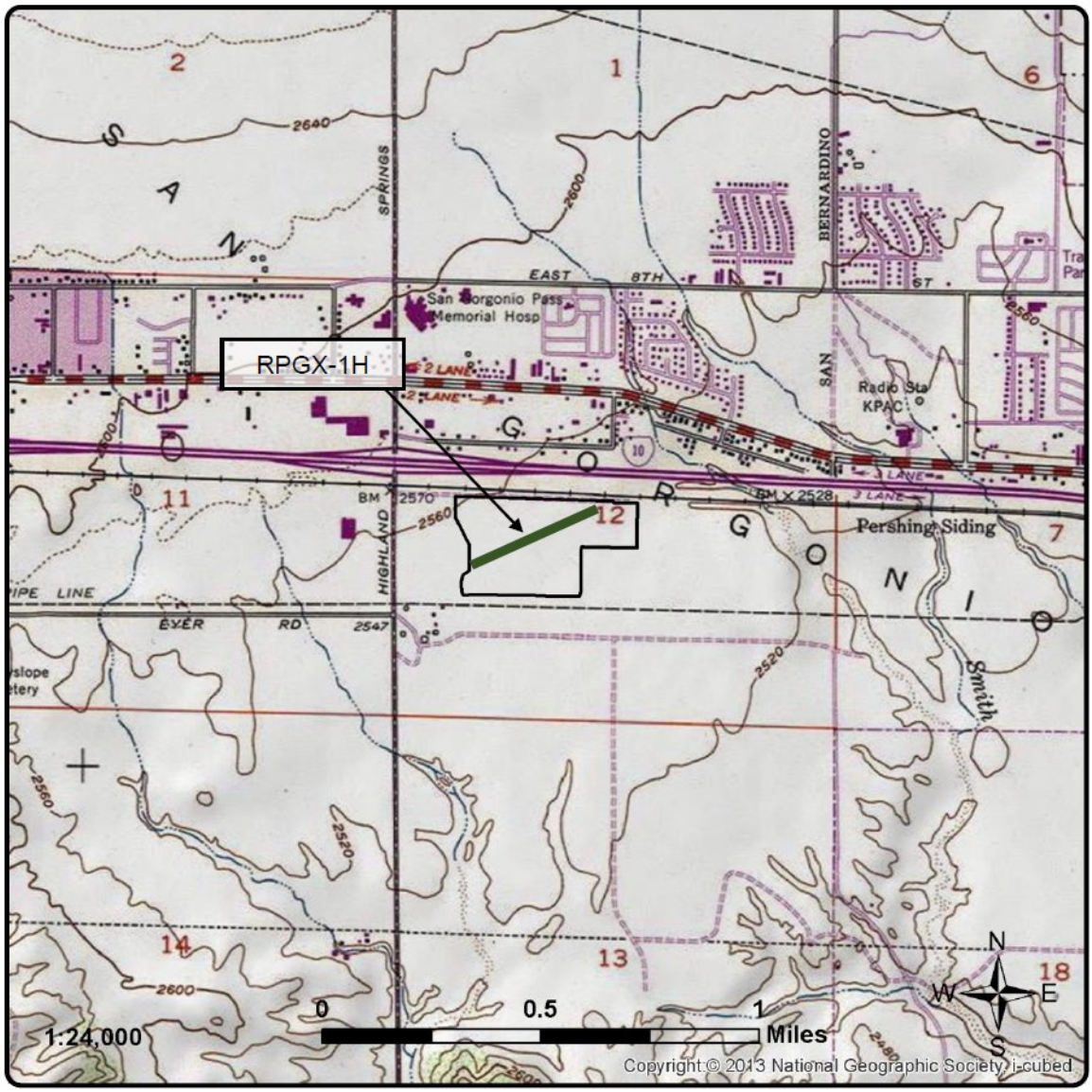
DPR 523L (9/2013)

State of California – Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #:
HRI #:
Trinomial:

Page 3 of 3 ***Resource Name or # (Assigned by recorder):**

***Map Name: Beaumont, CA. USGS 7.5' Quad** ***Scale: 1:24000** ***Date of Map: 1988**



DPR 523J (1/95) ***Required Information**

URBAN CROSSROADS

260 E. Baker St. | Suite 200 | Costa Mesa, CA 92626 | (949) 660-1994
urbanxroads.com

July 9, 2020

Mr. Ernie Perea
Romo Planning Group, Inc
9431 Haven Avenue, Ste. 232
Rancho Cucamonga, CA 91730

SUBJECT: SUN LAKES VILLAGE NORTH SPECIFIC PLAN NOISE MONITORING

Dear Mr. Ernie Perea:

Urban Crossroads, Inc. is pleased to provide the following Noise Monitoring for the Sun Lakes Village North Specific Plan (Project). To describe the existing ambient noise conditions, 24-hour noise level measurements were taken at three locations in the Project study area. The receiver locations were selected to describe and document the existing noise environment within the Project study area. Exhibit A provides the boundaries of the Project study area and the noise level measurement locations. To fully describe the existing noise conditions, noise level measurements were collected by Urban Crossroads, Inc. on Wednesday, July 1, 2020. Appendix A includes study area photos

MEASUREMENT PROCEDURE AND CRITERIA

To describe the existing noise environment, hourly noise levels were measured during weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it is possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis calibrator, Model CAL 150. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. The sound level meters and microphones were equipped with a windscreen during all measurements. All noise level measurement equipment satisfies the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. (1)

NOISE MEASUREMENT LOCATIONS

The long-term noise level measurements were positioned as close to the nearest sensitive receiver locations as possible to assess the existing ambient hourly noise levels surrounding the Project site. Both Caltrans and the FTA recognize that it is not reasonable to collect noise level measurements that can fully represent every part of a private yard, patio, deck, or balcony normally used for human activity when estimating impacts for new development projects. This is demonstrated in the Caltrans general site location guidelines which indicate that, *sites must be free of noise contamination by sources other than sources of interest. Avoid sites located near sources such as barking dogs, lawnmowers, pool pumps, and air conditioners unless it is the express intent of the analyst to measure these sources*. (2) Further, FTA guidance states, t*hat it is not necessary nor recommended that existing noise exposure be*

determined by measuring at every noise-sensitive location in the project area. Rather, the recommended approach is to characterize the noise environment for clusters of sites based on measurements or estimates at representative locations in the community. (3)

Based on recommendations of Caltrans and the FTA, it is not necessary to collect measurements at each individual building or residence, because each receiver measurement represents a group of buildings that share acoustical equivalence. (3) In other words, the area represented by the receiver shares similar shielding, terrain, and geometric relationship to the reference noise source. Receivers represent a location of noise sensitive areas and are used to estimate the future noise level impacts. Collecting reference ambient noise level measurements at the nearby sensitive receiver locations allows for a comparison of the before and after Project noise levels and is necessary to assess potential noise impacts due to the Project's contribution to the ambient noise levels.

NOISE MEASUREMENT RESULTS

The noise measurements presented below focus on the average or equivalent sound levels (L_{eq}). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period. Table 1 identifies the hourly daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) noise levels at each noise level measurement location. Appendix B provides a summary of the existing hourly ambient noise levels described below:

- Location L1 represents the noise southeast of the Project site by Sun Lakes Boulevard adjacent to existing vacant lot. The noise levels at this location consist primarily of traffic noise from Sun Lakes Boulevard. The noise level measurements collected show an overall 24-hour exterior noise level of 60.4 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 59.0 dBA L_{eq} with an average nighttime noise level of 51.3 dBA L_{eq}.
- Location L2 represents the noise levels Located south of the Project site on Sun Lakes Boulevard near existing single-family residential homes at 5871 Oakmont Drive. The ambient noise levels at this location account for traffic on Sun Lakes Boulevard. The noise level measurements collected show an overall 24-hour exterior noise level of 66.3 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 64.2 dBA L_{eq} with an average nighttime noise level of 57.6 dBA L_{eq}.
- Location L3 represents the noise levels Located west of the Project site Behind Rite Aid at 300 South Highland Springs Avenue. The 24-hour CNEL indicates that the overall exterior noise level is 63.7 dBA CNEL. The energy (logarithmic) average daytime noise level was calculated at 59.9 dBA L_{eq} with an average nighttime noise level of 56.4. dBA L_{eq}. Parking lot vehicle movements and truck activity represent the primary source of noise at this location.

Table 1 provides the (energy average) noise levels used to describe the daytime and nighttime ambient conditions. These daytime and nighttime energy average noise levels represent the average of all hourly noise levels observed during these time periods expressed as a single number. Appendix B provides summary worksheets of the noise levels for each hour as well as the minimum, maximum, L_1, L_2, L_5, L_8, L_{25}, L_{50}, L_{90}, L_{95}, and L_{99} percentile noise levels observed during the daytime and nighttime periods.

The background ambient noise levels in the Project study area are dominated by the transportation-related noise associated with Sunset Lakes Boulevard and parking lot vehicle movements. This includes the auto and heavy truck activities on study area roadway segments near the noise level measurement locations. The 24-hour existing noise level measurement results are shown on Table 1.

TABLE 1: 24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location[1]	Description	Energy Average Noise Level (dBA L_{eq})[2]		CNEL
		Daytime	Nighttime	
L1	Located southeast of the Project site by Sun Lakes Boulevard adjacent to existing vacant lot.	59.0	51.3	60.4
L2	Located south of the Project site on Sun Lakes Boulevard near existing single-family residential homes at 5871 Oakmont Drive.	64.2	57.6	66.3
L3	Located west of the Project site Behind Rite Aid at 300 South Highland Springs Avenue.	59.9	56.4	63.7

[1] See Exhibit A for the noise level measurement locations.
[2] Energy (logarithmic) average levels. The long-term 24-hour measurement worksheets are included in Appendix B. "Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

EXHIBIT A: NOISE MEASUREMENT LOCATIONS



AMBIENT CONDITIONS

This noise monitoring demonstrates the ambient noise conditions near potential receivers for the Project. The noise level measurements collected show an overall 24-hour exterior noise level ranging from 60.4 to 66.3 dBA CNEL. Daytime noise levels range from 59.0 to 64.0 dBA L_{eq} and nighttime noise levels range from 51.3 to 57.6 dBA L_{eq}. If you have any questions, please contact me directly at (949) 336-5979.

Respectfully submitted,

URBAN CROSSROADS, INC.

Bill Lawson, P.E., INCE
Principal

REFERENCES

1. **American National Standards Institute (ANSI).** *Specification for Sound Level Meters ANSI S1.4-2014/IEC 61672-1:2013.*
2. **California Department of Transportation Environmental Program.** *Technical Noise Supplement - A Technical Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA : s.n., September 2013.
3. **U.S. Department of Transportation, Federal Transit Administration.** *Transit Noise and Vibration Impact Assessment.* September 2018.

APPENDIX A:

STUDY AREA PHOTOS

JN: 12929 Study Area Photos



L1_E
33, 55' 19.780000", 116, 56' 14.890000"



L1_N
33, 55' 19.620000", 116, 56' 10.740000"



L1_S
33, 55' 19.340000", 116, 56' 14.840000"



L1_W
33, 55' 19.890000", 116, 56' 14.970000"



L2_E
33, 55' 19.710000", 116, 56' 27.690000"



L2_N
33, 55' 19.820000", 116, 56' 27.830000"

JN: 12929 Study Area Photos



L2_S
33, 55' 19.890000", 116, 56' 27.770000"



L2_W
33, 55' 19.640000", 116, 56' 27.660000"



L3_E
33, 55' 28.340000", 116, 56' 39.090000"



L3_N
33, 55' 28.510000", 116, 56' 39.250000"



L3_S
33, 55' 28.490000", 116, 56' 39.310000"



L3_W
33, 55' 28.310000", 116, 56' 39.060000"

APPENDIX B:

MEASUREMENT WORKSHEETS

24-Hour Noise Level Measurement Summary

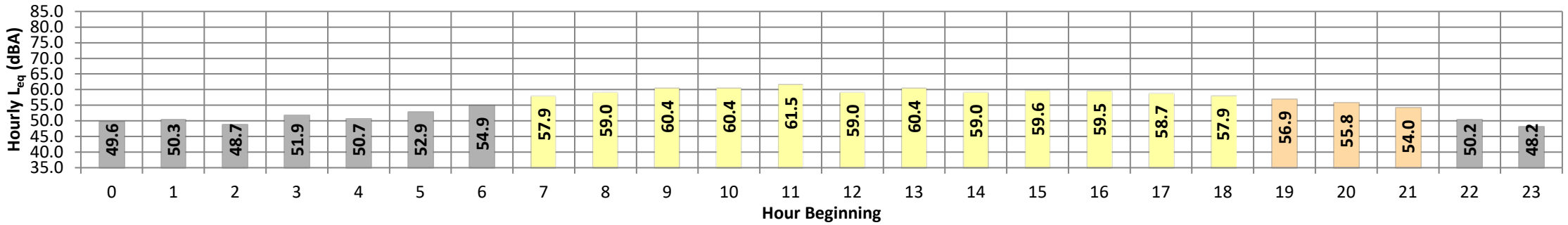
Date: Wednesday, July 01, 2020
Project: SUN LAKES VILLAGE NORTH

Location: L1 - Located southeast of the Project site by Sun Lakes Boulevard adjacent to existing vacant lot.

Meter: Piccolo II

JN: 12929
Analyst: P. Mara

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	49.6	59.2	45.7	58.7	58.0	55.3	52.9	48.3	47.3	46.1	45.9	45.7	49.6	10.0	59.6
	1	50.3	56.9	47.0	56.6	56.2	54.5	53.0	50.3	49.3	47.5	47.3	47.1	50.3	10.0	60.3
	2	48.7	54.3	46.2	54.0	53.6	52.1	51.0	48.8	48.0	46.7	46.5	46.3	48.7	10.0	58.7
	3	51.9	62.2	46.7	61.8	61.2	58.8	56.6	49.4	48.3	47.2	47.0	46.8	51.9	10.0	61.9
	4	50.7	61.7	45.2	61.1	60.3	57.3	55.0	48.3	46.9	45.7	45.5	45.3	50.7	10.0	60.7
	5	52.9	63.7	46.9	63.2	62.3	59.7	57.3	50.6	48.7	47.4	47.2	47.0	52.9	10.0	62.9
	6	54.9	66.1	46.7	65.6	64.7	61.9	59.6	53.2	48.9	47.2	47.0	46.8	54.9	10.0	64.9
Day	7	57.9	68.8	47.9	68.2	67.5	65.0	63.2	56.6	51.6	48.5	48.2	47.9	57.9	0.0	57.9
	8	59.0	68.8	48.8	68.3	67.6	65.6	64.2	59.1	53.7	49.6	49.2	48.9	59.0	0.0	59.0
	9	60.4	70.1	49.3	69.6	69.0	67.0	65.3	60.6	56.0	50.3	49.9	49.4	60.4	0.0	60.4
	10	60.4	70.0	48.5	69.6	69.1	67.1	65.7	60.5	54.8	49.5	49.1	48.7	60.4	0.0	60.4
	11	61.5	72.6	48.6	72.1	71.4	68.6	66.4	60.8	55.7	49.7	49.2	48.7	61.5	0.0	61.5
	12	59.0	68.9	46.7	68.4	67.6	65.5	64.2	59.5	54.2	47.9	47.3	46.9	59.0	0.0	59.0
	13	60.4	70.4	49.8	70.0	69.2	66.7	64.9	60.4	56.2	51.5	50.7	50.0	60.4	0.0	60.4
	14	59.0	69.8	46.9	69.3	68.9	66.5	63.5	57.7	53.0	47.8	47.3	47.0	59.0	0.0	59.0
	15	59.6	69.5	47.9	69.1	68.5	66.3	64.4	59.6	55.0	49.2	48.5	48.0	59.6	0.0	59.6
	16	59.5	69.6	48.9	69.1	68.3	66.1	64.3	59.6	55.0	49.7	49.3	49.0	59.5	0.0	59.5
	17	58.7	69.2	50.3	68.6	67.7	65.2	63.6	58.1	54.0	51.0	50.7	50.4	58.7	0.0	58.7
	18	57.9	69.5	49.7	68.8	67.9	65.1	62.2	56.1	52.1	50.2	50.0	49.7	57.9	0.0	57.9
Evening	19	56.9	66.6	50.3	66.2	65.5	63.5	61.7	56.0	52.9	50.8	50.6	50.3	56.9	5.0	61.9
	20	55.8	66.5	48.2	66.0	65.2	62.5	60.5	54.8	51.0	48.7	48.5	48.3	55.8	5.0	60.8
	21	54.0	63.8	49.9	63.3	62.3	59.7	57.8	53.1	51.4	50.2	50.1	50.0	54.0	5.0	59.0
Night	22	50.2	59.1	46.5	58.7	58.0	55.8	54.0	49.2	48.1	46.9	46.8	46.6	50.2	10.0	60.2
	23	48.2	55.1	45.6	54.6	54.0	52.1	50.8	47.9	47.2	46.1	45.9	45.7	48.2	10.0	58.2

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	57.9	68.8	46.7	68.2	67.5	65.0	62.2	56.1	51.6	47.8	47.3	46.9
	Max	61.5	72.6	50.3	72.1	71.4	68.6	66.4	60.8	56.2	51.5	50.7	50.4
Energy Average		59.6	Average:		69.3	68.5	66.2	64.3	59.1	54.3	49.6	49.1	48.7
Evening	Min	54.0	63.8	48.2	63.3	62.3	59.7	57.8	53.1	51.0	48.7	48.5	48.3
	Max	56.9	66.6	50.3	66.2	65.5	63.5	61.7	56.0	52.9	50.8	50.6	50.3
Energy Average		55.7	Average:		65.2	64.3	61.9	60.0	54.6	51.8	49.9	49.7	49.5
Night	Min	48.2	54.3	45.2	54.0	53.6	52.1	50.8	47.9	46.9	45.7	45.5	45.3
	Max	54.9	66.1	47.0	65.6	64.7	61.9	59.6	53.2	49.3	47.5	47.3	47.1
Energy Average		51.3	Average:		59.4	58.7	56.4	54.5	49.5	48.1	46.8	46.6	46.4

L_{eq} (dBA)		
24-Hour	*Daytime*	*Nighttime*
57.4	**59.0**	**51.3**

24-Hour CNEL (dBA)

60.4

URBAN CROSSROADS

24-Hour Noise Level Measurement Summary

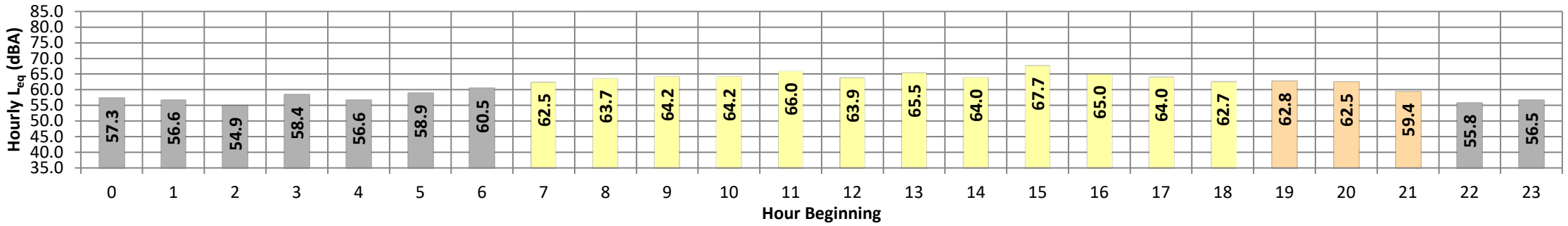
Date: Wednesday, July 01, 2020
Project: SUN LAKES VILLAGE NORTH

Location: L2 - Located south of the Project site on Sun Lakes Boulevard near existing single-family residential homes at 5871 Oakmont Drive.

Meter: Piccolo II

JN: 12929
Analyst: P. Mara

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	57.3	64.7	54.5	64.4	63.9	61.9	60.1	56.9	56.0	55.0	54.8	54.7	57.3	10.0	67.3
	1	56.6	64.7	52.1	64.4	63.9	61.7	59.9	56.3	55.0	52.8	52.5	52.2	56.6	10.0	66.6
	2	54.9	61.9	50.9	61.6	61.2	59.4	57.8	55.0	53.7	51.7	51.3	51.0	54.9	10.0	64.9
	3	58.4	66.4	55.3	66.0	65.5	63.0	60.9	57.8	57.0	55.8	55.6	55.3	58.4	10.0	68.4
	4	56.6	67.9	49.7	67.5	66.7	63.5	60.4	54.2	52.5	50.5	50.2	49.8	56.6	10.0	66.6
	5	58.9	67.3	53.9	67.1	66.7	65.1	63.2	58.3	56.1	54.5	54.2	54.0	58.9	10.0	68.9
	6	60.5	71.4	53.4	71.1	70.5	67.6	65.0	58.2	55.8	54.0	53.7	53.5	60.5	10.0	70.5
Day	7	62.5	73.3	51.8	73.0	72.4	69.9	67.9	61.0	55.5	52.6	52.2	51.9	62.5	0.0	62.5
	8	63.7	74.4	52.5	74.0	73.3	70.6	68.7	62.8	58.3	53.5	53.0	52.6	63.7	0.0	63.7
	9	64.2	74.6	50.9	74.3	73.6	71.4	69.9	63.3	57.9	51.9	51.4	51.0	64.2	0.0	64.2
	10	64.2	74.4	51.5	74.0	73.4	71.3	69.7	63.4	58.7	52.8	52.2	51.6	64.2	0.0	64.2
	11	66.0	76.9	50.8	76.5	75.7	73.0	71.0	65.6	59.7	51.9	51.3	50.9	66.0	0.0	66.0
	12	63.9	74.2	50.5	73.8	73.2	70.9	69.3	63.3	57.5	51.5	51.0	50.6	63.9	0.0	63.9
	13	65.5	75.6	51.9	75.2	74.5	72.3	70.6	65.4	60.4	53.5	52.7	52.0	65.5	0.0	65.5
	14	64.0	74.7	51.1	74.3	73.5	70.9	69.5	63.2	57.5	52.0	51.5	51.2	64.0	0.0	64.0
	15	67.7	82.0	51.9	80.7	78.9	74.3	71.4	64.9	59.2	52.9	52.4	52.0	67.7	0.0	67.7
	16	65.0	74.7	52.7	74.4	73.7	71.9	70.6	65.0	59.0	53.7	53.2	52.7	65.0	0.0	65.0
	17	64.0	73.8	54.2	73.5	72.9	70.9	69.5	63.6	58.4	55.0	54.6	54.3	64.0	0.0	64.0
	18	62.7	72.7	54.1	72.4	71.9	69.5	68.0	61.5	57.2	54.8	54.5	54.2	62.7	0.0	62.7
Evening	19	62.8	73.2	55.2	72.9	72.2	69.5	67.5	61.3	58.3	55.8	55.6	55.3	62.8	5.0	67.8
	20	62.5	73.7	53.3	73.3	72.6	69.9	67.6	60.2	56.2	54.1	53.7	53.4	62.5	5.0	67.5
	21	59.4	69.9	51.7	69.6	69.0	66.6	64.5	57.3	54.3	52.4	52.1	51.8	59.4	5.0	64.4
Night	22	55.8	66.8	50.5	66.3	65.2	61.7	58.9	54.2	52.7	51.1	50.8	50.6	55.8	10.0	65.8
	23	56.5	63.5	54.0	63.3	63.0	61.1	59.3	56.2	55.2	54.3	54.2	54.1	56.5	10.0	66.5

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	62.5	72.7	50.5	72.4	71.9	69.5	67.9	61.0	55.5	51.5	51.0	50.6
	Max	67.7	82.0	54.2	80.7	78.9	74.3	71.4	65.6	60.4	55.0	54.6	54.3
Energy Average		64.7	Average:		74.7	73.9	71.4	69.7	63.6	58.3	53.0	52.5	52.1
Evening	Min	59.4	69.9	51.7	69.6	69.0	66.6	64.5	57.3	54.3	52.4	52.1	51.8
	Max	62.8	73.7	55.2	73.3	72.6	69.9	67.6	61.3	58.3	55.8	55.6	55.3
Energy Average		61.8	Average:		71.9	71.3	68.7	66.5	59.6	56.3	54.1	53.8	53.5
Night	Min	54.9	61.9	49.7	61.6	61.2	59.4	57.8	54.2	52.5	50.5	50.2	49.8
	Max	60.5	71.4	55.3	71.1	70.5	67.6	65.0	58.3	57.0	55.8	55.6	55.3
Energy Average		57.6	Average:		65.8	65.2	62.8	60.6	56.3	54.9	53.3	53.0	52.8

L_{eq} (dBA)		
24-Hour	*Daytime*	*Nighttime*
62.7	**64.2**	**57.6**

24-Hour CNEL (dBA)

66.3

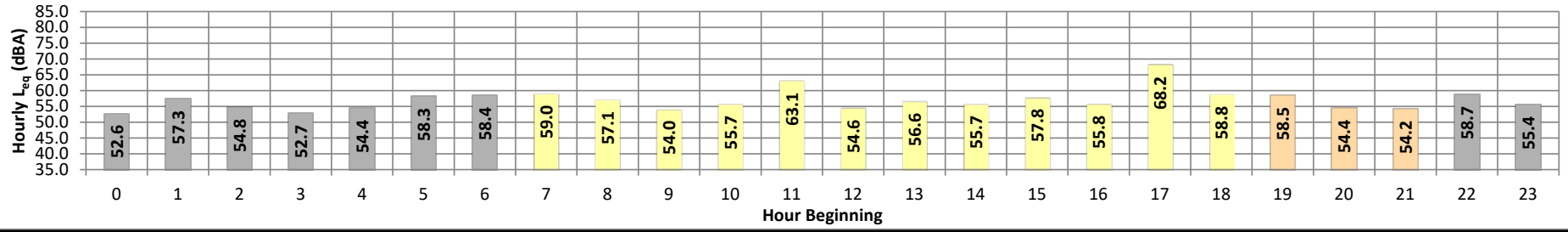
URBAN CROSSROADS

24-Hour Noise Level Measurement Summary

Date: Wednesday, July 01, 2020 *Location:* L3 - Located west of the Project site Behind Rite Aid at 300 South Highland Springs Avenue. *Meter:* Piccolo II *JN:* 12929

Project: SUN LAKES VILLAGE NORTH *Analyst:* P. Mara

Hourly L_{eq} dBA Readings (unadjusted)



Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%	L_{eq}	Adj.	Adj. L_{eq}
Night	0	52.6	57.0	49.2	56.8	56.6	56.1	55.4	53.3	51.9	49.8	49.5	49.3	52.6	10.0	62.6
	1	57.3	62.6	51.6	62.3	62.1	61.7	61.2	58.7	55.4	52.3	52.0	51.7	57.3	10.0	67.3
	2	54.8	60.8	50.1	60.4	60.2	59.4	58.4	55.8	53.2	50.7	50.5	50.2	54.8	10.0	64.8
	3	52.7	56.3	49.7	56.1	55.9	55.4	55.1	53.5	52.2	50.3	50.0	49.8	52.7	10.0	62.7
	4	54.4	58.8	50.2	58.6	58.4	57.9	57.6	55.3	53.6	51.0	50.6	50.3	54.4	10.0	64.4
	5	58.3	67.1	51.5	66.7	66.4	65.0	63.2	57.4	54.4	52.3	51.9	51.6	58.3	10.0	68.3
	6	58.4	66.2	51.8	65.6	65.0	63.3	62.0	59.8	55.2	52.4	52.2	51.9	58.4	10.0	68.4
Day	7	59.0	66.7	53.5	66.0	65.6	63.8	62.6	59.9	57.0	54.2	54.0	53.7	59.0	0.0	59.0
	8	57.1	61.6	53.3	61.4	61.2	60.7	60.4	58.2	55.7	53.9	53.7	53.4	57.1	0.0	57.1
	9	54.0	61.5	50.6	61.0	60.4	58.8	57.1	53.7	52.8	51.2	51.0	50.8	54.0	0.0	54.0
	10	55.7	61.4	52.0	61.1	60.6	59.3	58.6	56.5	54.4	52.6	52.4	52.1	55.7	0.0	55.7
	11	63.1	71.3	58.3	71.0	70.3	68.7	67.3	62.6	61.0	59.4	58.9	58.5	63.1	0.0	63.1
	12	54.6	62.8	50.8	62.1	61.3	59.2	57.6	54.4	52.8	51.5	51.2	50.9	54.6	0.0	54.6
	13	56.6	64.3	51.7	64.0	63.5	61.9	60.8	56.3	54.3	52.4	52.1	51.8	56.6	0.0	56.6
	14	55.7	62.7	51.3	62.3	61.7	59.9	58.9	56.7	54.1	52.0	51.7	51.5	55.7	0.0	55.7
	15	57.8	64.1	52.8	63.8	63.2	61.8	61.0	58.9	57.0	53.5	53.1	52.9	57.8	0.0	57.8
	16	55.8	62.6	51.5	62.2	61.7	60.1	59.0	56.3	54.3	52.2	51.9	51.6	55.8	0.0	55.8
	17	68.2	71.7	67.6	71.3	70.9	70.0	69.3	68.7	68.4	67.8	67.8	67.6	68.2	0.0	68.2
	18	58.8	62.2	56.3	62.0	61.8	60.9	60.4	59.1	58.5	57.6	57.4	56.5	58.8	0.0	58.8
Evening	19	58.5	63.0	55.0	62.7	62.5	61.7	61.2	59.6	57.5	55.8	55.5	55.1	58.5	5.0	63.5
	20	54.4	59.5	51.5	59.2	58.6	57.4	56.6	54.8	53.7	52.1	51.8	51.6	54.4	5.0	59.4
	21	54.2	60.2	50.7	59.8	59.5	58.4	57.4	54.5	53.2	51.3	51.1	50.8	54.2	5.0	59.2
Night	22	58.7	64.1	53.5	63.9	63.5	62.6	62.1	60.0	57.8	54.2	53.9	53.6	58.7	10.0	68.7
	23	55.4	60.8	50.3	60.5	60.2	59.3	58.7	56.8	54.2	51.0	50.7	50.4	55.4	10.0	65.4

Timeframe	Hour	L_{eq}	L_{max}	L_{min}	L1%	L2%	L5%	L8%	L25%	L50%	L90%	L95%	L99%
Day	Min	54.0	61.4	50.6	61.0	60.4	58.8	57.1	53.7	52.8	51.2	51.0	50.8
	Max	68.2	71.7	67.6	71.3	70.9	70.0	69.3	68.7	68.4	67.8	67.8	67.6
Energy Average		60.5	Average:		64.0	63.5	62.1	61.1	58.4	56.7	54.9	54.6	54.3
Evening	Min	54.2	59.5	50.7	59.2	58.6	57.4	56.6	54.5	53.2	51.3	51.1	50.8
	Max	58.5	63.0	55.0	62.7	62.5	61.7	61.2	59.6	57.5	55.8	55.5	55.1
Energy Average		56.2	Average:		60.6	60.2	59.2	58.4	56.3	54.8	53.1	52.8	52.5
Night	Min	52.6	56.3	49.2	56.1	55.9	55.4	55.1	53.3	51.9	49.8	49.5	49.3
	Max	58.7	67.1	53.5	66.7	66.4	65.0	63.2	60.0	57.8	54.2	53.9	53.6
Energy Average		56.4	Average:		61.2	60.9	60.1	59.3	56.7	54.2	51.6	51.3	51.0

L_{eq} (dBA)		
24-Hour	Daytime	Nighttime
58.9	59.9	56.4

24-Hour CNEL (dBA)

63.7

URBAN CROSSROADS

Sun Lakes Village North Specific Plan Amendment No. 5

TRAFFIC ANALYSIS

CITY OF BANNING

PREPARED BY:

Aric Evatt, PTP
aevatt@urbanxroads.com

Charlene So, PE
cso@urbanxroads.com

Connor Paquin, PE
cpaquin@urbanxroads.com

SEPTEMBER 4, 2020

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LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CMP	Congestion Management Program
DIF	Development Impact Fee
E+P	Existing Plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
NCHRP	National Cooperative Highway Research Program
PCE	Passenger Car Equivalent
PHF	Peak Hour Factor
Project	Sun Lakes Village North Specific Plan Amendment No. 5
RCTC	Riverside County Transportation Commission
RivTAM	Riverside Transportation Analysis Model
RTP	Regional Transportation Plan
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategies
SHS	State Highway System
TA	Traffic Analysis
TUMF	Transportation Uniform Mitigation Fee
WRCOG	Western Riverside Council of Governments
V/C	Volume to Capacity

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1 INTRODUCTION

This report presents the results of the traffic analysis (TA) for the proposed Sun Lakes Village North Specific Plan Amendment No. 5 development ("Project"), which is located north of Sun Lakes Boulevard and east of Highland Springs Avenue in the City of Banning, as shown on Exhibit 1-1.

The purpose of this TA is to evaluate the potential deficiencies related to traffic, identify circulation system deficiencies that may result from the development of the proposed Project, and to recommend improvements to resolve identified deficiencies in order to achieve acceptable operational conditions at study area intersections. This TA has been prepared in accordance with the County of Riverside's Traffic Impact Analysis Preparation Guide (August 2008) and the California Department of Transportation (Caltrans) Guide for the Preparation of Traffic Impact Studies. (1) (2)

1.1 SUMMARY OF FINDINGS

The Project is to construct the following improvements as design features in conjunction with development of the site:

- Project to install a traffic signal at the intersection of Driveway 3/Country Club Drive & Sun Lakes Boulevard (#8).
- Project to modify the existing median on Sun Lakes Boulevard to provide a minimum 150-feet of storage for the eastbound left turn lane onto Sun Lakes Village Drive.
- According to the City of Banning Circulation Element, Sun Lakes Boulevard and Sun Lakes Village Drive are currently built out to their ultimate half-sections. As such, there are no roadway improvement recommendations. However, curb, gutter, and sidewalk improvements are recommended, as needed for site access along the Project's frontage, consistent with the City's standards.

Additional details and intersection lane geometrics are provided in Section 1.6 *Recommendations* of this report.

The proposed Project is not anticipated to require the construction of any off-site improvements, however, there are improvement needs identified at off-site intersections for future cumulative traffic analysis scenarios. As such, the Project Applicant's responsibility for the Project's contributions towards deficient off-site intersections is fulfilled through payment of fair share and/or payment into pre-existing fee programs (if applicable) that would be assigned to the future construction of the identified recommended improvements. The Project Applicant would be required to pay requisite fees and/or fair share contributions consistent with the City's requirements (see Section 7 *Local and Regional Funding Mechanisms*).

EXHIBIT 1-1: PRELIMINARY LAND USE PLAN



LEGEND:

RIRO	*= RIGHT-IN/RIGHT-OUT ONLY ACCESS*
FULL	*= FULL ACCESS*
P	*= PASSENGER CARS ONLY*
PT	*= PASSENGER CARS AND TRUCKS*

N

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URBAN CROSSROADS

1.2 PROJECT OVERVIEW

The Project is proposed to consist of the development of 877,298 square feet of industrial park use, 52,065 square feet of medical office use, and 37,189 square feet of commercial retail use. Vehicular access will be provided via the following driveways:

- Sun Lakes Village Drive via Driveway 1 – Full access for both passenger cars and trucks
- Sun Lakes Village Drive via Driveway 2 – Full access for passenger cars only
- Sun Lakes Boulevard via Driveway 3 – Full access for passenger cars only
- Sun Lakes Boulevard via Driveway 4 – Right-in/Right-out access for passenger cars only

Regional access to the Project site is available from the I-10 Freeway via the Highland Springs Avenue interchange. Exhibit 1-2 depicts the location of the proposed Project in relation to the existing roadway network and the study area intersections.

Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, 2017. (3) The proposed Project is anticipated to generate a total of 5,594 trip-ends per day on a typical weekday with 509 trips during the weekday AM peak hour and 619 trips during the weekday PM peak hour. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2020) Conditions
- Existing plus Project (E+P) Conditions
- Horizon Year (2040) Without Project Conditions
- Horizon Year (2040) With Project Conditions

1.3.1 EXISTING (2020) CONDITIONS

Information for Existing (2020) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

1.3.2 EXISTING PLUS PROJECT CONDITIONS

The Existing plus Project (E+P) analysis determines traffic deficiencies that would occur on the existing roadway system with the addition of Project traffic.

EXHIBIT 1-2: LOCATION MAP



LEGEND:

0 = *EXISTING INTERSECTION ANALYSIS LOCATION*

(0) = *FUTURE INTERSECTION ANALYSIS LOCATION*

N

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URBAN CROSSROADS

1.3.5 HORIZON YEAR (2040) CONDITIONS

Traffic projections for Horizon Year (2040) conditions were derived from the Riverside Transportation Analysis Model (RivTAM) using accepted procedures for model forecast refinement and smoothing. This scenario evaluates the circulation network in order to compare the findings between the County's currently adopted General Plan, which includes the future Sun Lakes Boulevard extension, and the proposed circulation network modifications proposed by the Project. The Horizon Year conditions analyses will be utilized to determine if improvements funded through regional transportation mitigation fee programs, such as the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) and Development Impact Fee (DIF) programs, can accommodate the long-range cumulative traffic at the target level of service (LOS) identified in the City of Banning (lead agency) General Plan. (4) Each of these regional transportation fee programs are discussed in more detail in Section 7 *Local and Regional Funding Mechanisms*.

1.4 STUDY AREA

The 10 study area intersections shown on Exhibit 1-2 and listed in Table 1-1 were selected for evaluation in this TA based on the study area utilized in the Sun Lakes Village North Specific Plan Amendment #4 Traffic Impact Study (September 30, 2005, prepared by RK Engineering Group, Inc.), referred to hereafter as the "2005 Traffic Study." The study area includes intersections where the Project is anticipated to contribute 50 or more peak hour trips per the County of Riverside's traffic study guidelines. (1) The "50 peak hour trip" criteria represents a minimum number of trips at which a typical intersection would have the potential to be substantively affected by a given development proposal. The 50 peak hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within Riverside County for estimating a potential area of influence (i.e., study area).

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction	CMP?
1	Highland Springs Av. & I-10 WB Ramps	City of Banning, City of Beaumont, Caltrans	No
2	Highland Springs Av. & I-10 EB Ramps	City of Banning, City of Beaumont, Caltrans	No
3	Highland Springs Av. & 2nd St.	City of Banning, City of Beaumont	No
4	Highland Springs Av. & 1st St./Sun Lakes Bl.	City of Banning, City of Beaumont	No
5	Sun Lakes Village Dr. & Dwy. 1 – Future Intersection	City of Banning	No
6	Sun Lakes Village Dr. & Dwy. 2 – Future Intersection	City of Banning	No
7	Sun Lakes Village Dr. & Sun Lakes Bl.	City of Banning	No
8	Dwy. 3/Country Club Dr. & Sun Lakes Bl.	City of Banning	No
9	Dwy. 4 & Sun Lakes Bl. – Future Intersection	City of Banning	No
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.	City of Banning	No

The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and updated most recently updated in 2011. The Riverside County Transportation Commission (RCTC) adopted the 2011 CMP for the County of Riverside in December 2011. (5) There are no study area intersections identified as a Riverside County CMP facility.

1.5 DEFICIENCIES

This section provides a summary of deficiencies by analysis scenario. Section 2 *Methodologies* provides information on the methodologies used in the analysis and Section 5 *E+P Traffic Conditions* and Section 6 *Horizon Year (2040) Traffic Conditions* includes the detailed analysis. A summary of LOS results for all analysis scenarios is presented on Exhibit 1-3.

1.5.1 E+P CONDITIONS

Intersections

The study area intersections are anticipated to operate at an acceptable LOS during the peak hours, consistent with Existing (2020) traffic conditions.

Off-Ramp Queues

Consistent with Existing (2020) traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows.

1.5.2 HORIZON YEAR (2040) CONDITIONS

Intersections

The following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Horizon Year (2040) Without Project:

- Highland Springs Avenue & I-10 Westbound Ramps (#1) – LOS E AM and PM peak hours
- Highland Springs Avenue & I-10 Eastbound Ramps (#2) – LOS E AM and PM peak hours
- Highland Springs Avenue & 2nd Street (#3) – LOS D AM peak hour only
- Highland Springs Avenue & 1st Street/Sun Lakes Boulevard (#4) – LOS D AM peak hour; LOS E PM peak hour
- Sun Lakes Village Drive & Sun Lakes Boulevard (#7) – LOS F PM peak hour only
- Driveway 3/Country Club Drive & Sun Lakes Boulevard (#8) – LOS F PM peak hour only
- Twin Hills Drive/Country Club Drive & Sun Lakes Boulevard (#10) – LOS F PM peak hour only

EXHIBIT 1-3: SUMMARY OF DEFICIENT INTERSECTIONS BY ANALYSIS SCENARIO

#	Intersection	Existing (2020)	E+P	Horizon Year (2040) Without Project	Horizon Year (2040) With Project
1	Highland Springs Av. & I-10 WB Ramps	A-C	A-C	D-E	D-E
2	Highland Springs Av. & I-10 EB Ramps	A-C	A-C	D-E	D-E
3	Highland Springs Av. & 2nd St.	A-C	A-C	D-E	D-E
4	Highland Springs Av. & 1st St./Sun Lakes Bl.	A-C	A-C	D-E	F
5	Sun Lakes Village Dr. & Dwy. 1	NA	A-C	NA	A-C
6	Sun Lakes Village Dr. & Dwy. 2	NA	A-C	NA	A-C
7	Sun Lakes Village Dr. & Sun Lakes Bl.	A-C	A-C	F	F
8	Dwy. 3/Country Club Dr. & Sun Lakes Bl.	A-C	A-C	F	A-C
9	Dwy. 4 & Sun Lakes Bl.	NA	A-C	NA	A-C
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.	A-C	A-C	F	F

Note: the acceptable LOS for the freeway ramps is D

LEGEND:

- ▪ AM PEAK HOUR
- ▪ PM PEAK HOUR
- ▪ LOS A-C
- ▪ LOS D-E
- ▪ LOS F

NA ▪ NOT AN ANALYSIS LOCATION FOR THIS SCENARIO

There are no additional study area intersections that are anticipated to operate at an unacceptable LOS with the addition of Project traffic. It should be noted, the intersection of Driveway 3/Country Club Drive & Sun Lakes Boulevard (#8) is anticipated to operate at an acceptable LOS during the peak hours with the implementation of the Project design features discussed in Section 1.6 *Recommendations* of this TA.

Off-Ramp Queues

Consistent with Existing (2020) traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Horizon Year (2040) Without Project and With Project traffic conditions.

1.6 RECOMMENDATIONS

1.6.1 SITE ADJACENT AND SITE ACCESS RECOMMENDATIONS

The following recommendations are based on the minimum improvements needed to accommodate site access and maintain acceptable peak hour operations. The site adjacent recommendations are shown on Exhibit 1-4.

Project to maintain existing control and lane geometrics at the intersection of Sun Lakes Village Drive & Sun Lakes Boulevard (#7).

Recommendation 1 – Sun Lakes Village Drive & Driveway 1 (#5) – The following improvement is necessary to accommodate site access:

- Project to construct a stop control on the westbound approach and a shared left-right turn lane.

Recommendation 2 – Sun Lakes Village Drive & Driveway 2 (#6) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach and a shared left-right turn lane.

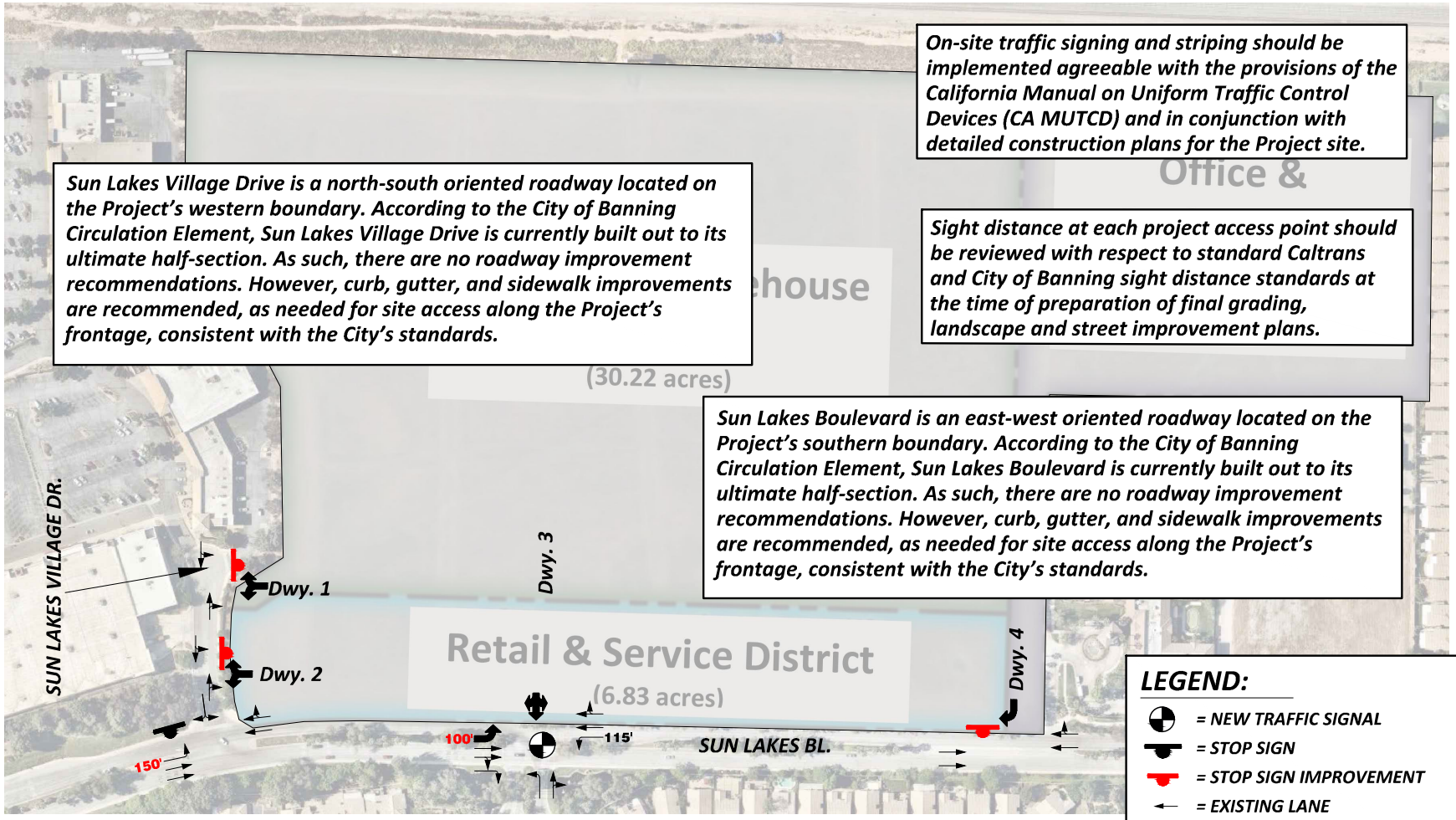
Recommendation 3 – Sun Lakes Village Drive & Sun Lakes Boulevard (#7) – The following improvement is necessary to accommodate site access:

- Project to modify the existing median on Sun Lakes Boulevard to provide a minimum 150-feet of storage for the eastbound left turn lane.

Recommendation 4 – Driveway 3 & Sun Lakes Boulevard (#8) – The following improvements are necessary to accommodate site access:

- Project to install a traffic signal.
- Project to construct a southbound shared left-through-right turn lane.
- Project to construct an eastbound left turn lane with a minimum of 100-feet of storage.

EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE ACCESS RECOMMENDATIONS



URBAN CROSSROADS

Recommendation 5 – Driveway 4 & Sun Lakes Boulevard (#8) – The following improvements are necessary to accommodate site access:

- Project to install a stop control on the southbound approach and a right turn lane. Project should construct the driveway to prohibit left-out turns onto Sun Lakes Boulevard.

Recommendation 6 – Sun Lakes Village Drive is a north-south oriented roadway located on the Project's western boundary. According to the City of Banning Circulation Element, Sun Lakes Village Drive is currently built out to its ultimate half-section. As such, there are no roadway improvement recommendations. However, curb, gutter, and sidewalk improvements are recommended, as needed for site access along the Project's frontage, consistent with the City's standards.

Recommendation 7 – Sun Lakes Boulevard is an east-west oriented roadway located on the Project's southern boundary. According to the City of Banning Circulation Element, Sun Lakes Boulevard is currently built out to its ultimate half-section. As such, there are no roadway improvement recommendations. However, curb, gutter, and sidewalk improvements are recommended, as needed for site access along the Project's frontage, consistent with the City's standards.

On-site traffic signing and striping should be implemented agreeable with the provisions of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and in conjunction with detailed construction plans for the Project site.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City of Banning sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

1.6.2 OFF-SITE RECOMMENDATIONS

The recommended improvements needed to address the cumulative deficiencies identified under Existing (2020), E+P, and Horizon Year (2040) traffic conditions are shown in Table 1-2. For those improvements listed in Table 1-2 and not constructed as part of the Project, the Project Applicant's responsibility for the Project's contributions towards deficient intersections is fulfilled through payment of fair share and/or TUMF/DIF program fees (if applicable) that would be assigned to construction of the identified recommended improvements. The Project Applicant would be required to pay TUMF/DIF and/or fair share fees consistent with the City's requirements (see Section 7 *Local and Regional Funding Mechanisms*).

Table 1-2

Summary of Improvements by Analysis Scenario

#	Intersection Location	Jurisdiction	Recommended Improvements[1]				Improvements in Fee Program?[1]	Project Responsibility[2]	Fair Share %[3]
			Existing (2020)	E+P	2040 Without Project	2040 With Project			
1	Highland Springs Av. & I-10 WB Ramps	Banning, Beaumont, Caltrans	None	None	Add SB free right turn lane Add WB left turn lane	Same Same	No No	Fair Share Fair Share	22.4%
2	Highland Springs Av. & I-10 EB Ramps	Banning, Beaumont, Caltrans	None	None	Add 2nd EB right turn lane	Same	No	Fair Share	29.5%
3	Highland Springs Av. & 2nd St.	Banning, Beaumont	None	None	Restripe the EB approach to provide dual left turn lanes and one shared through-right turn lane Modify the traffic signal to protect the eastbound and westbound left turns and to implement lead-lag operations for the eastbound and westbound left turns, with the eastbound left turn running as lag	Same Same	No No	Fair Share Fair Share	32.9%
4	Highland Springs Av. & 1st St./Sun Lakes Bl.	Banning, Beaumont	None	None	Add 2nd SB left turn lane Add 2nd WB through lane	Same Same	No No	Fair Share Fair Share	21.8%
7	Sun Lakes Village Dr. & Sun Lakes Bl.	Banning	None	None	Install a Traffic Signal	Same	No	Fair Share	34.2%
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.	Banning	None	None	Install a Traffic Signal	Same	No	Fair Share	6.7%

[1] Program improvements constructed by project may be eligible for fee credit. In lieu fee payment is at discretion of City.

[2] Identifies the Project's responsibility to construct an improvement or contribute a fee payment or fair share towards the implementation of the improvements shown.

[3] Represents the fair share percentage for the Project during the most impacted peak hour.

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2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. Since the City of Banning does not have their own traffic study guidelines, the methodologies described are generally consistent with the County of Riverside and Caltrans traffic study guidelines. (1) (2)

2.1 LEVEL OF SERVICE

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

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (6) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The City of Banning and City of Beaumont require signalized intersection operations analysis based on the methodology described in the HCM (6th Edition). Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections, LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1. Study area intersections have been evaluated using the Synchro (Version 10) analysis software package.

The traffic modeling and signal timing optimization software package Synchro (Version 10) is utilized to analyze signalized intersections within the City of Banning and City of Beaumont. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A	F
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B	F
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C	F
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D	F
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E	F
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up	F	F

Source: HCM, 6th Edition

A saturation flow rate of 1900 has been utilized for all study area intersections located within the City of Banning and the City of Beaumont. The peak hour traffic volumes are adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (6)

California Department of Transportation (Caltrans)

Per the Caltrans Guide for the Preparation of Traffic Impact Studies, the traffic modeling and signal timing optimization software package Synchro (Version 10) has also been utilized to analyze signalized intersections under Caltrans' jurisdiction, which include interchange to arterial ramps (i.e. I-10 Freeway ramps at Highland Springs Avenue). (2) Signal timing for the freeway arterial-to-ramp intersections have been obtained from Caltrans District 8 and were utilized for the purposes of this analysis.

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Banning and the City of Beaumont require the operations of unsignalized intersections be evaluated using the methodology described the HCM. (6) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay Per Vehicle (Seconds)	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Little or no delays.	0 to 10.00	A	F
Short traffic delays.	10.01 to 15.00	B	F
Average traffic delays.	15.01 to 25.00	C	F
Long traffic delays.	25.01 to 35.00	D	F
Very long traffic delays.	35.01 to 50.00	E	F
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F	F

Source: HCM, 6th Edition

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Per the HCM, the highest delay and associated LOS on the minor approach is reported for two-way stop-controlled intersections. For all-way stop controlled intersections, LOS is computed for the intersection as a whole and the average delay is reported (similar to signalized intersections).

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by the Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (7)

The signal warrant criteria for Existing conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The Caltrans CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (7) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing study area intersections for all analysis scenarios. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics (e.g. located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

Traffic signal warrant analyses were performed for the following unsignalized study area intersection shown in Table 2-3:

TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction
5	Sun Lakes Village Dr. & Dwy. 1 – Future Intersection	Banning
6	Sun Lakes Village Dr. & Dwy. 2 – Future Intersection	Banning
7	Sun Lakes Village Dr. & Sun Lakes Bl.	Banning
8	Dwy. 3/Country Club Dr. & Sun Lakes Bl.	Banning
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.	Banning

Although unsignalized, traffic signal warrants have not been performed for the intersection of Driveway 4 at Sun Lakes Boulevard since this intersection will be restricted to right-in/right-out access only. The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *E+P Traffic Conditions* and Section 6 *Horizon Year (2040) Traffic Conditions* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 FREEWAY OFF-RAMP QUEUING ANALYSIS

Consistent with Caltrans requirements, the 95th percentile queuing of vehicles has been assessed at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the I-10 Freeway at Highland Springs Avenue. Specifically, the queuing analysis is utilized to identify any potential queuing and "spill back" onto the I-10 Freeway mainline from the off-ramps.

The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential deficiencies/needs of the intersections with traffic added from the proposed Project. Storage (turn-pocket) length recommendations at the ramps have been based upon the 95th percentile queue resulting from the Synchro progression analysis. The footnote from the Synchro output sheets indicates if the 95th percentile cycle exceeds capacity. Traffic is simulated for two complete cycles of the 95th percentile traffic in Synchro in order to account for the effects of spillover between cycles. In practice, the 95th percentile queue shown will rarely be exceeded and the queues shown with the footnote are acceptable for the design of storage bays. The 95th percentile queue is derived from the average queue plus 1.65 standard deviations. The 95th percentile queue is not necessarily ever observed it is simply based on statistical calculations.

2.5 MINIMUM LEVEL OF SERVICE (LOS)

The definition of an intersection deficiency has been obtained from each of the applicable surrounding jurisdictions.

2.5.1 CITY OF BANNING

The City of Banning has established LOS C as the minimum level of service for all roadways/intersections within the City. Therefore, any City of Banning intersection operating at LOS D, E, or F will be considered deficient for the purposes of this analysis. LOS D is considered acceptable for intersections along Ramsey Street and the I-10 interchange intersections.

2.5.2 CITY OF BEAUMONT

The City of Banning has established LOS D as the minimum level of service for all roadways/intersections within the City (Policy 10 of the General Plan Circulation Element). Therefore, any intersection operating at LOS E or F will be considered deficient for the purposes of this analysis.

2.5.3 CALTRANS

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State Highway System (SHS) facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. Consistent with the City of Banning minimum LOS of LOS D at the I-10 interchange, LOS D will be used as the target LOS for both arterial-to-freeway ramps and freeway mainline segments and ramp junctions.

2.6 DEFICIENCY CRITERIA

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. To determine whether the addition of project traffic at a study intersection results in a direct project-related deficiency, the following thresholds will be utilized:

- A project-related traffic deficiency occurs at a study intersection if the addition of project-generated trips reduces the peak hour level of service of the study intersection to change from acceptable level of service (LOS A, B, C or D or LOS A, B, and C for City of Banning) to an unacceptable level of service (LOS E or F or LOS D, E, or F for City of Banning);
- A cumulative traffic deficiency occurs at a study intersection if the Project contributes peak hour trips to an intersection that is anticipated to operate at a deficient LOS without the Project (LOS E or F or LOS D, E, or F for City of Banning).

2.7 PROJECT FAIR SHARE CALCULATION METHODOLOGY

Improvements found to be included in the TUMF and/or DIF will be identified as such. For improvements that do not appear to be in either of the pre-existing fee programs, a fair share contribution based on the Project's proportional share may be imposed in order to address the Project's share of deficiencies in lieu of construction. It should be noted that fair share calculations are for informational purposes only and the City Traffic Engineer will determine the appropriate improvements to be implemented by a project (to be identified in the conditions of approval).

The Project's fair share contribution is determined based on the following equations, which are the ratio of Project traffic to net new traffic (where net new traffic is the future traffic less existing traffic):

Project Fair Share % = Project (Long-Range) Traffic / (2040 Total Traffic – Existing Traffic)

3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Banning General Plan Circulation Network, and a review of existing peak hour intersection operations, traffic signal warrant, and off-ramp queuing analyses.

3.1 EXISTING CIRCULATION NETWORK

The study area includes a total of 10 existing and future intersections as shown previously on Exhibit 1-2, where the Project is anticipated to contribute 50 or more peak hour trips, and is consistent with the 2005 Traffic Study. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 GENERAL PLAN CIRCULATION ELEMENTS

As noted previously, the Project site is located within the City of Banning. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on City of Banning General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Banning General Plan Circulation Element and Exhibit 3-3 illustrates the City of Banning General Plan roadway cross-sections.

Urban Arterials are six-lane divided roadways (typically divided by a raised median or painted two-way turn-lane) with a 134-foot right-of-way and a 110-foot curb-to-curb measurement. These roadways serve both regional through-traffic and inter-city traffic and typically direct traffic onto and off-of the freeways. The following study area roadway within the City of Banning is classified as an Urban Arterial:

- Highland Springs Avenue, south of Wilson Street

Major Roadways are four lane divided roadways and may provide on-street parking. These roadways typically have a 100-foot right-of-way and a 76-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas and serve to move large volumes of inter-city traffic. The following study area roadway within the City of Banning is classified as a Major Roadway:

- Sun Lakes Boulevard

Secondary Streets are four-lane roadways and may include a painted median. These roadways typically have an 88-foot right-of-way and a 64-foot curb-to-curb measurement. These roadways typically direct traffic through major development areas and a lesser capacity than Major Roadways. The following study area roadway within the City of Banning is classified as a Secondary Street:

- Highland Home Road, north of Sun Lakes Boulevard

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



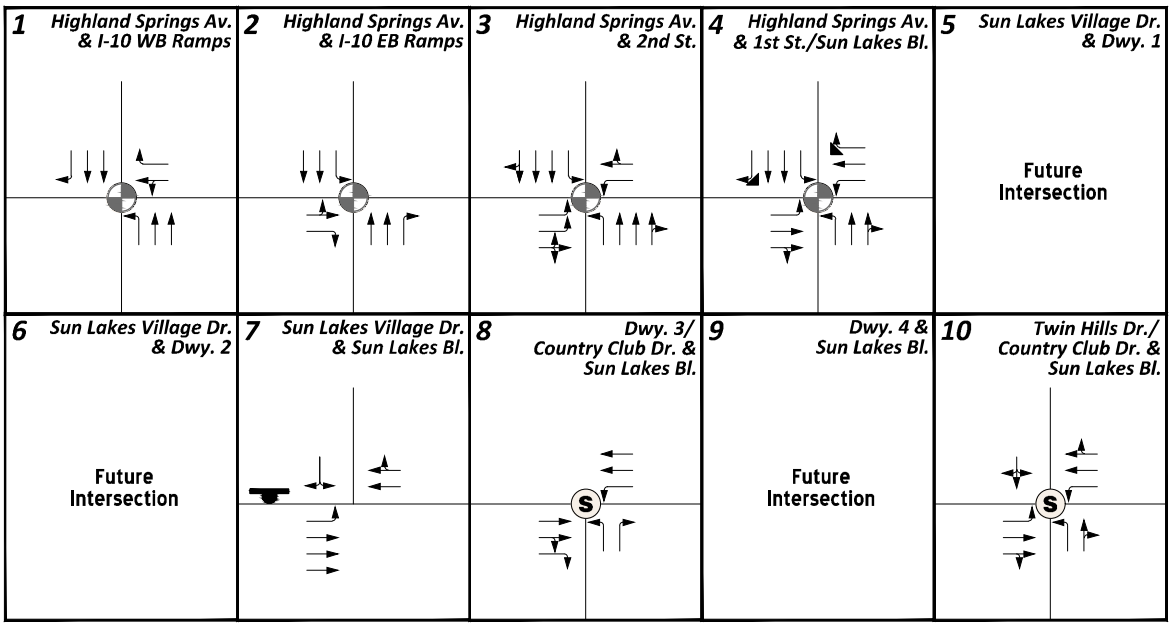
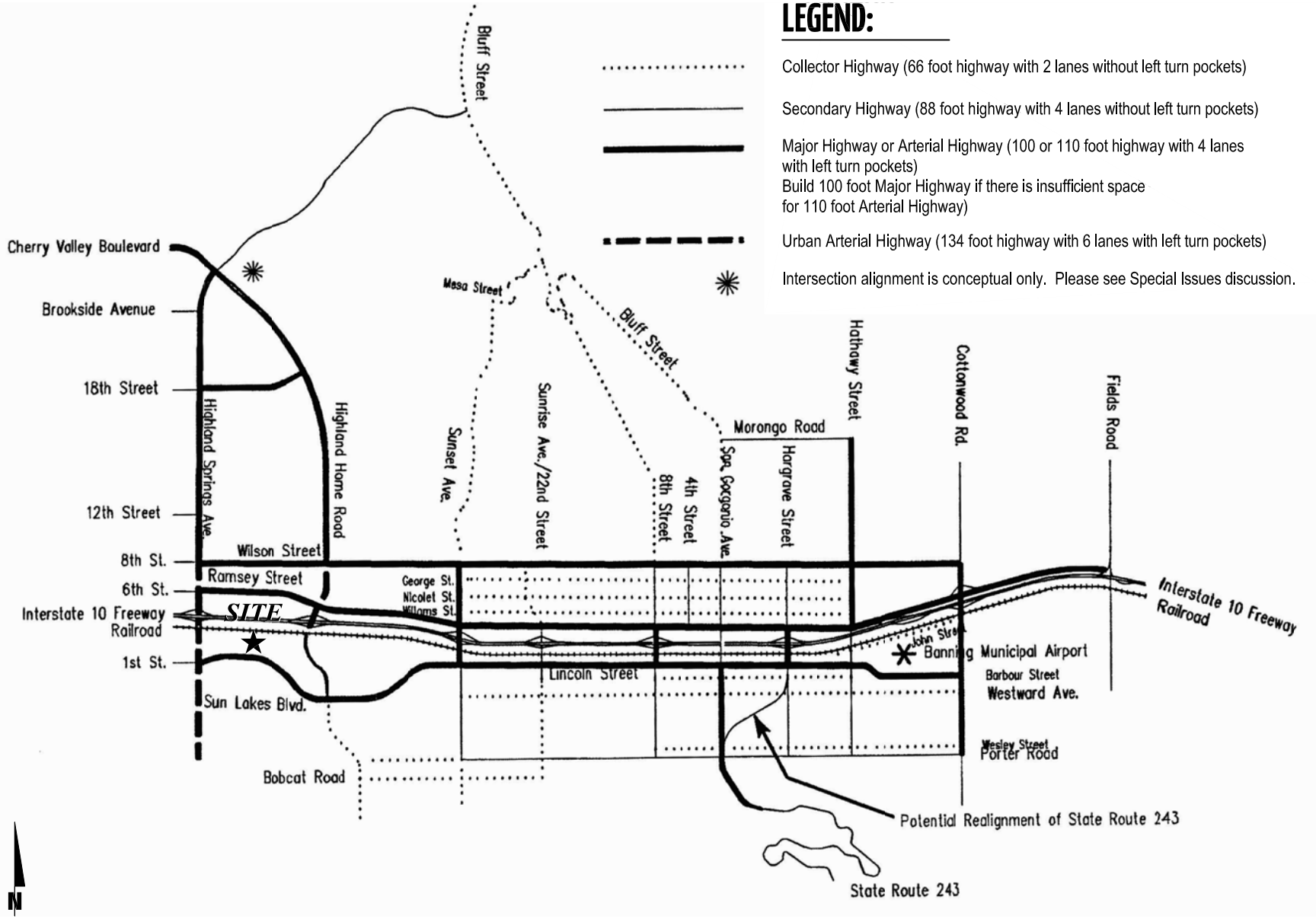
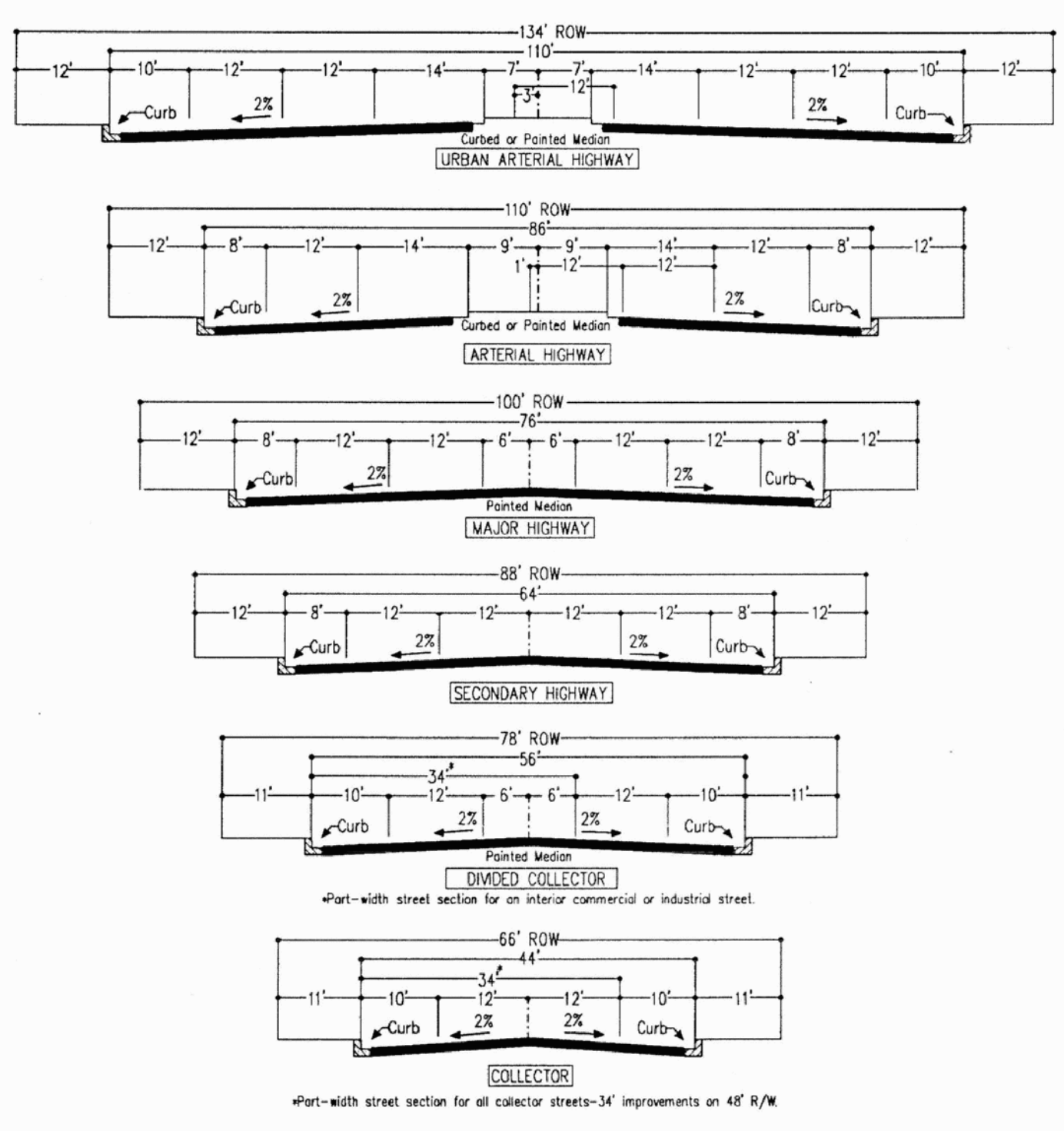


EXHIBIT 3-2: CITY OF BANNING GENERAL PLAN CIRCULATION ELEMENT



URBAN CROSSROADS

EXHIBIT 3-3: CITY OF BANNING GENERAL PLAN ROADWAY CROSS-SECTIONS



SOURCE: CITY OF BANNING (June 6, 2005)

Collector Streets are two-lane roadways and provide on-street parking on both sides. These roadways typically have a 66-foot right-of-way and a 44-foot curb-to-curb measurement. These roadways provide connections to secondary streets, arterials, and freeways, with most traffic being through-traffic or intra-city traffic. The following study area roadway within the City of Banning is classified as a Collector Street:

- Highland Home Road, south of Sun Lakes Boulevard

3.3 CITY OF BEAUMONT GENERAL PLAN CIRCULATION ELEMENT

The study area is also partially located within the County of Riverside. Exhibit 3-4 shows the County of Riverside General Plan Circulation Element, and Exhibit 3-5 illustrates the County of Riverside General Plan roadway cross-sections.

3.4 BICYCLE & PEDESTRIAN FACILITIES

The City of Banning General Plan does not include a bike facility exhibit. Exhibit 3-6 illustrates the existing pedestrian facilities, including sidewalks and crosswalks. As shown on Exhibit 3-6, there are existing pedestrian facilities in the vicinity of the Project site that would likely serve pedestrians.

3.5 TRANSIT SERVICE

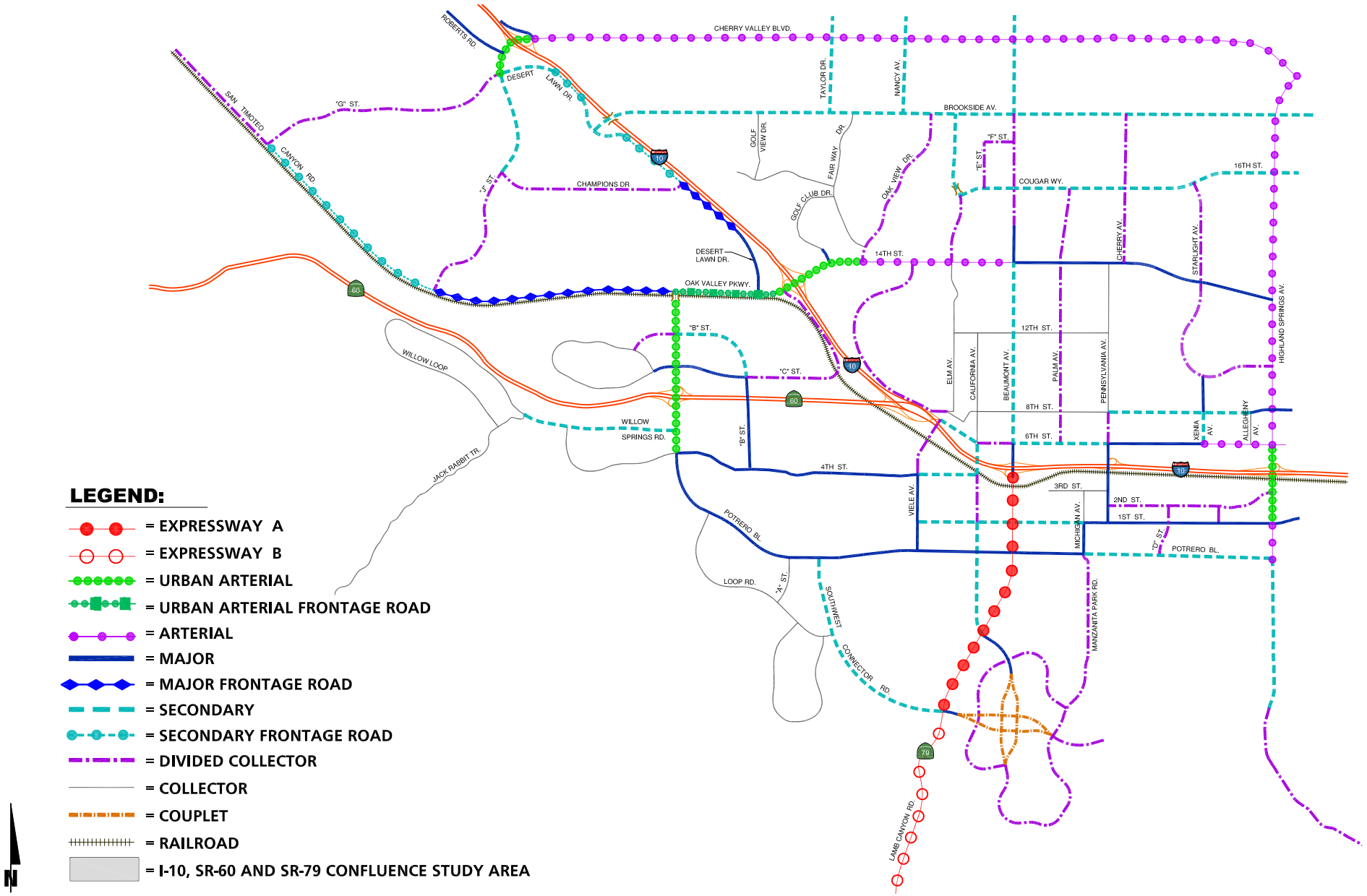
The study area is currently served by the Beaumont Transit with bus services along Highland Springs Avenue, 2nd Street, and 1st Street via Route, Route 4, and Community Link 120/125. The study area is also served by Pass Transit with bus service along Highland Springs Avenue, 2nd Street, and 1st Street via Route 1, Route 5, and Route 6. The transit services are illustrated on Exhibit 3-7. These transit routes could potentially serve the Project. Transit service is reviewed and updated by Beaumont Transit and Pass Transit periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.6 EXISTING TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in May 2018, November 2019, and July 2020. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

EXHIBIT 3-4: CITY OF BEAUMONT GENERAL PLAN CIRCULATION ELEMENT



URBAN CROSSROADS

EXHIBIT 3-5: CITY OF BEAUMONT GENERAL PLAN ROADWAY CROSS-SECTIONS

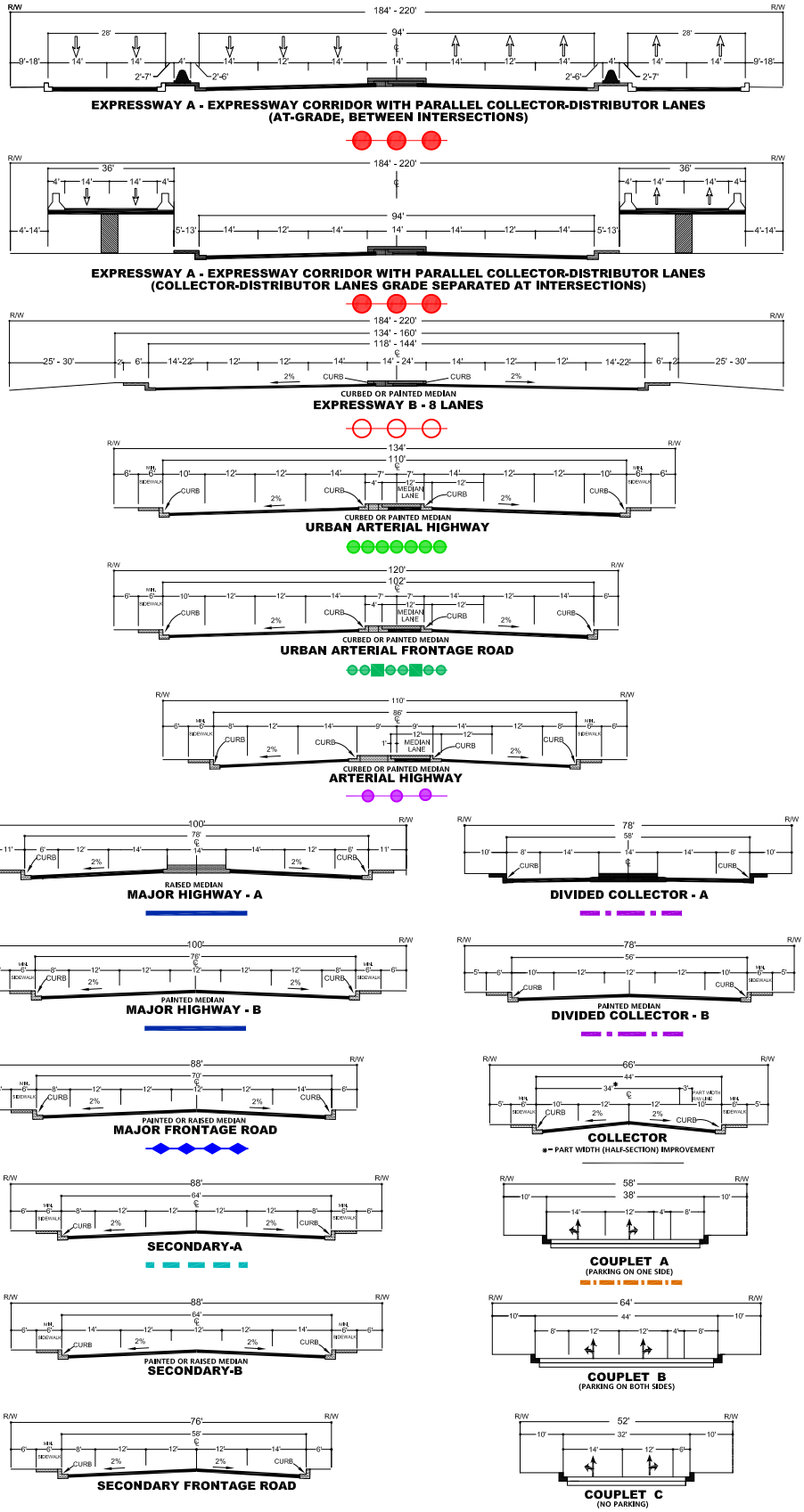
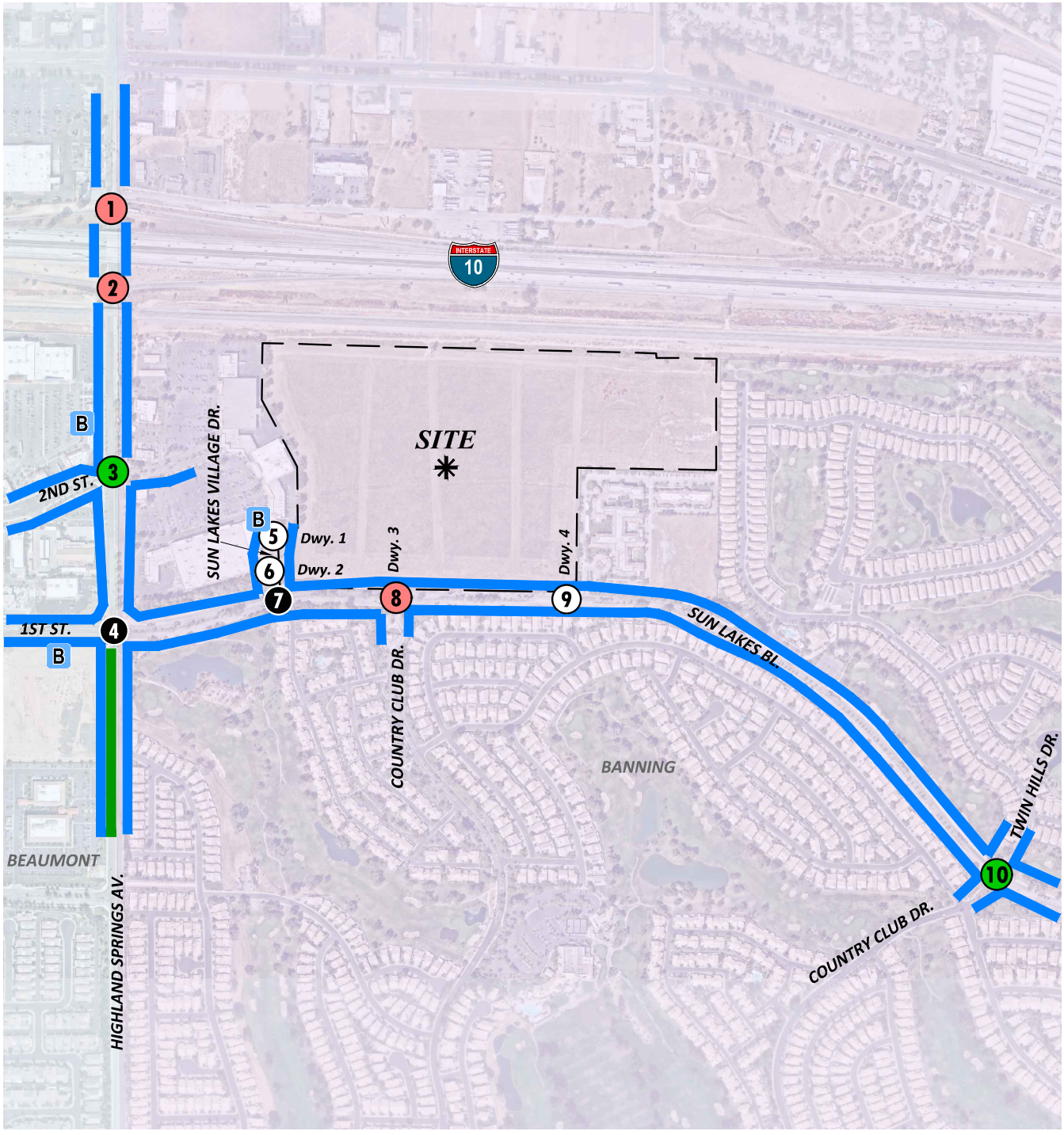


EXHIBIT 3-6: EXISTING PEDESTRIAN FACILITIES

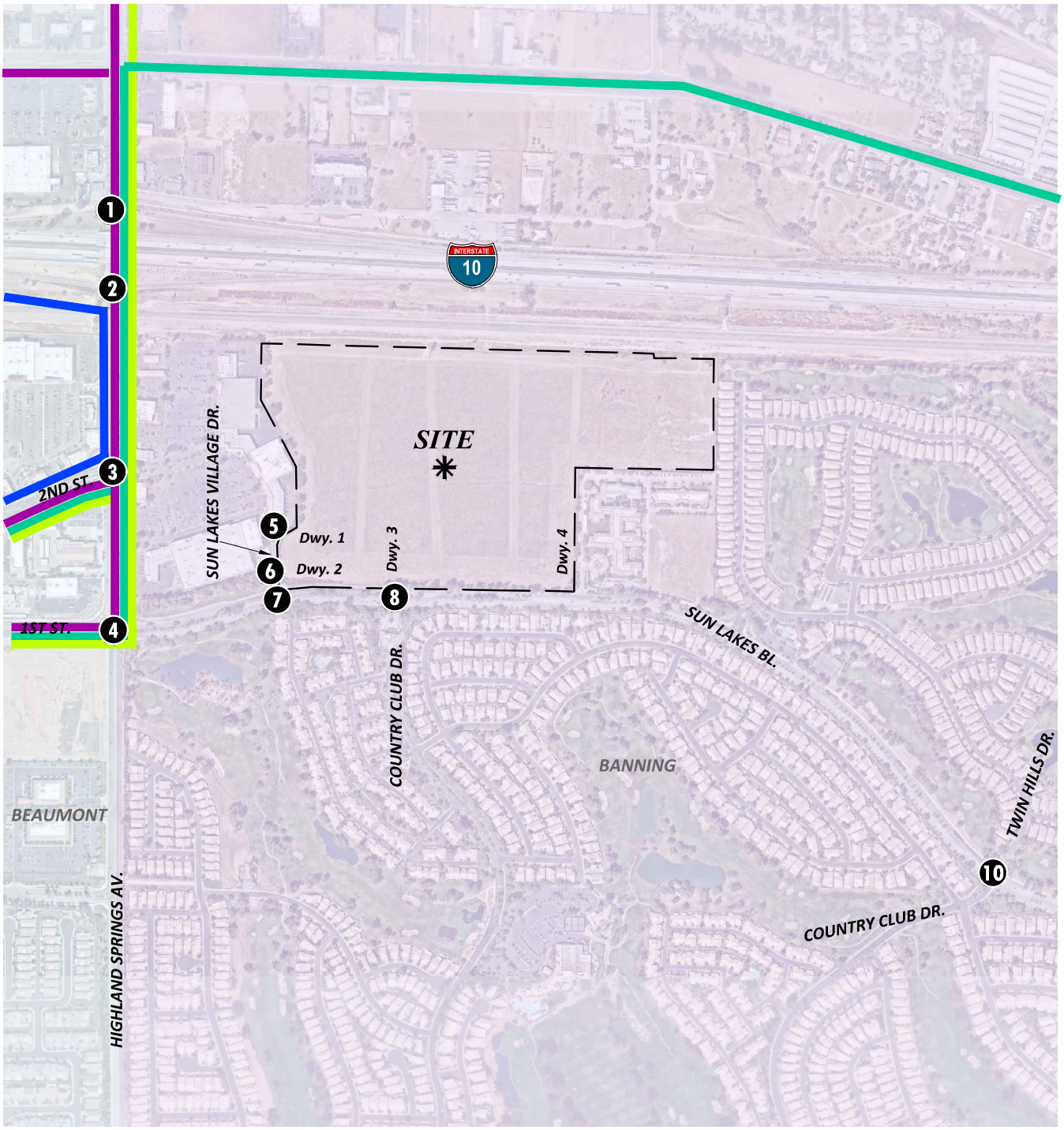


LEGEND:

- = SIDEWALK
- = BIKE LANE
- B = BUS STOP
- 0 = NO CROSSWALK
- 0 = FUTURE INTERSECTION
- 0 = CROSSWALK ON ALL APPROACHES
- 0 = CROSSWALK ON TWO APPROACHES

N

EXHIBIT 3-7: EXISTING TRANSIT ROUTES



LEGEND:

- = ROUTES 3 & 4-BEAUMONT TRANSIT
- = COMMUTER LINK 120/125 COMBO-BEAUMONT TRANSIT
- = PASS TRANSIT ROUTE 1
- = PASS TRANSIT ROUTE 5/6

N

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URBAN CROSSROADS

Due to the currently ongoing COVID-19 pandemic, schools and businesses within the study area were closed or operating at less than full capacity at the time this study was prepared. As such, historic (2018 and 2019) traffic counts were utilized in conjunction with a 2% growth rate to reflect 2020 conditions. The 2018 and 2019 weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. For the intersections where historic traffic counts were not readily available, traffic counts were collected in July 2020. A growth rate has been applied to these 2020 traffic counts, based on the growth at other study area intersections, to reflect pre-COVID-19 conditions. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1. These raw turning volumes have been flow conserved between intersections with limited access, no access, and where there are currently no uses generating traffic.

The traffic counts collected in May 2018, November 2019, and July 2020 include the following vehicle classifications: Passenger Cars, 2-Axle Trucks, 3-Axle Trucks, and 4 or More Axle Trucks. To represent the effects large trucks, buses and recreational vehicles have on traffic flow; all trucks were converted into Passenger Car Equivalent (PCE). By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and slow-down is much longer than for passenger cars and varies depending on the type of vehicle and number of axles. For the purpose of this analysis, a PCE factor of 1.5 has been applied to 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks to estimate each turning movement. These factors are consistent with the values recommended for use in the San Bernardino County CMP and are in excess of the factor recommended for use in the County of Riverside traffic study guidelines. (8) Although the County of Riverside has a recommended PCE factor of 2.0, the San Bernardino County CMP PCE factors have been utilized in an effort to conduct a more conservative analysis.

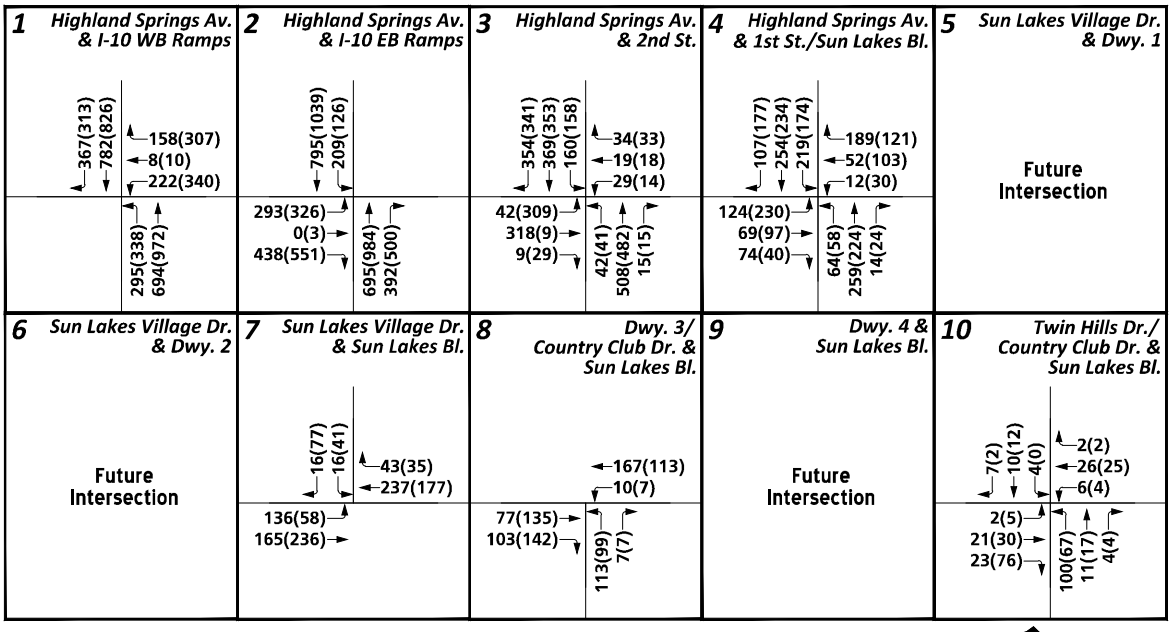
Existing weekday Average Daily Traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-8. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 13.56 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.37 percent. As such, the above equation utilizing a factor of 13.56 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 7.37 percent (i.e., 1/0.0737 = 13.56) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes are also shown on Exhibit 3-8.

EXHIBIT 3-8: EXISTING (2020) TRAFFIC VOLUMES (IN PCE)





3.7 EXISTING (2020) INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1 which indicates that the study area intersections are currently operating at an acceptable LOS during the peak hours.

It should be noted, based on field observations, the intersections of I-10 Westbound Ramps & Highland Springs Avenue (#1) and I-10 Eastbound Ramps & Highland Springs Avenue (#2) experienced queuing issues along Highland Springs Avenue during the AM peak hour. The northbound and southbound left turns onto the I-10 Freeway experienced heavy queues on Highland Springs Avenue only (not on the off-ramps). However, the entire length of the northbound and southbound left turn queues cleared each cycle. As such, the intersection operations analysis results shown in Table 3-1 reflect the field conditions at the time the 2019 traffic counts were collected the I-10 Freeway/Highland Springs Avenue interchange ramp-to-arterial intersections.

Consistent with Table 3-1, a summary of the peak hour intersection LOS for Existing conditions is shown on Exhibit 3-10. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

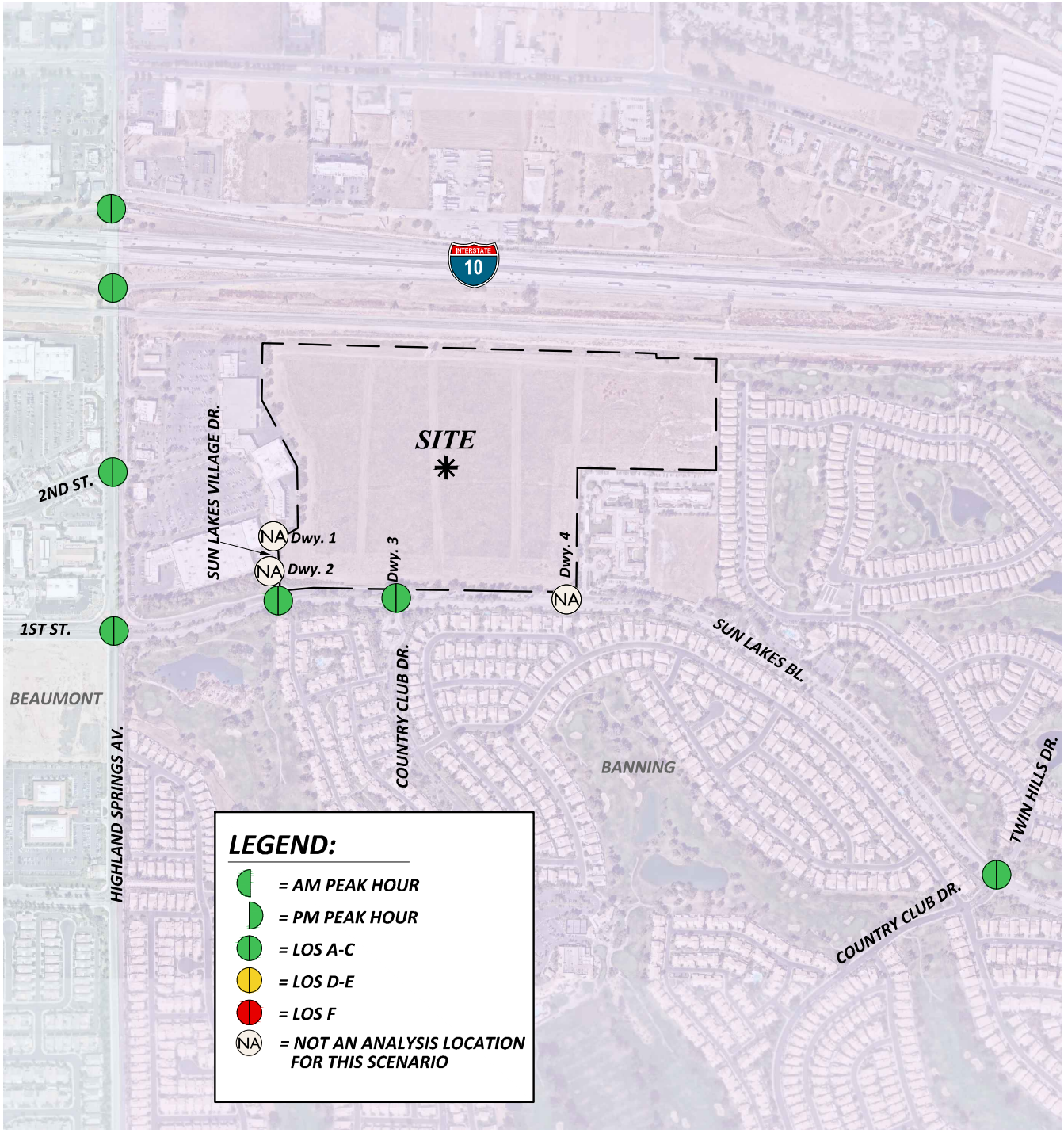
3.8 EXISTING (2020) TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. There are no unsignalized study area intersections that currently warrant a traffic signal for Existing (2020) traffic conditions (see Appendix 3.3).

3.9 EXISTING (2020) OFF-RAMP QUEUING ANALYSIS

A queuing analysis was performed for the off-ramps at the I-10 Freeway at Highland Springs Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the I-10 Freeway mainline. Queuing analysis findings are presented in Table 3-2. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown in Table 3-2, there are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows. This finding is consistent with field observations at the time traffic counts were conducted at the I-10 Freeway/Highland Springs Avenue interchange. Worksheets for Existing (2020) traffic conditions off-ramp queuing analysis are provided in Appendix 3.4.

EXHIBIT 3-9: EXISTING (2020) SUMMARY OF LOS



Note: the acceptable LOS for the freeway ramps is D

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Table 3-1

Intersection Analysis for Existing (2020) Conditions

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service		Acceptable LOS[4]
			Northbound			Southbound			Eastbound			Westbound							
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
1	Highland Springs Av. & I-10 WB Ramps	TS	1	2	0	0	2	1	0	0	0	0	1	1	23.5	31.5	C	C	D
2	Highland Springs Av. & I-10 EB Ramps	TS	0	2	1	1	2	0	0	1	1	0	0	0	23.4	21.5	C	C	D
3	Highland Springs Av. & 2nd St.	TS	1	3	0	1	3	0	2	1	0	1	1	0	23.4	19.5	C	B	C
4	Highland Springs Av. & 1st St./Sun Lakes Bl.	TS	1	2	0	1	2	1>	1	2	0	1	1	1>	25.1	15.4	C	B	C
5	Sun Lakes Village Dr. & Dwy. 1		Future Intersection																
6	Sun Lakes Village Dr. & Dwy. 2		Future Intersection																
7	Sun Lakes Village Dr. & Sun Lakes Bl.	CSS	0	0	0	0	1	0	1	3	0	0	2	0	12.1	10.5	B	B	C
8	Dwy. 3/Country Club Dr. & Sun Lakes Bl.	AWS	1	0	1	0	0	0	0	2	1	1	2	0	8.7	8.2	A	A	C
9	Dwy. 4 & Sun Lakes Bl.		Future Intersection																
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.	AWS	1	1	0	0	1	0	1	2	0	1	2	0	8.6	8.0	A	A	C

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; d= Defacto Right Turn Lane; > = Free Right Turn Lane

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal

[4] Minimum acceptable LOS for each applicable jurisdiction.

Table 3-2

Peak Hour Queuing Summary for Existing (2020) Conditions

Intersection	Movement	Available Stacking Distance (Feet)	95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM
Highland Springs Av. & I-10 WB Ramps	WBL/T	1,600	263	425 [2]	Yes	Yes
	WBR	350	57	207	Yes	Yes
Highland Springs Av. & I-10 EB Ramps	EBL/T	1,300	278	281	Yes	Yes
	EBR	630	366	559 [2]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

[2] 95th percentile volume exceeds capacity, queue may be longer.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

3.10 EXISTING DEFICIENCIES AND IMPROVEMENTS

3.10.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

All existing study area intersections currently operate at an acceptable LOS; therefore, no improvements are identified for Existing (2020) traffic conditions.

3.10.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

As shown previously in Table 3-2, there are currently no peak hour queuing issues at the I-10 Freeway and Highland Springs Avenue interchange for Existing (2020) traffic conditions. As such, no improvements have been identified.

4 PROJECTED FUTURE TRAFFIC

The Project is to consist of 877,298 square feet of industrial park use, 52,065 square feet of medical office use, and 37,189 square feet of commercial retail use. Vehicular access will be provided via the following driveways:

- Sun Lakes Village Drive via Driveway 1 – Full access for both passenger cars and trucks
- Sun Lakes Village Drive via Driveway 2 – Full access for passenger cars only
- Sun Lakes Boulevard via Driveway 3 – Full access for passenger cars only
- Sun Lakes Boulevard via Driveway 4 – Right-in/Right-out access for passenger cars only

Regional access to the Project site is available from the I-10 Freeway via the Highland Springs Avenue interchange.

4.1 PROJECT TRIP GENERATION

4.1.1 PROPOSED PROJECT TRIP GENERATION

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

In order to develop the traffic characteristics of the proposed Project, trip-generation statistics published in the ITE Trip Generation Manual (10th Edition, 2017) has been used. For purposes of this analysis, the following ITE land use codes and vehicle mixes have been utilized:

- Based on the types of uses anticipated to be developed within the business park area, the trip generation rates for ITE land use code 130 (Industrial Park) have been used to derive site specific trip generation estimates for the proposed industrial use. The vehicle mix has been obtained from the ITE's Trip Generation Manual Supplement (dated February 2020). This study provides the following vehicle mix: AM Peak Hour: 88.0% passenger cars and 12.0% trucks; PM Peak Hour: 90.0% passenger cars and 10.0% trucks; Weekday Daily: 85.0% passenger cars and 15.0% trucks. The truck percentages were further broken down by axle type per the following South Coast Air Quality Management District (SCAQMD) recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.
- A medical-dental office building is a facility that provides diagnoses and outpatient care on a route basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility.
- A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to service its own parking demands.

Internal capture is a percentage reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site. In other words, trips may be made between individual retail uses on-site or between the retail and industrial uses (employees) and

can be made either by walking or using internal roadways without using external streets (e.g., restaurant to retail). Internal capture reductions between the proposed land uses have been considered based on the ITE Trip Generation Handbook, 3rd Edition (2017). (3)

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. These types of trips are many times associated with retail uses. As the Project is proposed to include retail uses, applicable pass-by reduction percentages have been obtained and applied from the ITE Trip Generation Handbook, 3rd Edition (2017). (3)

Table 4-1 presents the trip generation rates for each of the land uses above. A summary of the Project's trip generation is shown in Table 4-2 in actual vehicles and in Table 4-3 in PCE. PCE trip generation has been utilized for the purposes of the operations analysis. As shown in Table 4-2, the proposed development is anticipated to generate a net total of 5,594 trip-ends per day on a typical weekday with 509 trips during the weekday AM peak hour and 619 trips during the weekday PM peak hour.

4.1.2 TRIP GENERATION COMPARISON

The proposed Project trips have been compared to the anticipated trips generated from the 2005 Traffic Study. As shown in Table 4-2, the proposed Project is anticipated to generate 5,234 fewer daily trips, with 238 fewer AM peak hour trips and 437 fewer PM peak hour trips.

4.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered to identify the route where the Project traffic would distribute. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site for the retail use, industrial passenger cars, and truck traffic and is generally consistent with the 2005 Traffic Study. The Project trip distribution patterns for the retail use, industrial passenger cars, and trucks were developed based on an understanding of existing travel patterns in the area, the geographical location of the site, and the site's proximity to the regional arterial and state highway system. The future extension of Sun Lakes Boulevard is assumed to be completed for long-range conditions only. As such, separate distributions have been prepared for near-term and long-range conditions.

Trip distribution patterns are shown on the following exhibits:

- Exhibit 4-1: Near-Term Industrial Park Truck
- Exhibit 4-2: Near-Term Industrial Park Passenger Cars
- Exhibit 4-3: Near-Term Retail/Medical Office
- Exhibit 4-4: Long-Range Industrial Park Truck
- Exhibit 4-5: Long-Range Industrial Park Passenger Cars
- Exhibit 4-6: Long-Range Retail/Medical Office

Table 4-1

Trip Generation Rates

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Actual Vehicle Trip Generation Rates									
Industrial Park[3]	TSF	130	0.324	0.076	0.400	0.084	0.316	0.400	3.370
Passenger Cars (AM-88.0%; PM-90.0%; Daily-85.0%)			0.285	0.067	0.348	0.076	0.284	0.348	2.865
2-Axle Trucks (AM-2.00%; PM-1.67%; Daily-2.51%)			0.006	0.002	0.009	0.001	0.005	0.009	0.084
3-Axle Trucks (AM-2.48%; PM-2.07%; Daily-3.11%)			0.008	0.002	0.011	0.002	0.007	0.011	0.105
4-Axle+ Trucks (AM-7.51%; PM-6.26%; Daily-9.39%)			0.024	0.006	0.032	0.005	0.020	0.033	0.316
Passenger Car Equivalent (PCE) Trip Generation Rates[4]									
Industrial Park[3]	TSF	130	0.324	0.076	0.400	0.084	0.316	0.400	3.370
Passenger Cars			0.285	0.067	0.352	0.076	0.284	0.360	2.865
2-Axle Trucks (PCE = 1.5)			0.010	0.002	0.012	0.002	0.008	0.010	0.127
3-Axle Trucks (PCE = 2.0)			0.016	0.004	0.020	0.003	0.013	0.017	0.209
4-Axle+ Trucks (PCE = 3.0)			0.073	0.017	0.090	0.016	0.059	0.075	0.949
Medical-Dental Office	720	TSF	2.168	0.612	2.780	0.969	2.491	3.460	34.800
Shopping Center	820	TSF	0.583	0.357	0.940	1.829	1.981	3.810	37.750

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

[2] TSF = thousand square feet

[3] Vehicle Mix Source: ITE Trip Generation Handbook Supplement (2020), Appendix C.
Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

[4] PCE factors per SBCTA CMP: 2-axle = 1.5; 3-axle = 2.0; 4+-axle = 3.0.

Table 4-2

Project Trip Generation Summary (Actual Vehicles)

Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Industrial Park	877.298	TSF							
Passenger Cars:			250	59	309	66	250	316	2,514
Truck Trips:									
2-axle:			6	1	7	1	5	6	74
3-axle:			7	2	9	2	6	8	92
4+-axle:			21	5	26	5	17	22	278
- Truck Trips			34	8	42	8	28	36	444
Industrial Park Subtotal			***284***	***67***	***351***	***74***	***278***	***352***	***2,958***
Medical Office	52.065	TSF	113	32	145	50	130	180	1,812
Internal Capture			-4	-7	-11	-1	-5	-6	-62
Office Subtotal			***109***	***25***	***134***	***49***	***125***	***174***	***1,750***
Commercial Retail	37.189	TSF	22	13	35	68	74	142	1,404
Internal Capture			-7	-4	-11	-5	-1	-6	-60
Pass-By (34% PM/Daily)			0	0	0	-21	-21	-43	-458
Retail Subtotal			***15***	***9***	***24***	***42***	***51***	***93***	***886***
TOTAL TRIPS (Actual Vehicles) [2]			**408**	**101**	**509**	**165**	**454**	**619**	**5,594**
Total Trips from Previous Traffic Study			**502**	**245**	**747**	**454**	**602**	**1,056**	**10,828**
Net Difference in Trips			**-94**	**-144**	**-238**	**-289**	**-148**	**-437**	**-5,234**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

Table 4-3

Project Trip Generation Summary (PCE)

Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Industrial Park	877.298	TSF							
Passenger Cars:			250	59	309	66	250	316	2,514
Truck Trips:									
2-axle:			9	2	11	2	7	9	112
3-axle:			14	3	17	3	11	14	184
4+-axle:			64	15	79	14	52	66	834
- Truck Trips			87	20	107	19	70	89	1,130
Industrial Park Subtotal			***337***	***79***	***416***	***85***	***320***	***405***	***3,644***
Medical Office	52.065	TSF	113	32	145	50	130	180	1,812
Internal Capture			-4	-7	-11	-1	-5	-6	-62
Office Subtotal			***109***	***25***	***134***	***49***	***125***	***174***	***1,750***
Commercial Retail	37.189	TSF	22	13	35	68	74	142	1,404
Internal Capture			-7	-4	-11	-5	-1	-6	-60
Pass-By (34% PM/Daily)			0	0	0	-21	-21	-42	-458
Retail Subtotal			***15***	***9***	***24***	***42***	***51***	***93***	***886***
TOTAL TRIPS (PCE) [2]			**461**	**113**	**574**	**176**	**496**	**672**	**6,280**
Total Trips from Previous Traffic Study			**502**	**245**	**747**	**454**	**602**	**1,056**	**10,828**
Net Difference in Trips			**-41**	**-132**	**-173**	**-278**	**-106**	**-384**	**-4,548**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

EXHIBIT 4-1: PROJECT (TRUCK) NEAR-TERM TRIP DISTRIBUTION



LEGEND:

10 = *PERCENT TO/FROM PROJECT*

N

12927 - trip.dwg

EXHIBIT 4-2: PROJECT (INDUSTRIAL CAR) NEAR-TERM TRIP DISTRIBUTION

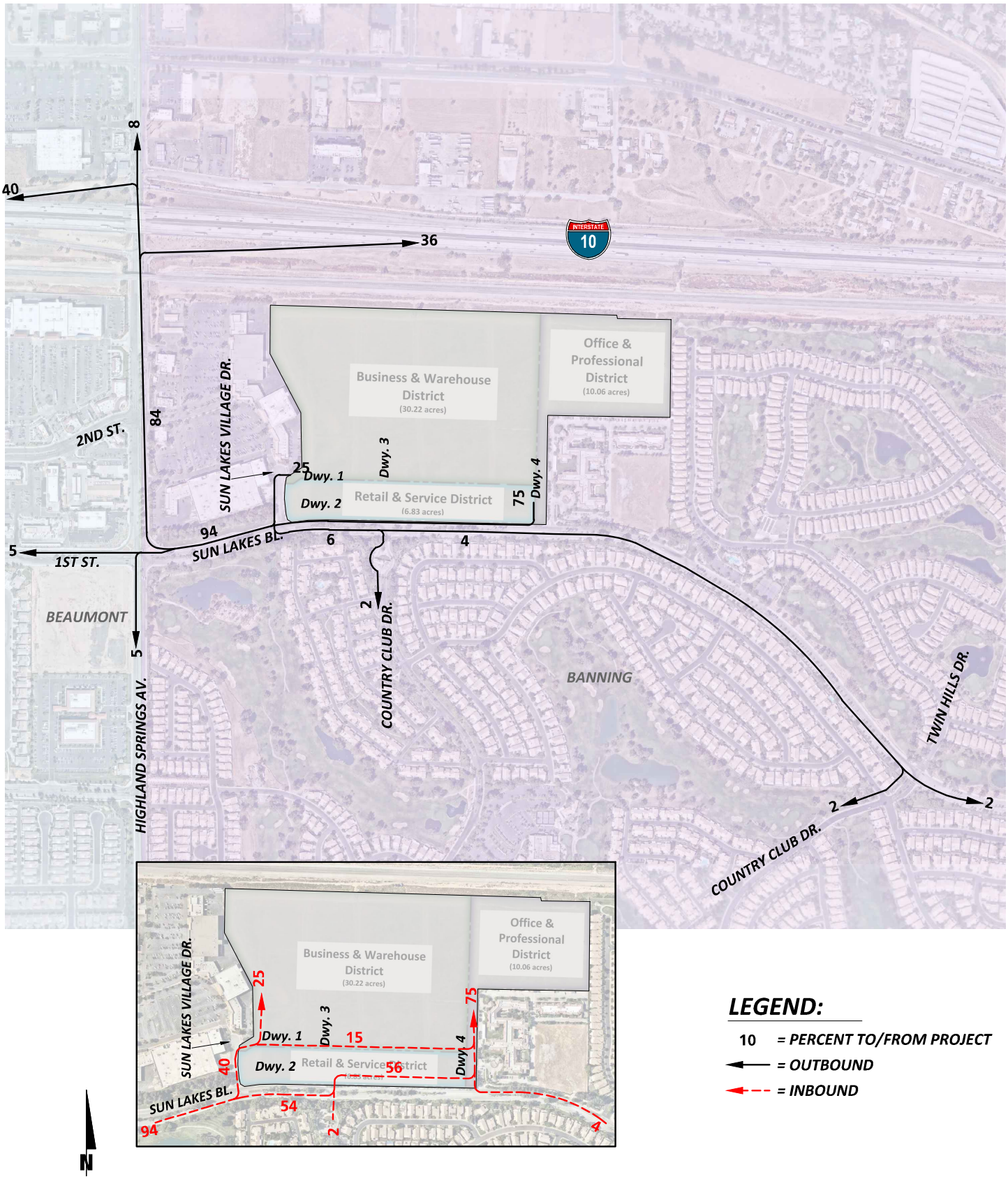
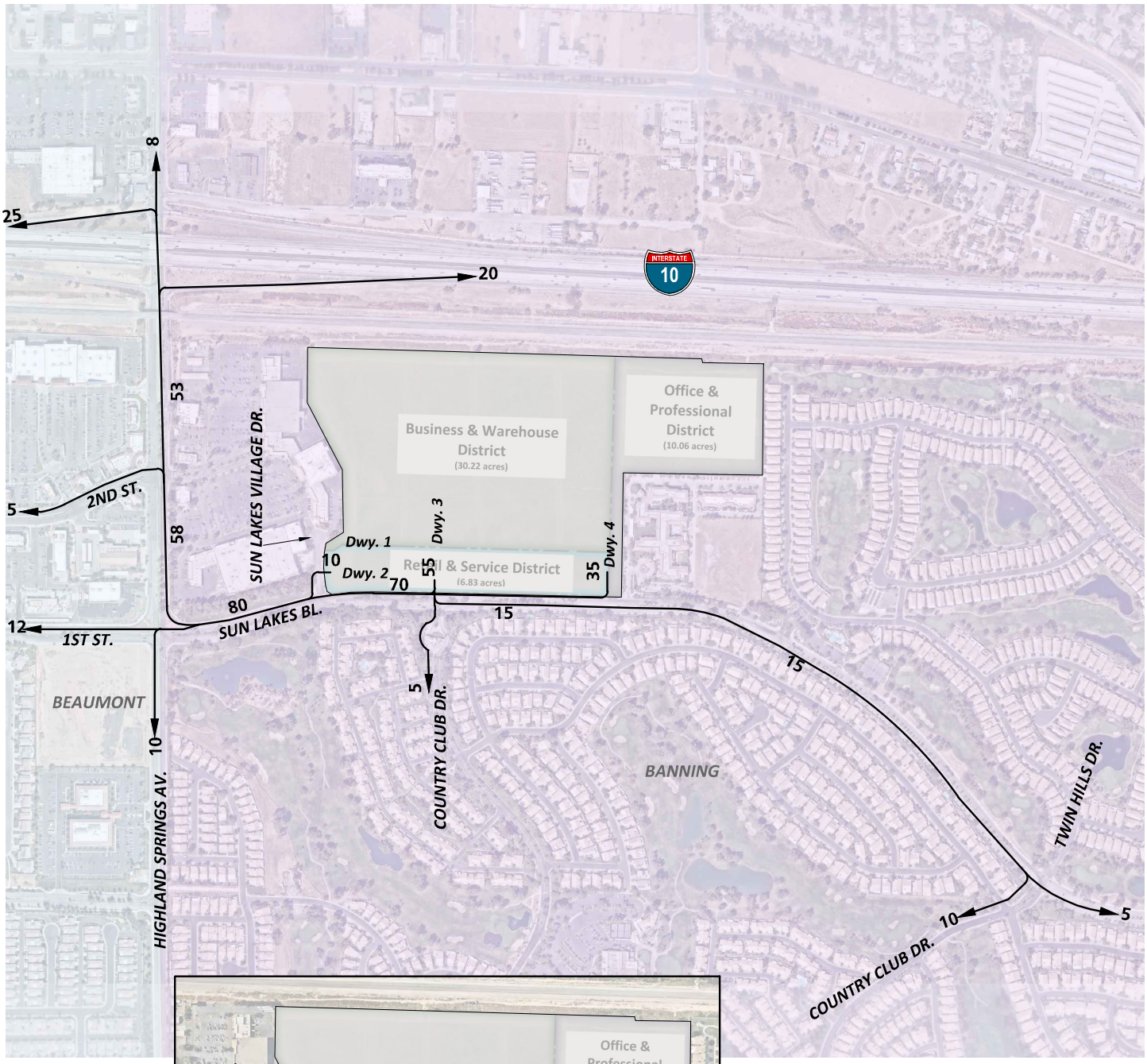
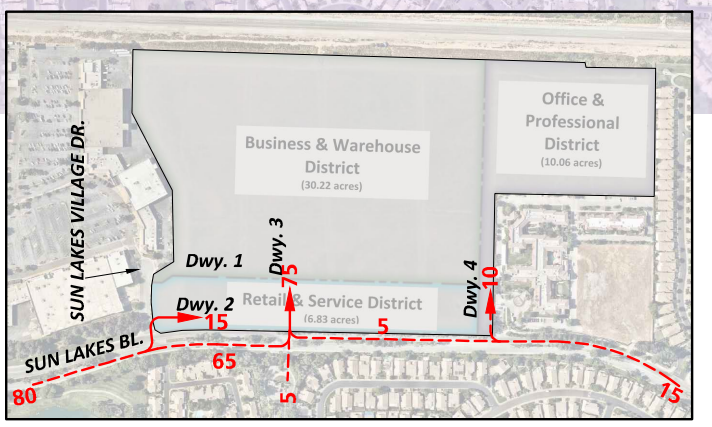


EXHIBIT 4-3: PROJECT (RETAIL/MEDICAL OFFICE) NEAR-TERM TRIP DISTRIBUTION





LEGEND:

10 = PERCENT TO/FROM PROJECT

= OUTBOUND

= INBOUND

N

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EXHIBIT 4-4: PROJECT (TRUCK) LONG-RANGE TRIP DISTRIBUTION



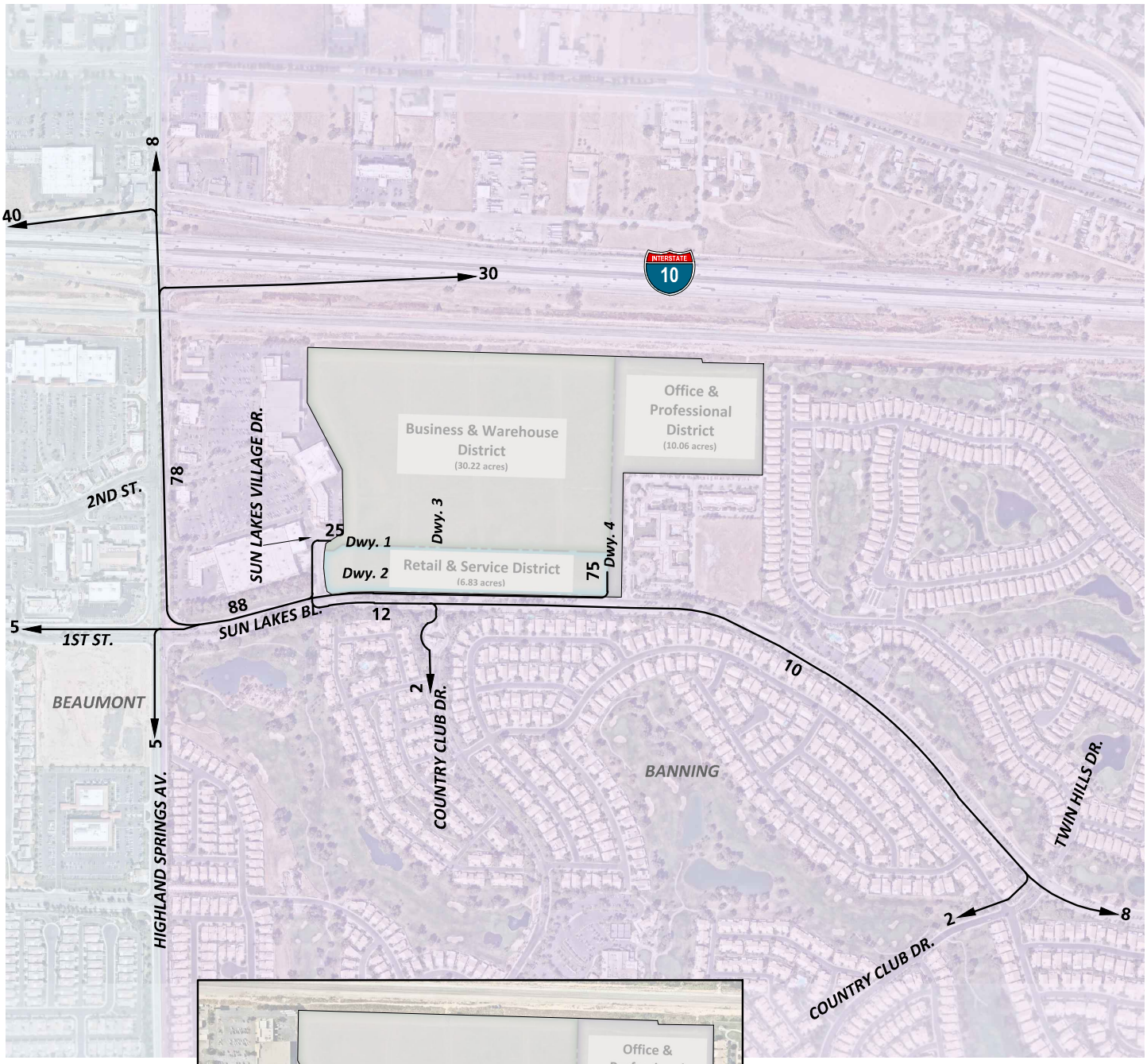
LEGEND:

10 = *PERCENT TO/FROM PROJECT*

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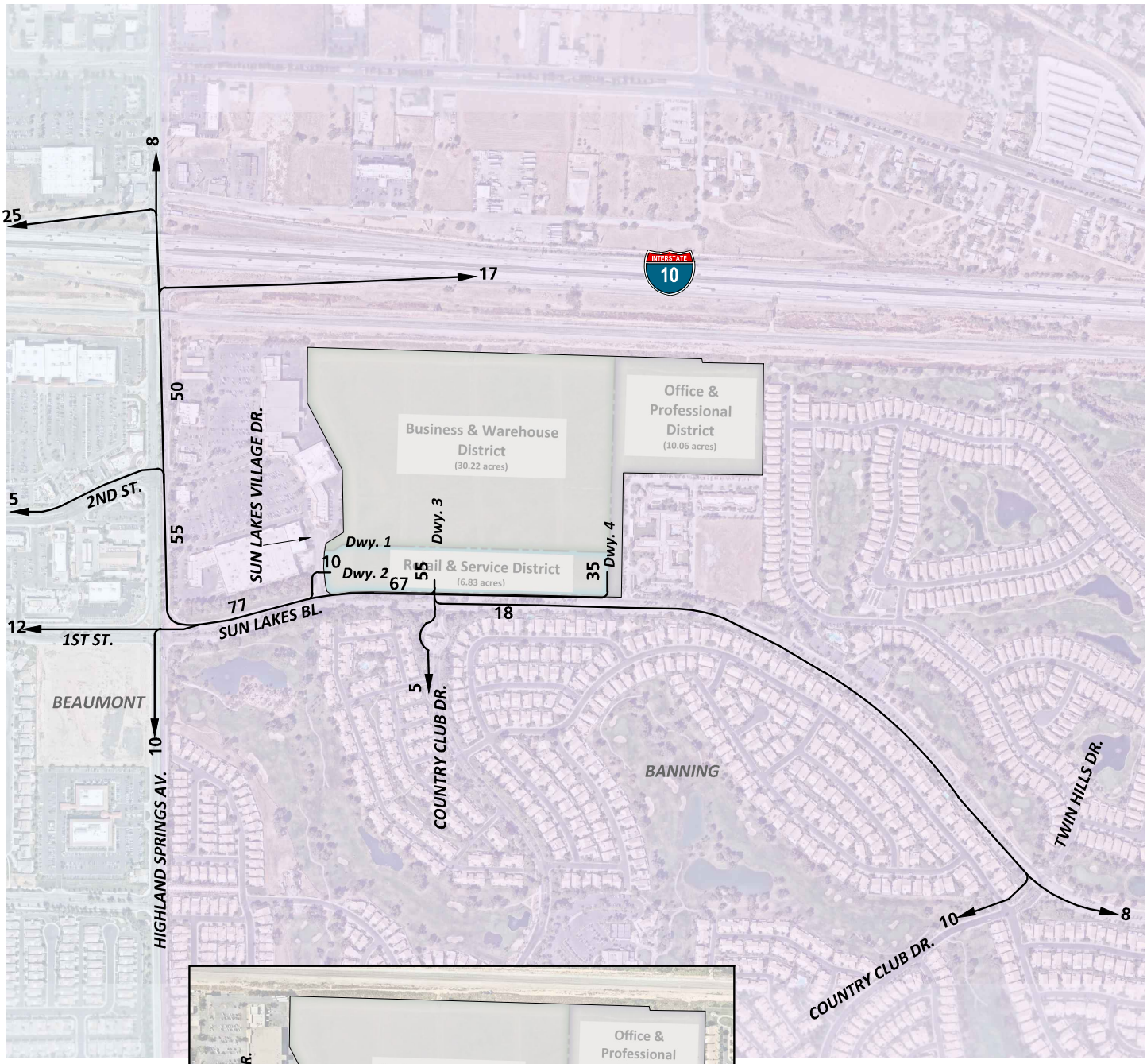
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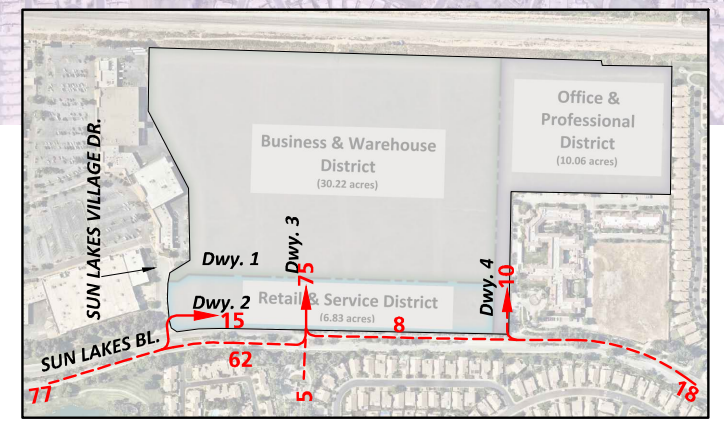
EXHIBIT 4-5: PROJECT (INDUSTRIAL CAR) LONG-RANGE TRIP DISTRIBUTION



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EXHIBIT 4-6: PROJECT (RETAIL/MEDICAL OFFICE) LONG-RANGE TRIP DISTRIBUTION





LEGEND:

10 = *PERCENT TO/FROM PROJECT*

= *OUTBOUND*

= *INBOUND*

N

4.3 MODAL SPLIT

The traffic reducing potential of public transit, walking, or bicycling have not been considered in this TA. Essentially, the traffic projections are "conservative" in that these alternative travel modes might be able to reduce the forecasted traffic volumes.

4.4 PROJECT TRIP ASSIGNMENT

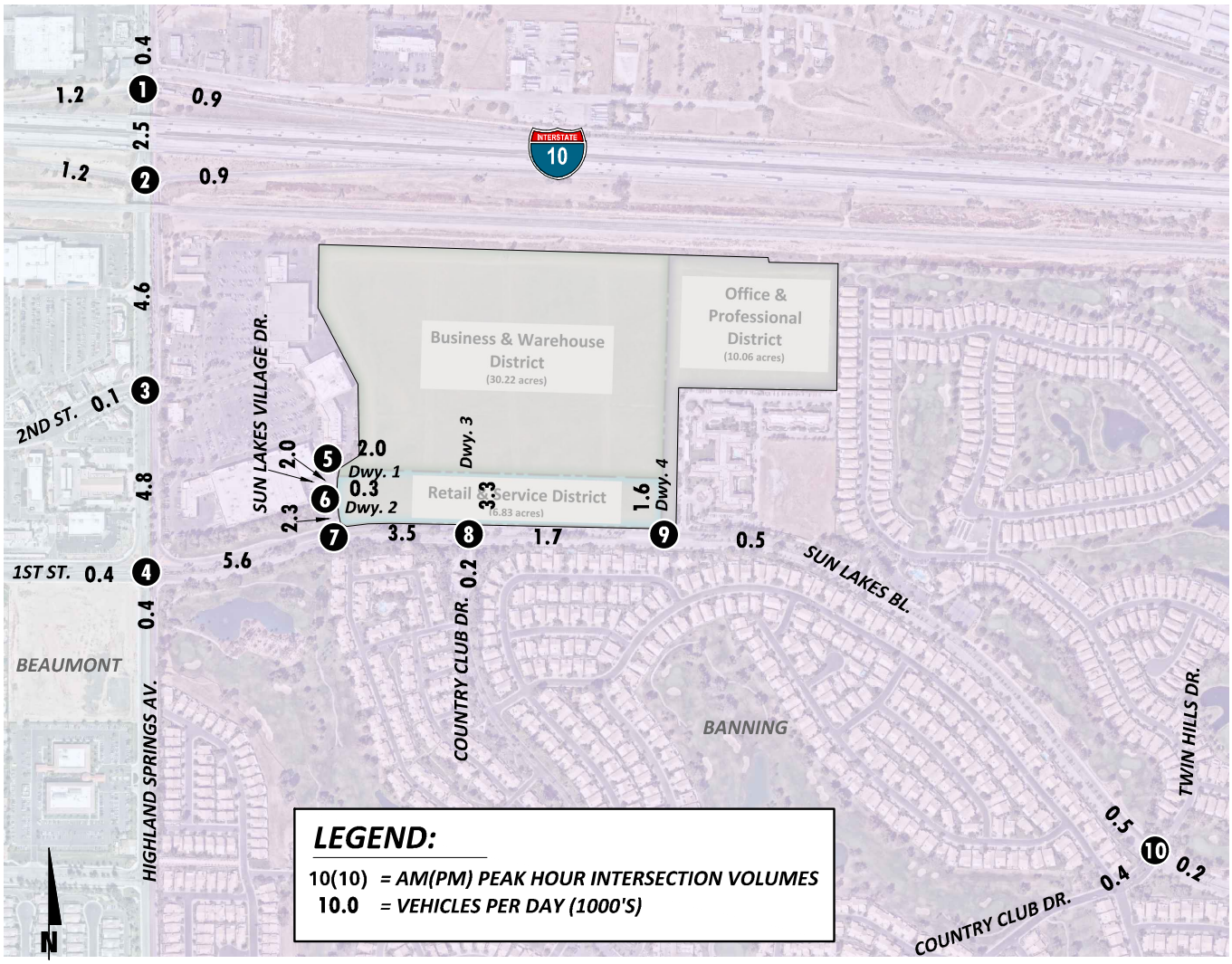
The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, the Project only ADT and peak hour intersection turning movement volumes for near-term conditions is shown on Exhibit 4-7 and the Project only ADT and peak hour intersection turning movement volumes for long-range conditions is shown on Exhibit 4-8.

4.5 BACKGROUND TRAFFIC

The adopted Southern California Association of Governments (SCAG) 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (May 2020) growth forecasts for the City of Banning identifies projected growth in population of 31,000 in 2016 to 41,500 in 2045, or a 33.87% increase over the 29-year period. (9) The change in population equates to roughly a 1.01% growth rate, compounded annually. Similarly, growth over the same 29-year period in households is projected to increase by 47.71%, or a 1.35% annual growth rate. Finally, growth in employment over the same 29-year period is projected to increase by 56.16%, or a 1.55% annual growth rate.

Based on a comparison of Existing (2020) traffic volumes to the Horizon Year (2040) forecasts, the average growth rate is estimated at approximately 1.94%, compounded annually between Existing (2020) and 2040 traffic conditions. The annual growth rate at each individual intersection is not lower than 1.68% compounded annually to as high as 11.92% compounded annually over the same time period. Therefore, the annual growth rate utilized for the purposes of this analysis would appear to conservatively approximate the anticipated regional growth in traffic volumes in the City of Banning for Horizon Year (2040) traffic conditions, especially when considered along with the addition of project-related traffic, which would tend to overstate as opposed to understate the potential effects to traffic and circulation.

EXHIBIT 4-7: PROJECT (NEAR-TERM) ONLY TRAFFIC VOLUMES (IN PCE)



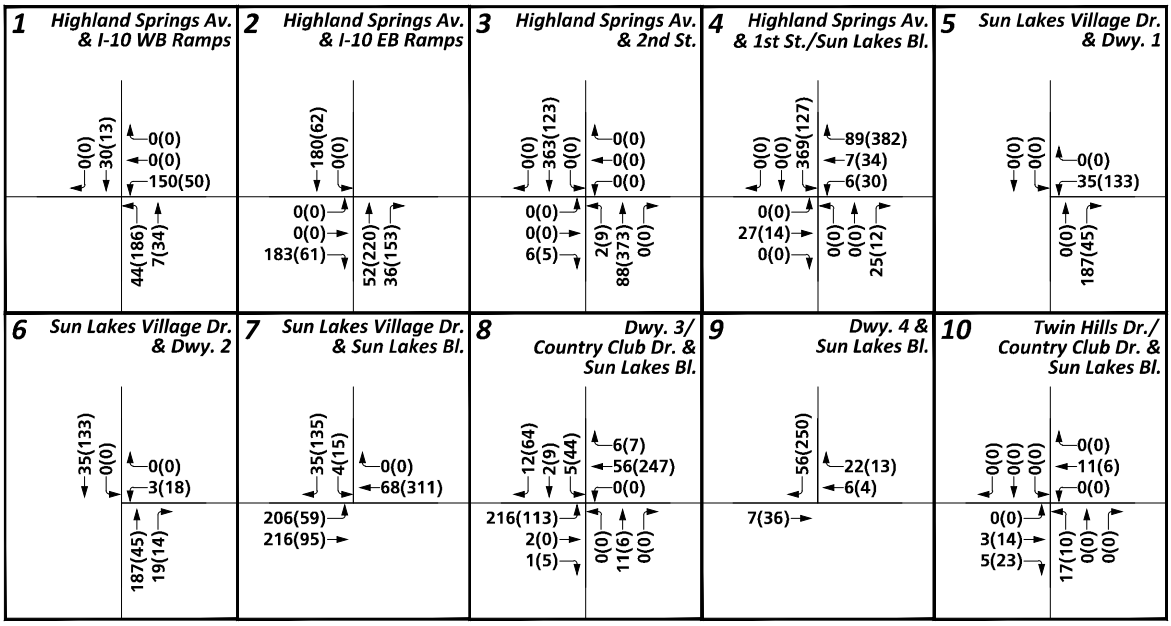
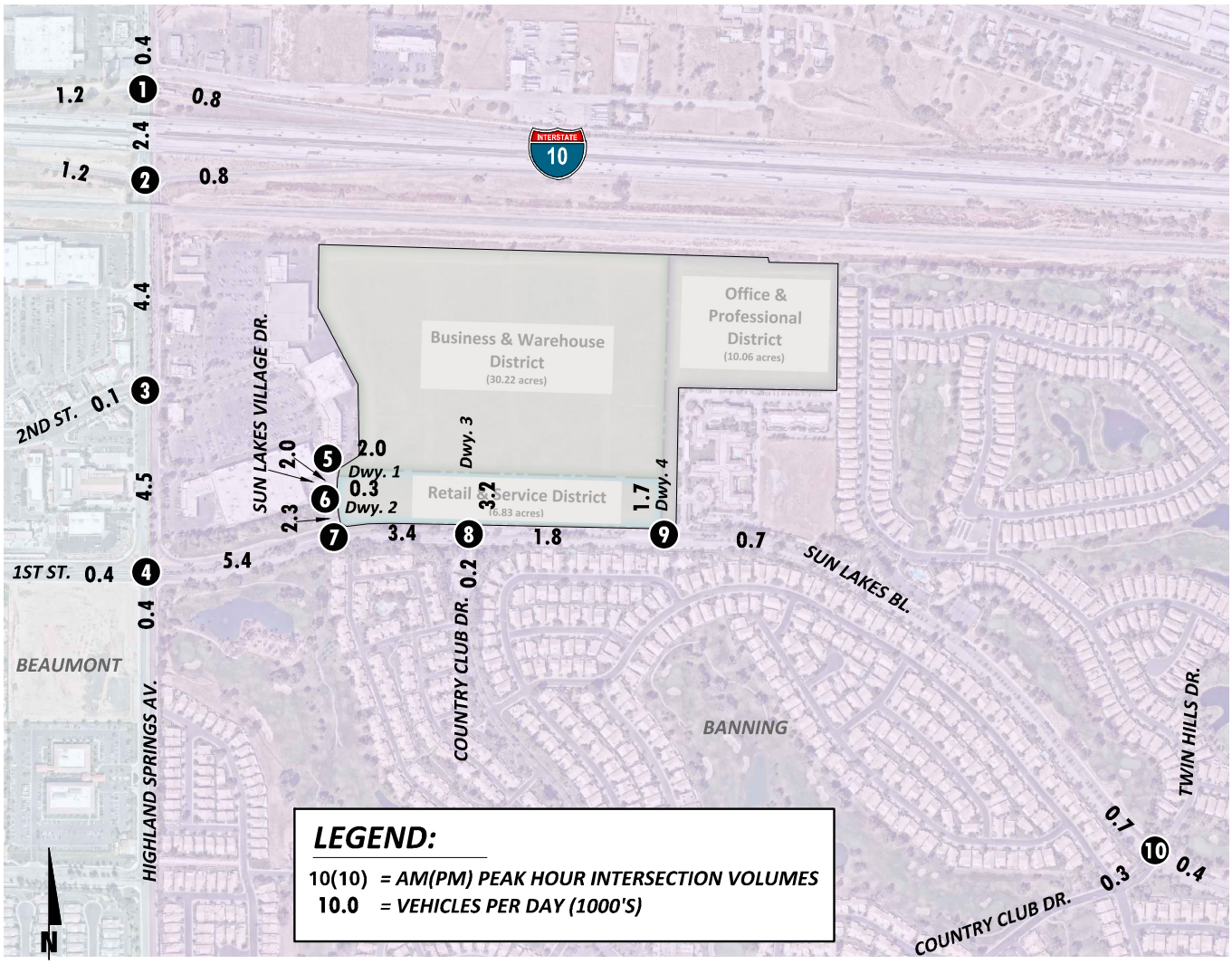
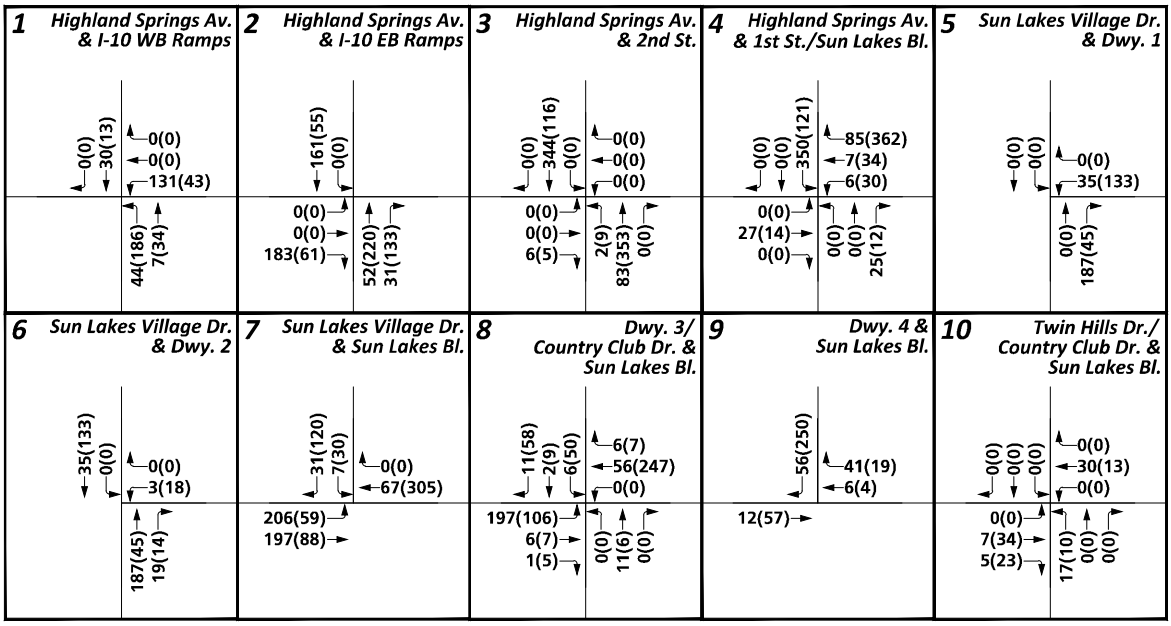


EXHIBIT 4-8: PROJECT (LONG-RANGE) ONLY TRAFFIC VOLUMES (IN PCE)





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4.6 HORIZON YEAR TRAFFIC FORECASTS

Traffic projections for Horizon Year conditions were derived from the RivTAM regional model using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between Existing and Horizon Year traffic conditions. The base model year for the RivTAM regional model is Year 2012 and the future year model is Year 2040.

In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year peak hour forecasts were refined using the model derived long-range forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location.

The refined future peak hour approach and departure volumes obtained from these calculations are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 255), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

Typically, the model growth is prorated and is subsequently added to the existing (base validation) traffic volumes to represent Horizon Year traffic conditions. However, review of the resulting model growth indicates negative growth for some of the study area intersections. In an effort to conduct a conservative analysis, reductions to traffic forecasts from Existing traffic conditions were not assumed as part of this analysis. As such, additional growth has also been applied on a movement-by-movement basis, where applicable, to estimate reasonable Horizon Year forecasts. Horizon Year turning volumes were compared to Existing volumes in order to ensure a minimum growth as a part of the refinement process. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year peak hour forecasts. This includes the intersections affected by the future Sun Lakes Boulevard extension.

The future Horizon Year Without Project peak hour turning movements were then reviewed by Urban Crossroads for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two freeway ramp locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis. Post-processing worksheets for Horizon Year Without Project traffic conditions are provided in Appendix 4.1.

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5 E+P TRAFFIC CONDITIONS

This section discusses the traffic forecasts for E+P conditions and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).

5.2 E+P TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus Project traffic. The ADT and peak hour intersection turning movement volumes which can be expected for E+P traffic conditions are shown on Exhibit 5-1.

5.3 INTERSECTION OPERATIONS ANALYSIS

5.3.1 E+P CONDITIONS

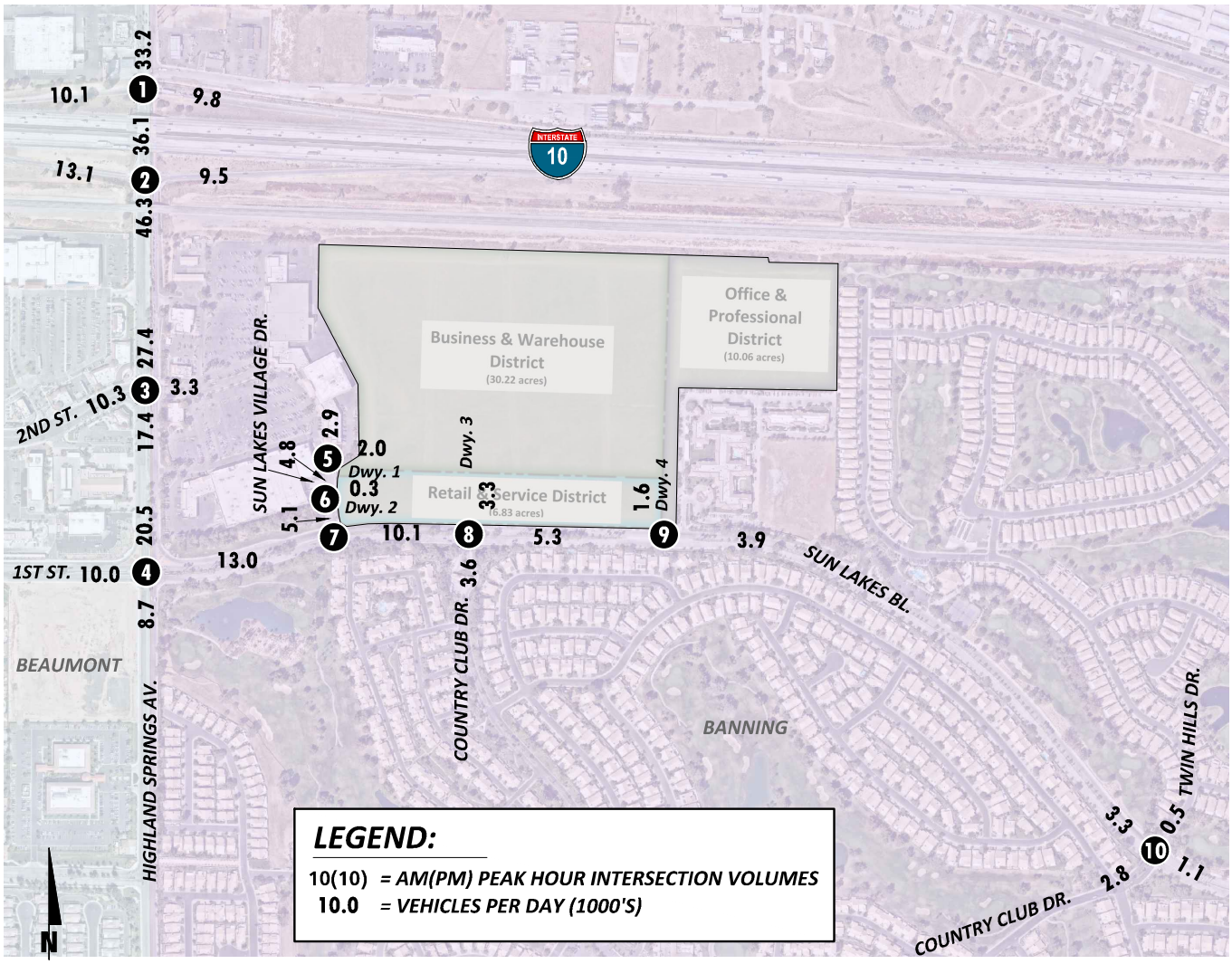
E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized in Table 5-1, which indicates that with the addition of Project traffic, the study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours, consistent with Existing (2020) traffic conditions. A summary of the peak hour intersection LOS for E+P traffic conditions is shown on Exhibit 5-2. The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix 5.1 of this TA.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The following unsignalized study area intersection is anticipated to meet a peak hour volume-based or planning-level ADT traffic signal warrant with the addition of Project traffic for E+P traffic conditions (see Appendix 5.2):

- Sun Lakes Village Drive & Sun Lakes Boulevard (#7)

EXHIBIT 5-1: E+P TRAFFIC VOLUMES (IN PCE)



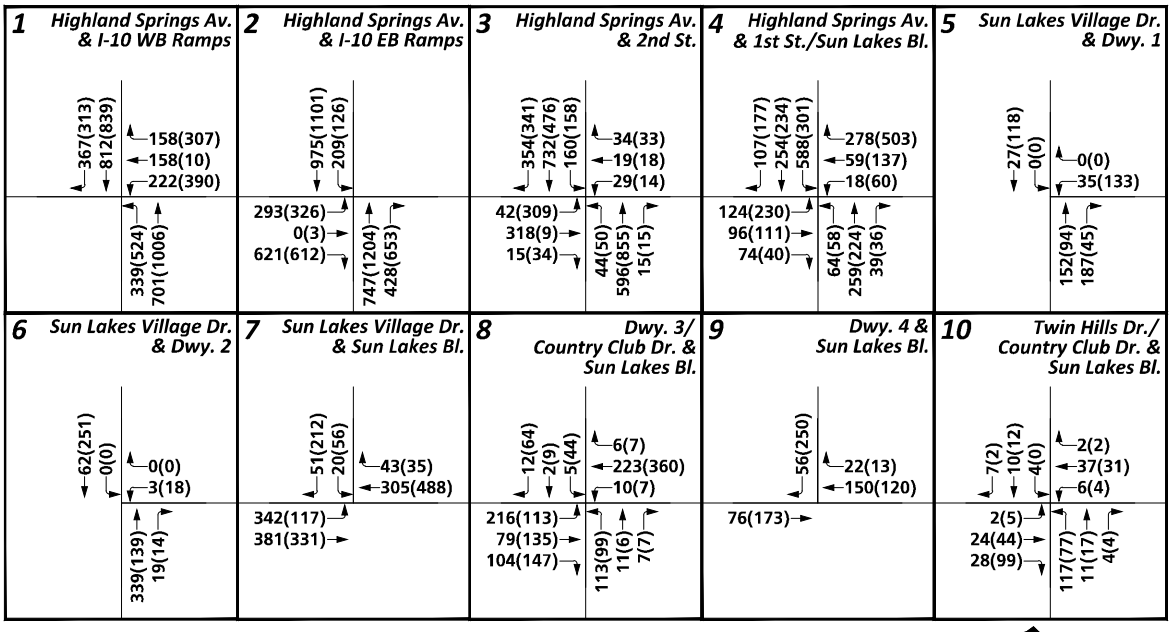
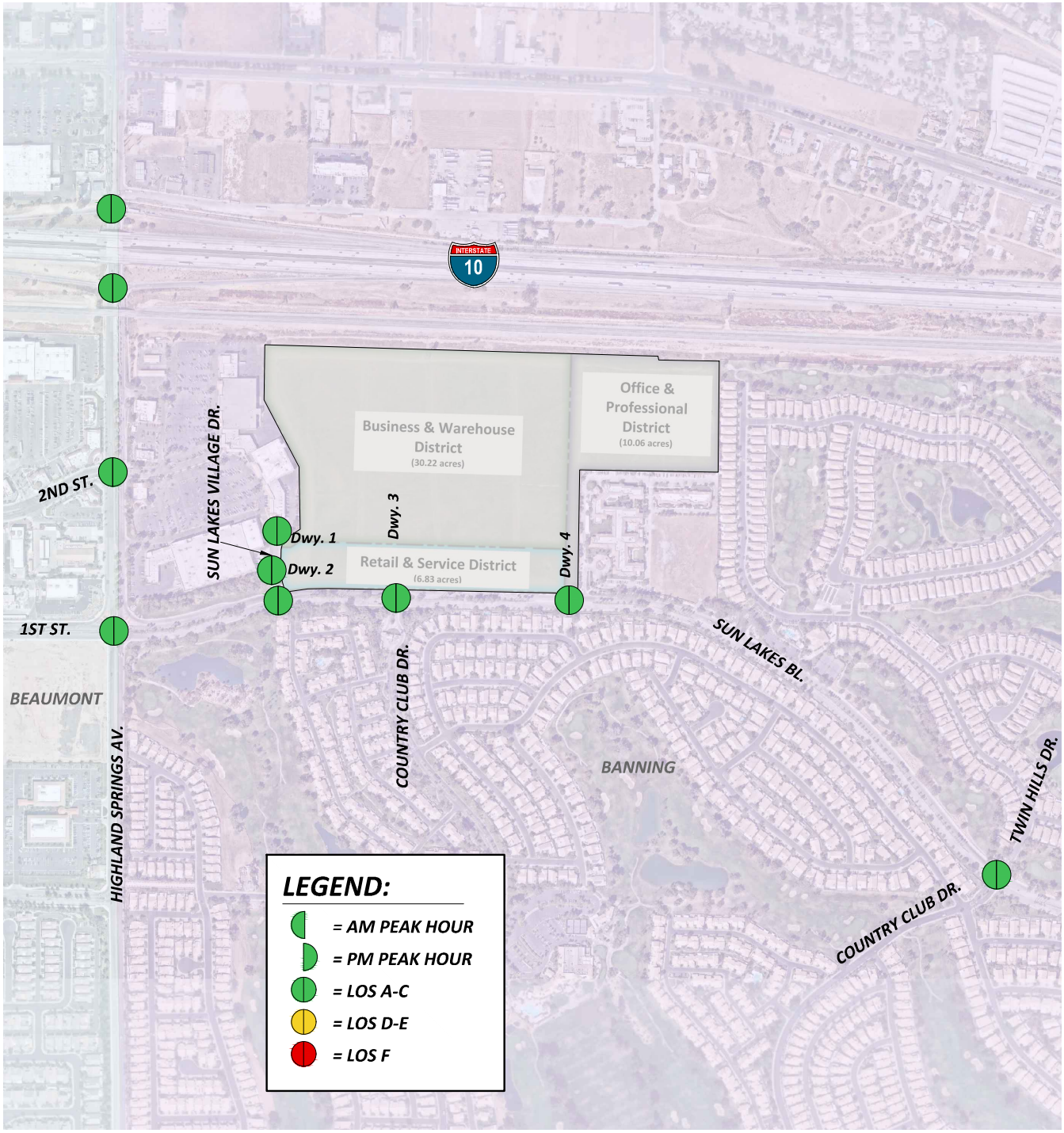


EXHIBIT 5-2: E+P SUMMARY OF LOS



Note: the acceptable LOS for the freeway ramps is D

N

Table 5-1

Intersection Analysis for E+P Conditions

#	Intersection	Traffic Control[2]	Existing (2020)				E+P				Acceptable LOS[3]
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service		
			AM	PM	AM	PM	AM	PM	AM	PM	
1	Highland Springs Av. & I-10 WB Ramps	TS	23.5	31.5	C	C	34.8	42.0	C	D	D
2	Highland Springs Av. & I-10 EB Ramps	TS	23.4	21.5	C	C	34.6	26.2	C	C	D
3	Highland Springs Av. & 2nd St.	TS	23.4	19.5	C	B	24.8	20.8	C	C	C
4	Highland Springs Av. & 1st St./Sun Lakes Bl.	TS	25.1	15.4	C	B	34.5	18.4	C	B	C
5	Sun Lakes Village Dr. & Dwy. 1	**CSS**	Future Intersection				10.4	11.1	B	B	C
6	Sun Lakes Village Dr. & Dwy. 2	**CSS**	Future Intersection				11.3	11.4	B	B	C
7	Sun Lakes Village Dr. & Sun Lakes Bl.	CSS	12.1	10.5	B	B	16.7	15.7	C	C	C
8	Dwy. 3/Country Club Dr. & Sun Lakes Bl.	AWS/**TS**[4]	8.7	8.2	A	A	17.3	19.0	B	B	C
9	Dwy. 4 & Sun Lakes Bl.	**CSS**	Future Intersection				9.0	10.1	A	B	C
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.	AWS	8.6	8.0	A	A	8.8	8.2	A	A	C

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

[2] CSS = Cross-street Stop; AWS = All-way Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Minimum acceptable LOS for each applicable jurisdiction.

[4] The Project will construct a traffic signal as part of the Project design features.

5.5 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for E+P are presented in Table 5-2. As shown in Table 5-2 and consistent with Existing traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows with the addition of Project traffic. Worksheets for E+P traffic conditions off-ramp queuing analyses are provided in Appendices 5.3.

5.6 EXISTING DEFICIENCIES AND IMPROVEMENTS

5.6.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

All existing study area intersections are anticipated to continue to operate at an acceptable LOS under E+P traffic conditions; therefore, no improvements have been identified.

5.6.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

As shown previously in Table 5-2, there are no anticipated peak hour queuing issues at the I-10 Freeway and Highland Springs Avenue interchange for E+P traffic conditions. As such, no improvements have been identified.

Table 5-2

Peak Hour Queuing Summary for E+P Conditions

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2020)				E+P			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
Highland Springs Av. & I-10 WB Ramps	WBL/T	1,600	263	425 [2]	Yes	Yes	520 [2]	517 [2]	Yes	Yes
	WBR	350	57	207	Yes	Yes	57	216	Yes	Yes
Highland Springs Av. & I-10 EB Ramps	EBL/T	1,300	278	281	Yes	Yes	278	281	Yes	Yes
	EBR	630	366	559 [2]	Yes	Yes	771 [2,3]	675 [2,3]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

[2] 95th percentile volume exceeds capacity, queue may be longer.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

6 HORIZON YEAR (2040) TRAFFIC CONDITIONS

This section discusses the methods used to develop Horizon Year (2040) Without and With Project traffic forecasts, and the resulting intersection operations, traffic signal warrant, and off-ramp queuing analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Horizon Year (2040) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Horizon Year conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- Other parallel facilities, that although not evaluated for the purposes of this analysis, are anticipated to be in place for Horizon Year traffic conditions and would affect the travel patterns within the study area.
- The future extension of Sun Lakes Boulevard is assumed to be completed.

6.2 HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the RivTAM (see Section 4.6 *Horizon Year Traffic Forecasts* of this TA for a detailed discussion on the post-processing methodology). The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2040) Without Project traffic conditions are shown on Exhibit 6-1.

6.3 HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the RivTAM plus the traffic generated by the proposed Project. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2040) With Project traffic conditions are shown on Exhibit 6-2.

EXHIBIT 6-1: HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUMES (IN PCE)



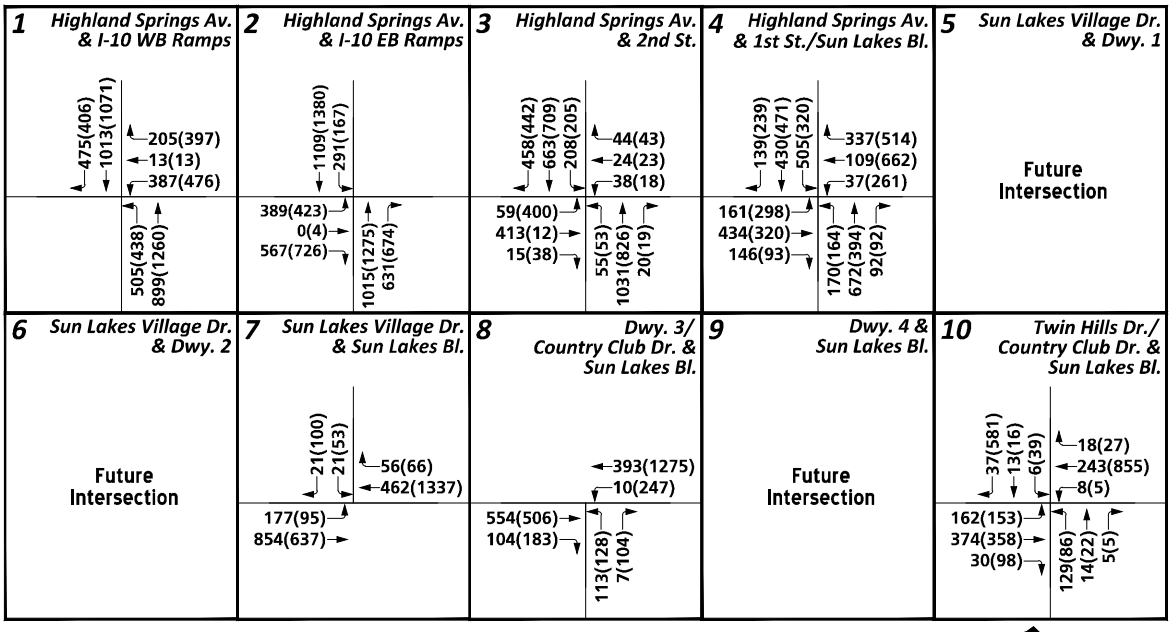
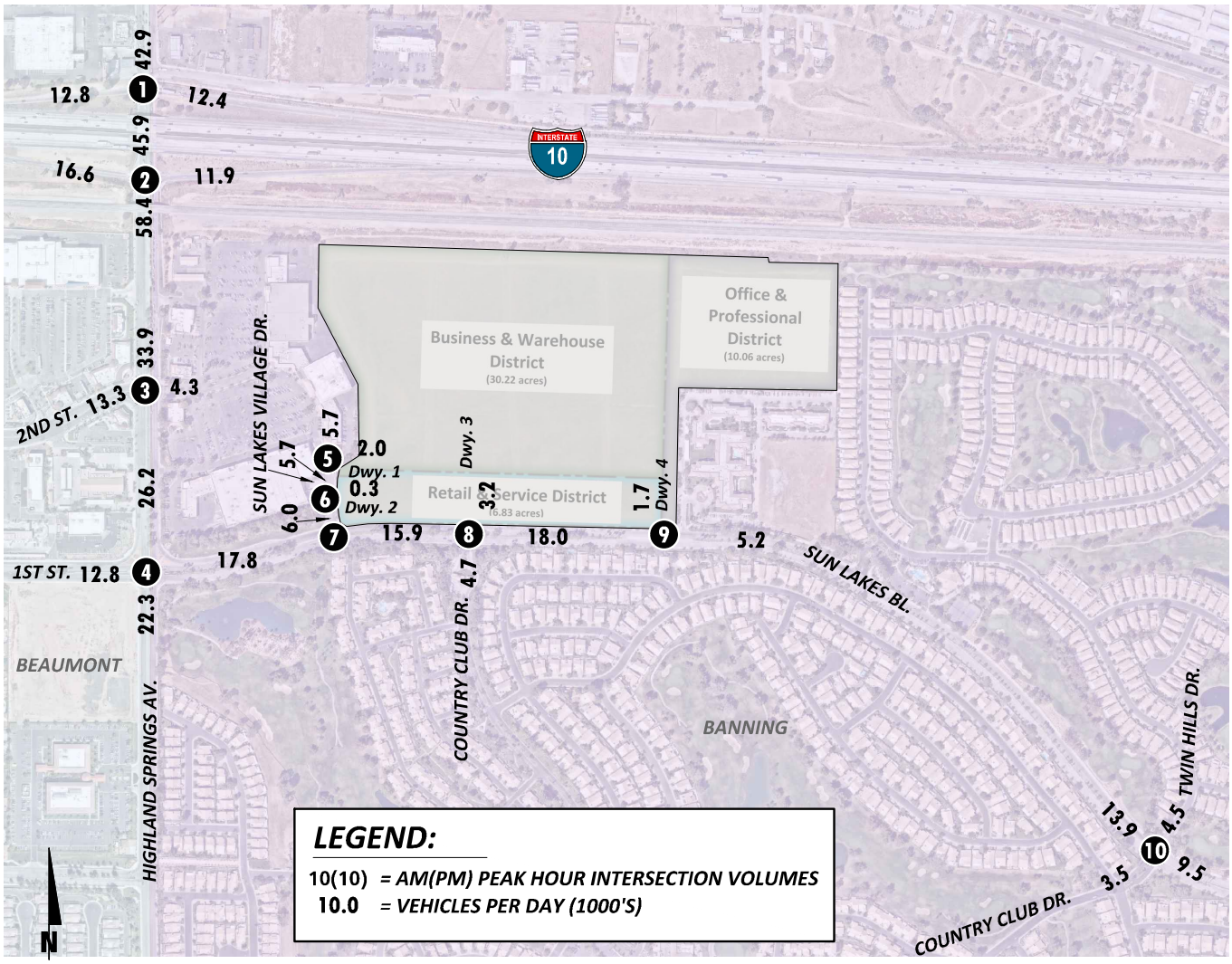


EXHIBIT 6-2: HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUMES (IN PCE)



1 Highland Springs Av. & I-10 WB Ramps 475(406) 1043(1084) 205(397) 13(13) 518(519) 549(624) 906(1294)	**2** Highland Springs Av. & I-10 EB Ramps 1270(1435) 291(167) 389(423) 0(4) 750(787) 1067(1495) 662(807)	**3** Highland Springs Av. & 2nd St. 458(442) 1007(825) 208(205) 44(43) 24(23) 38(18) 59(400) 413(12) 21(43) 57(62) 1114(1179) 20(19)	**4** Highland Springs Av. & 1st St./Sun Lakes Bl. 139(239) 430(471) 855(441) 422(876) 116(696) 43(291) 161(298) 461(334) 146(93) 170(164) 672(394) 117(104)	**5** Sun Lakes Village Dr. & Dwy. 1 35(152) 0(0) 0(0) 35(133) 197(121) 187(45)
6 Sun Lakes Village Dr. & Dwy. 2 70(285) 0(0) 0(0) 3(18) 384(166) 19(14)	**7** Sun Lakes Village Dr. & Sun Lakes Bl. 52(220) 28(83) 56(66) 529(1642) 383(154) 1051(725)	**8** Dwy. 3/ Country Club Dr. & Sun Lakes Bl. 24(58) 4(9) 10(50) 12(7) 449(1522) 10(247) 432(106) 556(513) 105(188) 113(128) 22(6) 7(104)	**9** Dwy. 4 & Sun Lakes Bl. 56(250) 41(19) 415(1526) 578(667)	**10** Twin Hills Dr./ Country Club Dr. & Sun Lakes Bl. 37(581) 13(16) 6(39) 18(27) 273(868) 8(5) 162(153) 381(392) 35(121) 146(96) 14(22) 5(5)

6.4 INTERSECTION OPERATIONS ANALYSIS

6.4.1 HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC CONDITIONS

Horizon Year (2040) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection analysis results are summarized in Table 6-1, which indicate that the following study area intersections are anticipated to operate at an unacceptable LOS during the peak hours under Horizon Year (2040) Without Project:

- Highland Springs Avenue & I-10 Westbound Ramps (#1) – LOS E AM and PM peak hours
- Highland Springs Avenue & I-10 Eastbound Ramps (#2) – LOS E AM and PM peak hours
- Highland Springs Avenue & 2nd Street (#3) – LOS D AM peak hour only
- Highland Springs Avenue & 1st Street/Sun Lakes Boulevard (#4) – LOS D AM peak hour; LOS E PM peak hour
- Sun Lakes Village Drive & Sun Lakes Boulevard (#7) – LOS F PM peak hour only
- Driveway 3/Country Club Drive & Sun Lakes Boulevard (#8) – LOS F PM peak hour only
- Twin Hills Drive/Country Club Drive & Sun Lakes Boulevard (#10) – LOS F PM peak hour only

A summary of the peak hour intersection LOS for Horizon Year (2040) Without Project conditions is shown on Exhibit 6-3. The intersection operations analysis worksheets for Horizon Year (2040) Without Project traffic conditions are included in Appendix 6.1 of this TA.

6.4.2 HORIZON YEAR (2040) WITH PROJECT TRAFFIC CONDITIONS

As shown in Table 6-1 and illustrated on Exhibit 6-4, there are no additional study area intersections that are anticipated to operate at an unacceptable LOS with the addition of Project traffic, in addition to the intersections previously identified under Horizon Year (2040) traffic conditions. It should be noted, the intersection of Driveway 3/Country Club Drive & Sun Lakes Boulevard (#8) is anticipated to operate at an acceptable LOS during the peak hours with the implementation of the Project design features discussed in Section 1.6 *Recommendations* of this TA. The intersection operations analysis worksheets for Horizon Year (2040) With Project traffic conditions are included in Appendix 6.2 of this TA.

6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

The following unsignalized study area intersections are anticipated to meet a peak hour volume-based or planning-level ADT traffic signal warrant with the addition of Project traffic for Horizon Year (2040) Without Project traffic conditions (see Appendix 6.3):

- Driveway 3/Country Club Drive & Sun Lakes boulevard (#8)
- Twin Hills Drive/Country Club Drive & Sun Lakes Boulevard (#10)

With the addition of Project traffic, there are no additional unsignalized study area intersections that are anticipated to meet a traffic signal warrant for Horizon Year (2040) With Project traffic conditions (see Appendix 6.4).

Table 6-1

Intersection Analysis for Horizon Year (2040) Conditions

#	Intersection	Traffic Control[2]	2040 Without Project				2040 With Project				Acceptable LOS[3]
			Delay[1] (secs.)		Level of Service		Delay[1] (secs.)		Level of Service		
			AM	PM	AM	PM	AM	PM	AM	PM	
1	Highland Springs Av. & I-10 WB Ramps	TS	**62.4**	**61.9**	**E**	**E**	**70.6**	**72.8**	**E**	**E**	D
2	Highland Springs Av. & I-10 EB Ramps	TS	**58.9**	**62.9**	**E**	**E**	**69.9**	**75.7**	**E**	**E**	D
3	Highland Springs Av. & 2nd St.	TS	**46.5**	22.6	**D**	C	**51.8**	27.8	**D**	C	C
4	Highland Springs Av. & 1st St./Sun Lakes Bl.	TS	**43.1**	**72.5**	**D**	**E**	**107.8**	**143.5**	**F**	**F**	C
5	Sun Lakes Village Dr. & Dwy. 1		Future Intersection				10.9	11.8	B	B	C
6	Sun Lakes Village Dr. & Dwy. 2		Future Intersection				11.8	12.0	B	B	C
7	Sun Lakes Village Dr. & Sun Lakes Bl.	CSS	15.7	**52.1**	C	**F**	24.2	**>100.0**	C	**F**	C
8	Dwy. 3/Country Club Dr. & Sun Lakes Bl.	AWS/**TS**[4]	14.1	**114.0**	B	**F**	20.7	34.6	C	C	C
9	Dwy. 4 & Sun Lakes Bl.	CSS	Future Intersection				10.2	24.3	B	C	C
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.	AWS	12.7	**>200.0**	B	**F**	13.5	**>200.0**	B	**F**	C

* **BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

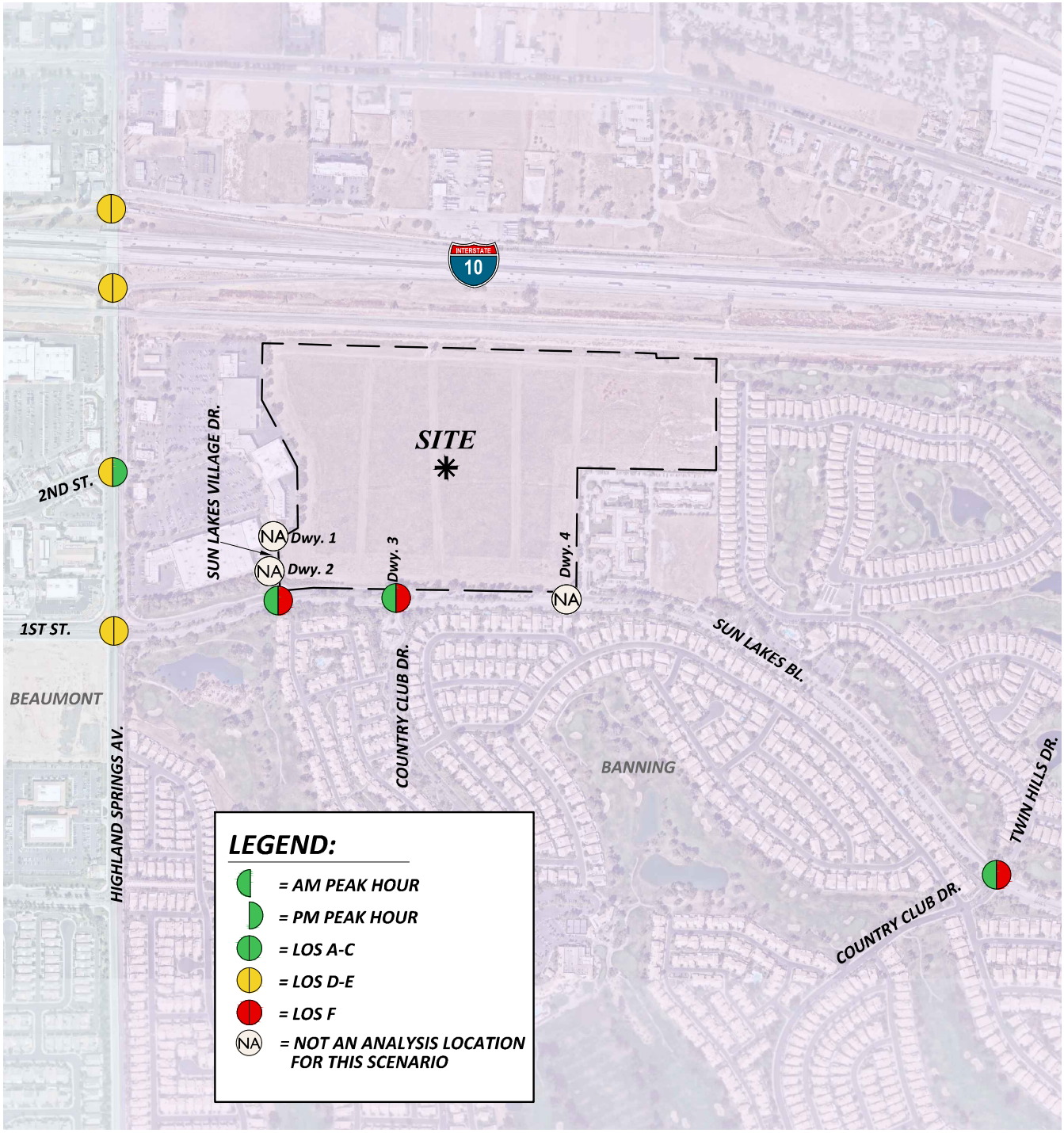
[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Minimum acceptable LOS for each applicable jurisdiction.

[4] The Project will construct a traffic signal as part of the Project design features.

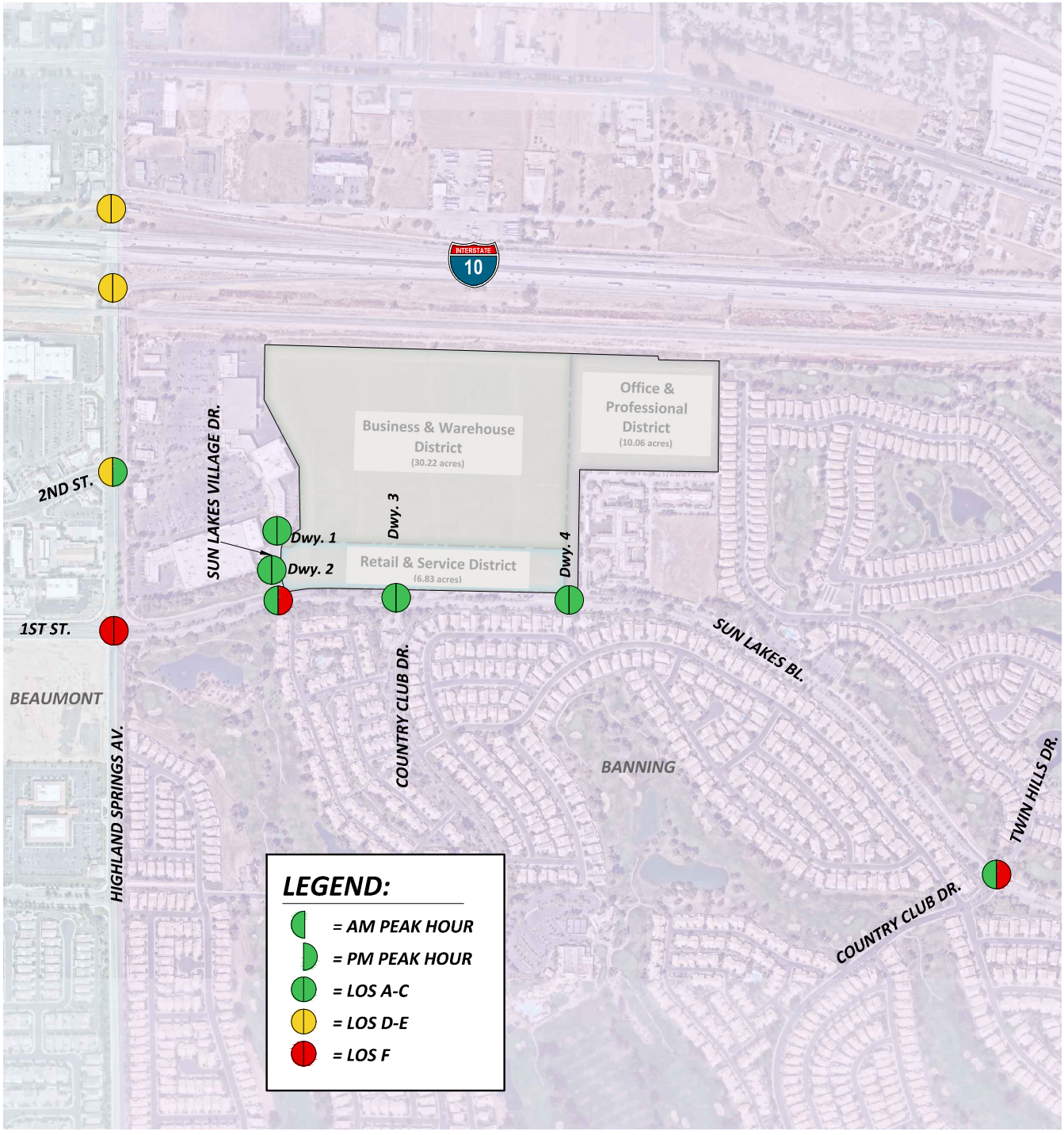
EXHIBIT 6-3: HORIZON YEAR (2040) WITHOUT PROJECT SUMMARY OF LOS



Note: the acceptable LOS for the freeway ramps is D

N

EXHIBIT 6-4: HORIZON YEAR (2040) WITH PROJECT SUMMARY OF LOS



Note: the acceptable LOS for the freeway ramps is D

N

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6.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Horizon Year (2040) Without Project and With Project traffic conditions are presented in Table 6-2. As shown in Table 6-2 and consistent with Existing traffic conditions, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95th percentile traffic flows under Horizon Year (2040) Without Project and With Project traffic conditions. Worksheets for Horizon Year (2040) Without Project and With Project traffic conditions off-ramp queuing analyses are provided in Appendices 6.5 and 6.6, respectively.

6.7 DEFICIENCIES AND RECOMMENDED IMPROVEMENTS

This section provides a summary of deficiencies, based on the City of Banning deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, and improvements needed to improve operations back to acceptable levels.

6.7.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

The effectiveness of the identified improvement strategies to address Horizon Year (2040) traffic deficiencies are presented in Table 6-3. The Project Applicant shall contribute to these improvements through construction (with applicable credits), payment DIF/TUMF fees or fair share contribution as identified in Table 1-2. Worksheets for Horizon Year (2040) Without and With Project conditions, with improvements, HCM calculation worksheets are provided in Appendices 6.7 and 6.8, respectively.

6.7.2 IMPROVEMENTS TO ADDRESS DEFICIENCIES ON OFF-RAMP QUEUES

As shown previously in Table 6-2, there are no anticipated peak hour queuing issues at the I-10 Freeway and Highland Springs Avenue interchange for Horizon Year (2040) traffic conditions. As such, no improvements have been identified.

Table 6-2

Peak Hour Queuing Summary for Horizon Year (2040) Conditions

Intersection	Movement	Available Stacking Distance (Feet)	2040 Without Project				2040 With Project			
			95th Percentile Queue (Feet)		Acceptable? [1]		95th Percentile Queue (Feet)		Acceptable? [1]	
			AM Peak Hour	PM Peak Hour	AM	PM	AM Peak Hour	PM Peak Hour	AM	PM
Highland Springs Av. & I-10 WB Ramps	WBL/T	1,600	557 [2]	591 [2]	Yes	Yes	780 [2]	754 [2]	Yes	Yes
	WBR	350	105	379 [2,3]	Yes	Yes	111	447 [2,3]	Yes	Yes
Highland Springs Av. & I-10 EB Ramps	EBL/T	1,300	385	583 [2]	Yes	Yes	379	590 [2]	Yes	Yes
	EBR	630	689 [2,3]	1,086 [2,3]	Yes	Yes	1019 [2,3]	1205 [2,3]	Yes	Yes

[1] Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided.

[2] 95th percentile volume exceeds capacity, queue may be longer.

[3] Although 95th percentile queue is anticipated to exceed the available storage for the turn lane, the adjacent through lane has sufficient storage to accommodate any spillover without spilling back and affecting the I-10 Freeway mainline.

Table 6-3

Intersection Analysis for Horizon Year (2040) Conditions With Improvements

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[1] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Highland Springs Av. & I-10 WB Ramps																	
	- Without Project	TS	1	2	0	0	2	**1>**	0	0	0	**1**	1	1	28.3	34.7	C	C
	- With Project	TS	1	2	0	0	2	**1>**	0	0	0	**1**	1	1	37.2	53.8	D	D
2	Highland Springs Av. & I-10 EB Ramps																	
	- Without Project	TS	0	2	1	1	2	0	0	1	**2**	0	0	0	32.9	29.9	C	C
	- With Project	TS	0	2	1	1	2	0	0	1	**2**	0	0	0	35.2	33.8	D	C
3	Highland Springs Av. & 2nd St.																	
	- Without Project[4]	TS	1	3	0	1	3	0	2	1	0	1	1	0	28.8	22.9	C	C
	- With Project[4]	TS	1	3	0	1	3	0	2	1	0	1	1	0	30.6	25.2	C	C
4	Highland Springs Av. & 1st St./Sun Lakes Bl.																	
	- Without Project	TS	1	2	0	**2**	2	1>	1	2	0	1	**2**	1>	21.2	28.6	C	C
	- With Project	TS	1	2	0	**2**	2	1>	1	2	0	1	**2**	1>	30.9	34.5	C	C
7	Sun Lakes Village Dr. & Sun Lakes Bl.																	
	- Without Project	**TS**	0	0	0	0	1	0	1	3	0	0	2	0	7.1	11.1	A	B
	- With Project	**TS**	0	0	0	0	1	0	1	3	0	0	2	0	10.4	27.4	B	C
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.																	
	- Without Project	**TS**	1	1	0	0	1	0	1	2	0	1	2	0	11.6	26.3	B	C
	- With Project	**TS**	1	1	0	0	1	0	1	2	0	1	2	0	11.8	26.6	B	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Free Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; **TS** = Improvement

[4] Improvement consists of restriping the eastbound approach to provide dual left turn lanes and a shared through-right turn lane, modifying the traffic signal to protect the eastbound and westbound left turns, and modifying the traffic signal to implement lead-lag operations for the eastbound and westbound left turns, with the eastbound left turn running as lag.

7 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Banning are funded through a combination of improvements constructed by the Project, development impact fee programs or fair share contributions. Fee programs applicable to the Project are described below.

7.1 RIVERSIDE COUNTY TRANSPORTATION UNIFORM MITIGATION FEE (TUMF)

The TUMF program is administered by the WRCOG based upon a regional Nexus Study most recently updated in 2016 to address major changes in right of way acquisition and improvement cost factors. (4) This regional program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program and is imposed and implemented in every jurisdiction in Western Riverside County.

7.2 CITY OF BANNING DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The City of Banning has created its own local DIF program to impose and collect fees from new residential, commercial and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. Under the City's DIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program.

The Project Applicant will be subject to the City's DIF fee program and will pay the requisite City DIF fees at the rates then in effect. The Project Applicant's payment of the requisite DIF fees at the rates then in effect pursuant to the DIF Program will mitigate its impacts to DIF-funded facilities.

7.3 MEASURE A

Measure A, Riverside County's half-cent sales tax for transportation, was adopted by voters in 1988 and extended in 2002. It will continue to fund transportation improvements through 2039. Measure A funds a wide variety of transportation projects and services throughout the County. RCTC is responsible for administering the program. Measure A dollars are spent in accordance with a voter-approved expenditure plan that was adopted as part of the 1988 election.

7.4 FAIR SHARE CONTRIBUTION

Project improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion). When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, have been provided in Table 7-1 for the applicable deficient study area intersection. These fees are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.

Table 7-1

Project Fair Share Calculations

#	Intersection		Existing	Project	2040 With Project	Total New Traffic	Project Fair Share[1]
1	Highland Springs Av. & I-10 WB Ramps						
		AM:	2,525	212	3,709	1,184	17.9%
		PM:	3,106	276	4,337	1,231	**22.4%**
2	Highland Springs Av. & I-10 EB Ramps						
		AM:	2,821	427	4,429	1,608	26.6%
		PM:	3,530	469	5,118	1,588	**29.5%**
3	Highland Springs Av. & 2nd St.						
		AM:	1,899	435	3,463	1,564	27.8%
		PM:	1,801	483	3,271	1,470	**32.9%**
4	Highland Springs Av. & 1st St./Sun Lakes Bl.						
		AM:	1,437	500	3,731	2,294	**21.8%**
		PM:	1,511	573	4,401	2,890	19.8%
7	Sun Lakes Village Dr. & Sun Lakes Bl.						
		AM:	613	508	2,099	1,486	**34.2%**
		PM:	624	602	2,889	2,265	26.6%
10	Twin Hills Dr./Country Club Dr. & Sun Lakes Bl.						
		AM:	216	59	1,098	882	**6.7%**
		PM:	245	80	2,326	2,081	3.8%

* Highest deficient peak hour represented in **BOLD** and shown on Table 1-2.

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8 REFERENCES

1. **Riverside County Transportation Department.** *Traffic Impact Analysis Preparation Guide.* County of Riverside : s.n., April 2008.

2. **California Department of Transportation.** *Guide for the Preparation of Traffic Impact Studies.* December 2002.

3. **Institute of Transportation Engineers.** *Trip Generation Manual.* 10th Edition. 2017.

4. **Western Riverside Council of Governments.** *TUMF Nexus Study, 2016 Program Update.* July 2017.

5. **Riverside County Transportation Commission.** *2011 Riverside County Congestion Management Program.* County of Riverside : RCTC, December 14, 2011.

6. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.

7. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CAMUTCD).* 2017.

8. **San Bernardino Associated Governments.** *Congestion Management Program for County of San Bernardino.* County of San Bernardino : s.n., Updated 2016.

9. **Southern California Association of Governments.** *2016 Regional Transportation Plan/Sustainable Communities Strategy.* April 2016.

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260 E. Baker St. | Suite 200 | Costa Mesa, CA 92626 | (949) 660-1994
urbanxroads.com

September 9, 2020

Mr. Ernest Perea
Romo Planning Group
9431 Haven Avenue, Ste. 232
Rancho Cucamonga, CA 91730

SUBJECT: SUN LAKES VILLAGE NORTH SPECIFIC PLAN AMENDMENT NO. 6 VEHICLE MILES TRAVELED (VMT) ANALYSIS

Dear Mr. Ernest Perea:

The following vehicle miles traveled (VMT) analysis has been prepared for the proposed Sun Lakes Village North Specific Plan Amendment No. 6 (**Project**) in the City of Banning. It is our understanding that the Project is to consist of a Specific Plan Amendment that amends the allowed Land Use Plan from "Retail Commercial" to "Business Park" and "Professional Office" along the primary freeway frontage and "Commercial Retail" along the Sun Lakes Boulevard frontage.

PROJECT OVERVIEW

The Project proposes to develop up to approximately 877,298 square feet (sf) of Industrial Park, 52,065 sf of medical office, and 37,189 sf of retail use on 47.11 acres.

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate takes effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (**Technical Advisory**). (1) Based on OPR's Technical Advisory, the Western Riverside Council of Governments (WRCOG) prepared a WRCOG SB 743 Implementation Pathway Document Package (March 2019) to assist its member agencies with implementation tools necessary to adopt analysis methodology, impact thresholds and mitigation approaches for VMT. To add to the previous work effort, WRCOG in February 2020 released its Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (**WRCOG Guidelines**), which provides specific procedures for complying with the new CEQA requirements for VMT analysis. (2)

VMT ANALYSIS METHODOLOGY

Through consultation with the City of Banning, it is our understanding that the City has yet to formally adopt its own VMT analysis guidelines and thresholds. Therefore, for the purposes of this analysis the recommended VMT analysis methodology and thresholds recommended by the Technical Advisory and supported by the WRCOG Guidelines have been used.

As outlined in the Technical Advisory, mixed-use projects such as the proposed Project need to evaluate each component of the project independently and apply the relevant significance threshold for each project type (i.e., office, retail, etc.). For the purposes of this VMT analysis, the evaluation of VMT will focus on the employment uses (i.e., industrial park and medical office uses) only. Consistent with Technical Advisory recommendations, local serving retail that is typically less than 50,000 sf will tend to improve retail destination proximity and short trips, which in turn reduces VMT. The Technical Advisory notes that local agencies can presume that such development creates a less-than-significant impact. [1]

The Technical Advisory provides for the following recommended threshold for office/industrial land use projects:

> "A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact." [2]

PROJECT SCREENING

The Technical Advisory provides details on appropriate "screening thresholds" that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed analysis. Screening thresholds are broken into three types:

- Project Type Screening
- Map Based Screening based on Low VMT Area
- Transit Priority Area (TPA) Screening

A land use project need only to meet one of the above screening thresholds to result in a less-than-significant impact.

For the purposes of this analysis, the initial VMT screening process has been conducted with using the WRCOG VMT Screening Tool (**Screening Tool**), which uses screening criteria consistent with the screening thresholds recommended in the Technical Advisory.

[1] Page 16 of the OPR's Technical Advisory.
[2] Page 16 of the OPR's Technical Advisory.

PROJECT TYPE SCREENING

The Technical Advisory identifies projects that are consistent with the current Sustainable Communities Strategy (SCS) or general plan, and that generate fewer than 110 daily vehicle trips be presumed to have a less-than-significant impact on VMT. Based on the Project's trip generation (see Attachment A), the Project is not consistent with the City's general plan and would generate more than 110 daily vehicle trips, therefore, the Project would not be eligible to screen out based on project type screening.

The Project Type screening threshold is not met.

LOW VMT AREA SCREENING

The Technical Advisory also states that, "residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT." The Screening Tool uses the sub-regional Riverside County Transportation Analysis Model (RIVTAM) to measure VMT performance within individual traffic analysis zones (TAZ's) within the WRCOG region. The Project's physical location based on parcel number was selected within the Screening Tool to determine the relevant TAZ's VMT as compared to the jurisdictional average (see Attachment B). The Project boundary is located in TAZ 4344, and would not appear to be within a low VMT generating TAZ based on daily total VMT per service population, but appears to potentially reside within a low generating TAZ based on daily home-based work (HBW) VMT per worker. As noted in the WRCOG Guidelines, "the analyst must identify if the project is consistent with the existing land use within the TAZ and use professional judgement that there is nothing unique about the project that would otherwise be mis-represented utilizing data from the travel demand model."[3] Based on a review of the land use information contained within TAZ 4344 for the RIVTAM base year (2012) model, the zone includes very low levels of employment and low amounts of population and household data. The proposed Project would significantly increase the number and type of employment uses in the zone and would therefore not be entirely consistent with the underlying land use assumptions.

The Low VMT Area screening threshold is not met.

TPA SCREENING

Consistent with guidance identified in the Technical Advisory, projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing "major transit stop"[4] or an existing stop along a "high-quality transit corridor"[5]) may be presumed to have a less than significant impact absent substantial evidence to the contrary.

[3] Page 25 of the WRCOG Guidelines

[4] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").

[5] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

However, the presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

Based on the Screening Tool results presented in Attachment B, the Project site does is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor.

The TPA screening threshold is not met.

Since none of the project level screening criteria were met, a project level VMT analysis should be prepared.

PROJECT VMT ASSESSMENT

RIVTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households and employment. The WRCOG Guidelines identifies RIVTAM as the appropriate tool for conducting VMT analysis for land use projects in Riverside County.

Project VMT has been calculated using the most current version of RIVTAM. Adjustments in socio-economic data (SED) (i.e., employment) have been made to a separate TAZ within the RIVTAM model to reflect the Project's proposed employment uses (i.e., industrial park and medical office). A separate TAZ is used to isolate the Project's VMT.

As noted previously, the Project's local serving retail component is less than 50,000 sf and meets the screening threshold recommended in the Technical Advisory for local serving retail projects that can be presumed to result in a less than significant impact.

Table 1 summarizes the employment estimates for the Project. It should be noted that the employment estimates are consistent with the land use to employment generation factors from the Riverside County General Plan. (3)

TABLE 1: EMPLOYMENT ESTIMATES

Land Use	Building Area	Building Area per Employee	Estimated Employees[6]
Industrial Park	877,298 sf	1,030 sf	852
Medical Office	52,065 sf	300 s.f.	174
Total:	929,363 sf	--	1,026

Adjustments to employment factors for the Project TAZ were made to the RIVTAM base year model (2012) and the cumulative year model (2040). Each model was then run with the updated SED factors included for the Project TAZ.

PROJECT VMT CALCULATION

Consistent with recommendations contained in the Technical Advisory, calculation of VMT for employment uses such as the industrial and medical office uses proposed by the Project are evaluated using home-based work trips[7]. The ability to separate trips by trip purpose can be achieved with the RIVTAM model by using the production-attraction (PA) trip matrices. Using these matrices, project generated HBW VMT was calculated for both the base year model (2012) and cumulative year model (2040) and linear interpolation was used to determine the Project's baseline (2020) HBW VMT. The HBW VMT is then normalized by dividing by the number of Project employees. As shown in Table 2, the Project baseline (2020) HBW VMT per worker is 13.33.

TABLE 2: PROJECT HBW VMT PER WORKER

	Project 2012	Project 2040	Project 2020 (interpolated)
Employment	1,026	1,026	1,026
HBW VMT	14,707	11,115	13,681
HBW VMT / Worker[8]	14.33	10.83	13.33

As noted previously, the City of Banning is still in development of their VMT guidelines and thresholds. To provide a comparison of the Project's VMT per worker to the existing regional VMT per worker, VMT values previously calculated and published by WRCOG as part of their WRCOG Guidelines has been utilized. WRCOG has provided HBW VMT per worker from RIVTAM for the base year model (2012) and the cumulative year model (2040) for each of its member agencies, the WRCOG region, and the unincorporated areas of the WRCOG region. For purposes of this assessment, the WRCOG region was utilized. Similar to the method used to calculation baseline (2020) Project VMT, the 2012 and 2040

[6] Riverside County General Plan Employment Factors
[7] Page 16 of the OPR's Technical Advisory
[8] HBW VMT/Employee is a measure of all auto trips between home and work and does not include heavy duty truck trips or freight, which is consistent with OPR direction and Riverside County VMT calculation guidelines.

published data for HBW VMT per worker were used to interpolate (using linear interpolation) the WRCOG region's baseline 2020 HBW VMT per worker (see Table 3).

TABLE 3: WRCOG UNINCORPORATED REGION HBW VMT PER WORKER

	Project 2012	Project 2040	Project 2020 (interpolated)
HBW VMT / Worker	12.83	14.02	13.17

Table 4 illustrates the comparison between Project-generated HBW VMT per worker to the existing (2020) WRCOG region HBW VMT per worker. As shown, the Project would exceed the 15 percent below existing regional HBW VMT per worker by 19.12 percent. As such, the Project's impact based on VMT for the light industrial and business park components is potentially significant.

TABLE 4: PROJECT VMT PER WORKER COMPARISON

	Project	Existing Regional Average (2020)	OPR 15% below Existing Regional Average
HBW VMT/Worker	13.33	13.17	11.19
Difference w/ Project		+0.16	+2.14
Percent Change		+1.22%	+19.12%

PROJECT'S POTENTIAL CUMULATIVE IMPACT ON VMT

The Technical Advisory states the following, "a project that falls below an efficiency-based threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts, and impacts that utilize plan compliance as a threshold of significance."[9] Therefore, the Project's finding related to cumulative impacts is considered potentially significant.

POTENTIAL VMT REDUCTION STRATEGIES

Transportation demand management (TDM) strategies have been evaluated for the purpose of reducing VMT impacts determined to be potentially significant. The effectiveness of TDM strategies to reduce VMT has been determined based on the SB 743 Implementation TDM Strategy Assessment (February 26, 2019, Fehr & Peers) (**WRCOG Report**) prepared for WRCOG and the Quantifying Greenhouse Gas Mitigation Measures (CAPCOA, 2010). The WRCOG Report indicates that of the 50 transportation measures presented by CAPCOA, only 41 are applicable at a building and site level. The remaining 9

[9] Page 6 of the OPR's Technical Advisory.

measures are functions of, or depend on, site location and/or actions by local and regional agencies or funders.

Based on a review of the 41 transportation measures identified by CAPCOA, the WRCOG Report identifies that only 7 of those measures may be effective at the project level. The effectiveness of the following TDM measures would be dependent in large part on future Project design features and building occupancies, which are unknown at this early land entitlement stage. Beyond the Project's tenancy considerations, land use context is a major factor relevant to the potential application and effectiveness of TDM measures. More specifically, the land use context of the Project is characteristically suburban. Of itself, the Project's suburban context acts to reduce the range of feasible TDM measures and moderates their potential effectiveness. Relevant discussion in this regard is presented in the WRCOG Report, excerpted in pertinent part below:

> The Technical Advisory relies on the Quantifying Greenhouse Gas Mitigation Measures, (CAPCOA) 2010 resource document to help justify the 15 percent reduction in VMT threshold stating, " . . . fifteen percent reduction in VMT are achievable at the project level in a variety of place types . . . ". A more accurate reading of the CAPCOA document is that a fifteen percent is the maximum reduction when combining multiple mitigation strategies for the *suburban center*[10] place type. For *suburban*[11] place types 10 percent is the maximum and requires a project to contain a diverse land use mix, workforce housing, and project-specific transit. It is also important to note that the maximum percent reductions were not based on data or research comparing the actual performance of VMT reduction strategies in these place types. Instead, the percentages were derived from a limited comparison of aggregate citywide VMT performance for Sebastopol, San Rafael, and San Mateo where VMT performance ranged from 0 to 17 percent below the statewide VMT/capita average based on data collected prior to 2002. Little evidence exists about the long-term performance of similar TDM strategies in different land use contexts. As such, VMT reductions from TDM strategies cannot be guaranteed in most cases (*WRCOG SB 743 Implementation Pathway Document Package*, pp. 65 – 66).

As indicated in the preceding discussion, even under the most favorable circumstances, projects located within a suburban context, such as the proposed Project evaluated here, can realize a maximum 10 percent reduction in VMT through implementation of feasible TDM measures. This could result in reduction from 13.33 to 11.99 HBW VMT per worker which would still exceed of the 15% below existing regional VMT per worker threshold of 11.19 by 7.15%. The following are the potential TDM measures

[10] ***Suburban Center:*** A project typically involving a cluster of multi-use development within dispersed, low-density, automobile dependent land use patterns (a suburb). The center may be an historic downtown of a smaller community that has become surrounded by its region's suburban growth pattern in the latter half of the 20th Century. The suburban center serves the population of the suburb with office, retail and housing which is denser than the surrounding suburb (*Quantifying Greenhouse Gas Mitigation Measures,* p. 60).

[11] ***Suburban:*** A project characterized by dispersed, low-density, single-use, automobile dependent land use patterns, usually outside.

that have the potential to be relevant to the proposed Project.

- *Measure 1: Increase Diversity of Land Uses.* Having different types of land uses near one another can decrease VMT since trips between land use types are shorter and may be accommodated by non-auto modes of transport. For example, when residential areas are in the same neighborhood as retail and office buildings, a resident may not need to travel outside of the neighborhood to meet his/her trip needs.

  Remarks: The Project proposes the construction of a diverse mix of land uses such as retail, medical office, and industrial park all to be located in close proximity to nearby single-family residential uses. It is recognized that the Project would introduce additional employment opportunities, acting to generally improve the regional jobs/housing balance. The resulting improved jobs/housing balance could reduce area commute VMT, as noted by CAPCOA (Quantifying Greenhouse Gas Mitigation Measures, p. 162).

- *Measure 2: Provide Pedestrian Network Improvements.* Providing a pedestrian access network to link areas of the Project site encourages people to walk instead of drive. This mode shift results in people driving less and thus a reduction in VMT.

  Remarks: The Project proposes increased diversification of land uses along with additional sidewalks along the Project's roadway network. This Project's implementation of this measure could provide for a potential reduction in Project VMT, as noted by CAPCOA (Quantifying Greenhouse Gas Mitigation Measures, p. 186).

- *Measure 3: Provide Traffic Calming Measure.* Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift will result in a decrease in VMT. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, and others.

  Remarks: There is limited opportunity for the Project to implement meaningful enhanced improvements related to traffic calming in this area. This measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- *Measure 4: Implement Car-Sharing Program.* Implementing a car-sharing program would allow individuals to have on-demand access to a shared fleet of vehicles on an as-needed basis. User costs are typically determined through mileage or hourly rates, with deposits and/or annual membership fees.

  Remarks: It is possible that employers within the Project site could implement car-sharing programs. This may provide car access for employees on an as-needed basis, and thereby alleviate some of the costs and responsibilities of individual car ownership. However, this would not necessarily result in a reduction of VMT but would rather transfer the VMT source from individually-owned autos to employee-subsidized autos. Moreover, CAPCOA indicates that this measure would at most result in nominal percent reduction in VMT (CAPCOA, Quantifying Greenhouse Gas Mitigation Measures, p. 245). This measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- *Measure 5: Increase Transit Service Frequency and Speed.* This measure serves to reduce transit-passenger travel time through more reduced headways and increased speed and reliability. This makes transit service more attractive and may result in a mode shift from auto to transit which reduces VMT.

  Remarks: The area is currently served by Riverside Transit Agency (RTA), a public transit agency serving various jurisdictions within Riverside County. As the Project has no control over the routes serviced or the frequency

of public transit service, the measure is therefore not evaluated further as a means of providing a reduction in Project VMT.

- *Measure 6: Encourage Telecommuting and Alternative Work Schedule.* Encouraging telecommuting and alternative work schedules reduces the number of commute trips and therefore VMT traveled by employees. Alternative work schedules could take the form of staggered starting times, flexible schedules, or compressed work weeks.

  Remarks: This measure could provide for a potential reduction in Project VMT, as noted by CAPCOA (Quantifying Greenhouse Gas Mitigation Measures, p. 236). However, the effectiveness of this measure is dependent on the ultimate building tenant(s) which are unknown currently. This measure is therefore not evaluated further as means of providing a reduction in Project VMT.

- *Measure 7: Provide Ride-Sharing Programs.* This strategy focuses on encouraging carpooling and vanpooling but its ultimate implementation is limited as Measure 6 above.

  Remarks: This measure could provide for a potential reduction in Project generated VMT, as noted by CAPCOA (Quantifying Greenhouse Gas Mitigation Measures, p. 227). However, the effectiveness of this measure is dependent on the ultimate building tenant(s) which are unknown currently. This measure is therefore not evaluated further as means of providing a reduction in Project VMT.

It is also recognized that as the Project area and surrounding communities develop as envisioned under the City of Banning general plan, new residential, office, retail, and industrial development would be implemented. These actions could collectively alter transportation patterns, improve the Region's jobs/housing ratio, diminish VMT, and support implementation of new or alternative TDM measures. There is no means, however, to quantify any VMT reductions that could result. Additionally, the effectiveness of some of the TDM strategies that have potential to reduce the Project VMT are dependent on as yet unknown Project building tenant(s); and as noted above, "VMT reductions from TDM strategies cannot be guaranteed in most cases."

In summary, the Project's HBW VMT per worker exceeds the threshold of 15% below the existing regional WRCOG HBW VMT per worker. Even with implementation of the limited feasible TDM measures discussed above, Project VMT cannot be reduced to levels that would be less-than-significant. Additionally, the efficacy of TDM measures and reduction of VMT impacts below thresholds cannot be assured. The Project VMT impact is therefore considered ***significant and unavoidable.***

If you have any questions, please contact me directly at (949) 336-5978.

Respectfully submitted,

URBAN CROSSROADS, INC.

Aric Evatt, PTP
President

Robert Vu, PE
Transportation Engineer

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **Western Riverside Council of Governments (WRCOG).** *Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment.* February 13, 2020.
3. **County of Riverside.** *Appendix E: Socioeconomic Build-Out Assumptions and Methodology.* County of Riverside : s.n., April 2017.

Attachment A

Project Trip Generation

Project Trip Generation Summary

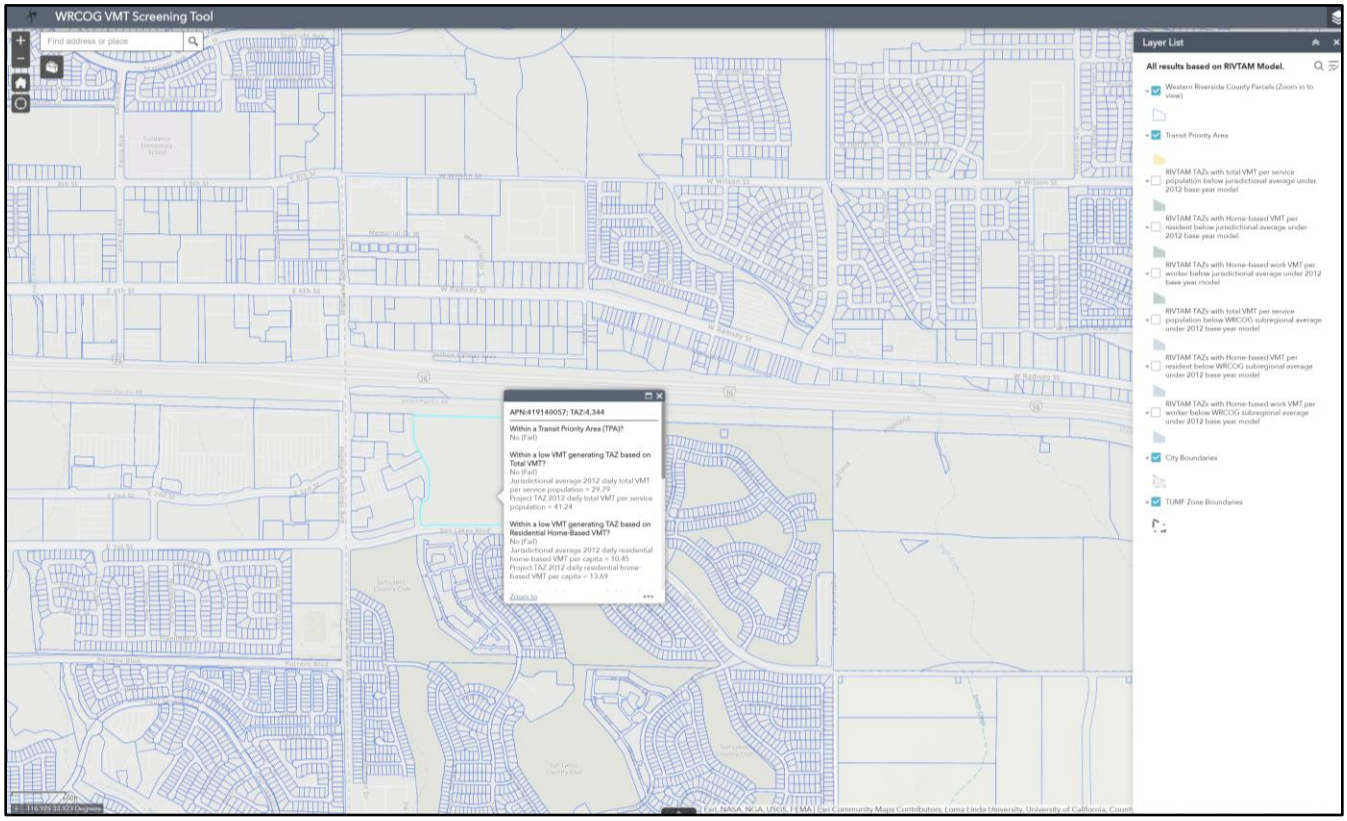
Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Industrial Park	877.298	TSF							
Passenger Cars:			250	59	309	66	250	316	2,514
Truck Trips:									
2-axle:			6	1	8	1	5	8	74
3-axle:			7	2	10	2	6	10	92
4+-axle:			21	5	28	5	17	29	278
- Truck Trips			34	8	46	8	28	47	444
Industrial Park Subtotal			***284***	***67***	***351***	***74***	***278***	***352***	***2,958***
Medical Office	52.065	TSF	113	32	145	50	130	180	1,812
Internal Capture			-4	-7	-11	-1	-5	-6	-62
Office Subtotal			***109***	***25***	***134***	***49***	***125***	***174***	***1,750***
Commercial Retail	37.189	TSF	22	13	35	68	74	142	1,404
Internal Capture			-7	-4	-11	-5	-1	-6	-60
Pass-By (34% PM/Daily)			0	0	0	-21	-21	-43	-458
Retail Subtotal			***15***	***9***	***24***	***42***	***51***	***93***	***886***
TOTAL TRIPS[2]			**408**	**101**	**509**	**165**	**454**	**619**	**5,594**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

Attachment B

WRCOG VMT Screening Tool


WRCOG VMT Screening Tool
Find address or place
Layer List
All results based on RIVTAM Model.
Western Riverside County Parcels (Zoom in to view)
Transit Priority Area
RIVTAM TAZs with total VMT per service population below jurisdictional average under 2012 base year model
RIVTAM TAZs with Home-based VMT per resident below jurisdictional average under 2012 base year model
RIVTAM TAZs with Home-based work VMT per worker below jurisdictional average under 2012 base year model
RIVTAM TAZs with total VMT per service population below WRCOG subregional average under 2012 base year model
RIVTAM TAZs with Home-based VMT per resident below WRCOG subregional average under 2012 base year model
RIVTAM TAZs with Home-based work VMT per worker below WRCOG subregional average under 2012 base year model
City Boundaries
TUMF Zone Boundaries
APN:419140057; TAZ:4,344
Within a Transit Priority Area (TPA)?
No (Fail)
Within a low VMT generating TAZ based on Total VMT?
No (Fail)
Jurisdictional average 2012 daily total VMT per service population = 29.79
Project TAZ 2012 daily total VMT per service population = 41.24
Within a low VMT generating TAZ based on Residential Home-Based VMT?
No (Fail)
Jurisdictional average 2012 daily residential home-based VMT per capita = 10.45
Project TAZ 2012 daily residential home-based VMT per capita = 13.69
Zoom to
Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, Loma Linda University, University of California, Count

Water Supply Assessment
for
Sun Lakes Village North
Specific Plan Amendment No. 5

City of Banning
99 E. Ramsey Street
Banning, CA 92220

Prepared by:

Romo Planning Group, Inc.
9431 Haven Avenue, Ste. 232
Rancho Cucamonga, CA 91730

August 31, 2020

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Findings

This Water Supply Assessment anticipates adequate water will be available during normal, single dry, and multiple dry water years during a 20-year projection to meet the projected water demand associated with the development allowed by the Sun Lakes Village Specific Plan Amendment No. 5, in addition to existing and planned future uses, including agricultural and manufacturing uses.

Water Supply Assessment Requirements

The City of Banning Public Works Department provides domestic water services to the City of Banning and portions of unincorporated Riverside County lands located southwesterly of the City limits. As a public water system, the City is mandated by California Water Code Section 10910 to prepare a Water Supply Assessment report that documents sources of water supply, quantifies water demands, evaluates drought impacts, and provides a comparison of water supply and demand. The Water Supply Assessment serves as the basis for the City to determine if adequate water will be available during normal, single dry, and multiple dry water years during a 20-year projection to meet the projected water demand associated with the Project, in addition to providing water for existing and planned future uses, including agricultural and manufacturing uses in its service area.

This Water Supply Assessment was prepared for consideration by the City of Banning City Council, as the lead agency under the California Environmental Quality Act (CEQA) for the environmental review of the Project. The WSA will be included in the City's Environmental Impact Report (EIR) for the Project.

Project Description

The Sun Lakes Village North Specific Plan ("Specific Plan") was originally approved by the City on February 28, 1983. The Project proposes to amend the Specific Plan Land Use Plan from Retail Commercial (Auto Dealer) to Business & Warehouse, Office & Professional, and Retail & Service (see Figure 2- Land Use Plan). The Specific Plan is also proposed to be amended to revise the permitted land uses ;development standards (including maximum building height, setbacks, open space, landscaping ,parking, and signage); design guidelines for development; and administration and implementation provisions. At this time there are no land use development entitlements being sought (i.e. site plan, parcel map, etc. Implementation of the Project's Land Use Plan (Figure 1), would allow up to approximately 877,298 square feet (sf) of Industrial Park, 52,065 sf of medical office, and 37,189 sf of retail use on 47.11 acres.

Figure 1. Land Use Plan



Estimating the Project's Water Demand

At the time this WSA was prepared, there were no land use development entitlements being sought (i.e. site plan, parcel map, etc.) by the Project proponent. In the absence of site-specific details, the water demand for the Project is based on the *City of Banning, Integrated Master Plan, Final Report*, March 2018. According to Table 3.8, *Known Developments Demand Projections,* the project identified as "Silverstone" in the table has the same amount of acreage (47 acres) and the same General Plan land use designation (retail commercial) as the proposed Project. As such, the same water demand used for the Silverstone project is used for the proposed Project which is estimated to be 279-acre feet per year (afy).

City's Water Supply System

Groundwater Supply and Reliability

The City has five sources of groundwater storage supply:

- Banning Storage Unit;
- Banning Bench Storage Unit;
- Banning Canyon Storage Unit;
- Beaumont Storage Unit; and
- Cabazon Storage Unit.

Banning Storage Unit

The Banning Storage Unit is approximately 3.9 square miles in size. With the four wells currently installed within this unit, the City has pumping capacity up to 3,500 gpm, or 5,646 acre-ft/year. The safe yield was determined to be 1,130-acre ft/ year, which is what the 2015 UWMP includes for future production projections.

Banning Bench Storage Unit

The Banning Bench Storage Unit is approximately 5.9 square miles in size. Three wells within this unit can produce up to 3,650 gpm, or 5,888 acre-ft/year. The safe yield was determined to be 1,960 acre-ft/year.

Banning Canyon Storage Unit

The Banning Canyon Storage Unit comprises approximately 1.6 square miles. The Banning Canyon Storage Unit is the largest source of water for the City. The San Gorgonio River, and a

diversion system from the Whitewater River, provide recharge for Banning Canyon. Eight wells within this unit can produce up to 8,600 gpm, or 13,873 acre-ft/year. The safe yield has been determined to be 4,070 acre-ft/year.

Beaumont Storage Unit

The Beaumont Storage is approximately 20 square miles in size Extraction of water from the Beaumont Storage Unit has been adjudicated, with rights shared amongst the City of Banning, the Beaumont - Cherry Valley Water District, the South Mesa Water District, and the Yucaipa Valley Water District. Five wells within this unit, plus the city's share of three additional wells co-owned with the Beaumont-Cherry Valley Water District, can produce up to 7,650 gpm, or 12,340 acre-ft/year.

Cabazon Storage Unit

The Cabazon Storage Unit is approximately 27 square miles in size and can store up to 1,000,000 acre-feet. The City does not have exclusive pumping rights for the Cabazon Storage Unit. One well within this unit, C-6, can produce up to 900 gpm, or 1,452 acre-ft/year. The City produced 786 acre-feet from C-6 in 2014. With the installation of additional wells and pipeline, the City could safely extract 2,515 acre-ft/year. Table 1 provides a summary of the available groundwater supplies from 2020 to 2040.

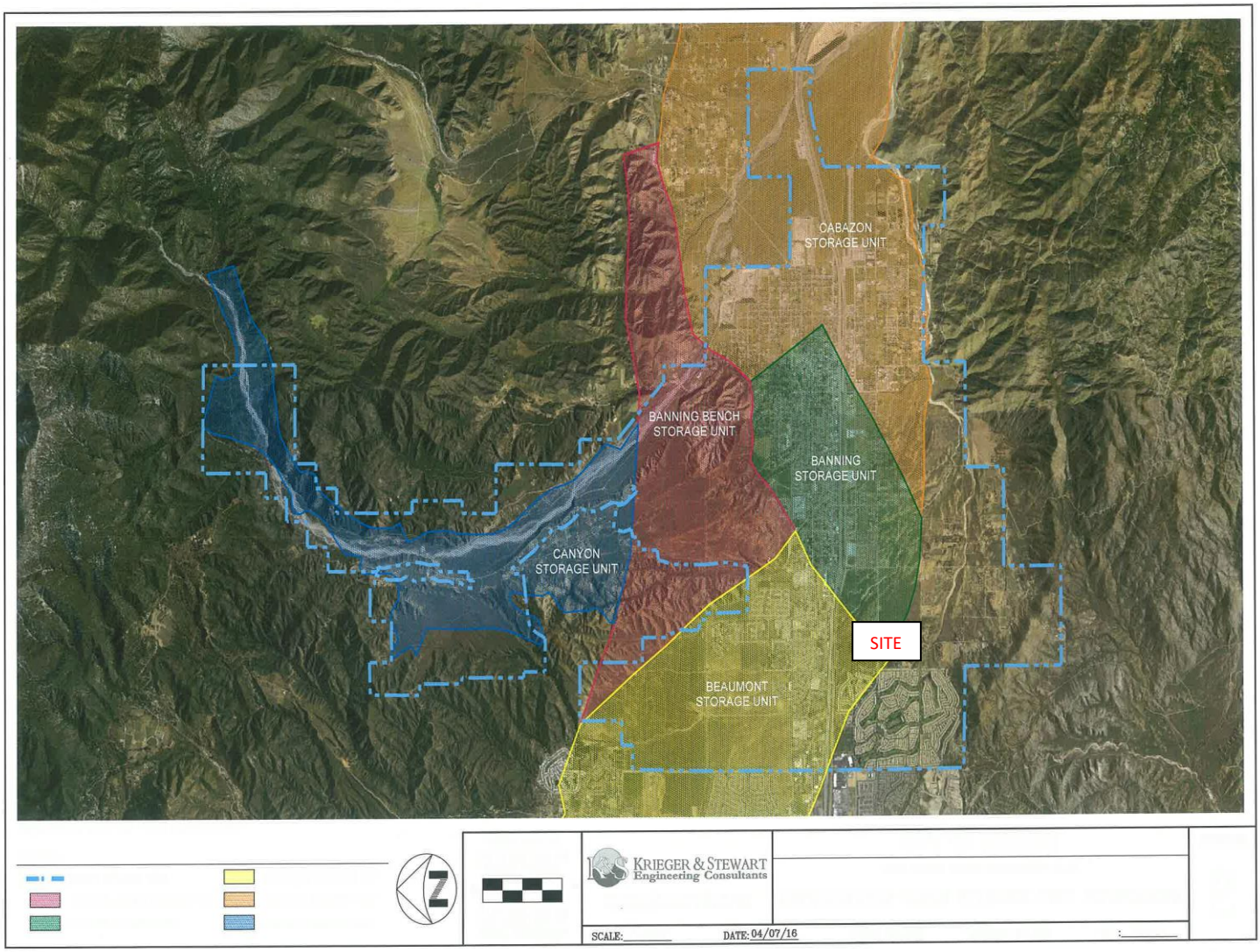
Table1: Groundwater Supplies 2020-2040 (AF/YR)

Basin Name	2020	2025	2030	2035	2040
Beaumont Storage Unit	1,266	1,145	1,029	925	925
Beaumont Storage Unit Recharge	2,718	2,718	2,718	2,718	2,718
Banning Storage Unit	1,130	1,130	1,130	1,130	1,130
Banning Bench Storage Unit	1,960	1,960	1,960	1,960	1,960
Banning Canyon Storage Unit	2,515	2,515	2,515	2,515	2,515
San Gorgonio Pass Subbasin Total	**13,659**	**13,538**	**13,422**	**13,318**	**13,318**

Data Source: 2015 UWMP Tab

Sun Lakes Village North SPA No.6 Water Supply Assessment

FIGURE 2: GROUNDWATER BASINS



Beaumont Basin Adjudication

The Beaumont Basin is an adjudicated basin pursuant to the *Stipulation for Entry of Judgment Adjudicating Groundwater Rights in the Beaumont Basin* (the Judgment), a copy of which is included in Appendix A (2015 UWMP**)**. Pursuant to the Judgment, the Court appointed a five-member Watermaster Committee, consisting of representatives from each of the five appropriators, which include City of Banning, City of Beaumont, Beaumont-Cherry Valley Water District, South Mesa Water Company, and Yucaipa Valley Water District.

The safe yield of the Beaumont Basin was initially established at 8,650 AF/yr., to be distributed among the appropriators. The safe yield is to be reevaluated at least once every ten years. Based on the *2013 Reevaluation of the Beaumont Basin Safe Yield*, dated April 3, 2015, the safe yield was determined to be 6,700 AF/yr.

Based on the Beaumont Basin Watermaster 2018 Consolidated Annual Report and Engineering Report, dated February 2020, the City has 52,320 af in its Appropriator's storage account.

Groundwater Reliability

Because the City's water supply is primarily groundwater, the City is not subject to short-term water shortages resulting from temporary dry weather conditions. Further, as part of the Beaumont Basin adjudication, the City has the option of storing up to 80,000-acre feet of water in the Beaumont Basin. At the end of calendar year 2014, City of Banning had 46,774 AF of water available in Beaumont Basin storage.

Imported Water Supply and Reliability

The City purchases State Water Project (SWP) water from the San Gorgonio Pass Water Agency (SGPWA), who is one of 29 state water contractors. Quantities of SWP water purchased are recharged to the Beaumont Basin at Beaumont-Cherry Valley Water Districts' Noble Creek spreading facility, which is in the vicinity of Beaumont Avenue and Cherry Valley Boulevard. Quantities of water obtained from SGPWA and recharged to the Beaumont Basin are set forth in Table 2 below. Quantities that will be recharged in the future are dependent upon SWP water availability and storage capacity available to the City.

Table 2: Imported Water Recharged to Beaumont Basin by City of Banning (AF/YR)

2010	2011	2012	2013	2014	2015
1,338	800	1,200	1,200	608	694

Data Source: San Gorgonio Pass Water Agency

On May 22, 2020, the SGPWA announced that the State Water Project (SWP) now expects to deliver 20 percent of requested supplies in 2020 because of above-average precipitation in May. An initial allocation of 10 percent was announced in December and increased to 15 percent in January. This will likely be the final allocation update of 2020. Although the City may expect variable reliability in availability of SWP water, such water is not its primary source of water, and short-term declines in SWP water availability would be offset by the City's substantial reserves of stored groundwater and would not result in a substantial impact to the City's water supply

Water Supplies During Normal, Single-Dry, and Multiple- Dry Year Conditions

The demand quantities were calculated based on an average per capita demand within the City's service area of 220 gallon per capita per day ("gpcd"), with future actual demands of the two proposed specific plan developments (Butterfield Ranch and Rancho San Gorgonio) at the demands set forth in their respective water supply assessments.

Table 3: Normal Year Supply and Demand Comparison (AF/YR)

	2020	2025	2030	2035	2040
Supply Totals	13,659	13,538	13,422	13,318	13,318
Demand Totals	10,515	11,320	12,047	12,837	13,629
Difference	**+3,144**	**+2,218**	**+1,375**	**+481**	**-311**

Data Source: 2015 UWMP Table 6-4.

Table 4: Single Dry Year Supply and Demand Comparison (AF/YR)

	2020	2025	2030	2035	2040
Supply Totals	13,659	13,538	13,422	13,318	13,318
Demand Totals	10,515	11,320	12,047	12,837	13,629
Difference	**+3,144**	**+2,218**	**+1,375**	**+481**	**-311**

Data Source: 2015 UWMP Table 6-5.

Table 5: Multiple Dry Years Supply and Demand Comparison (AF/YR)

		2020	2025	2030	2035	2040
First Year	Supply Totals	13,659	13,538	13,422	13,318	13,318
	Demand Totals	10,515	11,320	12,047	12,837	13,629
Second Year	**Difference**	**+3,144**	**+2,218**	**+1,375**	**+481**	**-311**
Second Year	Supply Totals	13,659	13,538	13,422	13,318	13,318
	Demand Totals	10,515	11,320	12,047	12,837	13,629
Third Year	**Difference**	**+3,144**	**+2,218**	**+1,375**	**+481**	**-311**
Third Year	Supply Totals	13,659	13,538	13,422	13,318	13,318
	Demand Totals	10,515	11,320	12,047	12,837	13,629
		+3,144	**+2,218**	**+1,375**	**+481**	**-311**

Data Source: 2015 UWMP Table 6-6
[1]Due to reliance on ground water supply reliability is the same during normal, single-dry, and multiple-dry water years (2015 UWMP)

Although projected supply totals are less than projected demand totals for 2040, the City has 52,320 AF of stored water in its Beaumont Basin storage account, which is not accounted for in the projected supply totals. Therefore, the City has ample water supplies to meet projected demands through 2040.

Water Shortage Contingency Planning

The City of Banning relies on groundwater as its primary source of water supply, and periodic drought has historically not substantially affected the groundwater levels. For this reason, the water shortage contingency analysis mainly focuses on water supply interruption resulting from equipment failure and disaster. The City adopted its Water Shortage Contingency Plan (WSCP) in 1991 with adoption of City Ordinance No. 1040. The WSCP outlines a plan of action in the event of a water shortage caused by a catastrophic event, such as electrical power failure, earthquake, pipeline failure, or other event that results in the City's potential inability to meet the water demands of its customers.

At these demands, the City will be able to meet future demands through 2035 with existing supplies, without using any of the City's 52,320 AF of groundwater in reserve storage in the Beaumont Storage Unit. If the stored groundwater is used to supplement demands, the City will be able to satisfy projected demands at 220 gpcd without acquiring additional quantities of replenishment water for many years beyond 2040.

Project Water Demand vs. City Water Supply

Table 6 shows a comparison of the Project's projected water demand compared to the available City water supplies for the period 2020 to 2040.

Table 6. Comparison of Project Demand vs. Projected Deliveries (afy)

Land Use	2020	2025	2030	2035	2040
Industrial	94	99	103	107	111
Commercial	2.281	2,382	2,484	2,586	2,694
Total	**2,375**	**2,481**	**2,587**	**2,693**	**2,805**
Project Demand	279	279	279	279	279
Project's Percent of Total	11.7%	11.2%	10.8	10.4	9.9%

Data Source: 2015 UWMP Table 3-1

As shown in Table 6 above, the Project's expected water demand is within the 2015 UWMP's total projected water supplies available during normal, single dry, and multiple dry water years for the next 20 years. Therefore, there will be adequate supplies to meet the projected water demand associated with the Project in addition to the existing and other planned future uses of the City's water system.

Summary

The Water Supply Assessment has been prepared to meet the requirements of Water Code Section 10910 of the Water Code. The assessment indicates adequate water will be available during normal, single dry, and multiple dry water years during a 20-year projection to meet the projected water demand associated with the development allowed by the Sun Lakes Village Specific Plan Amendment No. 5, in addition to existing and planned future uses, including agricultural and manufacturing uses.