INITIAL STUDY

FOR THE

HESPERIA RECREATION AND PARK DISTRICT LIME STREET PARK PROJECT

Prepared for:

Hesperia Recreation and Park District
16292 Lime Street
Hesperia, California 92345

Prepared by:

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LIST OF ABBREVIATIONS AND ACROYNMS

AAQS	Ambient Air Quality Standards
amsl	above mean sea level
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
BACMs	Best Available Control Measures
BMPs	Best Management Practices
BRA	Biological Resources Assessment
BUOW	Burrowing Owl
C&D	Construction and Demolition
CAAA	Clean Air Act Amendment
CAAQS	California Ambient Air Quality Standards
CAP	Climate Action Plan
CARB	California Air Resources Board
CCAR	California Climate Action Registry (now called Climate Action Reserve)
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
EIR	Environmental Impact Report
ESA	Endangered Species Act
FGC	Fish & Game Code
FTA	Federal Transit Association
GCC	Global Climate Change
GHG	Greenhouse Gas
HWD	Hesperia Water District
LRA	Local Responsible Area
LSA	Lake or Streambed Alteration Agreement
LST	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MM	Mitigation Measure
MND	Mitigated Negative Declaration
NAAQS	National Ambient Air Quality Standards
NBP	Nesting Bird Plan
NOI	Notice of Intent
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System

NRHP	National Register of Historic Places
PIO	Public / Institutional Overlay
PM	particulate matter
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SBBM	San Bernardino Base Meridian
SBCFD	San Bernardino County Fire Department
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SEL	Sound Exposure Level
SIP	State Implementation Plan
SMBMI	San Manuel Band of Mission Indians
SOx	Sulfur Oxides
SRA	State Responsibility Area
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TCR	Tribal Cultural Resources
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
VdB	vibration-velocity decibel
VMT	Vehicle Miles Traveled
VVWRA	Victor Valley Wastewater Reclamation Authority
WoUS	Waters of the United States
WQMP	Water Quality Management Plan

ENVIRONMENTAL CHECKLIST FORM

1. **Project Title:** Lime Street Park Project

2. **Lead Agency Name:** Hesperia Recreation and Park District
   Address: 16292 Lime Street, Hesperia, CA 92345

3. **Contact Person:** Marshawn Etchepare
   Phone Number: (760) 244-5488, ext. 118
   Email Address: m_etchepare@hesperiaparks.com

4. **Project Location:** Lime Street Park is located in the City of Hesperia at the northeast corner of Lime Street and Hesperia Road, San Bernardino County. The cadastral location is Section 28, Township 4 North, Range 4 West, SBBM. The latitude longitude location for the Park is as follows: 34° 24' 25.54" North and 117° 18' 24.06" West. The new proposed facilities occur primarily in the northeastern portion of the Park site as shown on Figure 1 (regional location), Figure 2 (site location), Figure 3 an aerial photo of the site; and Figure 4 a conceptual plan showing the location of the existing and proposed facilities.

5. **Project Sponsor:** Hesperia Recreation and Park District
   Name and Address: 16292 Lime Street, Hesperia, CA 92345

6. **General Plan Designation:** MSFC-SP-Main Street/Freeway Corridor Specific Plan; Public/Institutional Overlay (PIO)

7. **Zoning Classification:** Main St//Freeway Corridor Specific Plan: Public/Institutional Overlay (PIO)

8. **Project Description:**

The Hesperia Recreation and Park District (District) is proposing to implement improvements at its Lime Street Park. This is an existing District park with extensive recreation facilities that include, but are not limited to, four baseball fields, swimming pool, tennis courts and a community center with an adjacent playground. The park land currently includes two extensive open areas (graded and compacted dirt with no vegetation) where it is proposing additional recreation facility improvements to enhance the recreation capacity of Lime Street Park. These proposed improvements include the installation of the following possible facilities: two new lighted baseball/softball fields (these fields will also function as multi-sport fields for soccer and football); expanded paved parking area and access; volleyball court; outdoor water recreation feature, such as a splash pad; and a pervious walking/jogging path throughout the improved park area.

To fund the identified improvements, the District is seeking funds from California State Parks for the new facilities under a Proposition 68 Grant. An application has been submitted to the State for a grant of about $4.5 million dollars. To determine the types of facilities being sought by the affected community, the District conducted a robust community outreach effort. District Staff met with local stakeholders, including youth, seniors and families to receive input on the type of park facilities and expansion that would be uniquely suited to the area and that would address resident's concerns and desires. The proposed park facilities shown on Figure 4 illustrate the District priorities: new additional sports fields and better park access and parking. All other proposed and existing facilities are also shown on this map. The following listed facilities on

Figure 4 are proposed new facilities for the Lime Street Park: Facilities 1, 2, 3, 5, 6, 7, 8, 9, 10, 25, 28, and 29 for the Lime Street Park.

Once the proposed facilities have been installed, they will support a variety of activities which may include:

- Baseball, soccer, football and other games/activities requiring grass fields
- Vehicle parking, with night lighting
- Walking or jogging on the new walkway and trail
- Water play
- Volleyball
- Exercise area (outdoor fitness area)

Construction Scenario

As can be seen from Figure 3, most of the area of proposed construction area is essentially a flat, dirt landscape. Discussion with the District Staff indicates that for the proposed facilities, no mass grading will be required and it is anticipated that minimal overall grading will be required to install all of the facilities identified in the preceding text and listed on Figure 4. Once each individual facility is designed, installation will proceed. Construction activities will occur using small pieces of equipment, such as a small grader, loaders and a small water truck or hoses connected to the onsite irrigation system. It is possible that more than one facility could be under construction at a time. For the areas that require paving, such as the new parking area, the asphalt or concrete will be delivered to the site and applied to these areas in a routine manner. It is the intent of the District to attenuate noise, traffic, and dust during the course of construction

9. Surrounding land uses and setting (Briefly describe the project's surroundings)

Lime Street Park encompasses approximately 12 acres at the northwest corner of Hesperia Road and Lime Street. As shown on Figure 5, the area to the north is relatively undeveloped with one or two residences located a few hundred feet distant. Hesperia Road and the BNSF Railway mainline tracks are located to the east of the site. Residences are located about 200 feet from the Park's eastern boundary. South of the proposed new multi-use fields, are several park facilities, including two baseball fields and the Recreation and Park District office. South of Lime Street are low-density residences. About 400 feet west of the Park are four residences; about 300 feet east of the Park is a residential complex with several single family homes. As already indicated, the whole area of the Park has been disturbed by past activities with varying levels of intensity.

10. Lead Agency Discretionary Actions:

Discretionary actions that may be taken by the Lead Agency include, but are not limited to, the following: The proposed Lime Street Park Project does not require any discretionary permits from any known agency. The Hesperia Recreation and Park District Board will have to approve the conceptual design of the proposed improvements and the submittal of the funding application to the California State Parks Department. If funding is approved, the District Board will have to award construction contracts to implement the various facilities previously described. No other agency approvals have been identified as necessary to support implementation of the proposed project.

11. Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement.):

- Construction Compliance – Stormwater Discharge. Construction projects that disturb 1 acre of land or more are required to obtain coverage under the NPDES General Permit for Construction Activities (General Construction Permit), which requires the applicant to file a notice of intent (NOI) to discharge stormwater and to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP includes an overview of the Best Management Practices (BMPs) that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. The District will prepare a SWPPP for the project if the disturbance area exceeds 1 acre.

12. Have California Native American tribes traditionally and cultural affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? Yes, the District sent letters to the San Manuel Band of Mission Indians and the Torres Martinez Desert Cahuilla Indians pursuant to AB-52 on October 28 and 31, 2019 respectively. The initial 30-day consultation period ended on November 30, 2019. Within this period, the District received a letter back from the San Manuel Band of Mission Indians requesting mitigation measures to be included as part of this project. The Torres Martinez Desert Cahuilla Indians did not respond to the initial consultation letters within the designated 30-day period.

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

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 / Soils	☐ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials
☒ Hydrology & Water Quality	☒ Land Use / Planning	☐ Mineral Resources
☒ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

☐	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	Although the proposed project 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 proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact 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. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Tom Dodson & Associates
Prepared by

July 12, 2021
Date

Lead Agency (signature)

July 15, 2021
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:				
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 or 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?	☐	☐	☒	☐

SUBSTANTIATION

Environmental Setting

Lime Street Park is an existing park and recreation facility as shown in Figures 3 and 5. Almost all of the existing facilities shown on these two aerial photos are at ground level and do not prevent views to the mountains to the south and east. The areas to be developed are currently graded, compacted dirt pads. The proposed park facilities are all ground level facilities, including new multi-use fields, parking areas, park access improvements, and other exercise facilities at ground level.

Impact Analysis

a. *No Impact* – The CEQA Guidelines do not provide a definition of what constitutes a "scenic vista" or "scenic resource" or a reference as to from what vantage point(s) the scenic vista and/or resource, if any, should be observed. However, a scenic vista can generally be defined as a viewpoint from a public vantage point that provides expansive views of a highly-valued landscape for the benefit of the general public. Common examples include undeveloped hillsides, ridgelines, and open space areas that provide a unifying visual backdrop to a developed area. Scenic resources are those landscape patterns and features that are visually or aesthetically pleasing and that contribute affirmatively to the definition of a distinct community or region such as trees, rock outcroppings, and historic buildings. As stated above, the proposed recreation facilities would not result in a change in access to visual resources visible from the existing park. The onsite change to the park physical environment will enhance the overall park setting. Thus, project implementation has no potential to result in a substantial adverse effect on a scenic vista.

   Finally, the proposed projects that would require short-term ground disturbance. Upon completion of the proposed improvements, none of the projects would substantially alter the existing visual character of the park and may actually enhance the park-like setting. Therefore, the projects identified in the District's Lime Street Park Project would not have a substantial adverse effect on a scenic vista.

b. *No Impact* – The project footprint does not contain any scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway corridor. No scenic

resources, such as historical buildings, trees, or rock outcropping, would be removed, altered, or obstructed as part of the proposed project. There is no State scenic highway within the project area, as neither Lime Street nor Hesperia Road are considered as such. Therefore, the proposed projects will not damage any scenic resources within or adjacent a scenic State highway. Lime Street Park is a local oasis of greenery in the project area, but the proposed project is anticipated to enhance this scenic resource, not adversely impact it.

c. *No Impact* – The proposed project occurs in a suburban portion of the City of Hesperia. The proposed facilities would be constructed within an existing park and does not require any entitlements to proceed once funded. Upon completion of the proposed improvements, none of the projects would substantially degrade the existing visual character of the communities or open space areas. Therefore, the projects identified in the District's Lime Street Park Project would not substantially degrade the existing visual character or quality of the facility sites or surrounding areas.

d. *Less Than Significant Impact* – The District is will install night lighting at the multi-use fields and possible some lighting along portions of the walking/jogging path. Due to the distance from nearby residences and the existing night lighting, the potential for significant adverse impact from the new fields is forecast to be a less than significant impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. 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 Dept. 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:				
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?	☐	☐	☐	☒

SUBSTANTIATION

a. *No Impact* – The proposed project will occur within the boundaries of the existing Lime Street Park. Neither the project site, not the adjacent and surrounding properties are designated for agricultural use; no agricultural activities exist in the project area; and there is no potential for impact to any agricultural uses or values as a result of project implementation. According to the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, no prime farmland, unique farmland, or farmland of statewide importance exists within the vicinity of the proposed project (Figure II-1); the project site is identified as being located on urban build up land and other land. Therefore, no adverse impact to any agricultural resources would occur from implementing the proposed project. No mitigation is required.

b. *No Impact* –There are no agricultural uses currently on the Project site or on adjacent properties. The project site is zoned for Main St/Freeway Corridor Specific Plan: Public/Institutional Overlay

(PIO), and the land use designation is MSFC-SP-Main Street/Freeway Corridor Specific Plan; Public/Institutional Overlay (PIO). None of these land uses or zoning classifications support agricultural uses. Therefore, no potential exists for a conflict between the proposed project and agricultural zoning or Williamson Act contracts within the project area. No mitigation is required.

c. *No Impact* – Please refer to sections a) and b) above. The project site is zoned for Main Street/Freeway Corridor Specific Plan: Public/Institutional Overlay (PIO), and the land use designation is MSFC-SP-Main Street/Freeway Corridor Specific Plan; Public/Institutional Overlay (PIO). None of these land uses or zoning classifications support forest land or timberland uses or designations. No potential exists for a conflict between the proposed project and forest/timberland zoning. No mitigation is required.

d. *No Impact* – There are no forest lands within the project area because the project area is urbanized and located in the high desert. No potential for loss of forest land would occur if the project is implemented. No mitigation is required.

e. *No Impact* – Because the project site and surrounding area do not support either agricultural or forestry uses and, furthermore, because the project site and environs are not designated for such uses, implementation of the proposed project would not cause or result in the conversion of farmland or forest land to alternative use. No adverse impact would occur. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. 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:				
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?	☐	☐	☒	☐

SUBSTANTIATION: The following information utilized in this section of the Initial Study was obtained from the *Air Quality and GHG Impact Analysis, Hesperia Lime Street Park, City of Hesperia, California* prepared by Giroux and Associates dated November 5, 2019. This document is provided as Appendix 1 to this document.

Background

Climate
The climate of the Victor Valley, technically called an interior valley subclimate of Southern California's Mediterranean-type climate, is characterized by hot summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. The clouds and fog that form along the Southern California coastline rarely extend across the mountains to Victorville. The most important local weather pattern is associated with the funneling of the daily onshore sea breeze through El Cajon Pass into the upper desert to the northeast of the heavily developed portions of the Los Angeles Basin. This daily airflow brings polluted air into the area late in the afternoon from late spring to early fall. This transport pattern creates both unhealthful air quality as well as destroying the scenic vistas of the mountains surrounding the Victor Valley.

Air Quality Standards
Monitored air quality is evaluated and in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table III-1. Because the State of California had established Ambient Air Quality Standards (AAQS) several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table III-1. Sources and health effects of various pollutants are shown in Table III-2.

Of the standards shown in Table III-1, those for ozone (O3), and particulate matter (PM-10) are exceeded at times in the Mojave Desert Air Basin (MDAB). They are called “non-attainment pollutants.” Because of the variations in both the regional meteorology and in area-wide differences in levels of air pollution emissions, patterns of non-attainment have strong spatial and temporal differences.

Table III-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Average Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		–		
Fine Particulate Matter (PM2.5)[9]	24 Hour	–	–	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	–	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	
Nitrogen Dioxide (NO2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	–	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	–	Ultraviolet Flourescense; Spectrophotometry (Paraosaniline Method)
	3 Hour	–		–	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas)[11]	–	
Lead 8[12,13]	30-Day Average	1.5 µg/m^3	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Avg	–		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No Federal Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Footnotes

1 California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM10, PM2.5, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year, with a 24-hour average concentration above 150 $\mu g/m^3$, is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25̊C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25̊C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7 Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

8 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9 On December 14, 2012, the national PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primarily and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primarily and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11 On June 2, 2010, a new 1-hour SO2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 j.tg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table III-2
HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Baseline Air Quality

Monitoring of air quality in the MDAB is the responsibility of the Mojave Desert Air Quality Management District (MDAQMD) headquartered in Victorville, California. Because of the low population density of the air district, limited monitoring resources are distributed over a relatively large geographic area. The heaviest concentration of measurements is in the area of greatest development in the Victor Valley. Existing levels of criteria air pollutants in the project area can generally be inferred from measurements conducted at the Hesperia monitoring station. Although the Hesperia Station does not monitor the complete spectrum of pollutants, data for NO_2 and PM-2.5 are available from the Victorville Monitoring Station. CO is no longer monitored in the Mojave Desert. Table III-3 summarizes the available monitoring history from the Hesperia and Victorville monitoring stations for the last 3 years. From these data one can infer that baseline air quality levels near the project site are occasionally unhealthful, but that such violations of clean air standards usually affect only those people most sensitive to air pollution exposure.

Table III-3
PROJECT AREA AIR QUALITY MONITORING SUMMARY – 2016-2018
(DAYS STANDARDS WERE EXCEEDED AND MAXIMUM OBSERVED LEVELS)

Pollutant/Standard	2016	2017	2018
Ozone			
1-Hour > 0.09 ppm (S)	25	18	9
8-Hour > 0.07 ppm (S)	65	75	71
8- Hour > 0.075 ppm (F)	47	45	45
Max. 1-Hour Conc. (ppm)	0.119	0.114	0.113
Max. 8-Hour Conc. (ppm)	0.098	0.094	0.100
Nitrogen Dioxide			
1-Hour > 0.18 ppm (S)	0	0	0
Max. 1-Hour Conc. (ppm)	0.097	0.057	0.057
Respirable Particulates (PM-10)			
24-Hour > 50 $\mu g/m^3$ (S)	9	na	na
24-Hour > 150 $\mu g/m^3$ (F)	1	2	0
Max. 24-Hr. Conc. ($\mu g/m^3$)	203.5	163.9	138.9
Fine Particulates (PM-2.5)			
24-Hour > 35 $\mu g/m^3$ (F)	1	0	0
Max. 24-Hr. Conc. ($\mu g/m^3$)	41.5	27.2	32.7

na = not available; S=State Standard; F=Federal Standard
Source: Hesperia Station: Ozone, PM-10, Victorville Station: CO, NO_2, PM-2.5 data: www.arb.ca.gov/adam/

a. Photochemical smog (ozone) levels occasionally exceed standards. The 8-hour state ozone standard has been exceeded approximately 19 percent of all days in the last three years while the 1-hour state standard has been exceeded almost five percent of all days. The 8-hour federal standard has been exceeded approximately 12 percent of all days in the past three years. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade

b. Respirable dust (PM-10) levels often exceed the state standard of 50 $\mu g/m^3$ but the less stringent federal PM-10 standard of 50 $\mu g/m^3$ has only been violated three times for the last three years. Year 2018 had the lowest maximum 24-hour concentration in recent history.

c. A substantial fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). There has only been one violation in the last three years.

Although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within

Air Quality Standards

The Mojave Desert AQMD has adopted numerical emissions thresholds as indicators of potential impact even if the actual air quality increment cannot be directly quantified. The MDAQMD thresholds are as follows:

Carbon Monoxide (CO)	548 pounds/day	100 tons/year
Nitrogen Oxides (NOx)	137 pounds/day	25 tons/year
Sulfur Oxides (SOx)	137 pounds/day	25 tons/year
Reactive Organic Gases (ROG)	137 pounds/day	25 tons/year
Particulate Matter (PM-10)	82 pounds/day	15 tons/year
Particulate Matter (PM-2.5)	65 pounds/day	12 tons/year
GHG	548,000 pounds/day	100,000 tons/year

Impact Analysis

a. *Less Than Significant Impact* – Projects such as the proposed Lime Street Park Project do not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The City requires compliance with the Municipal Code for project such as this, and the Park District intends to meet these standards. The Lime Street Park Project will be fully consistent with both the General Plan designation and Zone classification for the project site, mainly because the Project involves upgrades to an existing Park. Thus, the proposed project is consistent with regional planning forecasts maintained by the Southern California Association of Governments (SCAG) regional plans. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis. As the analysis of project-related emissions provided below indicates, the proposed project will not cause or be exposed to significant air pollution, and is, therefore, consistent with the applicable air quality plan.

b. *Less Than Significant With Mitigation Incorporated* – Air pollution emissions associated with the proposed project would occur over both a short and long-term time period. Short-term emissions include fugitive dust from construction activities (i.e., site prep, demolition, grading, and exhaust emission) at the proposed Project site. Long-term emissions generated by future operation of the upgraded Lime Street Park include trip generation and water use for irrigation, as well as a small amount of energy use for lighting.

Background and Adjacent Uses
Lime Street Park is located in the City of Hesperia at the northeast corner of Lime Street and Hesperia Road and encompasses approximately 12 acres. This is an existing park that contains extensive recreation facilities, including, but not limited to, five baseball fields, swimming pool, tennis courts and a community center. The proposed improvements include the installation of the following possible facilities: two new baseball/softball fields (these fields will also function multi-sport fields for soccer and football; expanded paved parking area and access; volleyball court; outdoor water recreation

feature, such as a splash pad; and a pervious walking/jogging path throughout the improved park area.

Most of the area of proposed construction area is essentially a flat, dirt landscape. District Staff indicates that for the proposed facilities, no mass grading will be required and it is anticipated that minimal overall grading will be required to install all of the facilities identified.

For this analysis, worst case assumptions were made to be conservative. The entire park was treated like a new facility. Construction emissions are based on the build of a new 12-acre park though many of the park's amenities will remain.

The area to the north is relatively undeveloped with one or two residences located a few hundred feet in the distance. Hesperia Road and the BNSF Railway mainline tracks are located east of the site. The Santa Fe Mobile Home Park is across Hesperia Road and Santa Fe Avenue and has more than a 300-foot separation. South of Lime Street are low-density residences that are 100-feet from the closest parking lot. However, the parking lot will remain in place; no construction will occur directly adjacent to Lime Street. The closest new park feature to residences across Lime Street will be the proposed new multi-use fields and the Recreation and Park District Office. Additional residences are located about 500 feet west of the Park.

Construction Emissions
As discussed, it was assumed that the entire 12-acre park would be constructed. Table III-4 provides the construction equipment inventory developed by the CalEEMod model for the project.

Table III-4
CONSTRUCTION ACTIVITY EQUIPMENT FLEET

Phase Name and Duration	Equipment
Demolition (15 days)	1 Concrete Saw
	1 Excavator
	2 Dozers
Fine Grading (15 days)	1 Dozer
	1 Grader
	2 Loader/Backhoes
Construction (200 days)	1 Crane
	3 Loader/Backhoes
	1 Welders
	1 Generator Set
	2 Forklifts
Paving (20 days)	2 Pavers
	2 Paving Equipment
	2 Rollers

The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an engine—the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod model's default load factors for off-road equipment.

Utilizing the indicated equipment fleets and durations the worst case daily construction emissions are calculated by CalEEMod and are listed in Table III-5**.** As shown peak construction emissions would not exceed the daily MDAQMD significance thresholds. The only construction mitigation measure modeled was to water exposed site surfaces at least 3 times per day.

Table III-5
CONSTRUCTION ACTIVITY EMISSIONS
MAXIMUM DAILY EMISSIONS (POUNDS/DAY)

Maximum Construction Emissions	ROG	NOx	CO	SO_2	PM-10	PM-2.5
2020						
Unmitigated	3.2	28.4	25.0	0.0	9.9	4.6
w/Fugitive Dust Mitigation*	3.2	28.4	25.0	0.0	4.6	1.3
2021						
Unmitigated	1.3	13.0	15.1	0.0	0.8	0.7
w/Fugitive Dust Mitigation*	1.3	13.0	15.1	0.0	0.8	0.7
MDAQMD Thresholds	**137**	**137**	**548**	**137**	**82**	**65**

*fugitive dust control measures provided in Mitigation section of this report
Source: CalEEMod output in report appendix

Since MDAQMD emissions guidelines include a not to exceed annual threshold, these emissions were also evaluated as shown in Table III-6. As shown annual construction emissions are similarly below thresholds.

Table III-6
CONSTRUCTION ACTIVITY EMISSIONS
ANNUAL EMISSIONS (POUNDS/DAY)

Maximum Construction Emissions	ROG	NOx	CO	SO_2	PM-10	PM-2.5
2020						
Unmitigated	0.3	3.2	2.6	0.0	0.4	0.2
w/Fugitive Dust Mitigation*	0.3	3.2	2.3	0.0	0.4	0.2
2021						
Unmitigated	<0.1	0.1	0.2	<0.1	0.4	0.2
w/Fugitive Dust Mitigation*	<0.1	0.1	0.2	<0.1	0.0	<0.1
MDAQMD Thresholds	**25**	**25**	**100**	**25**	**15**	**12**

*fugitive dust control measures provided in Mitigation section of this report
Source: CalEEMod output in report appendix

Short-term emissions are primarily related to the construction of the project and are recognized to be short in duration and without lasting impacts on air quality. With the enhanced dust control mitigation measures listed below, construction activity air pollution emissions are not expected to exceed MDAQMD CEQA thresholds for any pollutant even if the phases are under simultaneous construction. Regardless, the PM-10 non-attainment status of the Mojave Desert area requires that Best Available Control Measures (BACMs) be used as required by the Mojave AQMD Rule 403. Recommended construction activity mitigation includes:

AIR-1 ***<u>Fugitive Dust Control</u>. The following measures shall be incorporated into project plans and specifications for implementation during construction:***

- ***Apply soil stabilizers to inactive areas.***

- ***Prepare a high wind dust control plan and implement plan elements and terminate soil disturbance when winds exceed 25 mph.***
- ***Stabilize previously disturbed areas if subsequent construction is delayed.***
- ***Apply water to disturbed surfaces 3 times/day.***
- ***Replace ground cover in disturbed areas quickly.***
- ***Reduce speeds on unpaved roads to less than 15 mph.***
- ***Trenches shall be left exposed for as short a time as possible.***
- ***Identify proper compaction for backfilled soils in construction specifications.***

This measure shall be implemented during construction, and shall be included in the construction contract as a contract specification.

With the above mitigation measure, any impacts related to construction emissions are considered less than significant. No further mitigation is required.

Operational Impacts
The Park would generate 23 daily weekday trips, 273 Saturday trips and 201 Sunday trips using trip generation numbers provided in CalEEMod for the proposed recreational uses. These numbers assume the Park use is entirely new and does not take credit for existing trips.

In addition to vehicular trips, the Park would also require water use for irrigation, and a small amount of energy usage for lighting.

Operational emissions were calculated using CalEEMod2016.3.2 for an assumed operational year of 2021. The daily operational impacts are shown in Table III-7 and annual emission are provided in Table III-8. As shown, operational emissions will not exceed applicable MDAQMD operational emissions CEQA thresholds of significance, therefore operational emissions are considered less than significant.

Table III-7
OPERATIONAL ACTIVITY EMISSIONS (LBS/DAY)

Activity	ROG	NOx	CO	SO_2	PM-10	PM-2.5
Area	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile	0.6	3.2	5.1	<0.1	1.3	0.3
Total	**0.6**	**3.2**	**5.1**	<0.1	**1.3**	**0.3**
MDAQMD Threshold	137	137	548	137	82	82

Table III-8
OPERATIONAL ACTIVITY EMISSIONS (TONS/YEAR)

Activity	ROG	NOx	CO	SO_2	PM-10	PM-2.5
Area	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Total	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
MDAQMD Threshold	25	25	100	25	15	12

Conclusion
With the incorporation of mitigation measures **AIR-1** and **AIR-2**, the development of the Lime Street Park Project would have a less than significant potential to 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. *Less Than Significant With Mitigation Incorporated* – The proposed project would generate minimal construction and operation related emissions. The proposed project would not emit hazardous or toxic emissions that would create an excess cancer risk of more than 10 in a million or a non-cancerous health index of more than 1.0. Therefore, With the implementation of Mitigation Measure **AIR-1** outlined under issue III(b) above, implementation of the Lime Street Park Project is anticipated to have a less than significant potential to expose sensitive receptors to substantial pollutant concentrations.

d. *Less Than Significant Impact* – Heavy-duty equipment in the proposed project area during construction will emit odors; however, the construction activity would cease to occur after a short period of time. Land uses generally associated with odor complaints include: Agricultural uses (livestock and farming); Wastewater treatment plants; Food processing plants; Chemical plants; Composting operations; Refineries; Landfills; Dairies; and, Fiberglass molding facilities. The proposed project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential sources of operational odors generated by the project would include disposal of miscellaneous municipal refuse. Consistent with City requirements, all project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations, thereby precluding substantial generation of odors due to temporary holding of refuse on-site. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances. No other sources of objectionable odors have been identified for the proposed Project. Furthermore, the project is not anticipated to result in other emissions that would adversely impact a substantial number of people. Impacts under this issue are considered less than significant and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and 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 Wildlife 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?	☐	☐	☐	☒

SUBSTANTIATION: The following information utilized in this Section of the Initial Study was obtained from the U.S. Fish and Wildlife Service IPaC Trust Resources Report, generated on October 9, 2019, as well as from the California Department of Fish and Wildlife California Natural Diversity Database (CNDDB), generated on October 9, 2019, pertaining to the Lime Street Park site project area only, which is provided as Appendix 2 to this document.

a. *No Impact* – The Lime Street Park serves as an existing park that is fenced, and has been graded and compacted and contains various features commonly found at parks (baseball fields, tennis courts, parking, etc.). The site itself contains landscaping, which includes trees, but does not include any natural habitat. There are two large spaces in which the majority of the new park features will be developed that consist of compacted dirt and no native vegetation. No natural habitat and no potential to support any species identified as a candidate, sensitive or special status species within the IPaC or CNDDB reports exists at the site. Due to past disturbance within the site, no further biological studies are necessary. With no habitat or species of concern located within the project area, the Lime Street Park Project has no potential for impact to any native biological resources. No impacts are anticipated. No mitigation is required.

b. *Less Than Significant Impact* – Implementation of the proposed project will not have an adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. The Project area is located adjacent to several vacant sites

that contain native vegetation characteristic of the high desert. Development of the Project will not encroach on any of these sites as construction and operation of the park will occur within the boundaries of the project site. Additionally, though the project area contains suitable habitat for several sensitive species, the Lime Street Park site does not contain any known riparian habitat or any other sensitive natural community identified by any agency. Therefore, any impacts under this issue are considered less than significant and no mitigation is required.

c. *No Impact* – According to the IPaC Trust Resources Report (Appendix 2), the project site does not contain any federally protected wetlands, or any other sensitive natural community resource. Therefore, with no habitat or species of concern located within the project area, no impacts are anticipated to occur from the implementation of the Lime Street Park Project. No mitigation is required.

d. *Less Than Significant With Mitigation Incorporated* – Based on a review of the IPaC Resources Report and the CNDDB Report (Appendix 2), several species of migratory birds could potentially be affected by construction activities in the area. With no native habitat, and no wildlife corridors that traverse the project site—particularly given that the project is adjacent to a major roadway, Santa Fe Avenue—implementation of the proposed project is not anticipated to interfere with the movement of native animals of any kind, or to impede the use of any native wildlife nursery sites. However, the project may require removal and replacement of trees on site that may be used for nesting birds. Therefore, the following mitigation measure is provided as a contingency in the event that any nesting birds are found at the site location:

BIO-1 ***The State of California prohibits the "take" of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal should be conducted outside of the State identified nesting season (typically February 1 through September 1). Alternatively, nesting bird surveys shall be conducted by a qualified avian biologist no more than three (3) days prior to vegetation clearing or ground disturbance activities. Preconstruction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the preconstruction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented by the qualified avian biologist. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, ongoing monitoring, establishment of avoidance and minimization measures, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, individual/pair's behavior, nesting stage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity. To avoid impacts to nesting birds, any grubbing or vegetation removal should occur outside peak breeding season (typically February 1 through September 1).***

With implementation of the above mitigation measure, any impacts under this issue are considered less than significant.

e. *Less Than Significant Impact* – The Lime Street Park serves as an existing park that is fenced, and has been graded and compacted and contains various features commonly found at parks (baseball fields, tennis courts, parking, etc.). The project site contains several trees that will be retained on site; however, there is a potential for some trees that are located within and directly adjacent to the areas of the park that are proposed to be developed to be removed and replaced at a ratio of at least a 1:1 ratio. Should any of trees that require removal fall under the City of Hesperia's Municipal Code, Chapter 16.24: Protected Plants, the District is required to obtain a tree removal permit. Adherence to the Municipal Code is considered adequate mitigation to ensure that no significant impacts would occur from any tree removal. No other local policies or ordinances protecting biological resources

would apply to the proposed project, as no native biological resources exist on site. Therefore, impacts under this issue are considered less than significant and no mitigation is required.

f. *No Impact* – Implementation of the Project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. There are no applicable Habitat Conservation Plans or Natural Community Conservation Plans in effect within the City of Hesperia. Based on this information, no further analysis is needed. No impacts are anticipated. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES: Would the project:				
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?	☐	☒	☐	☐

SUBSTANTIATION

a&b. *Less Than Significant With Mitigation Incorporated* – CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

The proposed project site currently serves as Lime Street Park, and the area within which the expanded park facilities will be developed has been graded and compacted. The Project site does not contain any historical resources. It is not anticipated that much excavation, if any will be required to install the proposed upgraded park facilities within the existing Lime Street Park, as such, it has been determined that, because the Park has been previously developed, graded, and compacted, the potential for unearthing any buried cultural resources is less than significant. However, if any earth moving activities are required, the following mitigation measure will ensure that impacts to any buried cultural materials that may be discovered during earth moving activities is carried are less than significant:

CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the District's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

More specifically, the San Manuel Band of Mission Indians requested in their response to the City's AB-52 consultation letter, that the following mitigation measures shall be implemented:

CUL-2 In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CUL-3 If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

With the incorporation of the above mitigation measures, potential for impact to cultural resources will be reduced to a less than significant level. No additional mitigation is required.

c. *Less Than Significant With Mitigation Incorporated* – As noted in the discussion above, no available information suggests that human remains may occur within the Area of Potential Effect (APE) and the potential for such an occurrence is considered very low. Human remains discovered during the project will need to be treated in accordance with the provisions of HSC §7050.5 and PRC §5097.98, which is mandatory. State law (Section 7050.5 of the Health and Safety Code) as well as local laws requires that the Police Department, County Sheriff and Coroner's Office receive notification if human remains are encountered. Compliance with these laws is considered adequate mitigation for potential impacts, however, the in their response to the City's AB-52 consultation letter, the San Manuel Band of Mission Indians requested that the following mitigation measures shall be implemented in relation to discovery and treatment of human remains:

CUL-4 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

With the incorporation of the above mitigation measures, potential for impact to discovery and treatment of human remains will be reduced to a less than significant level. No additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. ENERGY: Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

SUBSTANTIATION

a&b. *Less Than Significant Impact* – The proposed Project consists the development of new additional sports fields, better park access, and parking, the facilities will support a variety of activities which may include: baseball, soccer, football and other games/activities requiring grass fields; vehicle parking with night lighting; walking or jogging on the new sidewalk and trail; water play, volleyball; and an exercise area (outdoor fitness area). The park will not require substantial energy to operate, as the only energy required will be in support of outdoor field and pathway lighting. The Lime Street Park currently consumes energy through outdoor field lighting at the two existing fields, pathway lighting, and restroom lighting.

Energy consumption encompasses many different activities. For example, construction can include the following activities: delivery of equipment and material to a site from some location (note it also requires energy to manufacture the equipment and material, such as harvesting, cutting and delivering wood from its source); employee trips to work, possibly offsite for lunch (or a visit by a catering truck), travel home, and occasionally leaving a site for an appointment or checking another job; use of equipment onsite (electric or fuel); and sometimes demolition and disposal of construction waste. To minimize energy costs of construction debris management, mitigation has been established to require diversion of all material subject to recycling. Energy consumption by equipment will be reduced by requiring shutdowns when equipment is not in use after five minutes and ensuring equipment is being operated within proper operating parameters (tune-ups) to minimize emissions and fuel consumption. These requirements are consistent with State and regional rules and regulations. Under the construction scenario outlined above, the proposed Project will not result in wasteful, inefficient, or unnecessary energy consumption during construction.

The proposed Project will be powered by Southern California Edison (SCE) through the power distribution system located adjacent to the site. SCE will be able to supply sufficient electricity. The project site will not require any connection to natural gas. Park lighting must be constructed in conformance with a variety of existing energy efficiency regulatory requirements or guidelines including:

- Compliance California Green Building Standards Code, AKA the CALGreen Code (Title 24, Part 11), which became effective on January 1, 2017. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of building through the use of building concepts encouraging sustainable construction practices.
- Compliance with Indoor Water use consumption reduced through the maximum fixture water use rates.
- Compliance with diversion of construction and demolition materials from landfills.
- Compliance with AQMD Mandatory use of low-pollutant emitting finish materials.
- Compliance with AQMD Rules 431.1 and 431.2 to reduce the release of undesirable emissions.

- Compliance with diesel exhaust emissions from diesel vehicles and off-road diesel vehicle/equipment operations.
- Compliance with these regulatory requirements for operational energy use and construction energy use would not be wasteful or unnecessary use of energy.

Further, SCE is presently in compliance with State renewable energy supply requirements and SCE will supply electricity to the Project. Under the operational scenario for the proposed Project, the proposed Project will not result in wasteful, inefficient, or unnecessary energy consumption that could result in a significant adverse impact to energy issues based on compliance with the referenced laws, regulations and guidelines.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. GEOLOGY AND SOILS: 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 as a result of the project, and potentially result in onsite or offsite land-slide, 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?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

SUBSTANTIATION

a. Ground Rupture

No Impact – According to the regulatory map obtained from the California Department of Conservation showing Alquist-Priolo Earthquake Fault Zones and other seismic hazards (Figure VII-1), the proposed project site is not located in an area that has been mapped as containing geologic hazards, and therefore is not located in an Alquist Priolo Earthquake Fault Zone. The nearest fault zone is approximately 15 miles to the south at the San Bernardino Mountains. As such, the project site and general area do not contain any known faults, active or inactive. Therefore, no potential exists for the proposed project to experience any fault rupture along a delineated active fault.

Strong Seismic Ground Shaking

Less Than Significant Impact – The proposed project site, as with most of southern California, is in a seismically active area, and will most likely be subject to some ground shaking during the life of the Lime Street Park upgrades. According to the San Bernardino County Land Use Plan General Plan Geologic Hazard Overlay map (Figure VII-2), the proposed project is not located in close proximity to any delineated active faults. However, due to the proximity of the active San Andreas Fault, about fifteen miles to the south, and the active Helendale Fault, about fifteen miles to the northeast, the project site and area can be exposed to significant ground shaking during major earthquakes on either of these regional faults. Much of the project operations scenario will occur in outdoor spaces, and no new structures will be developed to support the Park, which presents minimal hazards from strong seismic ground shaking to humans working at the site. Therefore, impacts associated with strong ground shaking will be less than significant without mitigation.

Seismic-related Ground Failure Including Liquefaction

No Impact – The proposed project is located within an existing park. According to the San Bernardino County General Plan, General Land Use Plan with Geologic Overlays (Figure VII-2), the project does not contain land with any liquefaction susceptibility. Therefore, it is not anticipated that the proposed project would be susceptible to seismic-related ground failure, including liquefaction. Furthermore, no structures are proposed as part of the Park facility upgrades. No impacts are anticipated and no mitigation is required.

Landslides

No Impact – The project area is relatively flat. No hills or other significant topographic features exist on the project sites. According to the San Bernardino County General Plan, General Land Use Plan with Geologic Overlays (Figure VII-2), the project is not located in an area that is susceptible to landslides. No potential events can be identified that would result in adverse effects from landslides or that would cause landslides that could expose people or structures to such an event as a result of project implementation. No impacts are anticipated and no mitigation is required.

b. *Less Than Significant With Mitigation Incorporated* – During construction, it is not anticipated that much soil erosion will occur. The project will develop portions of the park that were not previously developed beyond grading and soil compaction. No structures are proposed to be developed as part of the proposed project. However, given that the project will require some grading to develop the ball fields, parking lot and other Park improvements, there is a potential for short-term soil erosion. Because the project site has been previously compacted and has been developed as a dairy, the potential for substantial soil erosion or loss can be controlled to a less than significant impact level with the implementation of mitigation measures. Based on the mitigation listed below, best management practices (BMPs) will be employed during construction to minimize the potential for soil erosion impacts.

GEO-1 ***Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. Where covering is not possible, measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the Project site for future cleanup such that erosion does not occur.***

GEO-2 ***All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the Park is being constructed.***

With implementation of the above mitigation measures, implementation of the SWPPP and associated BMPs, any impacts under this issue are considered less than significant.

c. *Less Than Significant Impact* – Refer to the discussion under VII(a) above. Potential instability associated with slope stability and liquefaction related to the project was determined to be less than significant, as outlined under discussion a(iii) and a(iv) above. According to the United States Department of Agriculture Web Soil Survey, the project Area of Potential Effect (APE) is underlain by Cajon Sand, 0 to 2 percent slopes. These soils are typically well drained, and are therefore considered stable with a low potential for lateral spreading or subsidence. Thus, the Project will not 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse. Any impacts are considered less than significant and no mitigation is required.

d. *No Impact* – According to the U.S. Department of Agriculture (USDA) Web Soil Survey Soil map prepared for the project site (Appendix 3), approximately 83 percent of the proposed project site is located on Cajon Sand, 0 to 2 percent slopes. Expansive soils are generally of a clay type soil, not a sandy soil such as the Cajon Sand series soils that underlay the project site. Thus, based on the absence of clay-type soils on site, the proposed project would not be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. No impacts are anticipated and no mitigation is required.

e. *No Impact* – The Project does not propose any septic tanks or alternative wastewater disposal systems. Therefore, determining if the Project site soils are capable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater does not apply. No impacts are anticipated. No mitigation is required.

f. *Less Than Significant With Mitigation Incorporated* – The potential for discovering paleontological resources during development of the Project is considered highly unlikely based on the fact that the site has been previously engineered. No unique geologic features are known or suspected to occur on or beneath the sites. However, because these resources are located beneath the surface and can only be discovered as a result of ground disturbance activities, should any be required in support of the project, the following measure shall be implemented:

GEO-3 Should any paleontological resources be accidentally encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with the District. The paleontological professional shall assess the find, determine its significance, and determine appropriate mitigation measures within the guidelines of the California Environmental Quality Act that shall be implemented to minimize any impacts to a paleontological resource.

With incorporation of this contingency mitigation, the potential for impact to paleontological resources will be reduces to a less than significant level. No additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
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?	☐	☐	☒	☐

SUBSTANTIATION: The following information utilized in this section of the Initial Study was obtained from the *Air Quality and GHG Impact Analysis, Hesperia Lime Street Park, City of Hesperia, California* prepared by Giroux and Associates dated November 5, 2019. This document is provided as Appendix 1 to this document.

a&b. *Less Than Significant Impact* –

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. Many scientists believe that the climate shift taking place since the industrial revolution (1900) is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years.

An individual project like the Project evaluated in this Greenhouse Gas Impact Analysis cannot generate enough greenhouse gas emissions to effect a discernible change in global climate. However, the Project may participate in the potential for GCC by its incremental contribution of greenhouse gasses combined with the cumulative increase of all other sources of greenhouse gases, which when taken together constitute potential influences on GCC.

Significance Thresholds

In response to the requirements of SB97, the State Resources Agency developed guidelines for the treatment of GHG emissions under CEQA. These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March 2010. The CEQA Appendix G guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Conflicts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The process is broken down into quantification of project-related GHG emissions, deciding significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. At each of these steps, the new GHG guidelines afford the lead agency with substantial flexibility.

The MDAQMD has published thresholds for Greenhouse Gases emissions (CO_2e). The daily threshold is 548,000 lbs/day and the annual threshold is 100,000 MT/year.

Project Related GHG Emissions Generated

Construction Activity GHG Emissions
The project is assumed to require less than two years for construction. During project construction, the CalEEMod2016.3.2 computer model predicts that the construction activities will generate the annual CO_2e emissions identified in Table VIII-1.

Table VIII-1
CONSTRUCTION EMISSIONS (METRIC TONS CO_2e)

	CO_2e Daily	CO_2e Annual
Year 2020	6,824.4	636.5
Year 2021	2,346.6	26.7

CalEEMod Output provided in appendix

GHG impacts from construction are considered individually less than significant.

Operational GHG Emissions
The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional CO_2e emissions are summarized in the CalEEMod2016.3.2 output files found in the appendix of this report. The total operational and annualized construction emissions for the proposed project are identified in Table VIII-2. The project GHG emissions are considered less-than-significant.

Table VIII-2
OPERATIONAL EMISSIONS (METRIC TONS CO_2e)

Consumption Source	Daily Emissions (lbs/day)	Annual Emissions (MT/year)
Area Sources	0	0.0
Energy Utilization	0	0.0
Mobile Source	1,882.7	90.0
Solid Waste Generation	-	0.5
Water Consumption	-	50.8
Construction	6,824.4	636.5
Total Project Emissions	**8,707.1**	**777.8**
Guideline Threshold	548,000	100,000

Consistency with GHG Plans, Programs and Policies
The City of Hesperia developed a Climate Action Plan (CAP) in 2010[1]. This CAP outlines the General Plan Update policies and CAP strategies that would reduce emissions. The Hesperia CAP outlines a course of action for the City government and the community of Hesperia to reduce per capita GHG emissions by 29% below currently projected levels by 2020 and adapt to effects of climate change. The Hesperia CAP includes actions such as reducing emissions from new development through CEQA, increasing bicycle use through a safe and well-connected system of bicycle paths and end of trip facilities, reducing energy use from the transport and treatment of water, and improving the City's recycling and source reduction program so make continued progress in minimizing waste. The City of Hesperia also contributed to the San Bernardino Associated Governments County Regional Greenhouse Gas Reduction Plan.[2]

[1] http://www.cityofhesperia.us/DocumentCenter/View/1291/23660023-Hesperia-CAP-July-20?bidId=
[2] https://www.gosbcta.com/wp-content/uploads/2019/10/Final-Plan-.pdf

The only applicable measure is provided below:

> CAP-13.13 The City should implement water saving measures at public parks and other landscaped areas maintained by the City. The City should use recycled water in public landscaped areas as supplies become available.

Project construction and operational emissions are much less than the CEQA thresholds established by the MDAQMD. Therefore, the project is consistent with the Hesperia CAP, and as such impacts under this issue are considered less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
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?	☐	☐	☐	☒

SUBSTANTIATION

a&b. *Less Than Significant With Mitigation Incorporated* – The Project should not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; but it may 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 during construction. During construction there may be a potential for accidental release of petroleum products in sufficient quantity to pose a significant hazard to people or the environment. The following mitigation measure will be incorporated into the SWPPP prepared for the Project and it can reduce such a hazard to a less than significant level.

HAZ-1 ***All accidental spills or discharge of hazardous material during construction activities shall be reported to the Certified Unified Program Agency and shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately a licensed disposal or treatment facility. This measure shall be incorporated into the SWPPP prepared for the proposed project. Prior to accepting the site as remediated, the area contaminated shall be tested to verify that any residual***

concentrations meet the standard for future residential or public use of the site.

The proposed project will consist of upgrading an existing park to expand the facilities available to the public. Operation of such uses would not involve the use of a substantial amount of hazardous materials. Household/commercial cleaning supplies would continue to be used in support of the restroom facilities, but no substantial increase in the use of hazardous materials is anticipated to be required to support the expanded park facilities. Compliance with all Federal, State, and local regulations governing the storage and use of hazardous materials is required, and will ensure that the Project operates in a manner that poses no substantial hazards to the public or the environment. No further mitigation is required.

c. *No Impact* – The nearest school to the proposed project site—Lime Street Elementary School—is located more than a quarter mile east of the project site along Lime Street. Given that the proposed project will not emit hazardous emissions or utilize or produce any acutely hazardous materials, substances, or waste, and that there are no existing or proposed schools located within one-quarter mile of the project site, no impacts under this issue are anticipated and no mitigation is required.

d. *No Impact* – This site currently contains Lime Street Park, which has many features typical of a City park, though it has two large open spaces that are vacant containing compacted dirt. The Project will not be located on a site that is included on a list of hazardous materials sites that are currently under remediation. According to the California State Water Board's GeoTracker website (consistent with Government Code Section 65962.5), which provides information regarding Leaking Underground Storage Tanks (LUST), there are no LUST or LUST cleanup sites within 2,500 feet of the Project site (Figure IX-1). Therefore, the proposed construction and operation of the site with expanded park facilities will not create a significant hazard to the population or to the environment from their implementation. No impacts are anticipated and no mitigation is required.

e. *Less Than Significant Impact* – According to the San Bernardino County Land Use Plan General Plan Hazard Overlays Map (Figure IX-2), the closest airport to the project site is the Hesperia Airport, which is located about one and a quarter miles to the south of the Project site. The Hazard Overlays Map indicates that the proposed project is located just outside of the Airport Safety Review Area, and as such further development of this site will not exacerbate any hazards from the Park's proximity to the nearby airport. Furthermore, the proposed project currently serves as Lime Street Park, and as such there is no proposed change in use at the project site. Based on this information, implementation of the Project will not result in a safety hazard for people residing or working in the project area. No impacts are anticipated and no mitigation is required.

f. *Less Than Significant Impact* – The proposed project is located along Lime Street and Hesperia Road within an established site that currently operates as the Lime Street Park. The project is bound by Lime Street to the south and by Hesperia Road to the east. A limited potential to interfere with an emergency response or evacuation plan will occur during construction. Control of access during construction will ensure emergency access to the sites and project areas during construction. No known emergency response or evacuation plans or routes are known to exist in the vicinity of the Project and no such plans will be affected by this Project. Therefore, impacts under this issue are considered less than significant, no mitigation is required.

g. *No Impact* – The proposed project is not located in a wildland fire hazard area, and according to the San Bernardino County Land Use Plan General Plan Hazard Overlays Map (Figure IX-2), the nearest fire safety (FS) overlay district is located southwest of the project site towards the south San Bernardino Mountains and just south of the California Aqueduct. The fire threat throughout most of the community plan area is considered moderate, with high fire hazard risks located adjacent to the mountains to the south. The proposed expansion of the Lime Street Park facilities would not expose people or structures to a significant risk of loss, injury or death involving wildland fires as the site is not located in the vicinity of the high wildland fire hazard area. No impacts are anticipated and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such 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 which would:				
(i) result in substantial erosion or siltation onsite or offsite?	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite 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?; or,	☐	☒	☐	☐
(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?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less Than Significant With Mitigation Incorporated* – The proposed project is located within the planning area of the Lahontan Regional Water Quality Control Board (RWQCB). The project would be supplied with water by City of Hesperia Water District (HWD).

For a developed area, the only three sources of potential violation of water quality standards or waste discharge requirements are from generation of municipal wastewater, stormwater runoff, and potential discharges of pollutants, such as accidental spills. Municipal wastewater is delivered to the Victor Valley Wastewater Reclamation Authority's (VVWRA) Wastewater Treatment Plant, located at 20111 Shay Road, Victorville, CA 92394 about fourteen and a half miles to the northwest of the project site. Wastewater is also delivered to the Hesperia Subregional Water Recycling facility, which is located at 14269 Mojave St, Hesperia, CA 92345 about 3 miles northwest of Lime Street Park. It is capable of producing one million gallons per day (MGD) of recycled water. Only wastewater is treated at the Subregional facility; solid waste will be returned to the sewer line where it continues to the main VVWRA plant in Victorville for treatment.[3] VVWRA is responsible for the collection,

[3] http://vvwra-prod.civica.granicusops.com/about_us/subregionals.htm

transmission, treatment, and disposal of wastewater from its member agencies, relating to flows to the Wastewater Treatment Plant in Victorville, California.

To address stormwater and accidental spills within this environment, any new project must ensure that site development implements a Storm Water Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) to control potential sources of water pollution that could violate any standards or discharge requirements during construction and a Water Quality Management Plan (WQMP) to ensure that project-related after development surface runoff meets discharge requirements over the short- and long-term. The WQMP would specify stormwater runoff permit Best Management Practices (BMPs) requirements for capturing, retaining, and treating on site stormwater once the Lime Street Park improvements have been developed. The most critical component of the SWPPP that will be implemented is to control all runoff during construction and operation to ensure that no sediment or any pollutant discharges are released into the general environment. These measures are intended to be complementary, not incremental.

HYD-1 ***The construction contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) that will be implemented to prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving offsite. The SWPPP shall be developed with the goal of achieving a reduction in pollutants both during and following construction to control storm water runoff to the maximum extent practicable based on available, feasible best management practices.***

The following BMPs or comparable measures shall be included in the SWPPP during construction:

- ***Stockpiled material should not be stored in areas which are subject to the erosive flows of water.***
- ***Measures such as the use of straw bales, sandbags, silt fencing or detention basins shall be used to capture and hold eroded material for future cleanup.***
- ***Rainfall will be prevented from entering material and waste storage areas and pollution-laden surfaces.***
- ***Construction-related contaminants will be prevented from leaving the site and polluting waterways.***
- ***A spill prevention control and countermeasures and remediation plan shall be in place and implemented to control release of hazardous substances.***

Because the over 50% of Lime Street Park consists of pervious surfaces, and much of the site will remain pervious once the proposed site improvements have been developed. The Project has identified onsite drainage that will ensure that runoff is retained on site. The SWPPP would specify the BMPs that the Project would be required to implement during construction activities to ensure that all potential water pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. The City of Hesperia General Plan Environmental Impact Report (EIR) indicates that the City of Hesperia has established a Construction Site Stormwater Runoff Control Program to reduce pollutants from construction activities that result in a land disturbance of greater than or equal to one acre. An intercity Storm Water Management Plan (SWMP) has been implemented to effectively control erosion, sedimentation, and other construction-based pollutants during construction. The proposed Lime Street Park improvements will be required to adhere to these Programs and Plans.

With implementation of these mandatory Plans and their BMPs, as well as mitigation measure **HAZ-1** and **HYD-1** above, the development of the Lime Street Park will not cause a violation of any water quality standards or waste discharge requirements.

b. *Less Than Significant Impact* – The proposed project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a substantial lowering of the local groundwater table level. According to the District, Lime Street Park currently uses about 0.78 acre feet of potable water per year (AFY) to support the Park's operation. The District estimates that the potable water use will increase by about one third with the implementation of the proposed Lime Street Park improvements. As such, an additional 0.259 AFY of potable water is anticipated to be required in support of the proposed Project. The City of Hesperia Water District (HWD) currently serves Lime Street Park. The proposed improvements at Lime Street Park will utilize existing connections within adjacent roadways and within the Park to support the needs of the proposed Park facilities. Based on a review of the Hesperia Water District Urban Water Management Program (UWMP, 2015),[4] it is anticipated that in the future, landscaping (such as that which would be anticipated to support a park) within the City will be served by recycled water, not potable water. Given that Victor Valley Wastewater Reclamation Authority (VVWRA) has not completed the infrastructure to deliver water to Lime Street Park, it is anticipated that for the foreseeable future, the Park will continue to utilize potable water until recycled water becomes available at the site. HWD's UWMP indicates that the total water demand and total supply in 2020 will be 15,078 acre feet per year (AFY), which includes a demand for 1,000 AFY of recycled water. The District's UWMP anticipates that the total water demand and supply in 2035 will be 19,297 AFY, which includes a demand and supply of 1,000 AFY of recycled water. The Project will operate under the guidelines outlined in the UWMP and within HWD's capacity, and the estimated water demand will represent only a nominal percentage of the surplus that currently exists in the water supply. The anticipated demand of water supply within HWD's retail service area is anticipated to be greater than the demand for water in the future, which indicates that HWD has available capacity to serve the proposed Project.

HWD provides domestic water from sixteen active wells within and around the City of Hesperia. All wells are located in the Mojave River Groundwater Basin. The proposed Lime Street Park Project is not anticipated to significantly reduce the amount of area within the Park that can be used for groundwater recharge because, generally, Parks contain a large amount of pervious area. While the proposed Park improvements may result in a slight reduction in the amount of recharge associated with natural runoff, this reduction is expected to be off-set/replaced by infiltration from drainage collection mechanisms that will be developed concurrent with impervious areas developed by the proposed Project. The development of the project will, therefore, not substantially interrupt the existing percolation of the site, or any flow of groundwater under the project site. No significant adverse impacts to groundwater resources are forecast to occur from implementing the proposed Project. No mitigation is required.

c i. Result in substantial erosion or siltation onsite or offsite?

Less Than Significant Impact – The proposed project is not anticipated to significantly change the volume of flows downstream of the project site, and would not be anticipated to change the amount of surface water in any water body in an amount that could initiate a new cycle of erosion or sedimentation downstream of the project site. The Project will develop improvements at an existing park site, which contains pervious coverage of over 50% of the site. The proposed improvements include additional parking, which will decrease the overall pervious area within the site. However, the proposed project currently serves as a park with drainage systems that manage surface flows. The proposed site improvements will include further drainage improvements to accommodate the facilities proposed as part of the Lime Street Park Improvements. On site flows within the new development will be collected and conveyed in a controlled manner such that runoff will be collected and allowed to infiltrate on site. This system will be designed to capture the peak 100-year flow runoff from the project site or otherwise be detained on site and discharged in conformance with City and County requirements. The downstream drainage system will not be altered and given the control of future surface runoff from the project site, thus, the potential for downstream erosion or sedimentation will be controlled to a less than significant impact level.

[4] http://www.cityofhesperia.us/DocumentCenter/View/13505/2015-UWMP-FINAL-DRAFT-2016-05-11?bidId=

c. ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?

Less Than Significant Impact – The proposed project will alter the existing drainage courses or patterns onsite but will maintain the existing offsite downstream drainage system through control of future discharges from the site, which would prevent flooding onsite or offsite from occurring. The Project will develop improvements at an existing park site, which contains pervious coverage of over 50% of the site. The proposed improvements include additional parking, which will decrease the overall pervious area within the site. However, the proposed project currently serves as a park with drainage systems that manage surface flows. The proposed site improvements will include further drainage improvements to accommodate the facilities proposed as part of the Lime Street Park Improvements. On site flows within the new development will be collected and conveyed in a controlled manner such that runoff will be collected and allowed to infiltrate on site. This system will be designed to capture the peak 100-year flow runoff from the project site or otherwise be detained on site and discharged in conformance with City and County requirements. Thus, the implementation of onsite drainage improvements and applicable requirements will ensure that stormwater runoff will not substantially increase the rate or volume of runoff in a manner that would result in flooding on- or off-site. Impacts under this issue are considered less than significant with no mitigation required.

c. iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant With Mitigation Incorporated – As indicated above, the Project will not substantially create or contribute runoff water that would exceed the capacity of existing or planned stormwater capacity, or provide substantial additional sources of polluted water, particularly because the project includes water quality control measures that will manage on-site runoff. The Project will require the implementation of a SWPPP and WQMP, and implementation of mitigation measure **HAZ-1**, which will ensure that discharge of polluted material does not occur or is remediated in the event of an accidental spill. However, in most cases onsite surface flows will be collected and conveyed in a controlled manner. At present, the site serves as Lime Street Park; drainage is currently managed on site. However, the proposed project will install drainage systems commensurate with new park facilities; thus, with the development of the site as proposed and through development of the planned drainage systems, runoff from the site would be managed efficiently within the areas of the park that are not currently engineered, containing only compacted dirt. Thus, the implementation of onsite drainage improvements and applicable requirements will ensure that that drainage and stormwater will not create or contribute runoff that would exceed the capacity of existing or planned offsite stormwater drainage systems or provide substantial additional sources of polluted runoff. Impacts under this issue are considered less than significant with implementation of mitigation.

c. iv. Impede or redirect flood flows?

Less Than Significant Impact – According to the San Bernardino County General Plan, General Land Use Plan with Hazard Overlays map (Figure IX-2), the proposed project is not located within a flood plain safety overlay district.[5] Furthermore, development of this site is not anticipated to redirect or impede flood flow at the project site, particularly given that surface flows on site will be directed to the onsite drainage features which will be capable of intercepting the peak 100-year flow rate from the project site or otherwise be detained on site and discharged in conformance with San Bernardino County requirements. Therefore, impacts under this issue are considered less than significant and no mitigation is required.

d. *Less Than Significant With Mitigation Incorporated* – Please refer to response IX(c) above. The proposed project is not located within a flood hazard, tsunami, or seiche zone. As stated above, the project site currently contains the Lime Street Park within which the park improvements will be

[5] Map data for FP1 and FP2 zones from DFRIM digital data issued by the Federal Emergency Management Agency. FP3 data compiled from local flood sources.

installed. During construction, runoff will be managed through implementation of a SWPPP and Water Quality Management Plan (WQMP), and implementation of mitigation measure **HAZ-1** and **HYD-1**, which will ensure that the risk of release of pollutants from the project site is less than significant. The project is located more than 70 miles from the Pacific Ocean, which eliminates the potential for a tsunami to impact the project area. Additionally, a seiche would not occur within the vicinity of the project because no lakes or enclosed bodies of water exist near the site that could be impacted by such an event. Finally, according to the San Bernardino County General Plan, General Land Use Plan with Hazard Overlays map (Figure IX-2), the proposed project is located outside of the area of inundation to the northeast of the project site. As such, with the implementation of mitigation measures **HAZ-1** and **HYD-1** above, the proposed project would have a less than significant potential to risk release of pollutants due to project inundation.

e. *Less Than Significant Impact* – Please refer to the discussion under issue X(b) above. The "2018 Sustainable Groundwater Management Basin Prioritization: Process and Results" document, prepared by the State of California Department of Water Resources[6], indicates that the Mojave River basin is under very low priority. As stated in the 2018 Basin Prioritization, of the 517 groundwater basins in California, 109 are prioritized as high and medium and 408 are prioritized as low and very low. The Mojave River Basin from which the Project will receive water by way of the City of Hesperia does not have a sustainable groundwater management plan or and the Project will not interfere with the overall water quality of the basin as discussed above. Therefore, it is not anticipated that the proposed Lime Street Park Project would have a significant potential to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

[6] https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Basin-Prioritization/Files/2018-Sustainable-Groundwater-Management-Act-Basin-Prioritization.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. LAND USE AND PLANNING: Would the project:				
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?	☐	☐	☐	☒

SUBSTANTIATION

a. *No Impact* – The project will expand facilities within an existing park. The boundaries of Lime Street Park will not be altered as a result of the proposed park improvements; the improvements will occur internally within the existing park. The land use designation of Lime Street Park is MSFC-SP-Main Street/Freeway Corridor Specific Plan; Public/Institutional Overlay (PIO) and the zoning classification is Main St//Freeway Corridor Specific Plan: Public/Institutional Overlay (PIO). Given that the land use designation and zoning classification will remain unchanged, and that the proposed Park improvements are consistent with the current use of the site as Lime Street Park and will occur within the confines of the Park boundaries, the addition of the proposed Park improvements at this location would be consistent with both the uses surrounding the project and the surrounding land use designations and zoning classifications. Consequently, the development of the project site with the proposed use will not divide any established community in any manner. Therefore, no impacts under this issue are anticipated and no mitigation is necessary.

b. *No Impact* – The land use designation of Lime Street Park is MSFC-SP-Main Street/Freeway Corridor Specific Plan; Public/Institutional Overlay (PIO) and the zoning classification is Main St//Freeway Corridor Specific Plan: Public/Institutional Overlay (PIO). The proposed Lime Street Park Project will be fully consistent the General Plan and with the City's Zoning Code. Therefore, the implementation of this Project at this site will be consistent with surrounding land uses, and current use of the site. Based on this information, implementation of the Lime Street Park Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. No impacts are anticipated under this issue and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
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?	☐	☐	☐	☒

SUBSTANTIATION:

a&b. *No Impact* – The proposed project will be developed within the existing Lime Street Park, which does not contain any known mineral resources. A review of the Hesperia General Plan EIR indicates that, "According to the proposed Hesperia General Plan Conservation and Open Space Element, the City of Hesperia currently has not identified any known mineral resources that would be of value to the region and the residents of the state." Therefore, given that no known mineral resources exist within the City, the development of the Project will not cause any loss of mineral resource values to the region or residents of the state, nor would it result in the loss of any locally important mineral resources within the City. No impacts would occur under these issues. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a 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?	☐	☐	☐	☒

SUBSTANTIATION

Background

Noise is generally described as unwanted sound. The proposed Lime Street Park Project will develop two new lighted baseball/softball fields (these fields will also function multi-sport fields for soccer and football); expanded paved parking area and access; volleyball court; outdoor water recreation feature, such as a splash pad; and a pervious walking/jogging path throughout the improved park area. The proposed project is located adjacent to the BNSF railway line, located between Hesperia Road and Santa Fe Avenue, and as such is located within a relatively high background noise environment. Additionally, both Hesperia Road and Santa Fe Avenue East are considered major roadways within the City and as such are a major source of noise within the Project vicinity.

The unit of sound pressure ratio to the faintest sound detectable to a person with normal hearing is called a decibel (dB). Sound or noise can vary in intensity by over one million times within the range of human hearing. A logarithmic loudness scale, similar to the Richter scale for earthquake magnitude, is therefore used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all sound frequencies within the entire spectrum. Noise levels at maximum human sensitivity from around 500 to 2,000 cycles per second are factored more heavily into sound descriptions in a process called “A-weighting,” written as “dBA.”

Leq is a time-averaged sound level; a single-number value that expresses the time-varying sound level for the specified period as though it were a constant sound level with the same total sound energy as the time-varying level. Its unit is the decibel (dB). The most common averaging period for Leq is hourly.

Because community receptors are more sensitive to unwanted noise intrusion during more sensitive evening and nighttime hours, state law requires that an artificial dBA increment be added to quiet time noise levels. The State of California has established guidelines for acceptable community noise levels that are based on the Community Noise Equivalent Level (CNEL) rating scale (a 24-hour integrated noise measurement scale). The guidelines rank noise land use compatibility in terms of "normally acceptable," "conditionally acceptable," and "clearly unacceptable" noise levels for various land use types. The State Guidelines, Land Use Compatibility for Community Noise Exposure, single-family homes are "normally acceptable" in exterior noise environments up to 60 dB CNEL and "conditionally acceptable" up to 70 dB CNEL based on this scale. Multiple family residential uses are "normally acceptable" up to 65 dB CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries and churches are "normally acceptable"

up to 70 dB CNEL, as are office buildings and business, commercial and professional uses with some structural noise attenuation.

Hesperia Noise Regulations

According to the City of Hesperia General Plan EIR, the sound levels caused by rail traffic decrease at a rate of 3 to 4.5 dB when the distance from the railroad is doubled, depending on the surface hardness between the source and the receiving property. Sound exposure from a train—as indicated in Table 3.11-3 of the Hesperia General Plan EIR (Table XIII-1)—indicates that the sound exposure level (SEL) ranges from 89.4 to 114.0; the 1-hour Leq at 50 feet (assumes one passby in a one-hour period) ranges from 59.6 to 79.3. Each of these measurements vary based on the number of locomotives, the number of cars, the speed, the distance from the track centerline, and whether or not the train uses its horn.

Table XIII-1
NOISE STANDARDS

Affected Land Use	Maximum	Time Period
(Receiving Noise)	Noise Level	10 PM – 7 AM
A-1, A-2, R-1, R-3, and RR Zone Districts	55 dBA	7 AM – 10 AM
A-1, A-2, R-1, R-3, and RR Zone Districts	60 dBA*	Anytime
C-1, C-2, C-3, C-4, C-R, AP, P-1 Zone Districts	65 dBA*	Anytime

Source: Hesperia Municipal Code Noise Standards; Table 3.11-7: Noise Standards, City of Hesperia General Plan EIR

The noise standard for that receiving land use for a cumulative period of more than thirty minutes in any hour; or the noise standard plus five dBA for a cumulative period of more than fifteen minutes in any hour; or the noise standard plus ten dBA for a cumulative period of more than five minutes in any hour; or the noise standard plus fifteen dBA for a cumulative period of more than one minute in any hour; or the noise standard plus twenty dBA for any period of time.

Noise Exemptions include:

1. Motor vehicles not under the control of an industrial use;
2. Emergency equipment, vehicles and devices;
3. Temporary construction, repair, or demolition activities between seven a.m. and seven p.m. except Sundays and federal holidays.

Vibration Standards and Exemptions include the following:

A. Vibration Standard. No ground vibration shall be allowed which can be felt without the aid of instruments at or beyond the lot line; nor will any vibration be permitted which produces a particle velocity greater than or equal to 0.2 inches per second measured at or beyond the lot line.
B. Vibration Measurement. Vibration velocity shall be measured with a seismograph or other instrument capable of measuring and recording displacement and frequency, particle velocity or acceleration. Readings are to be made at points of maximum vibration along any lot line next to a residential or commercial district or a community industrial lot.
C. Exempt Vibrations. The following sources of vibration are not regulated by this code: 1. Motor vehicles not under the control of an industrial use; 2. Temporary construction, maintenance or demolition activities between seven a.m. and seven p.m. except Sundays and federal holidays.

Impact Analysis

a. *Less Than Significant With Mitigation Incorporated* – As stated in the discussion above, the background noise level at the existing Lime Street Park site varies due to adjacent train and roadway traffic. The noise standard for the project site is a maximum of 65 dBA anytime of the day. The proposed project is located in a modestly developed area that has retained a rural character that is common within the City of Hesperia. Lime Street Park is located within a relatively high background

noise environment from the Project's location adjacent to major roadways and to the BNSF railway line. The project is located within a site designated for Public/Institutional use, but is surrounding by Medium Density Residential land uses. South of Lime Street are low-density residences. The nearest sensitive uses to the area in which the development of the upgraded park facilities will be installed are about 400 feet west of the Park and about 300 feet east of the Park.

Short-Term Noise

The project will comply with the City's Noise regulations during construction by limiting work hours to between the hours 7 a.m. and 7 p.m. except Sundays and federal holidays. During this time, construction noise is exempt from the City's CNEL limiting Noise regulations. Construction noise is considered a common necessity for new development. Therefore, through compliance with the City's noise standards, short-term construction impacts would not expose persons to or generate noise in excess of standards established by the City or by any other applicable agencies. Therefore, short-term construction impacts would be considered less than significant. The Project will comply with the City Municipal Code, as construction will occur only within the hours considered allowable by the City. Construction equipment generates noise that ranges between approximately 75 and 90 dBA at a distance of 50 feet. Refer to Table XIII-2 below, which shows construction equipment noise levels at 25, 50 and 100 feet from the noise source.

Table XIII-2
NOISE LEVELS OF CONSTRUCTION EQUIPMENT AT 25, 50 AND 100 FEET (in dBA LEQ) FROM THE SOURCE

Equipment	Noise Levels at 25 feet	Noise Levels at 50 feet	Noise Levels at 100 feet
Earthmoving			
Front Loader	85	79	73
Backhoes	86	80	74
Dozers	86	80	74
Tractors	86	80	74
Scrapers	91	85	79
Trucks	91	85	79
Material Handling			
Concrete Mixer	91	85	79
Concrete Pump	88	82	76
Crane	89	83	77
Derrick	94	88	82
Stationary Sources			
Pumps	82	79	70
Generator	84	78	72
Compressors	87	81	75
Other			
Saws	84	78	72
Vibrators	82	76	70

Source: U.S. Environmental Protection Agency "Noise"

The nearest residences to the Lime Street Park Project improvement area are located about 300 feet from the boundary of the area of potential effects (APE). The short-term noise impacts associated with Project construction activities are forecast to be less than significant through compliance with the City Municipal Code—as addressed above—and by implementing the following measures. As

construction activities may be a nuisance to nearby residents, the following mitigation shall be implemented:

NOI-1 ***The District will require that all construction equipment be operated with mandated noise control equipment (mufflers or silencers). Enforcement will be accomplished by random field inspections by applicant personnel during construction activities.***

NOI-2 ***Equipment not in use for five minutes shall be shut off.***

NOI-3 ***Equipment shall be maintained and operated such that loads are secured from rattling or banging.***

NOI-4 ***Where available, electric-powered equipment shall be used rather than diesel equipment and hydraulic-powered equipment shall be used instead of pneumatic power.***

NOI-5 ***Construction employees shall be trained in the proper operation and use of equipment consistent with these mitigation measures, including no unnecessary revving of equipment.***

NOI-6 ***No radios or other sound equipment shall be used at this site unless required for emergency response by the contractor.***

Thus, based on the existing noise circumstances within the vicinity of the Project (i.e. from the adjacent roadways and rail traffic directly adjacent to the project site), short-term noise impacts are considered less than significant with the implementation of the mitigation measures above.

Long-Term Noise

The long term or permanent change in noise consists of the additional trips and noise related to park activities associated with full operation of improved Lime Street Park. Due to the high background noise as a result of the proximity of the adjacent roadways, and rail traffic, the additional trips generated to the site each day would not cause a significant change in the existing noise on the project site. Given the background discussion above, which indicates that noise levels at the project site can range between 59.6 and 114 from rail traffic, the background level at the Park currently experiences a background noise level that exceeds the noise standard for Public Institutional uses (65 dBA). Additionally, the noise from the adjacent roadways puts the project within the 60-65 CNEL contour from traffic related noise. This indicates that the project site is located in a high existing background noise environment. Once the Project is in operation, the Project will generate noise from visitors utilizing the expanded park facilities. Traffic noise and operational noise at the expanded park is anticipated to be less than significant given the modest amount of noise such uses generate, as well as the hours in which noise would be generated at those sites (generally during daylight hours, though some activities, such as baseball may occur at night). Furthermore, activities that would occur within the existing and new park facilities must comply with the Municipal Code, and as such must comply with the City's noise standards. Noise Control standards outlined in the City Municipal Code prohibits the timing of noisy events in the evening, thus through compliance with the City's noise standards, the long-term increases in ambient noise levels at the proposed park are considered less than significant.

b. *Less Than Significant Impact* – Vibration is the periodic oscillation of a medium or object. The rumbling sound caused by vibration of room surfaces is called structure borne noises. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous or transient. Vibration is often described in units of velocity (inches per second), and discussed in decibel (dB) units in order to compress the range of numbers required to describe vibration. Vibration impacts related to human development are

generally associated with activities such as train operations, construction, and heavy truck movements.

The FTA Assessment states that in contrast to airborne noise, ground-borne vibration is not a common environmental problem. Although the motion of the ground may be noticeable to people outside structures, without the effects associated with the shaking of a structure, the motion does not provoke the same adverse human reaction to people outside. Within structures, the effects of ground-borne vibration include noticeable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. FTA Assessment further states that it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. However, some common sources of vibration are trains, trucks on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment. The Federal Transit Association (FTA) guidelines identify a level of 80 VdB for sensitive land uses. This threshold provides a basis for determining the relative significance of potential Project related vibration impacts.

The construction of the proposed park improvements is not anticipated to require significant excavation or other activities that would create extensive groundborne vibration activities. Furthermore, given that the nearest sensitive receptor is over 300 feet from the boundary of the APE, and that the nearby rail corridor generates intermittent vibration in the vicinity of the project, it is not anticipated that vibration will be detectable at the nearest sensitive receptors to the project site during construction. The operation of the project site as the expanded Lime Street Park does not contain any uses that would generate excessive vibration. Therefore, the proposed project will have a less than significant potential to generate excessive groundborne vibration or groundborne noise. No mitigation is required.

c. *No Impact* – According to the San Bernardino County Land Use Plan General Plan Hazard Overlays Map (Figure IX-2), the closest airport to the project site is the Hesperia Airport, which is located about one and a quarter miles to the south of the Project site. Based on a review of the Hesperia General Plan EIR, according to the Noise Technical Study (2009) prepared for the Hesperia Airport, the 60 CNEL contour extends approximately 350 feet east and west from the center of the runway, and approximately 1,000 feet north and south from the ends of the Hesperia Airport runway. Lime Street Park does not fall within the noise contour. Based on this information, implementation of the Project will not result in a safety hazard for people residing or working in the project area. No impacts are anticipated and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

SUBSTANTIATION

a. *Less Than Significant Impact* – Implementation of the Project will not induce substantial population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure). This project proposes to expand an existing Park within the City of Hesperia that has not been completely developed. The provision of new park facilities is not typically considered to be growth inducing, but instead is considered growth accommodating to meet the current demand for park facilities within the City. The proposed park expansion would provide additional fields within which unplanned and organized recreational activities would occur. The development of the Lime Street Park upgrades will require a temporary work force to complete construction (approximately 20 persons). No new Park District employees are anticipated to be required in the long term in support of the proposed Park improvements. Furthermore, according to the SCAG's profile for the City of Hesperia (May 2019), the City had a population of 94,829 in 2018[7], the City of Hesperia General Plan EIR indicates that the anticipated population within the City by 2035 will be 211,109. As such, the City has planned for extensive growth in population beyond that which exists at present, and should the project result in a temporary increase in population by 20 persons, or by one or two persons in the long term should the District require additional personal to manage and maintain the new park, this growth would be well within the planned growth within the City of Hesperia as indicated by the General Plan EIR. Thus, based on the type of Project, and the small increment of potential indirect population growth the Project may generate, the population generation associated with Project implementation will not induce substantial population growth that exceeds either local or regional projections.

b. *No Impact* – No occupied residences are located on the project site; therefore, implementation of the proposed Project will not displace substantial numbers of existing housing or persons, necessitating the construction of replacement housing elsewhere. No impacts will occur; therefore, no mitigation is required.

[7] https://www.scag.ca.gov/Documents/Hesperia.pdf

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. PUBLIC SERVICES: 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:				
a) Fire protection?	☐	☐	☒	☐
b) Police protection?	☐	☐	☒	☐
c) Schools?	☐	☐	☒	☐
d) Parks?	☐	☐	☒	☐
e) Other public facilities?	☐	☐	☐	☒

SUBSTANTIATION

a. *Less Than Significant Impact* – The nearest fire station to the proposed project is located approximately 2.5 miles to the northeast of Lime Street Park; San Bernardino County Fire Station #302 is located at 17288 Olive St, Hesperia, CA 92345. The City of Hesperia and the sphere of influence are served by the San Bernardino County Fire Department (SBCFD). Lime Street Park is currently served by the SBCFD for emergencies that occur within the Park; the upgraded facilities at the park are anticipated to increase Park visitation, which could lead to a commensurate number of additional accidents of the sort that might occur at a park (broken limb, head injury, accidental fall, dog bite, etc.). It is not anticipated that the development of the vacant areas within the existing Park would generate substantial fire risk, particularly given that no new structures are proposed to be developed. It would take less than 5 minutes for SBCFD to reach the Park from Station #302. Based on the above information, the proposed Project does not pose a significant fire or emergency response hazard, nor is the proposed Project forecast to cause a significant demand for fire protection services. The City will require standard conditions to ensure adequate fire flow at the improved Park facilities. These requirements are considered adequate measures to prevent any significant impacts under this issue, thus no mitigation is required.

b. *Less Than Significant Impact* – The City of Hesperia receive police services through the San Bernardino County Sheriff Department. The Department enforces local, state, and federal laws; performs investigations and makes arrests; administers emergency medical treatment; and responds to County emergencies. The sheriff station is located at 15840 Smoke Tree Street in Hesperia. The upgraded facilities proposed at Lime Street Park are anticipated to create a minimal demand for law enforcement protection services based on the type of uses and the general lack of activities that would substantially increase demand for such services. Since the overall park area is not proposed to be expanded—the park upgrades will occur within the existing Lime Street Park boundaries—will not be increased substantially relative to the approved park and recreation area in the City, the level of adverse impact to law enforcement services is not forecast to be significantly adverse. Additionally, the Project is not expected to result in any unique or more extensive crime problems that cannot be handled with the existing level of police resources. No new or expanded police facilities would need to be constructed as a result of the Project. Therefore, impacts to police protection resources from implementation of the proposed Project are considered less than significant; no mitigation measures are required.

c. *Less Than Significant Impact* – The proposed Project is located within the area served by Hesperia Unified School District. The nearest school—Lime Street Elementary School—is located about less than a half mile south/southeast of the project site at 16852 Lime St, Hesperia, CA 92345. As addressed above under issue Population and Housing, XV(a) above, the proposed Project does not include any land uses that would substantially induce population growth, and will not require a substantial temporary or permanent labor force. The improvement of an existing park is not anticipated to impacts school in any manner. Thus, the proposed Project will not generate a substantial increase in elementary, middle, or high school population. Therefore, any impacts under this issue are considered less than significant. No mitigation is required.

d. *Less Than Significant Impact* – The proposed Project would upgrade the facilities at the District's existing Lime Street Park, which serves the residents and visitors of the City of Hesperia. Lime Street Park currently includes two extensive open areas (graded and compacted dirt with no vegetation) where it is proposing additional recreation facility improvements to enhance the recreation capacity of Lime Street Park. These proposed improvements include the installation of the following possible facilities: two new baseball/softball fields (these fields will also function multis-port fields for soccer and football; expanded paved parking area and access; volleyball court; outdoor water recreation feature, such as a splash pad; and a pervious walking/jogging path throughout the improved park area. As discussed throughout this Initial Study, the development of these improvements is not anticipated to cause any significant adverse impacts. As such, given that the proposed project would improve access to park facilities, it is anticipated that the proposed Lime Street Park Project would have a less than significant potential to cause a substantial adverse impacts to Parks. No mitigation is required.

e. *No Impact* – Other public facilities include library and general municipal services. Since the Project will not directly induce substantial population growth, it is not forecast that the use of such facilities will increase as a result of the proposed project. The project will develop a park that will contribute to the City's available Public Services. Thus, any impacts under this issue are considered less than significant, and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. RECREATION:				
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?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less Than Significant Impact* – As discussed under issue XV(d) above, the proposed Project would upgrade the facilities at the District's existing Lime Street Park, which serves the residents and visitors of the City of Hesperia. Lime Street Park currently includes two extensive open areas (graded and compacted dirt with no vegetation) where it is proposing additional recreation facility improvements to enhance the recreation capacity of Lime Street Park. These proposed improvements include the installation of the following possible facilities: two new baseball/softball fields (these fields will also function multis-port fields for soccer and football; expanded paved parking area and access; volleyball court; outdoor water recreation feature, such as a splash pad; and a pervious walking/jogging path throughout the improved park area. The proposed park contains facilities that may be considered recreational facilities, but as discussed throughout this Initial Study, the development of these facilities is not anticipated to cause any significant adverse impacts. The proposed park enhancements are designed to meet the needs of residents and visitors of the City of Hesperia, and as such by expanding park services within the City and Park District, the project would not substantially deteriorate or accelerate deterioration of an existing facility; instead, the project seeks to enhance an existing facility. As such, given that the proposed project would improve access to park facilities within the boundaries of the existing Lime Street Park, it is anticipated that the proposed Project have a less than significant impact under this issue. No mitigation is required.

b. *Less Than Significant Impact* – As discussed under issue XV(d) and issue XVI(a) above, the proposed Lime Street Park Project would construct additional park related facilities within the existing Park boundaries. Based on the data and analysis contained in this Initial Study, the proposed facilities are not anticipated to cause a substantial adverse impact on the environment under any issue. As such, though the proposed project includes the construction of park/recreational facilities, the Lime Street Park Project would have a less than significant potential to have an adverse physical effect on the environment. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. TRANSPORTATION: Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, 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 inter-sections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

SUBSTANTIATION

a. *Less Than Significant Impact* – Implementation of the proposed project will not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The proposed project is located within the existing Lime Street Park, which is located at the corner of Lime Street and Hesperia Road. These roadways are classified by the City of Hesperia General Plan as Suburban Rural roadways, which provide connection between the various types of arterial and local streets within the City. These roadways are not heavily traveled in the vicinity of the Project, and are not located in the vicinity of intersections or roadways that are considered deficient by the City of Hesperia General Plan and General Plan EIR.

The park would generate an average of 23 daily weekday trips, 273 Saturday trips and 201 Sunday trips using trip generation numbers provided in CalEEMod for the proposed recreational uses. As such, the additional trips are not anticipated to exceed 50 trips during either the AM or PM Peak Hour, particularly given that park use is generally spread throughout the daylight hours, and sometimes into the night hours when the fields are lit for various sports leagues use. The Project will also generate construction traffic, which is temporary; during construction, the Project is anticipated to generate about 50 roundtrips per day, which will be spread throughout the day during construction.

Lime Street Park is currently accessible by car, by adjacent sidewalk, by an adjacent Class 2 Bike Trail along Lime Street and by an adjacent Class 3 Bike Trail along Hesperia Road. Lime Street Park will continue to be accessible by the above means of transport once the Park has been upgraded. The City of Hesperia is served by Victor Valley Transit Authority for bus service. The nearest bus stop to the Park is located about a mile north of Lime Street Park at Main Street and 3rd Avenue. The proposed Lime Street Park Project is not anticipated to conflict with the circulation of any alternative modes of transportation.

Based on a review of the circulation in the vicinity of Lime Street Park, and the minimal peak hour traffic that would be generated over the short- and long-term by the proposed Lime Street Park Project, implementation of the Project has a less than significant potential to conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system No mitigation is required.

b. *Less Than Significant Impact* – The proposed project would develop additional Park facilities within the existing Lime Street Park, which is located within the City of Hesperia. The City has not yet developed a threshold for vehicle miles travelled; however, as discussed above, the location of the Project is within the vicinity of many alternative modes of transportation, such as bike lanes, sidewalks, and transit. The type of Project proposed is anticipated to continue to attract a local

clientele (within the City of Hesperia), many of which do not travel a great distance to visit the Park, and are not anticipated to travel great distances to specifically visit the upgraded Park as proposed by this Project. Given that the proposed Project is anticipated to serve the local community, the number of vehicle miles traveled per trip generated by the Project is anticipated to be minimal. The greatest distance in which vehicles would travel to the site would occur as a result of park users visiting from out of town, but these trips would be minimal compared to the number of trips per day made to the site by local park visitors regularly. Therefore, the proposed Lime Street Park Project is not anticipated to result in significant impact related to vehicle miles travelled, and thus would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts under this issue are considered less than significant.

c&d. *Less Than Significant Impact* – The proposed project will occur entirely within the boundaries of Lime Street Park. Though the Project will alter site access during construction, based on the location of the proposed Park improvements, it is not anticipated that construction will interrupt traffic flow on or involve construction within surrounding roadways. Ingress and egress from Lime Street Park is currently provided along Lime Street and Hesperia Road. The proposed Park improvement area will be accessed through an existing entrance along Hesperia Road. Construction within Lime Street Park will limit visitor vehicular access to this entrance for a portion of construction of the proposed Project. Pedestrian access throughout the existing Park elements will be maintained throughout construction, and the parking lot along Lime Street will remain accessible to visitors accessing the park by car or bike. Additionally, street parking along Hesperia Road will be maintained. As such, emergency access to the site during construction is anticipated to be maintained in a similar manner to that which exists at present. Once the improvements are installed at Lime Street Park, emergency access to the site will occur in a similar manner, with improved parking and walkways throughout the Park that would facilitate easier access to certain portions of the Park. Given that the Project will be developed within the existing boundaries of Lime Street Park, it is not anticipated that any hazards from site design would occur. Furthermore, the Park improvements are anticipated to be compatible with existing site uses to make for a more cohesive Park experience for Park goers.

Given that much of the infrastructure in support of the Lime Street Park operations is already in place, the project is not anticipated to have the potential to substantially increase hazards due to design or incompatible use. Furthermore, because of the lack of adverse impact on local circulation and the fact that no modifications to Lime Street or Hesperia Road will be required to meet access requirements of the proposed project, impacts to emergency access are forecast to be less than significant during both construction and operation.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial change in the significance of tribal cultural resources, 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 the California Native American tribe, and that is:				
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), or	☐	☒	☐	☐
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 sub-division (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.	☐	☒	☐	☐

SUBSTANTIATION

A Tribal Resources is defined in the Public Resources Code section 21074 and includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following: included or determined to be eligible for inclusion in the California Register of Historical Resources or 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 purpose of this paragraph, the lead agency shall consider the significance of the resources to a California American tribe;
- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape;
- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “non-unique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal resource if it conforms with the criteria of subdivision (a).

a&b. *Less Than Significant With Mitigation Incorporated* – The project site is located within the area of cultural significance for the San Manuel Band of Mission Indians and the Torres Martinez Desert Cahuilla Indians. The City sent letters pursuant to AB-52 on October 28th and 31st, 2019 respectively to the above tribes. The initial 30-day consultation period ended on November 30, 2019. Within this period, the City received a letter back from the San Manuel Band of Mission Indians (SMBMI) requesting mitigation measure to be included as part of this project. Given the amount of existing disturbance within the proposed project footprint, the Tribe (SMBMI) indicated that they have no concerns with the proposed project and simply requests the following language be included regarding inadvertent discoveries:

TCR-1 ***The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.***

TCR-2 ***Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.***

The Torres Martinez Desert Cahuilla Indians have not responded to the letters sent pursuant to AB-52, thus with mitigation measures above, and with mitigation measures **CUL-1** through **CUL-4,** and **GEO-1**, any cultural resources of importance uncovered will be handled properly. Therefore, with implementation identified mitigation measures, the Project is not anticipated to cause a change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape, or object with 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. No further mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater 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 dry 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 and regulations related to solid waste?	☐	☐	☒	☐

SUBSTANTIATION

a. Water

Less Than Significant Impact – Water will continue to be provided by the City of Hesperia Water District (HWD or District). Lime Street Park is currently served by the District, and the proposed improvements will utilize existing connections within adjacent roadways and within the Park to support the needs of the proposed Park facilities. Based on a review of the Hesperia Water District Urban Water Management Program (UWMP, 2015),[8] it is anticipated that landscaping (such as that which would be anticipated to support a park) within the City will be served by recycled water, not potable water. However, given that Victor Valley Wastewater Reclamation Authority (VVWRA) has not completed the infrastructure to deliver water to Lime Street Park, it is anticipated that for the foreseeable future, the Park will continue to utilize potable water until recycled water becomes available at the site. The District's UWMP indicates that the total water demand and total supply in 2020 will be 15,078 acre feet per year (AFY), which includes a demand for 1,000 AFY of recycled water. The District's UWMP anticipates that the total water demand and supply in 2035 will be 19,297 AFY, which includes a demand and supply of 1,000 AFY of recycled water. The Project will operate under the guidelines outlined in the UWMP and within District's capacity, and the estimated water demand will represent only a nominal percentage of the surplus that currently exists in the water supply. The anticipated demand of water supply within the District's retail service area is anticipated to be greater than the demand for water in the future, which indicates that the District has available capacity to serve the proposed Project. Therefore, development of the improvements at Lime Street Park would not result in a significant environmental effect related to the relocation or construction of new or expanded water facilities. Impacts are less than significant.

[8] http://www.cityofhesperia.us/DocumentCenter/View/13505/2015-UWMP-FINAL-DRAFT-2016-05-11?bidId=

Wastewater

Less Than Significant Impact – The proposed project would develop improved park facilities at the existing Lime Street Park. All wastewater generated by the plumbing system within the existing Park is delivered to VVWRA, which has adequate capacity to serve the demands of park visitors. The proposed Project does not include the provision of additional restroom facilities; however, it is anticipated that park use will increase as a result of the proposed new facilities, and as such, an increase in wastewater generated at the Park is anticipated to occur. This increase is nominal compared to the 18 million gallons per day (MGD) capacity of the VVWRA wastewater treatment plant (WWTP). Furthermore, the City of Hesperia generated a volume of wastewater in the amount of about 2.0 MGD in 2015, and at this time and for the foreseeable future, VVWRA maintains ample capacity to treat the wastewater delivered from its member agencies. As such, given the nominal amount of additional wastewater generated by the forecast increase in Park visitors as a result of the proposed Project, it is not anticipated that VVWRA would need to expand their existing facilities beyond that which is already planned to accommodate the wastewater generated by the proposed Project. Therefore, development of the Project would not result in a significant environmental effect related to the relocation or construction of new or expanded wastewater facilities. Impacts are less than significant.

Stormwater

Less Than Significant Impact – The proposed project would develop improved park facilities at the existing Lime Street Park. The Project will develop improvements at an existing park site, which contains pervious coverage of over 50% of the site. The proposed improvements include additional parking, which will decrease the overall pervious area within the site. However, the proposed project currently serves as a park with drainage systems that manage surface flows. The proposed site improvements will include further drainage improvements to accommodate the facilities proposed as part of the Lime Street Park Improvements. On site flows within the new development will be collected and conveyed in a controlled manner such that runoff will be collected and allowed to infiltrate on site. This system will be designed to capture the peak 100-year flow runoff from the project site or otherwise be detained on site and discharged in conformance with City and County requirements. The downstream drainage system will not be altered and given the control of future surface runoff from the project site; therefore, surface water will be adequately managed on site and as such, development of the Project would not result in a significant environmental effect related to the relocation or construction of new or expanded stormwater facilities. Impacts are less than significant.

Electric Power

Less Than Significant Impact – Southern California Edison (SCE) currently provides electricity to Lime Street Park, and will provide electricity to the new Park facilities through the existing the power distribution system located adjacent to and within the site. This system will be able to supply sufficient electricity. No construction or relocation of electric facilities will be required to serve the Project. Therefore, development of the Project would not result in a significant environmental effect related to the relocation or construction of new or expanded electric power facilities. Impacts are less than significant.

Natural Gas

No Impact – Development of the improvements at Lime Street Park would not demand natural gas. Therefore, the Project would not result in a significant environmental effect related to the relocation or construction of new or expanded natural gas facilities. No impacts are anticipated.

Telecommunications

No Impact – Development of the improvements at Lime Street Park would not require installation of wireless internet service or phone serve. Therefore, the Project would not result in a significant environmental effect related to the relocation or construction of new or expanded telecommunication facilities. No impacts are anticipated.

b. *Less Than Significant Impact* – Please refer to the discussion under Hydrology, Section X(b) above, as well as the discussion under item a, Water above. As stated above, the proposed project is

anticipated to require an additional 0.259 AFY of potable water in addition to the existing water demand at Lime Street Park. Based on the data contained in the 2015 Hesperia Water District Urban Water Management Plan[9], it is anticipated that in the future, landscaping (such as that which would be anticipated to support a park) within the City will be served by recycled water, not potable water. Given that Victor Valley Wastewater Reclamation Authority (VVWRA) has not completed the infrastructure to deliver water to Lime Street Park, it is anticipated that for the foreseeable future, the Park will continue to utilize potable water until recycled water becomes available at the site. HWD's UWMP indicates that the total water demand and total supply in 2020 will be 15,078 acre feet per year (AFY), which includes a demand for 1,000 AFY of recycled water. The District's UWMP anticipates that the total water demand and supply in 2035 will be 19,297 AFY, which includes a demand and supply of 1,000 AFY of recycled water. The Project will operate under the guidelines outlined in the UWMP and within HWD's capacity, and the estimated water demand will represent only a nominal percentage of the surplus that currently exists in the water supply. The anticipated demand of water supply within HWD's retail service area is anticipated to be greater than the demand for water in the future, which indicates that HWD has available capacity to serve the proposed Project. Therefore, it is anticipated that HWD will have sufficient potable water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years; alternatively, it is anticipated that, once VVWRA makes recycled water available within the Project area, it will have ample supply of recycled water available to serve Lime Street Park's non-potable water requirements. Impacts under this issue are considered less than significant.

c. *Less Than Significant Impact* – All wastewater generated by the plumbing system within the existing Park is delivered to VVWRA. VVWRA serves the City of Hesperia, as well as surrounding Cities, and while VVWRA collects and treats wastewater generated within the City, the City maintains a sewer system that connects to a VVWRA interceptor which delivers the wastewater to the VVWRA WWTP. The WWTP has adequate capacity to serve the demands of current park visitors. The Lime Street Park Project does not include the provision of additional restroom facilities; however, it is anticipated that park use will increase as a result of the proposed new facilities, and as such, an increase in wastewater generated at the Park is anticipated to occur. This increase is nominal compared to the 18 MGD capacity of the VVWRA WWTP. Furthermore, the City of Hesperia generated a volume of wastewater in the amount of about 2.0 MGD in 2015, and at this time and for the foreseeable future, VVWRA maintains ample capacity to treat the wastewater delivered from its member agencies. As such, given the nominal amount of additional wastewater generated by the forecast increase in Park visitors as a result of the proposed Project, it anticipated that VVWRA has adequate capacity to serve the project's projected demand in addition to its existing commitments. Impacts are less than significant and no mitigation is required.

d-e. *Less Than Significant Impact* – Other than a small amount of construction wastes (concrete, wood, etc.) and waste associated with the daily use of the park, the Project will not generate a substantial amount of solid wastes and will not adversely affect the existing solid waste disposal system. Once in operation, the new facilities are anticipated to support a greater number of park-goers and as a result, it is anticipated that there will be a commensurate increase in waste generated at the Park. Advance Disposal Company currently provides residential and commercial waste collection and recycling programs under a franchise agreement with the City. According to the City of Hesperia General Plan EIR, after waste is collected, it is delivered to the Materials Recovery Facility (MRF), owned and operated by Advance Disposal, located at 17105 Mesa Street in Hesperia; the remaining solid waste is disposed of at the Victorville Sanitary Landfill. Approximately 63 percent of the solid waste generated in Hesperia is being recycled, exceeding the 50 percent requirement pursuant to the California Integrated Waste Management Act of 1989 (AB939). The Victorville Sanitary Landfill has adequate capacity to handle the waste generated at Lime Street Park. According to the CalRecycle, the maximum permitted capacity of Victorville Sanitary Landfill is 83,200,000 Cubic Yards (CY), while its remaining capacity is 81,510,000 CY; the Victorville Sanitary Landfill can accept 3,000 tons per day. Thus, there is adequate solid waste disposal capacity for solid waste generated as a result of implementation of the proposed Project both in the short term and long term.

[9] http://www.cityofhesperia.us/DocumentCenter/View/13505/2015-UWMP-FINAL-DRAFT-2016-05-11?bidId=

Though it is not anticipated that substantial construction and demolition (C & D) waste will be generated by construction of the project given that the site is mostly vacant and compacted in the areas proposed to be developed, any C & D waste will be recycled to the maximum extent feasible in accordance with the California Green Building Code, and any residual materials will be delivered to one of several C & D disposal sites in the area surrounding the project site. Additionally, should it be present, any hazardous materials collected on the project site during either construction of the Project will be transported and disposed of by a permitted and licensed hazardous materials service provider. Thus, the Project will not conflict with any state, federal, or local regulations regarding solid waste. These impacts are considered less than significant. No additional mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XX. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
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 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?	☐	☐	☐	☒

SUBSTANTIATION

a-d. *No Impact* – The proposed project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zone, therefore the proposed project can have no impacts to any wildfire issues. According to the CAL FIRE Fire Hazard Severity Zones in State Responsibility Areas (SRA) Map of San Bernardino County, the proposed project is not located within a very high fire hazard severity zone in an SRA (Figure XX-1). Furthermore, according to the CAL FIRE Fire Hazard Severity Zones in Local Responsibility Areas (LRA) Map of San Bernardino County, the proposed project is not located within a very high fire hazard severity zone in an LRA (Figure XX-2). The proposed project area is located within an existing Park that is located in a rural/developed area that is removed from the high fire hazard areas that are located adjacent to the San Bernardino Mountains. As such, no impacts under these issues are anticipated.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XXI. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to substantially 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, substantially 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?	☐	☒	☐	☐

SUBSTANTIATION

a. *Less Than Significant With Mitigation Incorporated* – The Project has no potential to cause a significant impact any biological or cultural resources. The project has been identified as having no potential—with the implementation of mitigation measures—to degrade the quality of the natural environment, substantially reduce 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, or reduce the number or restrict the range of a rare or endangered plant or animal. Based on the historic disturbance of the site, and its current disturbed condition, the potential for impacting biological resources is low; however, mitigation measures were identified in order to protect cultural resources that might exist within the Project site. Given that the project site currently serves as Lime Street Park, the analysis herein concluded that no cultural resources of importance are located at the project site, so it is not anticipated that any resources could be affected by the Project because no cultural resources exist. However, because it is not known what could be unearthed should the development of the Park require excavation, contingency mitigation measures are provided to ensure that, in the unlikely event that any resources are found, they are protected from any potential impacts. Please see biological and cultural sections of this Initial Study.

b. *Less Than Significant Impact With Mitigation Incorporated* – The Project has nine (9) potential impacts that are individually limited, but may be cumulatively considerable The issues of Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Tribal Cultural Resources require the implementation of mitigation measures to reduce impacts to a less than significant level and ensure that cumulative effects are not cumulatively considerable. The Project is not considered growth-inducing, as defined by *State CEQA Guidelines.* These issues require the implementation of mitigation measures to reduce impacts to a less than significant level and ensure that cumulative effects are not cumulatively considerable. All other environmental issues were found to have no significant impacts without implementation of mitigation. The potential cumulative environmental effects of implementing the proposed project have been determined to be less than considerable and thus, would have a less than significant cumulative impact.

c. *Less Than Significant With Mitigation Incorporated* – The Project will achieve long-term community goals by providing further park facilities to the City of Hesperia and surrounding communities. The short-term impacts associated with the Project, which are mainly construction-related impacts, are less than significant with mitigation, and the proposed Project is compatible with long-term environmental protection. The issues of Air Quality, Geology and Soils, Hazards and Hazardous Materials, and Noise require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed project have been determined to be less than significant.

Conclusion

This document evaluated all CEQA issues contained in the latest Initial Study Checklist form. The evaluation determined that either no impact or less than significant impacts would be associated with the issues of Aesthetics, Agricultural and Forestry Resources, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Population/Housing, Public Services, Recreation, and Wildfire. The issues of Air Quality, Biological Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, and Tribal Cultural Resources require the implementation of mitigation measures to reduce impacts to a less than significant level. The required mitigation has been proposed in this Initial Study to reduce impacts for these issues to a less than significant impact.

Based on the findings in this Initial Study, the Hesperia Recreation and Park District (District) proposes to adopt a Mitigated Negative Declaration (MND) for the Lime Street Park Project. A Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) will be issued for this project by the District. The Initial Study and NOI will be circulated for 30 days of public comment because this project does not involve the state as either a responsible or trustee agency. At the end of the 30-day review period, a final MND package will be prepared and it will be reviewed by the District for a possible adoption at a future District hearing, the date for which has not yet been determined. If you or your agency comments on the MND/NOI for this project, you will be notified about the meeting date in accordance with the requirements in Section 21092.5 of CEQA (statute).

Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; *Sundstrom v. County of Mendocino*,(1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors*, (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; San *Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

Revised 2019
Authority: Public Resources Code sections 21083 and 21083.09
Reference: Public Resources Code sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3/ 21084.2 and 21084.3

SUMMARY OF MITIGATION MEASURES

Air Quality

AIR-1 Fugitive Dust Control. The following measures shall be incorporated into project plans and specifications for implementation during construction:

- Apply soil stabilizers to inactive areas.
- Prepare a high wind dust control plan and implement plan elements and terminate soil disturbance when winds exceed 25 mph.
- Stabilize previously disturbed areas if subsequent construction is delayed.
- Apply water to disturbed surfaces 3 times/day.
- Replace ground cover in disturbed areas quickly.
- Reduce speeds on unpaved roads to less than 15 mph.
- Trenches shall be left exposed for as short a time as possible.
- Identify proper compaction for backfilled soils in construction specifications.

This measure shall be implemented during construction, and shall be included in the construction contract as a contract specification.

Biological Resources

BIO-1 The State of California prohibits the “take” of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal should be conducted outside of the State identified nesting season (typically February 1 through September 1). Alternatively, nesting bird surveys shall be conducted by a qualified avian biologist no more than three (3) days prior to vegetation clearing or ground disturbance activities. Preconstruction surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. The qualified avian biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the preconstruction nesting bird surveys, a Nesting Bird Plan (NBP) shall be prepared and implemented by the qualified avian biologist. At a minimum, the NBP shall include guidelines for addressing active nests, establishing buffers, ongoing monitoring, establishment of avoidance and minimization measures, and reporting. The size and location of all buffer zones, if required, shall be based on the nesting species, individual/pair’s behavior, nesting stage, nest location, its sensitivity to disturbance, and intensity and duration of the disturbance activity. To avoid impacts to nesting birds, any grubbing or vegetation removal should occur outside peak breeding season (typically February 1 through September 1).

Cultural Resources

CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the District's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

CUL-2 In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CUL-3 If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

CUL-4 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

Geology and Soils

GEO-1 Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. Where covering is not possible, measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the Project site for future cleanup such that erosion does not occur.

GEO-2 All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the Park is being constructed.

GEO-3 Should any paleontological resources be accidentally encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with the District. The paleontological professional shall assess the find, determine its significance, and determine appropriate mitigation measures within the guidelines of the California Environmental Quality Act that shall be implemented to minimize any impacts to a paleontological resource.

Hazards and Hazardous Materials

HAZ-1 All accidental spills or discharge of hazardous material during construction activities shall be reported to the Certified Unified Program Agency and shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately a licensed disposal or treatment facility. This measure shall be incorporated into the SWPPP prepared for the proposed project. Prior to accepting the site as remediated, the area contaminated shall be tested to verify that any residual concentrations meet the standard for future residential or public use of the site.

Hydrology and Water Quality

HYD-1 The construction contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) that will be implemented to prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving offsite. The SWPPP shall be developed with the goal of achieving a reduction in pollutants both during and following construction to control stormwater runoff to the maximum extent practicable based on available, feasible best management practices.

The following BMPs or comparable measures shall be included in the SWPPP during construction:

- Stockpiled material should not be stored in areas which are subject to the erosive flows of water.

- Measures such as the use of straw bales, sandbags, silt fencing or detention basins shall be used to capture and hold eroded material for future cleanup.
- Rainfall will be prevented from entering material and waste storage areas and pollution-laden surfaces.
- Construction-related contaminants will be prevented from leaving the site and polluting waterways.
- A spill prevention control and countermeasures and remediation plan shall be in place and implemented to control release of hazardous substances.

Noise

NOI-1 The District will require that all construction equipment be operated with mandated noise control equipment (mufflers or silencers). Enforcement will be accomplished by random field inspections by applicant personnel during construction activities.

NOI-2 Equipment not in use for five minutes shall be shut off.

NOI-3 Equipment shall be maintained and operated such that loads are secured from rattling or banging.

NOI-4 Where available, electric-powered equipment shall be used rather than diesel equipment and hydraulic-powered equipment shall be used instead of pneumatic power.

NOI-5 Construction employees shall be trained in the proper operation and use of equipment consistent with these mitigation measures, including no unnecessary revving of equipment.

NOI-6 No radios or other sound equipment shall be used at this site unless required for emergency response by the contractor.

Tribal Cultural Resources

TCR-1 The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.

TCR-2 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

REFERENCES

California Department of Fish and Wildlife California Natural Diversity Database (CNDDB), generated on October 9, 2019, pertaining to the Lime Street Park site project area only

Giroux & Associates, *"Air Quality and GHG Impact Analysis, HE-128 Hesperia Lime Street Park, City of Hesperia, California"* dated November 5, 2019

City of Hesperia General Plan EIR

U.S. Department of Agriculture (USDA) Web Soil Survey Soil map

U.S. Fish and Wildlife Service IPaC Trust Resources Report, generated on October 9, 2019

Websites

http://www.cityofhesperia.us/DocumentCenter/View/1291/23660023-Hesperia-CAP-July-20?bidId=
https://www.gosbcta.com/wp-content/uploads/2019/10/Final-Plan-.pdf
http://vvwra-prod.civica.granicusops.com/about_us/subregionals.htm
http://www.cityofhesperia.us/DocumentCenter/View/13505/2015-UWMP-FINAL-DRAFT-2016-05-11?bidId=
Map data for FP1 and FP2 zones from DFRIM digital data issued by the Federal Emergency Management Agency. FP3 data compiled from local flood sources.
https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Basin-Prioritization/Files/2018-Sustainable-Groundwater-Management-Act-Basin-Prioritization.pdf
https://www.scag.ca.gov/Documents/Hesperia.pdf
http://www.cityofhesperia.us/DocumentCenter/View/13505/2015-UWMP-FINAL-DRAFT-2016-05-11?bidId=
http://www.cityofhesperia.us/DocumentCenter/View/13505/2015-UWMP-FINAL-DRAFT-2016-05-11?bidId=

FIGURES

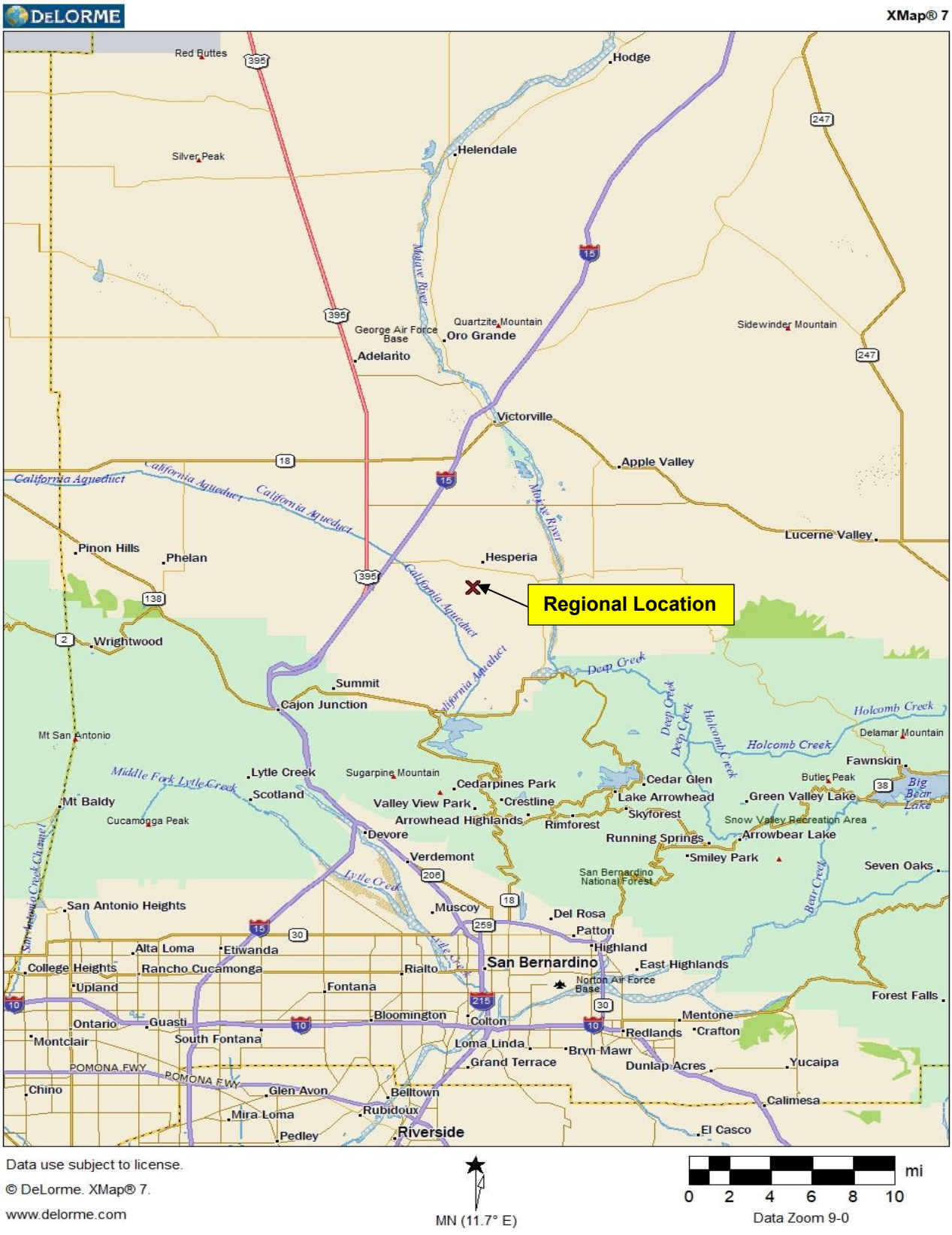


FIGURE 1

Tom Dodson & Associates
Environmental Consultants

Regional Location

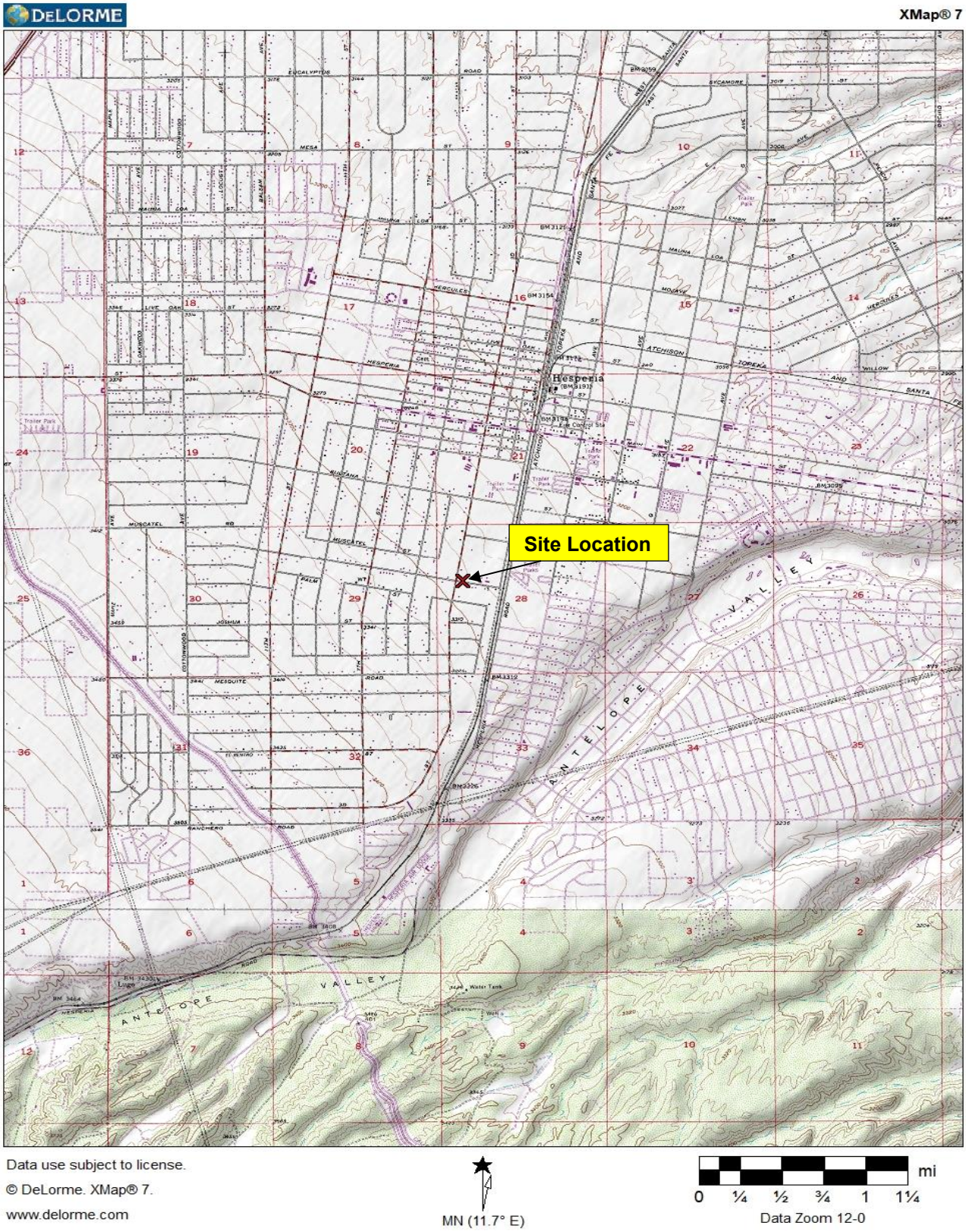


FIGURE 2

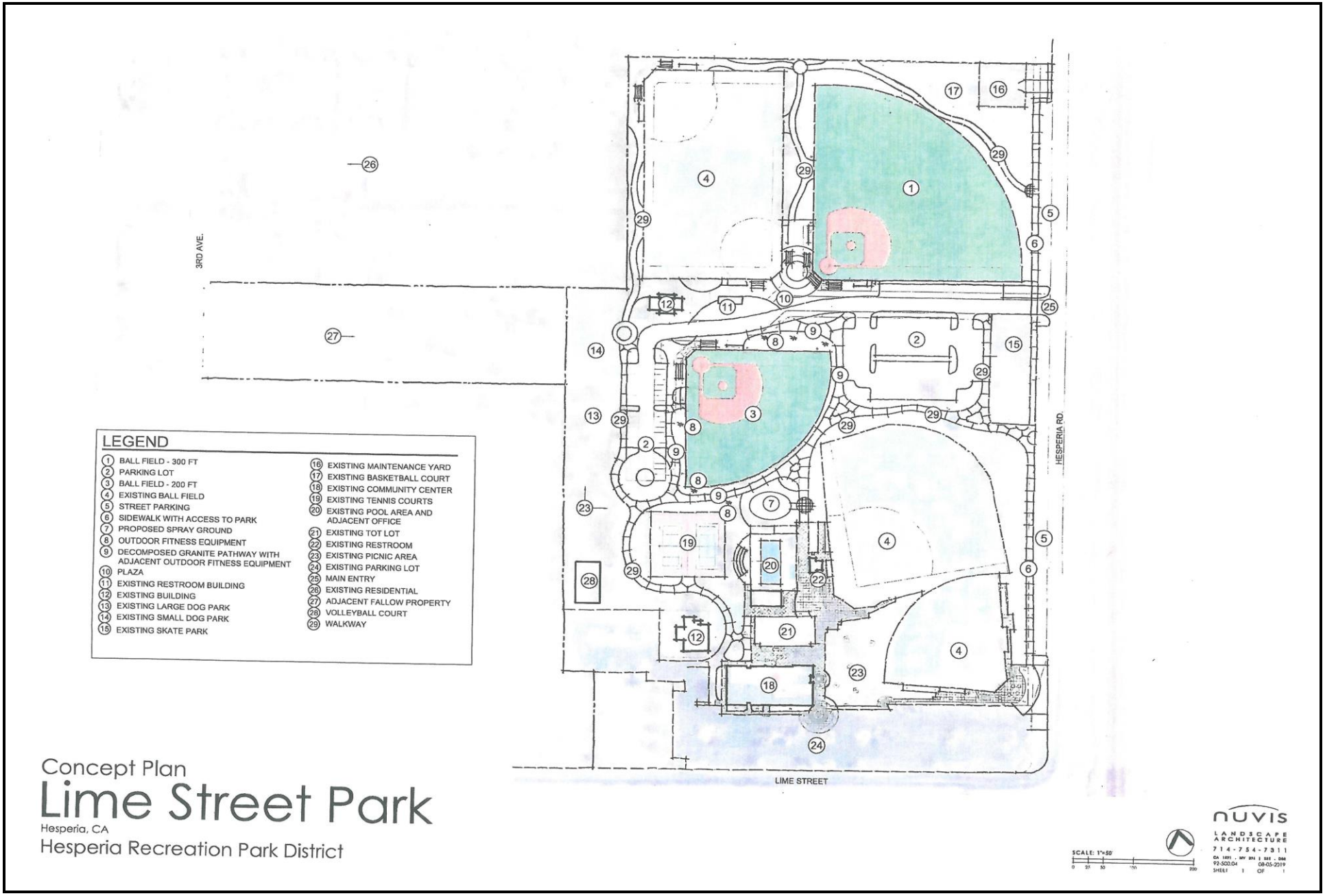
Tom Dodson & Associates
Environmental Consultants

Site Location

FIGURE 3

Tom Dodson & Associates
Environmental Consultants

Aerial Photo of Site



SOURCE: Nuvis Landscape Architecture

FIGURE 4

Tom Dodson & Associates
Environmental Consultants

Conceptual Plan

FIGURE 5

Tom Dodson & Associates
Environmental Consultants

Aerial Photo Showing Area North of the Site

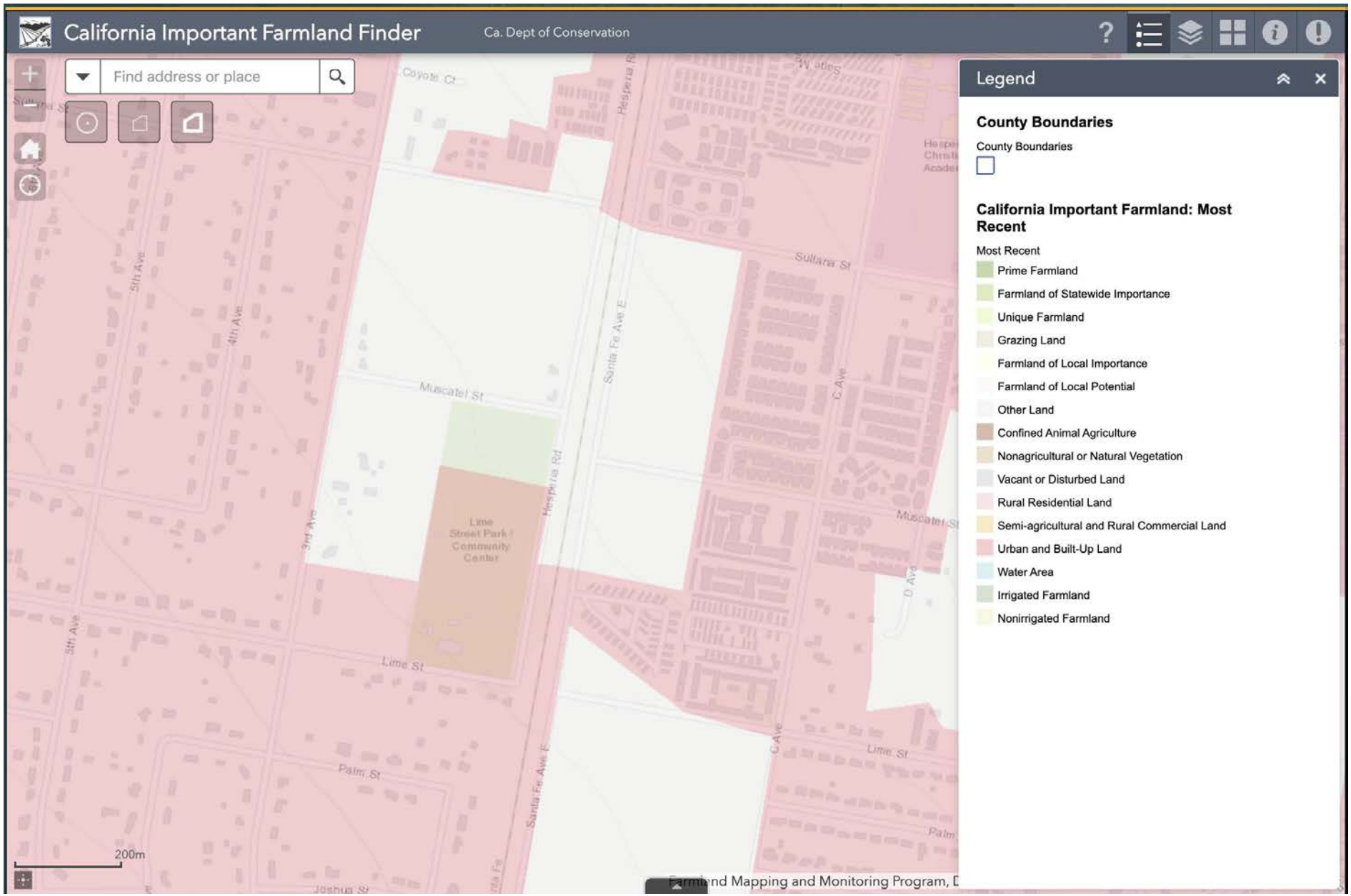


FIGURE II-1

Tom Dodson & Associates
Environmental Consultants

Farmland Map

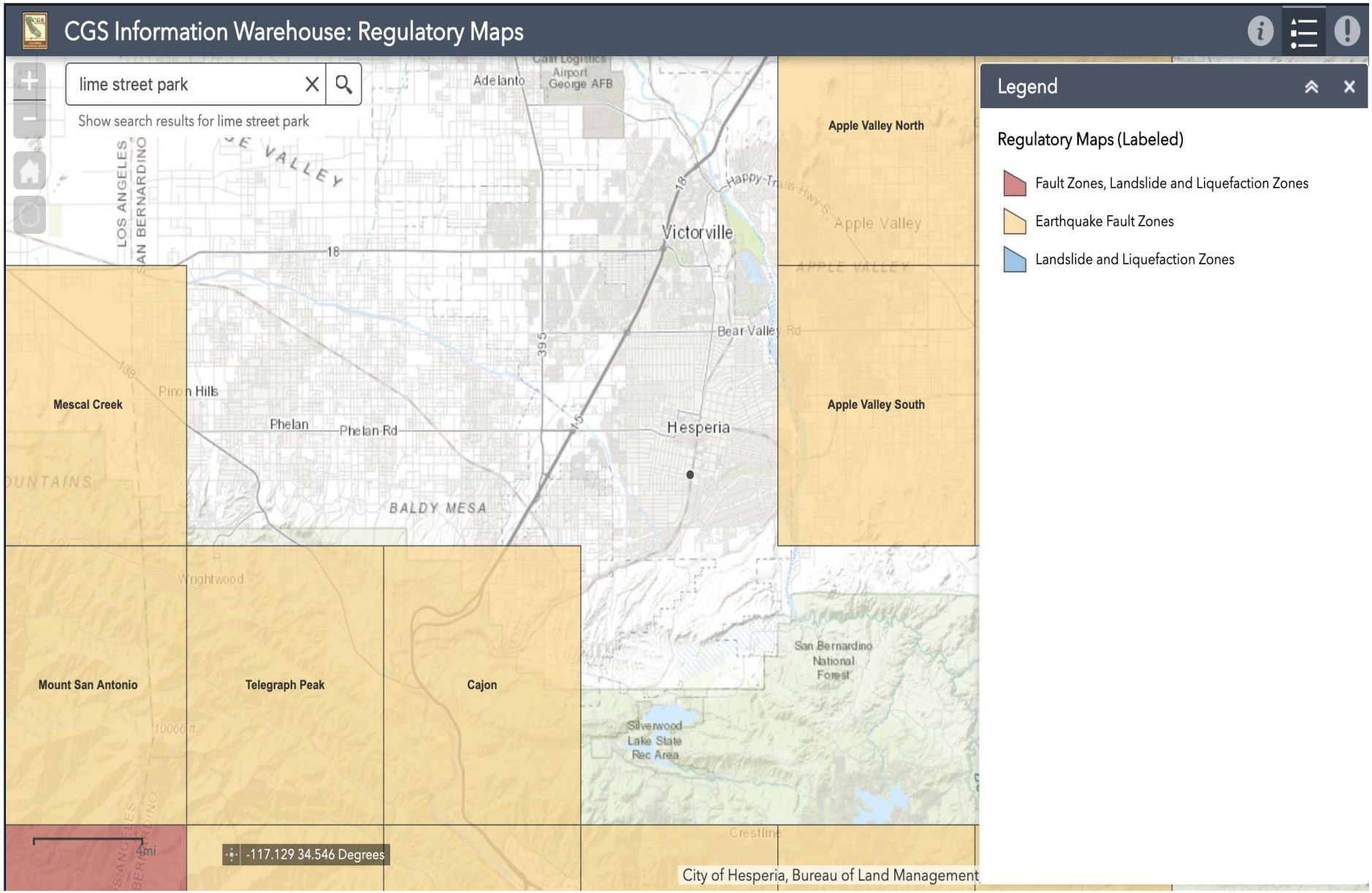
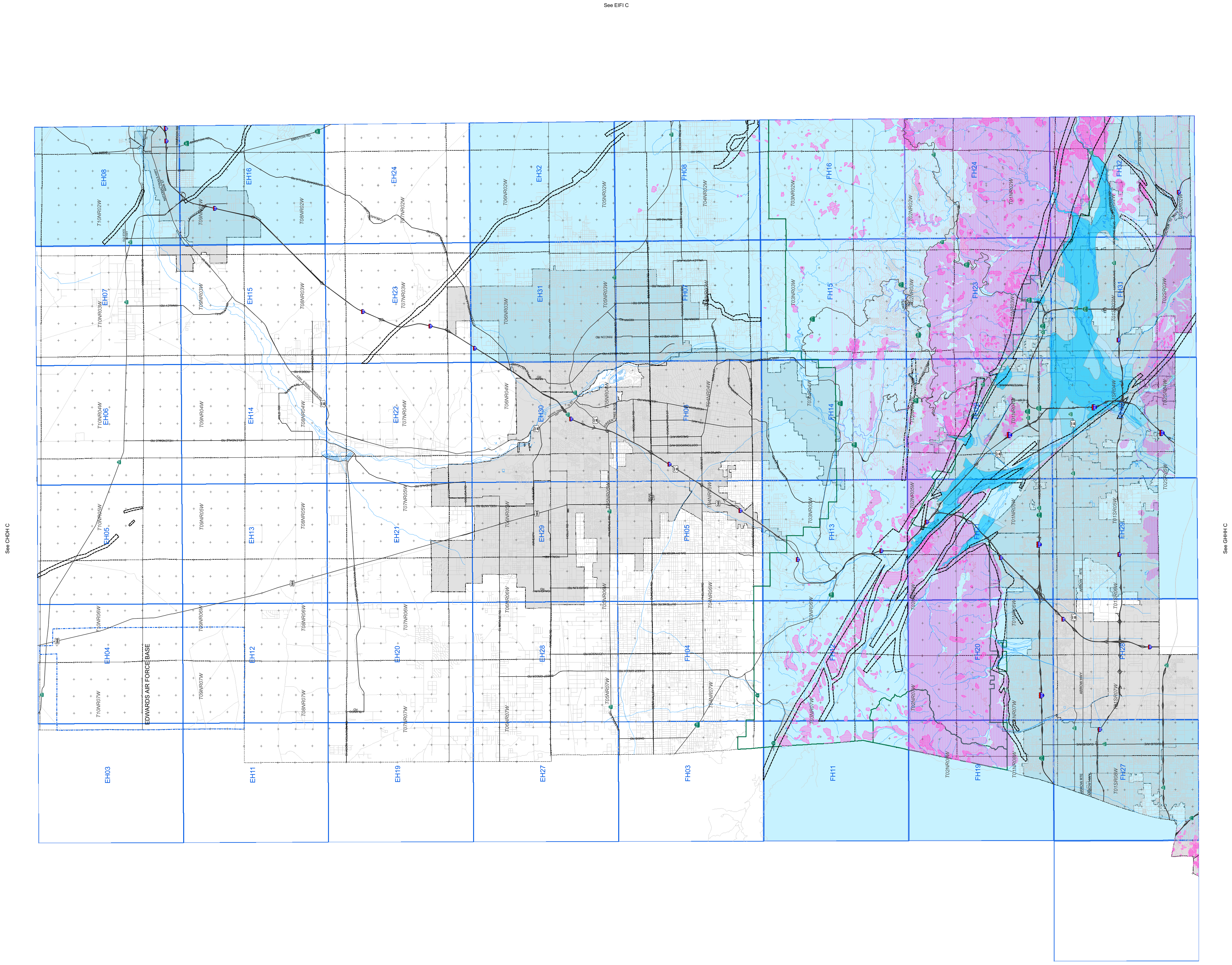


FIGURE VII-1

Tom Dodson & Associates
Environmental Consultants

Alquist-Priolo Map



San Bernardino County Land Use Plan
GENERAL PLAN
Geologic Hazard Overlays

EHFH C
VICTORVILLE/SAN BERNARDINO

FIGURE VII-2

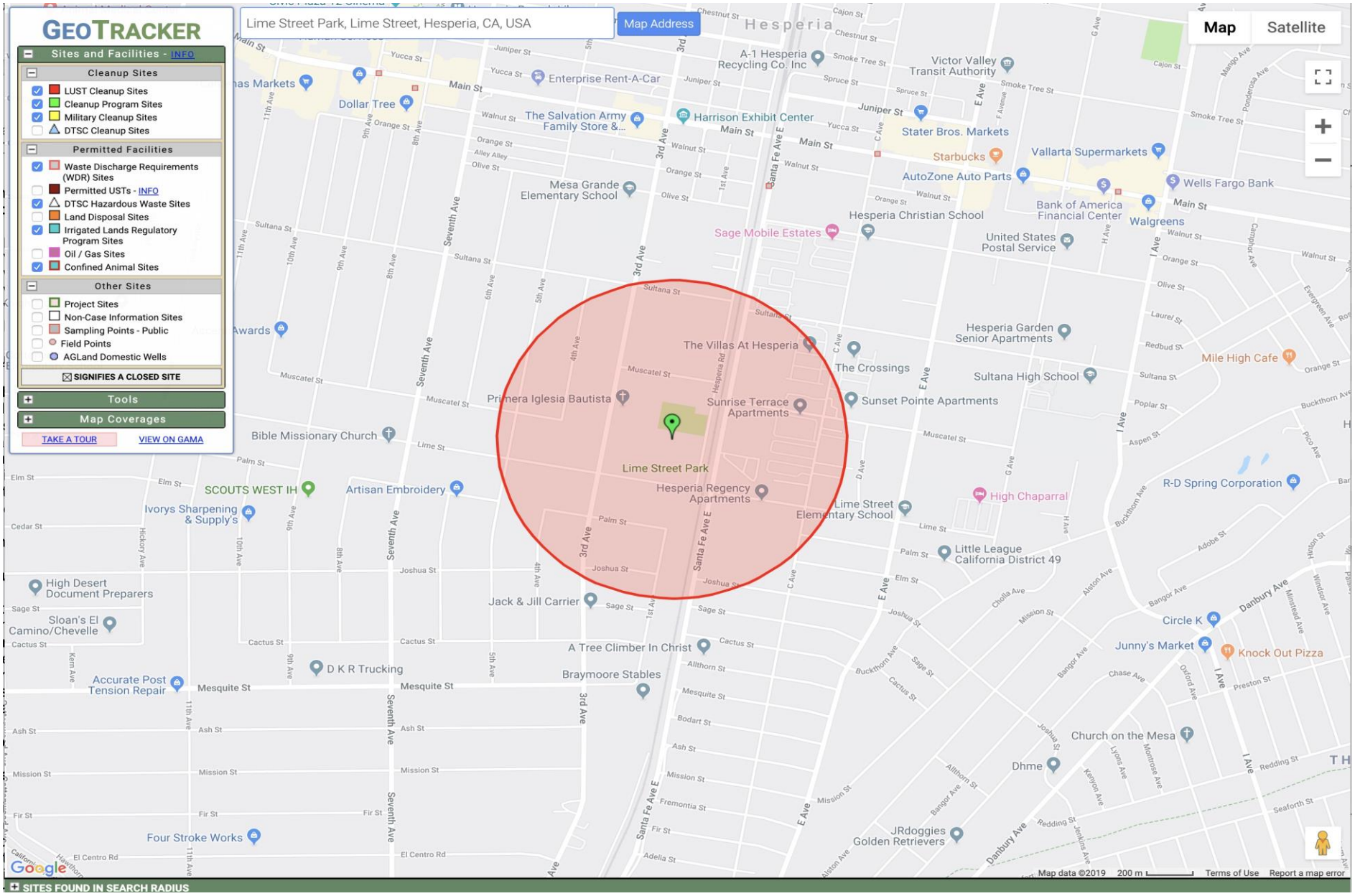


FIGURE IX-1

Tom Dodson & Associates
Environmental Consultants

GeoTracker

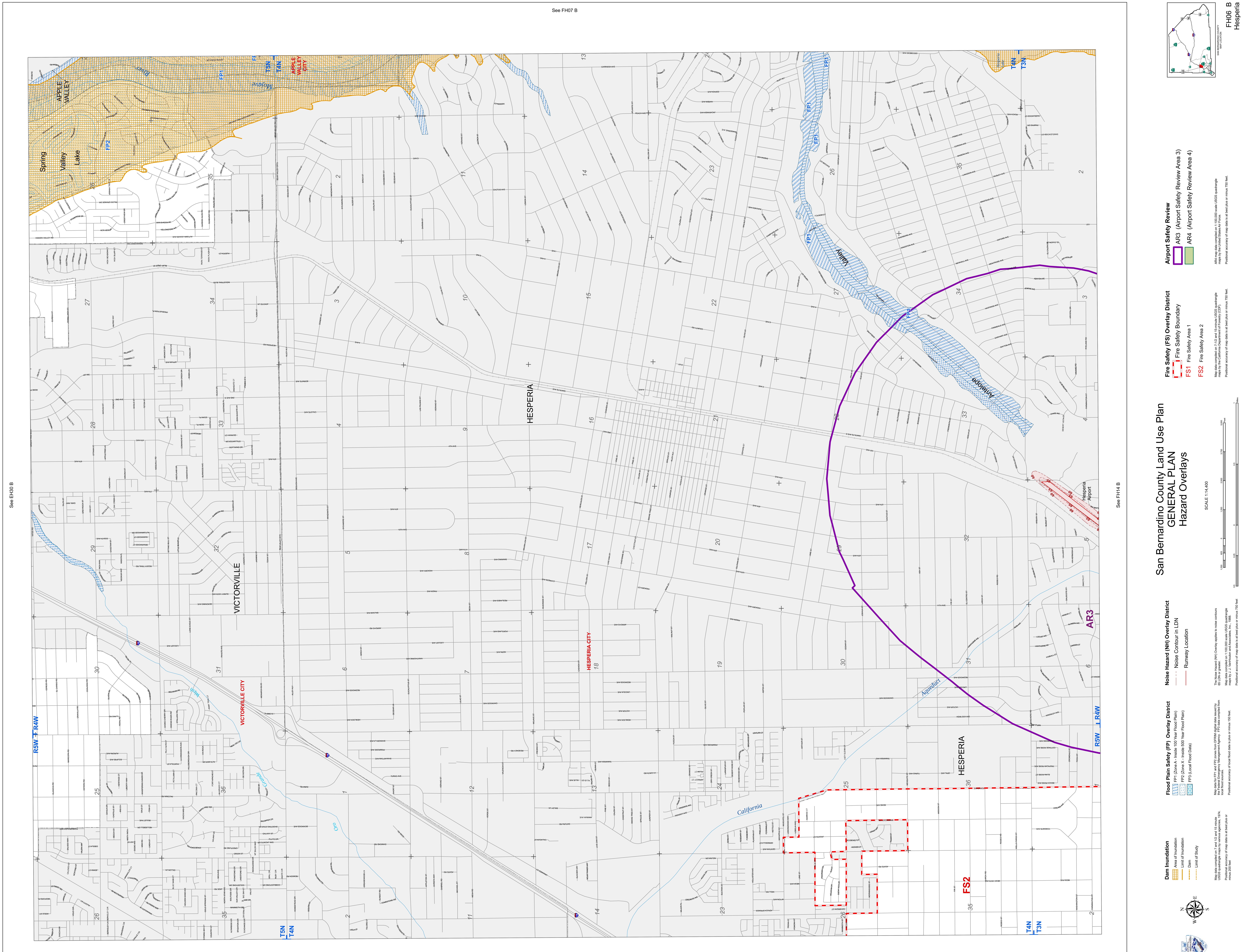
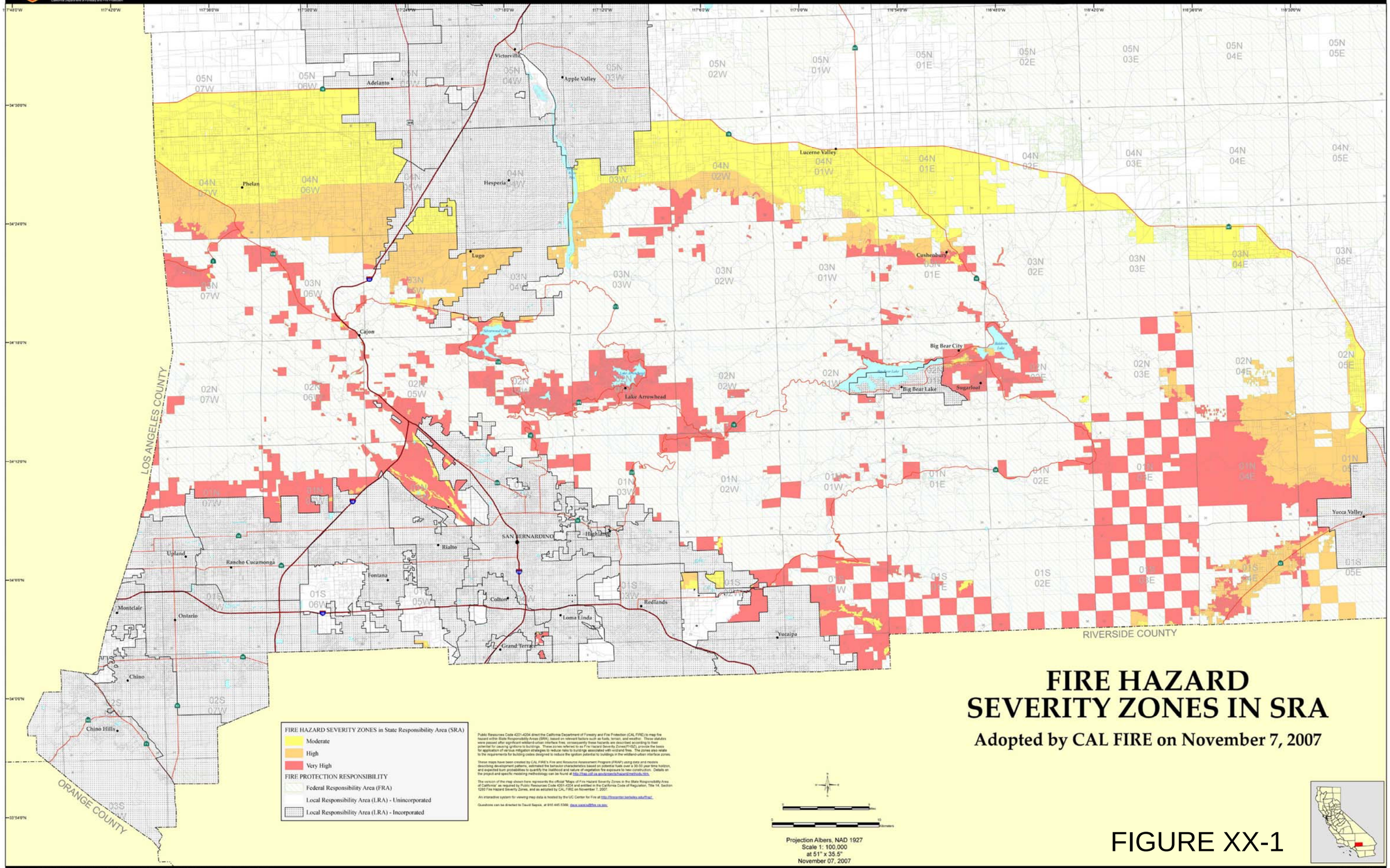

See FH07 B
See EH30 B
See FH14 B
See FH05 B
APPLE VALLEY
Spring Valley Lake
Mojave River
APPLE VALLEY CITY
HESPERIA
VICTORVILLE
VICTORVILLE CITY
HESPERIA CITY
Antelope Valley
Hesperia Airport
California Aqueduct
AR3
FS2
FP1
FP2
T5N
T4N
T3N
R5W
R4W
FH06 B
Hesperia
San Bernardino County Land Use Plan
GENERAL PLAN
Hazard Overlays
Airport Safety Review
AR3 (Airport Safety Review Area 3)
AR4 (Airport Safety Review Area 4)
Fire Safety (FS) Overlay District
Fire Safety Boundary
FS1 Fire Safety Area 1
FS2 Fire Safety Area 2
Noise Hazard (NH) Overlay District
Noise Contour in LDN
Runway Location
Flood Plain Safety (FP) Overlay District
FP1 (Zone A - Inside 100 Year Flood Plain)
FP2 (Zone X - Inside 500 Year Flood Plain)
FP3 (Local Flood Data)
Dam Inundation
Area of Inundation
Limit of Inundation
Dam
Limit of Study

FIGURE IX-2

SW San Bernardino County



Public Resources Code 4201-4204 direct the California Department of Forestry and Fire Protection (CAL FIRE) to map fire hazard within State Responsibility Areas (SRA) based on relevant factors such as fuels, terrain, and weather. These statutes were passed after significant wildland-urban interface fires, consequently these hazards are described according to their potential for causing ignitions to buildings. These zones referred to as Fire Hazard Severity Zones(FHSZ), provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires. The zones also relate to the requirements for building codes designed to reduce the ignition potential for buildings in the wildland-urban interface zones.

These maps have been created by CAL FIRE's Fire and Resource Assessment Program (FRAP) using data and models describing development patterns, estimated fire behavior characteristics based on potential fuels over a 30-50 year time horizon, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure to new construction. Details on the project and specific modeling methodology can be found at http://frap.cdf.ca.gov/projects/hazard/methods.html.

The version of the map shown here represents the official "Maps of Fire Hazard Severity Zones in the State Responsibility Area of California" as required by Public Resources Code 4201-4204 and entitled in the California Code of Regulation, Title 14, Section 1280 Fire Hazard Severity Zones, and as adopted by CAL FIRE on November 7, 2007.

An interactive system for viewing map data is hosted by the UC Center for Fire at http://firecenter.berkeley.edu/frap/.

Questions can be directed to David Sapsis, at 916) 445 5368, dave.sapsis@fire.ca.gov.

Projection Albers, NAD 1927
Scale 1: 100,000
at 51" x 35.5"
November 07, 2007

FIRE HAZARD SEVERITY ZONES IN SRA

Adopted by CAL FIRE on November 7, 2007

FIGURE XX-1

Arnold Schwarzenegger, Governor,
State of California
Mike Chrisman, Secretary for Resources,
The Resources Agency
Ruben Grijalva, Director,
Department of Forestry and Fire Protection

MAP ID: FHSZS_MAP
DATA SOURCES
CAL FIRE Fire Hazard Severity Zones (FHSZS06_3)
CAL FIRE State Responsibility Areas (SRA05_5)
CAL FIRE Incorporated Cities (Incorp07_3)
PLSS (1:100,000 USGS, Land Grants with CAL FIRE grid)

Fire and Resource Assessment Program
California Department of Forestry and Fire Protection

Hesperia

Very High Fire Hazard Severity Zones in LRA
As Recommended by CAL FIRE

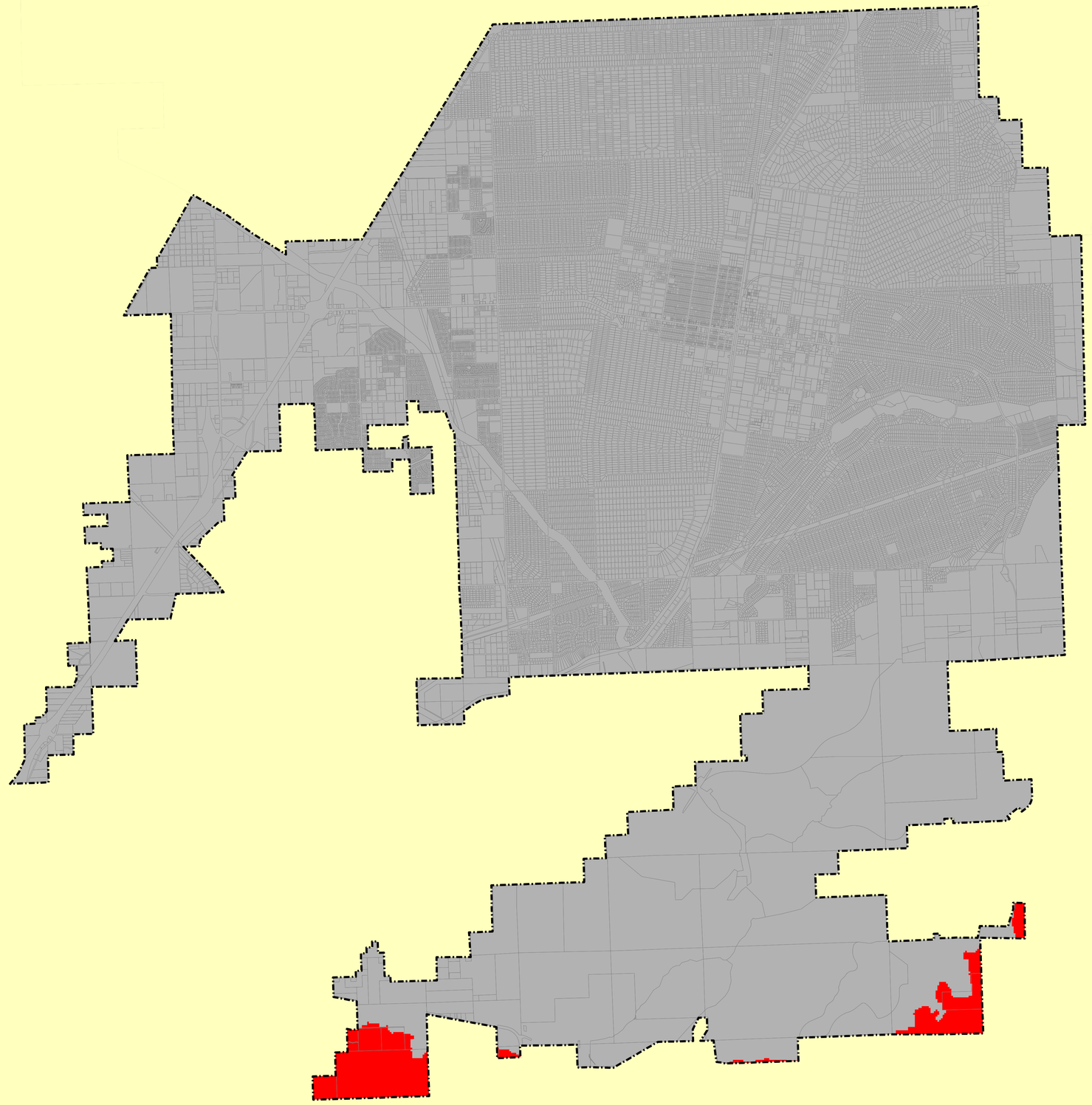


FIGURE XX-2

Fire Hazard Severity Zones

Local Responsibility Area	State or Federal Responsibility Areas
VHFHSZ	VHFHSZ
Non-VHFHSZ	Non-VHFHSZ

City Boundary
Parcels
County Boundary

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CAL FIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of **potential** fuels over a 30-50 year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure (including firebrands) to buildings. Details on the project and specific modeling methodology can be found at http://frap.cdf.ca.gov/projects/hazard/methods.htm. Local Responsibility Area VHFHSZ maps were initially developed in the mid-1990s and are now being updated based on improved science, mapping techniques, and data.

In late 2005 to be effective in 2008, the California Building Commission adopted California Building Code Chapter 7A requiring new buildings in VH FHSZs to use ignition resistant construction methods and materials. These new codes include provisions to improve the ignition resistance of buildings, especially from firebrands. The updated very high fire hazard severity zones will be used by building officials for new building permits in LRA. The updated zones will also be used to identify property whose owners must comply with natural hazards disclosure requirements at time of property sale and 100 foot defensible space clearance. It is likely that the fire hazard severity zones will be used for updates to the safety element of general plans.

This specific map is based on a geographic information system dataset that depicts final CAL FIRE recommendations for Very High FHSZs within the local jurisdiction. The process of finalizing these boundaries involved an extensive local review process, the details of which are available at http://frap.cdf.ca.gov/projects/hazard/btnwl/ (click on "Continue as guest without logging in"). Local government has 120 days to designate, by ordinance, very high fire hazard severity zones within its jurisdiction after receiving the recommendation. Local government can add additional VHFHSZs. There is no requirement for local government to report their final action to CAL FIRE when the recommended zones are adopted. Consequently, users are directed to the appropriate local entity (county, city, fire department, or Fire Protection District) to determine the status of the local fire hazard severity zone ordinance.

This map was developed using data products such as parcel and city boundaries provided by local government agencies. In certain cases, this includes copyrighted geographic information. The maps are for display purposes only - questions and requests related to parcel or city boundary data should be directed to the appropriate local government entity.

N
W E
S

0 2 Miles

0 3 Kilometers

Projection Albers, NAD 1983
Scale 1: 36,000
at 36" x 36"
October 29, 2008

Obtain FRAP maps, data, metadata and publications on the Internet at http://frap.cdf.ca.gov
For more information, contact CAL FIRE-FRAP, PO Box 944246, Sacramento, CA 94244-2460, (916) 327-3939.

MAP ID: FHSZL_c36_Hesperia

DATA SOURCES
CAL FIRE Fire Hazard Severity Zones (FHSZL06_3)

APPENDIX 1

AIR QUALITY and GHG IMPACT ANALYSES

HE-128 HESPERIA LIME STREET PARK

HESPERIA, CALIFORNIA

Prepared by:

Giroux & Associates
1800 E Garry St., #205
Santa Ana, CA 92705

Prepared for:

Tom Dodson & Associates
PO Box 2307
San Bernardino, CA 92406

Date:

November 5, 2019

Project No.: P19-041 A

ATMOSPHERIC SETTING

The climate of the Victor Valley, technically called an interior valley subclimate of Southern California's Mediterranean-type climate, is characterized by hot summers, mild winters, infrequent rainfall, moderate afternoon breezes, and generally fair weather. The clouds and fog that form along the Southern California coastline rarely extend across the mountains to Victorville. The most important local weather pattern is associated with the funneling of the daily onshore sea breeze through El Cajon Pass into the upper desert to the northeast of the heavily developed portions of the Los Angeles Basin. This daily airflow brings polluted air into the area late in the afternoon from late spring to early fall. This transport pattern creates both unhealthful air quality as well as destroying the scenic vistas of the mountains surrounding the Victor Valley.

The low annual humidity, moderate temperature swings, very low rainfall and frequent breezy conditions are typical of California's "High Desert" subclimate. Most years do not see temperatures in Hesperia drop below about 20°F or above about 105°F. Occasionally, however, Hesperia does experience very hot temperatures over 105°F with a record high of 113°F in 1995, and some colder temps down to a record low of -1°F in December, 1949.

The Victor Valley is located in a transition area between the semi-arid conditions of the Los Angeles Basin and the completely arid portions of the Mojave Desert. The Valley's location in the "rainshadow" of the San Gabriel Mountains further enhances its dryness. Rainfall averages around 6 inches per year in Hesperia with light to moderate rain falling on only 10 days per year. Because of Southern California's location on the edge of the mid-latitude storm track, a shift in the jet stream aloft of a few hundred miles north or south can mean the difference between a year with twice the annual average rainfall and one with drought conditions where less than one-half of the normal rainfall is observed. The Hesperia area may occasionally experience a light winter snowfall (1-2 inches per year), but temperatures do not remain cold enough for the snow to stay on the ground for very long.

Winds blow primarily from south to north and from west to east in response to the regional pattern of airflow from the cool ocean to the heated interior. A large portion of the airflow across the proposed project area therefore has its origin in more developed areas of the Los Angeles Basin. Over 50 percent of all airflow derives from a narrow sector from south through west. These winds are moderately strong, averaging from 8-12 mph, but become light and variable at night with about 10 percent of all hours almost complete calm. Afternoon winds may, at times, exceed 20 mph and begin to pick up fine dust and other loose material.

The wind distribution is an important atmospheric parameter because it controls both the initial rate of pollutant dispersal near the source as well as the ultimate regional trajectory of air pollution. These prevailing winds provide a vehicle for visible smog to be transported from the South Coast Air Basin through the mountain passes to the Mojave Desert Air Basin (MDAB). The rapid daytime heating of the lower air leads to convective activity. This exchange of upper air tends to accelerate surface winds during the warm part of the day when convection is at a maximum. During the winter, the rapid cooling of the surface layers at night retards this exchange of momentum which often results in calm winds.

In addition to winds which govern the horizontal dispersion of locally generated emissions, vertical temperature structure controls the depth through which pollutants can be mixed. The strong surface heating by day in the Mojave Desert usually creates a vertical temperature distribution that decreases rapidly with height (unstable). At night, especially in winter, cool air settles in low-lying areas and forms shallow radiation-induced temperature inversions (stable) that may temporarily restrict the dispersion of low-level pollutant emissions. Such inversions "burn off" rapidly after sunrise. The elevated subsidence/marine inversions that create major air quality problems in coastal environments are rarely observed in the desert. When they do form, their bases are from 6 - 8,000 feet mean sea level and thus do not impede vertical dispersion. The low-level radiation inversions, however, play an important role in limiting the dispersive capacity of the local airshed from late evening to the next morning. Because they burn off rapidly in the morning, their importance to the dispersion of air contaminants is limited to localized effects.

AIR QUALITY SETTING

AMBIENT AIR QUALITY STANDARDS (AAQS)

In order to gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the Environmental Protection Agency (EPA) adopted a rule, which extended and established a new attainment deadline for ozone for the year 2021. Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted in 1997 for these pollutants.

Planning and enforcement of the federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their required attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to “non-attainment” for the 8-hour ozone standard.

Table 1

Ambient Air Quality Standards						
Pollutant	**Averaging Time**	**California Standards** [1]		**National Standards** [2]		
		Concentration [3]	**Method** [4]	**Primary** [3,5]	**Secondary** [3,6]	**Method** [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	**No National Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page …

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Table 1 (continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table 2
Health Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Respirable Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted in 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard, but only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in 2005, which aligned with the exposure period for the federal 8-hour standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.075 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress towards attaining state standards, but there are no hard deadlines or any consequences of non-attainment. During the same re-evaluation process, the ARB adopted an annual state standard for nitrogen dioxide ($NO_{2)}$ that is more stringent than the corresponding federal standard, and strengthened the state one-hour NO_2 standard.

As part of EPA's 2002 consent decree on clean air standards, a further review of airborne particulate matter (PM) and human health was initiated. A substantial modification of federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to 10 micron size was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted. In December, 2012, the federal annual standard for PM-2.5 was reduced from 15 $\mu g/m^3$ to 12 $\mu g/m^3$ which matches the California AAQS. The severity of the basin's non-attainment status for PM-2.5 may be increased by this action and thus require accelerated planning for future PM-2.5 attainment.

In response to continuing evidence that ozone exposure at levels just meeting federal clean air standards is demonstrably unhealthful, EPA had proposed a further strengthening of the 8-hour standard. A new 8-hour ozone standard was adopted in 2015 after extensive analysis and public input. The adopted national 8-hour ozone standard is 0.07 ppm which matches the current California standard. It will require three years of ambient data collection, then 2 years of non-attainment findings and planning protocol adoption, then several years of plan development and approval. Final air quality plans for the new standard are likely to be adopted around 2022. Ultimate attainment of the new standard in ozone problem areas such as Southern California might be after 2025.

Of the standards shown in Table 1, those for ozone (O_3), and particulate matter (PM-10) are exceeded at times in the MDAB. They are called "non-attainment pollutants." Because of the variations in both the regional meteorology and in area-wide differences in levels of air pollution emissions, patterns of non-attainment have strong spatial and temporal differences.

BASELINE AIR QUALITY

Monitoring of air quality in the MDAB is the responsibility of the Mojave Desert Air Quality Management District (MDAQMD) headquartered in Victorville, California. Because of the low population density of the air district, limited monitoring resources are distributed over a relatively large geographic area. The heaviest concentration of measurements is in the area of greatest development in the Victor Valley. Existing levels of criteria air pollutants in the project area can generally be inferred from measurements conducted at the Hesperia monitoring station. Although the Hesperia Station does not monitor the complete spectrum of pollutants, data for NO_2 and PM-2.5 are available from the Victorville Monitoring Station. CO is no longer monitored in the Mojave Desert. **Table 3** summarizes the available monitoring history from the Hesperia and Victorville monitoring stations for the last 3 years. From these data one can infer that baseline air quality levels near the project site are occasionally unhealthful, but that such violations of clean air standards usually affect only those people most sensitive to air pollution exposure.

a. Photochemical smog (ozone) levels occasionally exceed standards. The 8-hour state ozone standard has been exceeded approximately 19 percent of all days in the last three years while the 1-hour state standard has been exceeded almost five percent of all days. The 8-hour federal standard has been exceeded approximately 12 percent of all days in the past three years. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade

b. Respirable dust (PM-10) levels often exceed the state standard of 50 $\mu g/m^3$ but the less stringent federal PM-10 standard of 50 $\mu g/m^3$ has only been violated three times for the last three years. Year 2018 had the lowest maximum 24-hour concentration in recent history.

c. A substantial fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). There has only been one violation in the last three years.

Although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within the reasonably near future.

Table 3

Air Quality Monitoring Summary (2015-2018)
(Number of Days Standards Were Exceeded, and Maximum Levels During Such Violations)
(Entries shown as estimated days exceeding standard)

Pollutant/Standard	2016	2017	2018
Ozone			
1-Hour > 0.09 ppm (S)	25	18	9
8-Hour > 0.07 ppm (S)	65	75	71
8- Hour > 0.075 ppm (F)	47	45	45
Max. 1-Hour Conc. (ppm)	0.119	0.114	0.113
Max. 8-Hour Conc. (ppm)	0.098	0.094	0.100
Nitrogen Dioxide			
1-Hour > 0.18 ppm (S)	0	0	0
Max. 1-Hour Conc. (ppm)	0.097	0.057	0.057
Inhalable Particulates (PM-10)			
24-Hour > 50 $\mu g/m^3$ (S)	9	na	na
24-Hour > 150 $\mu g/m^3$ (F)	1	2	0
Max. 24-Hr. Conc. ($\mu g/m^3$)	203.5	163.9	138.9
Ultra-Fine Particulates (PM-2.5)			
24-Hour > 35 $\mu g/m^3$ (F)	1	0	0
Max. 24-Hr. Conc. ($\mu g/m^3$)	41.5	27.2	32.7

na = not available
S=State Standard
F=Federal Standard

Source: Hesperia Station: Ozone, PM-10, Victorville Station: CO, NO_2, PM-2.5 data: www.arb.ca.gov/adam/

AIR QUALITY IMPACTS

BACKGROUND

Lime Street Park is located in the City of Hesperia at the northeast corner of Lime Street and Hesperia Road and encompasses approximately 12 acres. This is an existing park that contains extensive recreation facilities, including, but not limited to, five baseball fields, swimming pool, tennis courts and a community center. The proposed improvements include the installation of the following possible facilities: two new baseball/softball fields (these fields will also function multi-sport fields for soccer and football; expanded paved parking area and access; volleyball court; outdoor water recreation feature, such as a splash pad; and a pervious walking/jogging path throughout the improved park area.

Most of the area of proposed construction area is essentially a flat, dirt landscape. District Staff indicates that for the proposed facilities, no mass grading will be required and it is anticipated that minimal overall grading will be required to install all of the facilities identified.

For this analysis, worst case assumptions were made to be conservative. The entire park was treated like a new facility. Construction emissions are based on the build of a new 12-acre park though many of the park's amenities will remain.

ADJACENT USES

The area to the north is relatively undeveloped with one or two residences located a few hundred feet in the distance. Hesperia Road and the BNSF Railway mainline tracks are located east of the site. The Santa Fe Mobile Home Park is across Hesperia Road and Santa Fe Avenue and has more than a 300-foot separation. South of Lime Street are low-density residences that are 100-feet from the closest parking lot. However, the parking lot is remaining. The closest new park feature to residences across Lime Street will be the proposed new multi-use fields and the Recreation and Park District office. About 500 feet west of the Park are three residences.

STANDARDS OF SIGNIFICANCE

The Mojave Desert AQMD has adopted numerical emissions thresholds as indicators of potential impact even if the actual air quality increment cannot be directly quantified. The MDAQMD thresholds are as follows:

Carbon Monoxide (CO)	548 pounds/day	100 tons/year
Nitrogen Oxides (NOx)	137 pounds/day	25 tons/year
Sulfur Oxides (SOx)	137 pounds/day	25 tons/year
Reactive Organic Gases (ROG)	137 pounds/day	25 tons/year
Particulate Matter (PM-10)	82 pounds/day	15 tons/year
Particulate Matter (PM-2.5)	65 pounds/day	12 tons/year
GHG	548,000 pounds/day	100,000 tons/year

CONSTRUCTION ACTIVITY IMPACTS

CalEEMod was developed by the SCAQMD to provide a model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions. CalEEMod was used to analyze project impacts.

As discussed, it was assumed that the entire 12-acre park would be constructed. **Table 4** provides the construction equipment inventory developed by the CalEEMod model for the project.

Table 4
Construction Activity Equipment Fleet

Phase Name and Duration	Equipment
Demolition (15 days)	1 Concrete Saw
	1 Excavator
	2 Dozers
Fine Grading (15 days)	1 Dozer
	1 Grader
	2 Loader/Backhoes
Construction (200 days)	1 Crane
	3 Loader/Backhoes
	1 Welders
	1 Generator Set
	2 Forklifts
Paving (20 days)	2 Pavers
	2 Paving Equipment
	2 Rollers

The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an engine—the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod model's default load factors for off-road equipment.

Utilizing the indicated equipment fleets and durations the worst case daily construction emissions are calculated by CalEEMod and are listed in **Table 5.** As shown peak construction emissions would not exceed the daily MDAQMD significance thresholds. The only construction mitigation measure modeled was to water exposed site surfaces at least 3 times per day.

Table 5
Construction Activity Emissions
Maximum Daily Emissions (pounds/day)

Maximal Construction Emissions	ROG	NOx	CO	SO_2	PM-10	PM-2.5
2020						
Unmitigated	3.2	28.4	25.0	0.0	9.9	4.6
w/Fugitive Dust Mitigation*	3.2	28.4	25.0	0.0	4.6	1.3
2021						
Unmitigated	1.3	13.0	15.1	0.0	0.8	0.7
w/Fugitive Dust Mitigation*	1.3	13.0	15.1	0.0	0.8	0.7
MDAQMD Thresholds	137	137	548	137	82	65

* fugitive dust control measures provided in Mitigation section of this report
Source: CalEEMod output in report appendix

Since MDAQMD emissions guidelines include a not to exceed annual threshold, these emissions were also evaluated as shown in **Table 6.** As shown annual construction emissions are similarly below thresholds.

Table 6
Construction Activity Emissions
Annual Emissions (pounds/day)

Maximal Construction Emissions	ROG	NOx	CO	SO_2	PM-10	PM-2.5
2020						
Unmitigated	0.3	3.2	2.6	0.0	0.4	0.2
w/Fugitive Dust Mitigation*	0.3	3.2	2.3	0.0	0.4	0.2
2021						
Unmitigated	<0.1	0.1	0.2	<0.1	0.4	0.2
w/Fugitive Dust Mitigation*	<0.1	0.1	0.2	<0.1	0.0	<0.1
MDAQMD Thresholds	25	25	100	25	15	12

* fugitive dust control measures provided in Mitigation section of this report
Source: CalEEMod output in report appendix

OPERATIONAL IMPACTS

The Park would generate 23 daily weekday trips, 273 Saturday trips and 201 Sunday trips using trip generation numbers provided in CalEEMod for the proposed recreational uses. These numbers assume the Park use is entirely new and does not take credit for existing trips.

In addition to vehicular trips, the Park would also require water use for irrigation, and a small amount of energy usage for lighting.

Operational emissions were calculated using CalEEMod2016.3.2 for an assumed operational year of 2021. The daily operational impacts are shown in **Table 7** and annual emission are provided in **Table 8**. As shown, operational emissions will not exceed applicable MDAQMD operational emissions CEQA thresholds of significance.

Table 7
Operational Activity Emissions (lbs/day)

Activity	ROG	NOx	CO	SO_2	PM-10	PM-2.5
Area	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile	0.6	3.2	5.1	<0.1	1.3	0.3
Total	**0.6**	**3.2**	**5.1**	<0.1	**1.3**	**0.3**
MDAQMD Threshold	137	137	548	137	82	82

Table 8
Operational Activity Emissions (tons/year)

Activity	ROG	NOx	CO	SO_2	PM-10	PM-2.5
Area	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Energy	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mobile	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Total	<0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
MDAQMD Threshold	25	25	100	25	15	12

MITIGATION

CONSTRUCTION EMISSIONS MITIGATION

Short-term emissions are primarily related to the construction of the project and are recognized to be short in duration and without lasting impacts on air quality. With the enhanced dust control mitigation measures listed below, construction activity air pollution emissions are not expected to exceed MDAQMD CEQA thresholds for any pollutant even if the phases are under simultaneous construction. Regardless, the PM-10 non-attainment status of the Mojave Desert area requires that Best Available Control Measures (BACMs) be used as required by the Mojave AQMD Rule 403. Recommended construction activity mitigation includes:

Dust Control

- Apply soil stabilizers such as hay bales or aggregate cover to inactive areas.
- Prepare a high wind dust control plan and implement plan elements and terminate soil disturbance when winds exceed 25 mph.
- Stabilize previously disturbed areas if subsequent construction is delayed.
- Water exposed surfaces and haul roads 3 times/day.
- Cover all stockpiles with tarps.
- Replace ground cover in disturbed areas quickly.
- Reduce speeds on unpaved roads to less than 15 mph.
- Trenches shall be left exposed for as short a time as possible.

PROJECT RELATED GHG EMISSIONS GENERATION

GHG THRESHOLDS

The MDAQMD has published thresholds for Greenhouse Gases emissions (CO_2e). The daily threshold is 548,000 lbs/day and the annual threshold is 100,000 MT/year.

CONSTRUCTION ACTIVITY GHG EMISSIONS

The project is assumed to require less than two years for construction. During project construction, the CalEEMod2016.3.2 computer model predicts that the construction activities will generate the annual CO_2e emissions identified in **Table 9**.

Table 9
Construction Emissions (Metric Tons CO_2e)

	CO_2e Daily	**CO_2e Annual**
Year 2020	6,824.4	636.5
Year 2021	2,346.6	26.7

CalEEMod Output provided in appendix

PROJECT OPERATIONAL GHG EMISSIONS

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional CO_2e emissions are summarized in the CalEEMod2016.3.2 output files found in the appendix of this report.

The total operational and annualized construction emissions for the proposed project are identified in **Table 10**. The project GHG emissions are considered less-than-significant.

Table 10
Operational Emissions
(Metric Tons CO_2e)

Consumption Source	**Daily Emissions (lbs/day)**	**Annual Emissions (MT/year)**
Area Sources	0	0.0
Energy Utilization	0	0.0
Mobile Source	1,882.7	90.0
Solid Waste Generation	-	0.5
Water Consumption	-	50.8
Construction	6,824.4	636.5
Total Proj Emissions	8,707.1	777.8
Guideline Threshold	**548,000**	**100,000**

CONSISTENCY WITH GHG PLANS, PROGRAMS AND POLICIES

The City of Hesperia developed a Climate Action Plan (CAP) in 2010[1]. This CAP outlines the General Plan Update policies and CAP strategies that would reduce emissions. The Hesperia CAP outlines a course of action for the City government and the community of Hesperia to reduce per capita GHG emissions by 29% below currently projected levels by 2020 and adapt to effects of climate change. The Hesperia CAP includes actions such as reducing emissions from new development through CEQA, increasing bicycle use through a safe and well-connected system of bicycle paths and end of trip facilities, reducing energy use from the transport and treatment of water, and improving the City's recycling and source reduction program so make continued progress in minimizing waste. The City of Hesperia also contributed to the San Bernardino Associated Governments County Regional Greenhouse Gas Reduction Plan.[2]

The only applicable measure is provided below:

> CAP-13.13 The City should implement water saving measures at public parks and other landscaped areas maintained by the City. The City should use recycled water in public landscaped areas as supplies become available.

Project construction and operational emissions are much less than the CEQA thresholds established by the MDAQMD. Therefore, the project is consistent with the Hesperia CAP.

[1] http://www.cityofhesperia.us/DocumentCenter/View/1291/23660023-Hesperia-CAP-July-20?bidId=
[2] https://www.gosbcta.com/wp-content/uploads/2019/10/Final-Plan-.pdf

CALEEMOD2016.3.2 COMPUTER MODEL OUTPUT

- **DAILY EMISISONS**
- **ANNUAL EMISSIONS**

Hesperia Lime Park

San Bernardino-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	12.00	Acre	12.00	522,720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
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 -

Construction Phase - Demo::15 days, Fine Grading: 15 days, Construction: 200 days, Paving: 20 days

Construction Off-road Equipment Mitigation -

Off-road Equipment - Demo: 1 concrete saw, 1 excavator, 2 dozers

Off-road Equipment - no mass grading-level site

Off-road Equipment - Construction: 1 crane, 2 forklifts, 1 gen set, 3 loader backhoes, 1 welder

Off-road Equipment - Paving: 2 pavers, 2 paving equipment, 2 rollers

Off-road Equipment - Fine Grading: 1 dozer, 1 grader, 2 loader/backhoes

Hesperia Lime Park - San Bernardino-Mojave Desert County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	200.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	30.00	15.00
tblConstructionPhase	PhaseEndDate	5/18/2021	12/29/2020
tblConstructionPhase	PhaseEndDate	1/28/2020	1/21/2020
tblGrading	AcresOfGrading	7.50	37.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00

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	3.2204	28.4158	25.0144	0.0682	8.8376	1.4258	9.8622	3.6401	1.3276	4.5827	0.0000	6,804.5111	6,804.5111	0.7936	0.0000	6,824.3519
2021	1.3175	12.9550	15.1259	0.0240	0.3615	0.6785	0.8018	0.0959	0.6243	0.6569	0.0000	2,328.6726	2,328.6726	0.7174	0.0000	2,346.6070
Maximum	**3.2204**	**28.4158**	**25.0144**	**0.0682**	**8.8376**	**1.4258**	**9.8622**	**3.6401**	**1.3276**	**4.5827**	**0.0000**	**6,804.5111**	**6,804.5111**	**0.7936**	**0.0000**	**6,824.3519**

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	3.2204	28.4158	25.0144	0.0682	3.5469	1.4258	4.5715	1.4462	1.3276	2.3888	0.0000	6,804.5111	6,804.5111	0.7936	0.0000	6,824.3519
2021	1.3175	12.9550	15.1259	0.0240	0.3615	0.6785	0.8018	0.0959	0.6243	0.6569	0.0000	2,328.6726	2,328.6726	0.7174	0.0000	2,346.6070
Maximum	**3.2204**	**28.4158**	**25.0144**	**0.0682**	**3.5469**	**1.4258**	**4.5715**	**1.4462**	**1.3276**	**2.3888**	**0.0000**	**6,804.5111**	**6,804.5111**	**0.7936**	**0.0000**	**6,824.3519**

	ROG	NOx	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**	**57.51**	**0.00**	**49.61**	**58.72**	**0.00**	**41.87**	**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	0.0271	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.6300e-003	2.6300e-003	1.0000e-005		2.8000e-003
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	0.5347	3.2495	5.0707	0.0184	1.2426	0.0127	1.2553	0.3325	0.0119	0.3444		1,880.0013	1,880.0013	0.1082		1,882.7056
Total	**0.5617**	**3.2495**	**5.0719**	**0.0184**	**1.2426**	**0.0127**	**1.2553**	**0.3325**	**0.0119**	**0.3444**		**1,880.0039**	**1,880.0039**	**0.1082**	**0.0000**	**1,882.7084**

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	0.0271	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.6300e-003	2.6300e-003	1.0000e-005		2.8000e-003
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	0.5347	3.2495	5.0707	0.0184	1.2426	0.0127	1.2553	0.3325	0.0119	0.3444		1,880.0013	1,880.0013	0.1082		1,882.7056
Total	**0.5617**	**3.2495**	**5.0719**	**0.0184**	**1.2426**	**0.0127**	**1.2553**	**0.3325**	**0.0119**	**0.3444**		**1,880.0039**	**1,880.0039**	**0.1082**	**0.0000**	**1,882.7084**

	ROG	NOx	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	Fine Grading	Grading	1/29/2020	2/18/2020	5	15	
2	Demolition	Demolition	1/1/2020	1/21/2020	5	15	
3	Building Construction	Building Construction	3/25/2020	12/29/2020	5	200	
4	Paving	Paving	5/19/2021	6/15/2021	5	20	
5	Architectural Coating	Architectural Coating	6/16/2021	7/13/2021	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

Hesperia Lime Park - San Bernardino-Mojave Desert County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	1	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Fine Grading	Excavators	0	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Fine Grading	Graders	1	8.00	187	0.41
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Scrapers	0	8.00	367	0.48
Paving	Paving Equipment	2	8.00	132	0.36
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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	4	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	4	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	220.00	86.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	44.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Fine 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	1.9743	21.8681	10.5055	0.0214		1.0234	1.0234		0.9416	0.9416		2,071.5982	2,071.5982	0.6700		2,088.3481
Total	**1.9743**	**21.8681**	**10.5055**	**0.0214**	**8.6733**	**1.0234**	**9.6968**	**3.5965**	**0.9416**	**4.5381**		**2,071.5982**	**2,071.5982**	**0.6700**		**2,088.3481**

3.2 Fine 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	0.0888	0.0534	0.6852	1.6800e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		167.2764	167.2764	5.2000e-003		167.4064
Total	**0.0888**	**0.0534**	**0.6852**	**1.6800e-003**	**0.1643**	**1.1100e-003**	**0.1654**	**0.0436**	**1.0200e-003**	**0.0446**		**167.2764**	**167.2764**	**5.2000e-003**		**167.4064**

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	1.9743	21.8681	10.5055	0.0214		1.0234	1.0234		0.9416	0.9416	0.0000	2,071.5982	2,071.5982	0.6700		2,088.3481
Total	**1.9743**	**21.8681**	**10.5055**	**0.0214**	**3.3826**	**1.0234**	**4.4060**	**1.4026**	**0.9416**	**2.3442**	**0.0000**	**2,071.5982**	**2,071.5982**	**0.6700**		**2,088.3481**

3.2 Fine 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	0.0888	0.0534	0.6852	1.6800e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		167.2764	167.2764	5.2000e-003		167.4064
Total	**0.0888**	**0.0534**	**0.6852**	**1.6800e-003**	**0.1643**	**1.1100e-003**	**0.1654**	**0.0436**	**1.0200e-003**	**0.0446**		**167.2764**	**167.2764**	**5.2000e-003**		**167.4064**

3.3 Demolition - 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	2.8222	28.3757	15.2176	0.0285		1.4250	1.4250		1.3268	1.3268		2,747.4681	2,747.4681	0.7345		2,765.8293
Total	**2.8222**	**28.3757**	**15.2176**	**0.0285**		**1.4250**	**1.4250**		**1.3268**	**1.3268**		**2,747.4681**	**2,747.4681**	**0.7345**		**2,765.8293**

3.3 Demolition - 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	0.0666	0.0400	0.5139	1.2600e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		125.4573	125.4573	3.9000e-003		125.5548
Total	**0.0666**	**0.0400**	**0.5139**	**1.2600e-003**	**0.1232**	**8.3000e-004**	**0.1241**	**0.0327**	**7.7000e-004**	**0.0335**		**125.4573**	**125.4573**	**3.9000e-003**		**125.5548**

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	2.8222	28.3757	15.2176	0.0285		1.4250	1.4250		1.3268	1.3268	0.0000	2,747.4681	2,747.4681	0.7345		2,765.8293
Total	**2.8222**	**28.3757**	**15.2176**	**0.0285**		**1.4250**	**1.4250**		**1.3268**	**1.3268**	**0.0000**	**2,747.4681**	**2,747.4681**	**0.7345**		**2,765.8293**

3.3 Demolition - 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	0.0666	0.0400	0.5139	1.2600e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		125.4573	125.4573	3.9000e-003		125.5548
Total	**0.0666**	**0.0400**	**0.5139**	**1.2600e-003**	**0.1232**	**8.3000e-004**	**0.1241**	**0.0327**	**7.7000e-004**	**0.0335**		**125.4573**	**125.4573**	**3.9000e-003**		**125.5548**

3.4 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	1.9758	17.8885	15.6682	0.0254		1.0204	1.0204		0.9614	0.9614		2,405.0322	2,405.0322	0.5750		2,419.4067
Total	**1.9758**	**17.8885**	**15.6682**	**0.0254**		**1.0204**	**1.0204**		**0.9614**	**0.9614**		**2,405.0322**	**2,405.0322**	**0.5750**		**2,419.4067**

3.4 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	0.2682	9.2500	1.8094	0.0243	0.5826	0.0441	0.6267	0.1677	0.0421	0.2099		2,559.4387	2,559.4387	0.1614		2,563.4746
Worker	0.9764	0.5871	7.5367	0.0185	1.8073	0.0122	1.8195	0.4794	0.0113	0.4906		1,840.0402	1,840.0402	0.0572		1,841.4705
Total	**1.2446**	**9.8371**	**9.3462**	**0.0428**	**2.3899**	**0.0563**	**2.4461**	**0.6471**	**0.0534**	**0.7005**		**4,399.4789**	**4,399.4789**	**0.2187**		**4,404.9451**

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	1.9758	17.8885	15.6682	0.0254		1.0204	1.0204		0.9614	0.9614	0.0000	2,405.0322	2,405.0322	0.5750		2,419.4067
Total	**1.9758**	**17.8885**	**15.6682**	**0.0254**		**1.0204**	**1.0204**		**0.9614**	**0.9614**	**0.0000**	**2,405.0322**	**2,405.0322**	**0.5750**		**2,419.4067**

3.4 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	0.2682	9.2500	1.8094	0.0243	0.5826	0.0441	0.6267	0.1677	0.0421	0.2099		2,559.4387	2,559.4387	0.1614		2,563.4746
Worker	0.9764	0.5871	7.5367	0.0185	1.8073	0.0122	1.8195	0.4794	0.0113	0.4906		1,840.0402	1,840.0402	0.0572		1,841.4705
Total	**1.2446**	**9.8371**	**9.3462**	**0.0428**	**2.3899**	**0.0563**	**2.4461**	**0.6471**	**0.0534**	**0.7005**		**4,399.4789**	**4,399.4789**	**0.2187**		**4,404.9451**

3.5 Paving - 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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2556**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.5 Paving - 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	0.0619	0.0359	0.4726	1.2200e-003	0.1232	8.1000e-004	0.1240	0.0327	7.5000e-004	0.0334		121.4617	121.4617	3.5200e-003		121.5497
Total	**0.0619**	**0.0359**	**0.4726**	**1.2200e-003**	**0.1232**	**8.1000e-004**	**0.1240**	**0.0327**	**7.5000e-004**	**0.0334**		**121.4617**	**121.4617**	**3.5200e-003**		**121.5497**

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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2556**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

3.5 Paving - 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	0.0619	0.0359	0.4726	1.2200e-003	0.1232	8.1000e-004	0.1240	0.0327	7.5000e-004	0.0334		121.4617	121.4617	3.5200e-003		121.5497
Total	**0.0619**	**0.0359**	**0.4726**	**1.2200e-003**	**0.1232**	**8.1000e-004**	**0.1240**	**0.0327**	**7.5000e-004**	**0.0334**		**121.4617**	**121.4617**	**3.5200e-003**		**121.5497**

3.6 Architectural Coating - 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					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**0.2189**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 Architectural Coating - 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	0.1816	0.1052	1.3864	3.5800e-003	0.3615	2.3900e-003	0.3638	0.0959	2.2000e-003	0.0981		356.2878	356.2878	0.0103		356.5458
Total	**0.1816**	**0.1052**	**1.3864**	**3.5800e-003**	**0.3615**	**2.3900e-003**	**0.3638**	**0.0959**	**2.2000e-003**	**0.0981**		**356.2878**	**356.2878**	**0.0103**		**356.5458**

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	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**0.2189**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.6 Architectural Coating - 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	0.1816	0.1052	1.3864	3.5800e-003	0.3615	2.3900e-003	0.3638	0.0959	2.2000e-003	0.0981		356.2878	356.2878	0.0103		356.5458
Total	**0.1816**	**0.1052**	**1.3864**	**3.5800e-003**	**0.3615**	**2.3900e-003**	**0.3638**	**0.0959**	**2.2000e-003**	**0.0981**		**356.2878**	**356.2878**	**0.0103**		**356.5458**

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	0.5347	3.2495	5.0707	0.0184	1.2426	0.0127	1.2553	0.3325	0.0119	0.3444		1,880.0013	1,880.0013	0.1082		1,882.7056
Unmitigated	0.5347	3.2495	5.0707	0.0184	1.2426	0.0127	1.2553	0.3325	0.0119	0.3444		1,880.0013	1,880.0013	0.1082		1,882.7056

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	22.68	273.00	200.88	179,108	179,108
Total	22.68	273.00	200.88	179,108	179,108

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

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					
City 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
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**

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					
City 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
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	0.0271	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.6300e-003	2.6300e-003	1.0000e-005		2.8000e-003
Unmitigated	0.0271	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.6300e-003	2.6300e-003	1.0000e-005		2.8000e-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	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0269					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.6300e-003	2.6300e-003	1.0000e-005		2.8000e-003
Total	**0.0270**	**1.0000e-005**	**1.2300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.6300e-003**	**2.6300e-003**	**1.0000e-005**		**2.8000e-003**

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	0.0269					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.1000e-004	1.0000e-005	1.2300e-003	0.0000		0.0000	0.0000		0.0000	0.0000		2.6300e-003	2.6300e-003	1.0000e-005		2.8000e-003
Total	**0.0270**	**1.0000e-005**	**1.2300e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**2.6300e-003**	**2.6300e-003**	**1.0000e-005**		**2.8000e-003**

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

Hesperia Lime Park

San Bernardino-Mojave Desert County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
City Park	12.00	Acre	12.00	522,720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
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 -

Construction Phase - Demo::15 days, Fine Grading: 15 days, Construction: 200 days, Paving: 20 days

Construction Off-road Equipment Mitigation -

Off-road Equipment - Demo: 1 concrete saw, 1 excavator, 2 dozers

Off-road Equipment - no mass grading-level site

Off-road Equipment - Construction: 1 crane, 2 forklifts, 1 gen set, 3 loader backhoes, 1 welder

Off-road Equipment - Paving: 2 pavers, 2 paving equipment, 2 rollers

Off-road Equipment - Fine Grading: 1 dozer, 1 grader, 2 loader/backhoes

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	300.00	200.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	30.00	15.00
tblConstructionPhase	PhaseEndDate	5/18/2021	12/29/2020
tblConstructionPhase	PhaseEndDate	1/28/2020	1/21/2020
tblGrading	AcresOfGrading	7.50	37.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	10.00	20.00

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	0.3487	3.1681	2.6224	7.0200e-003	0.3018	0.1261	0.4279	0.0912	0.1185	0.2097	0.0000	634.4393	634.4393	0.0818	0.0000	636.4850
2021	0.0169	0.1460	0.1809	3.0000e-004	4.7500e-003	7.7500e-003	0.0125	1.2600e-003	7.2100e-003	8.4700e-003	0.0000	26.5517	26.5517	6.7700e-003	0.0000	26.7209
Maximum	**0.3487**	**3.1681**	**2.6224**	**7.0200e-003**	**0.3018**	**0.1261**	**0.4279**	**0.0912**	**0.1185**	**0.2097**	**0.0000**	**634.4393**	**634.4393**	**0.0818**	**0.0000**	**636.4850**

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	0.3487	3.1681	2.6224	7.0200e-003	0.2621	0.1261	0.3882	0.0747	0.1185	0.1933	0.0000	634.4390	634.4390	0.0818	0.0000	636.4847
2021	0.0169	0.1460	0.1809	3.0000e-004	4.7500e-003	7.7500e-003	0.0125	1.2600e-003	7.2100e-003	8.4700e-003	0.0000	26.5517	26.5517	6.7700e-003	0.0000	26.7209
Maximum	**0.3487**	**3.1681**	**2.6224**	**7.0200e-003**	**0.2621**	**0.1261**	**0.3882**	**0.0747**	**0.1185**	**0.1933**	**0.0000**	**634.4390**	**634.4390**	**0.0818**	**0.0000**	**636.4847**

	ROG	NOx	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**	**12.94**	**0.00**	**9.01**	**17.81**	**0.00**	**7.54**	**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	1-1-2020	3-31-2020	0.4919	0.4919
2	4-1-2020	6-30-2020	1.0057	1.0057
3	7-1-2020	9-30-2020	1.0168	1.0168
4	10-1-2020	12-31-2020	0.9933	0.9933
6	4-1-2021	6-30-2021	0.1536	0.1536
7	7-1-2021	9-30-2021	0.0094	0.0094
		Highest	1.0168	1.0168

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	4.9300e-003	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
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	0.0251	0.1849	0.2636	9.7000e-004	0.0682	7.1000e-004	0.0689	0.0183	6.7000e-004	0.0190	0.0000	89.8455	89.8455	5.5400e-003	0.0000	89.9839
Waste						0.0000	0.0000		0.0000	0.0000	0.2091	0.0000	0.2091	0.0124	0.0000	0.5180
Water						0.0000	0.0000		0.0000	0.0000	0.0000	50.6125	50.6125	2.0900e-003	4.3000e-004	50.7935
Total	**0.0300**	**0.1849**	**0.2637**	**9.7000e-004**	**0.0682**	**7.1000e-004**	**0.0689**	**0.0183**	**6.7000e-004**	**0.0190**	**0.2091**	**140.4582**	**140.6673**	**0.0200**	**4.3000e-004**	**141.2957**

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	4.9300e-003	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
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	0.0251	0.1849	0.2636	9.7000e-004	0.0682	7.1000e-004	0.0689	0.0183	6.7000e-004	0.0190	0.0000	89.8455	89.8455	5.5400e-003	0.0000	89.9839
Waste						0.0000	0.0000		0.0000	0.0000	0.2091	0.0000	0.2091	0.0124	0.0000	0.5180
Water						0.0000	0.0000		0.0000	0.0000	0.0000	50.6125	50.6125	2.0900e-003	4.3000e-004	50.7935
Total	**0.0300**	**0.1849**	**0.2637**	**9.7000e-004**	**0.0682**	**7.1000e-004**	**0.0689**	**0.0183**	**6.7000e-004**	**0.0190**	**0.2091**	**140.4582**	**140.6673**	**0.0200**	**4.3000e-004**	**141.2957**

	ROG	NOx	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

Hesperia Lime Park - San Bernardino-Mojave Desert County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Fine Grading	Grading	1/29/2020	2/18/2020	5	15	
2	Demolition	Demolition	1/1/2020	1/21/2020	5	15	
3	Building Construction	Building Construction	3/25/2020	12/29/2020	5	200	
4	Paving	Paving	5/19/2021	6/15/2021	5	20	
5	Architectural Coating	Architectural Coating	6/16/2021	7/13/2021	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
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	1	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Fine Grading	Excavators	0	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Fine Grading	Graders	1	8.00	187	0.41
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Fine Grading	Rubber Tired Dozers	1	8.00	247	0.40
Fine Grading	Scrapers	0	8.00	367	0.48
Paving	Paving Equipment	2	8.00	132	0.36
Fine Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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	4	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Fine Grading	4	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	220.00	86.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	44.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Fine 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					0.0651	0.0000	0.0651	0.0270	0.0000	0.0270	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0148	0.1640	0.0788	1.6000e-004		7.6800e-003	7.6800e-003		7.0600e-003	7.0600e-003	0.0000	14.0949	14.0949	4.5600e-003	0.0000	14.2089
Total	**0.0148**	**0.1640**	**0.0788**	**1.6000e-004**	**0.0651**	**7.6800e-003**	**0.0727**	**0.0270**	**7.0600e-003**	**0.0340**	**0.0000**	**14.0949**	**14.0949**	**4.5600e-003**	**0.0000**	**14.2089**

3.2 Fine 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	5.9000e-004	4.4000e-004	4.4900e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0438	1.0438	3.0000e-005	0.0000	1.0446
Total	**5.9000e-004**	**4.4000e-004**	**4.4900e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0438**	**1.0438**	**3.0000e-005**	**0.0000**	**1.0446**

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					0.0254	0.0000	0.0254	0.0105	0.0000	0.0105	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0148	0.1640	0.0788	1.6000e-004		7.6800e-003	7.6800e-003		7.0600e-003	7.0600e-003	0.0000	14.0949	14.0949	4.5600e-003	0.0000	14.2089
Total	**0.0148**	**0.1640**	**0.0788**	**1.6000e-004**	**0.0254**	**7.6800e-003**	**0.0331**	**0.0105**	**7.0600e-003**	**0.0176**	**0.0000**	**14.0949**	**14.0949**	**4.5600e-003**	**0.0000**	**14.2089**

3.2 Fine 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	5.9000e-004	4.4000e-004	4.4900e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0438	1.0438	3.0000e-005	0.0000	1.0446
Total	**5.9000e-004**	**4.4000e-004**	**4.4900e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0438**	**1.0438**	**3.0000e-005**	**0.0000**	**1.0446**

3.3 Demolition - 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	0.0212	0.2128	0.1141	2.1000e-004		0.0107	0.0107		9.9500e-003	9.9500e-003	0.0000	18.6935	18.6935	5.0000e-003	0.0000	18.8184
Total	**0.0212**	**0.2128**	**0.1141**	**2.1000e-004**		**0.0107**	**0.0107**		**9.9500e-003**	**9.9500e-003**	**0.0000**	**18.6935**	**18.6935**	**5.0000e-003**	**0.0000**	**18.8184**

3.3 Demolition - 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	4.4000e-004	3.3000e-004	3.3700e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.7829	0.7829	2.0000e-005	0.0000	0.7835
Total	**4.4000e-004**	**3.3000e-004**	**3.3700e-003**	**1.0000e-005**	**9.1000e-004**	**1.0000e-005**	**9.1000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.7829**	**0.7829**	**2.0000e-005**	**0.0000**	**0.7835**

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	0.0212	0.2128	0.1141	2.1000e-004		0.0107	0.0107		9.9500e-003	9.9500e-003	0.0000	18.6934	18.6934	5.0000e-003	0.0000	18.8184
Total	**0.0212**	**0.2128**	**0.1141**	**2.1000e-004**		**0.0107**	**0.0107**		**9.9500e-003**	**9.9500e-003**	**0.0000**	**18.6934**	**18.6934**	**5.0000e-003**	**0.0000**	**18.8184**

3.3 Demolition - 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	4.4000e-004	3.3000e-004	3.3700e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.1000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.7829	0.7829	2.0000e-005	0.0000	0.7835
Total	**4.4000e-004**	**3.3000e-004**	**3.3700e-003**	**1.0000e-005**	**9.1000e-004**	**1.0000e-005**	**9.1000e-004**	**2.4000e-004**	**1.0000e-005**	**2.5000e-004**	**0.0000**	**0.7829**	**0.7829**	**2.0000e-005**	**0.0000**	**0.7835**

3.4 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	0.1976	1.7889	1.5668	2.5400e-003		0.1020	0.1020		0.0961	0.0961	0.0000	218.1809	218.1809	0.0522	0.0000	219.4849
Total	**0.1976**	**1.7889**	**1.5668**	**2.5400e-003**		**0.1020**	**0.1020**		**0.0961**	**0.0961**	**0.0000**	**218.1809**	**218.1809**	**0.0522**	**0.0000**	**219.4849**

3.4 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	0.0274	0.9366	0.1960	2.3900e-003	0.0574	4.4300e-003	0.0618	0.0166	4.2400e-003	0.0208	0.0000	228.5508	228.5508	0.0153	0.0000	228.9343
Worker	0.0867	0.0650	0.6587	1.7000e-003	0.1773	1.2200e-003	0.1785	0.0471	1.1300e-003	0.0482	0.0000	153.0926	153.0926	4.7200e-003	0.0000	153.2105
Total	**0.1141**	**1.0016**	**0.8548**	**4.0900e-003**	**0.2346**	**5.6500e-003**	**0.2403**	**0.0636**	**5.3700e-003**	**0.0690**	**0.0000**	**381.6434**	**381.6434**	**0.0201**	**0.0000**	**382.1448**

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	0.1976	1.7889	1.5668	2.5400e-003		0.1020	0.1020		0.0961	0.0961	0.0000	218.1806	218.1806	0.0522	0.0000	219.4846
Total	**0.1976**	**1.7889**	**1.5668**	**2.5400e-003**		**0.1020**	**0.1020**		**0.0961**	**0.0961**	**0.0000**	**218.1806**	**218.1806**	**0.0522**	**0.0000**	**219.4846**

3.4 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	0.0274	0.9366	0.1960	2.3900e-003	0.0574	4.4300e-003	0.0618	0.0166	4.2400e-003	0.0208	0.0000	228.5508	228.5508	0.0153	0.0000	228.9343
Worker	0.0867	0.0650	0.6587	1.7000e-003	0.1773	1.2200e-003	0.1785	0.0471	1.1300e-003	0.0482	0.0000	153.0926	153.0926	4.7200e-003	0.0000	153.2105
Total	**0.1141**	**1.0016**	**0.8548**	**4.0900e-003**	**0.2346**	**5.6500e-003**	**0.2403**	**0.0636**	**5.3700e-003**	**0.0690**	**0.0000**	**381.6434**	**381.6434**	**0.0201**	**0.0000**	**382.1448**

3.5 Paving - 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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0126**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.5 Paving - 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	5.5000e-004	4.0000e-004	4.1200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0106	1.0106	3.0000e-005	0.0000	1.0113
Total	**5.5000e-004**	**4.0000e-004**	**4.1200e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0106**	**1.0106**	**3.0000e-005**	**0.0000**	**1.0113**

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	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0126**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.5 Paving - 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	5.5000e-004	4.0000e-004	4.1200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0106	1.0106	3.0000e-005	0.0000	1.0113
Total	**5.5000e-004**	**4.0000e-004**	**4.1200e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0106**	**1.0106**	**3.0000e-005**	**0.0000**	**1.0113**

3.6 Architectural Coating - 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					
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	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**2.1900e-003**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.6 Architectural Coating - 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	1.6100e-003	1.1600e-003	0.0121	3.0000e-005	3.5500e-003	2.0000e-005	3.5700e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.9644	2.9644	9.0000e-005	0.0000	2.9665
Total	**1.6100e-003**	**1.1600e-003**	**0.0121**	**3.0000e-005**	**3.5500e-003**	**2.0000e-005**	**3.5700e-003**	**9.4000e-004**	**2.0000e-005**	**9.6000e-004**	**0.0000**	**2.9644**	**2.9644**	**9.0000e-005**	**0.0000**	**2.9665**

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	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**2.1900e-003**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.6 Architectural Coating - 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	1.6100e-003	1.1600e-003	0.0121	3.0000e-005	3.5500e-003	2.0000e-005	3.5700e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.9644	2.9644	9.0000e-005	0.0000	2.9665
Total	**1.6100e-003**	**1.1600e-003**	**0.0121**	**3.0000e-005**	**3.5500e-003**	**2.0000e-005**	**3.5700e-003**	**9.4000e-004**	**2.0000e-005**	**9.6000e-004**	**0.0000**	**2.9644**	**2.9644**	**9.0000e-005**	**0.0000**	**2.9665**

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	0.0251	0.1849	0.2636	9.7000e-004	0.0682	7.1000e-004	0.0689	0.0183	6.7000e-004	0.0190	0.0000	89.8455	89.8455	5.5400e-003	0.0000	89.9839
Unmitigated	0.0251	0.1849	0.2636	9.7000e-004	0.0682	7.1000e-004	0.0689	0.0183	6.7000e-004	0.0190	0.0000	89.8455	89.8455	5.5400e-003	0.0000	89.9839

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	22.68	273.00	200.88	179,108	179,108
Total	22.68	273.00	200.88	179,108	179,108

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
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

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					
City 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
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**

5.2 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					
City 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
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			
City Park	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	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	4.9300e-003	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Unmitigated	4.9300e-003	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004

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	4.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Total	**4.9200e-003**	**0.0000**	**1.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.1000e-004**	**2.1000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

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	4.9100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	1.1000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.1000e-004	2.1000e-004	0.0000	0.0000	2.3000e-004
Total	**4.9200e-003**	**0.0000**	**1.1000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.1000e-004**	**2.1000e-004**	**0.0000**	**0.0000**	**2.3000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	50.6125	2.0900e-003	4.3000e-004	50.7935
Unmitigated	50.6125	2.0900e-003	4.3000e-004	50.7935

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 14.2978	50.6125	2.0900e-003	4.3000e-004	50.7935
Total		**50.6125**	**2.0900e-003**	**4.3000e-004**	**50.7935**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 14.2978	50.6125	2.0900e-003	4.3000e-004	50.7935
Total		**50.6125**	**2.0900e-003**	**4.3000e-004**	**50.7935**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2091	0.0124	0.0000	0.5180
Unmitigated	0.2091	0.0124	0.0000	0.5180

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.03	0.2091	0.0124	0.0000	0.5180
Total		**0.2091**	**0.0124**	**0.0000**	**0.5180**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.03	0.2091	0.0124	0.0000	0.5180
Total		**0.2091**	**0.0124**	**0.0000**	**0.5180**

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

APPENDIX 2

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Bernardino County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS

California Condor Gymnogyps californianus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/8193

Least Bell's Vireo Vireo bellii pusillus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/5945

Southwestern Willow Flycatcher Empidonax traillii extimus — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6749

Reptiles

NAME	STATUS
Desert Tortoise Gopherus agassizii There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/4481	Threatened

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad Anaxyrus californicus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3762	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Costa's Hummingbird Calypte costae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10

Lawrence's Goldfinch Carduelis lawrencei Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

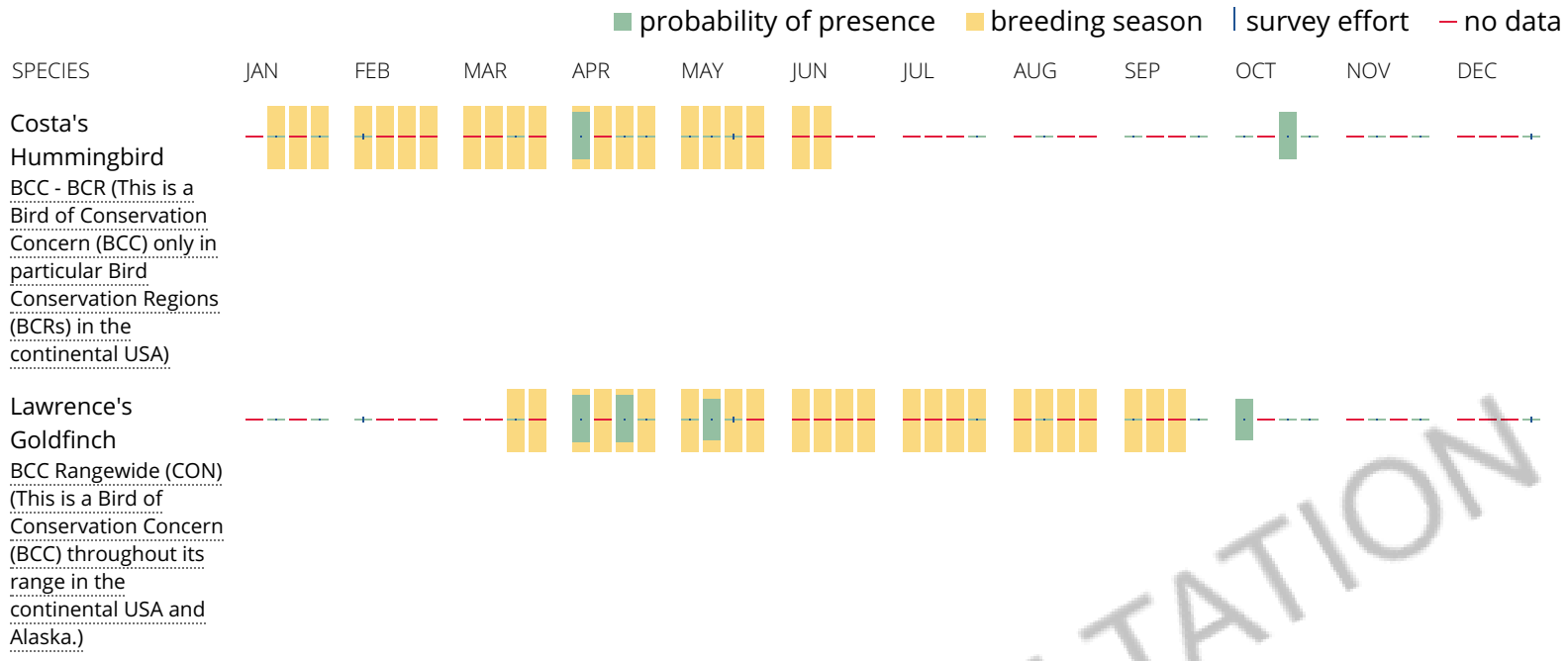
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets

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Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the

key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hesperia (3411743))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Asio otus long-eared owl	ABNSB13010	None	None	G5	S3?	SSC
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Canbya candida white pygmy-poppy	PDPAP05020	None	None	G3G4	S3S4	4.2
Eremothera boothii ssp. boothii Booth's evening-primrose	PDONA03052	None	None	G5T4	S3	2B.3
Opuntia basilaris var. brachyclada short-joint beavertail	PDCAC0D053	None	None	G5T3	S3	1B.2
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
Siphateles bicolor mohavensis Mohave tui chub	AFCJB1303H	Endangered	Endangered	G4T1	S1	FP
Toxostoma lecontei Le Conte's thrasher	ABPBK06100	None	None	G4	S3	SSC
Vireo vicinior gray vireo	ABPBW01140	None	None	G4	S2	SSC
Xerospermophilus mohavensis Mohave ground squirrel	AMAFB05150	None	Threatened	G2G3	S2S3	

Record Count: 13

APPENDIX 3

Soil Map—San Bernardino County, California, Mojave River Area
(Lime Street Park)

Map Scale: 1:2,460 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area
Survey Area Data: Version 11, Sep 17, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 1, 2015—Feb 4, 2015

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
112	CAJON SAND, 0 TO 2 PERCENT SLOPES	22.3	100.0%
Totals for Area of Interest		**22.3**	**100.0%**