Rush Environmental, LLC

Prepared For Leland Krelle & Doug Nagy

An IS/MND for the Schafer 60-acre

PROJECT TITLE:

Initial Study/Mitigated Negative Declaration for a Commercial Cannabis Cultivation, Manufacturing, Retail, and Recreational Facility of approximately 265,000 square-feet located southeasterly from Randsburg Mojave Road. Furthermore, the southerly half of the subject property is bisected by Twenty Mule Team Parkway Road (TMTPR).

PREPARED BY:

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INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR THE DEVELOPMENT OF A COMMERCIAL CANNABIS CULTIVATION, MANUFACTURING, DISTRIBUTION, AND ANCILLARY OPERATIONS AND ACTIVITIES ASSOCIATED WITH COMMERCIAL CANNABIS ON SIXTY (60) ACRES (AC). THE PROJECT PROPOSED THE CONSTRUCTION OF 26 ENCLOSED CULTIVATION BUILDINGS CONSISTING APPROXIMATELY 185,000 SQUARE-FEET AND 5 CANNABIS MANUFACTURING BUILDINGS CONSISTING OF APPROXIMATELY 80,000 SQUARE-FEET, FOR A TOTAL OF 265,000 SQUARE-FEET. THE PROJECT IS LOCATED SOUTHEASTERLY OF RANDSBURG-MOJAVE ROAD AND BISECTED BY TWENTY MULE TEAM PARKWAY ROAD. ASSESSOR PARCEL NUMBERS (APN): 350-140-01, WITHIN THE CITY OF CALIFORNIA CITY, CALIFORNIA.

I. Purpose and Authority

Project Description:

The Project generally consists of the siting, permitting, construction, and operations of a maximum of twenty-six (26) buildings for commercial cannabis cultivation within a total of 185,000 square-feet (SF) and five (5) manufacturing buildings within a total of 80,000 SF. The total Project square-foot totals a maximum of 265,000 SF of building space within a maximum of thirty-one (31) buildings. The types of uses proposed are authorized in the M-1 zone include the cultivation, manufacturing, distribution, and ancillary activities associated with commercial cannabis cultivation. In addition, the proposed Project uses are subject to the applicable State Law and Regulations, including but not limited to California Code of Regulations (CCR) – Title 21, Division 42, under the Bureau of Cannabis Control (BCC).

The City of California City allows commercial cannabis cultivation, manufacturing, distribution, and testing facilities, as a permitted use on property zoned M-1 – Light Industrial. Commercial cannabis cultivation and manufacturing shall be permitted, in accordance with the criteria and procedures set forth Title 5, Chapter 6 of the California City Municipal Code and upon application and approval of a regulatory permit pertaining to operation of the facility including the duty to obtain any, and all, required state licenses. The proposed project is in M-1 – Light Industrial. All cannabis related activities are only permitted in the interior of enclosed structures, facilities, and buildings.

The Project is located within Section 16, of Township 32-South and Range 38-East, with the far northwest corner of the subject property located approximately 138-linear feet (LF), southeasterly from Randsburg Mojave Road. Furthermore, the southerly half of the subject property is bisected by Twenty Mule Team Parkway Road (TMTPR). The Project is an approximately sixty (60)-acre (ac) located on Assessor's Parcel Number (APN) 350-140-01, which is the NW ¼ of the SW ¼ and the E ½ of the SW ¼ of the SW ¼ of Section 16, within the M.D.B.M., all located within the City of California City.

Land Use Summary Table

Proposed Land Use Activity	Unit #	Square Footage (ea.)	Total Square Footage
Large Greenhouse	11	10,000	110,000
Small Greenhouse	15	5,000	75,000
Small Metal Building	2	10,000	20,000
Large Metal Building	3	20,000	60,000
Retention/Detention Basins	2	59,016	59,013
Parking Spaces	199	34,029	34,029
TOTAL	**31**		**265,000***
**Does not include area associated with retention basins and parking.*			

All land uses and future buildings and structures will be consistent with both state and local regulations, including compliance with the 2019 California Building Code (CBC).

The Project site plan also incorporates two (2) retention basin that encompass approximately 1.4-acres, which is approximately 2.3% of the Project site. The Project will be developed in multiple phases each including approximately 100,000 SF of development area. In accordance with the CCMC, each phase will require adequate emergency access, parking, landscaping and other necessary improvements to ensure that each phase can develop independently from all others. More specifically, each phase will include the frontage improvements and the construction of a commercial driveway approach from TMTPR in order to access the Project site. Within each phase, the Project proponent shall also provide all-weather site access for emergency/fire/police access within an internal driveway that provides circulation around the entire site plan. The Project also incorporates 125 parking spaces (including those available for persons with disabilities), storage facilities, and associated ancillary cannabis manufacturing facilities.

The Project anticipates the use of municipal water infrastructure facilities, given the location of an existing water infrastructure relative to the Project site. According to Figure III-1, the Existing Water Map identifies a twenty (20")-inch water main that serves the City from a 2.5-million-gallon (MG) reservoir, located in the foothills[1]. The city has 7 different pressure zones to maintain pressure ranges between 50 and 100 psi. One zone has pressures as high as 130 psi and the city is planning on installing a PRV to reduce this pressure. Most residential and commercial connections have pressure reducing regulators. Customer meters are typically located on the property line and the average length of customer service lines is 25-feet. All water production sources are metered, and pursuant to the City's 2015 UWMP the meters are considered highly accurate. Customer meters are also considered highly accurate as most of them have been installed, replaced, upgraded since 2009. The City maintains five (5) above ground water storage reservoirs totaling 5.85 million gallons (MG). These tanks are Reservoir B1 (2.5 MG), Reservoir C2 (1 MG), Reservoir D3 (1 MG), Reservoir E4 (1 MG) and Rancho Reservoir (0.350 MG).

The Project anticipates the use of municipal wastewater/sewer facilities, given the location of existing sewer infrastructure, relative to its location to the Project. According to Figure 4: City Density Zone Map of the City's Local Agency Management Plan (LAMP), the Project is not located within a Sewer Density Zone. However, according to Figure 6: Existing Sewer System Map, a 24-inch sewer main trunk line bisects the Project site, along the same alignment as TMTPR. Based upon the nature of the proposed development, the Project will be required to connect to the City's municipal sewer system, thus constructing an 8"-12" sewer lateral line, from the project site and within the privately developed property that will interconnect with the main trunk line within TMTPR.

A. Type of Project: Site Specific ☒; Citywide ☐; Community ☐; Policy ☐.

B. Total Project Area: 60-acres (156,816,000 SF)

Residential Acres: 0	**Lots:** 0	**Units:** 0	**Projected No. of Residents:** 0
Commercial Acres: 0	**Lots:** 0	**Sq. Ft. of Bldg. Area:** 0	**Est. No. of Employees:** 0
Industrial Acres: 60	**Lots:**	**Sq. Ft. of Bldg. Area:** 265,000 SF	**Est. No. of Employees (Reg):** 125-150
			Est. No. of Employees (Harvest): 250

C. Assessor's Parcel No(s): 350-140-01

D. Street References: The proposed project is located southeasterly of Randsburg Mojave Road and bisected by Twenty Mule Team Parkway Road., APN: 350-140-01, located within California City.

[1] California City 2015 URMP Update, Chapter 3.4, Section 3.4.1 and 3.4.3, Page 19.

Brief description of the existing environmental setting of the Project site and its surroundings:

The Project is approximately 60 gross acres and is located Planning Sub-Area 5 of the California City General Plan. Sub-Area 5 generally includes Section 13-16 of Township 32S, Range 38E and is bordered by the 16 Section line to the north, the City boundary to the south, 120th St. as the westerly boundary and the Section 18 line as the easterly boundary. The physical development of the project site, and the bisecting public Rights-of-Way (R/W), will be improved in order to eliminate geometric, sharp or dangerous turning movement and roadway safety issues of concern; which include, but are not limited to unsafe or dangerous road conditions, sub-standard circulation patterns and traffic geometrics, frequent dust pollution; and other similar considerations through the implementation standard development-related Conditions of Approval (COAs) and compliance with the California City Municipal Code (CCMC). Based upon the analysis contained within the incorporated Initial Study, the Project will not create a potentially significant impact, upon the surrounding environmental. The Project will be conditioned to comply with all applicable codes, regulations, and ordinances related to the Project, including but not limited to City-regulated noise level maximums, existing air quality emission thresholds, greenhouse gas emissions, vehicle miles traveled (VMT), and/or the quality of the City's water and sewer system.

The following reports and/or studies are applicable to development of the project site and hereby incorporated by reference:

- *City of California City Final General Plan 2009-2028,* City of California City, originally approved October 6, 2009 (City of California City 2009)
- *City of California City Draft Environmental Impact Report on the Redevelopment Plan for the*
- *California City Redevelopment Plan* (1998)
- *City of California City Final General Plan 2009-2028 Initial Study and Mitigated Negative Declaration* (SCH#1992062069)
- *City of California City Final Environmental Impact Report on the Redevelopment Plan from the California City Redevelopment Plan* (SCH#8715918)
- *Kern County Airport Land Use Commission Plan (ALUCP)*

This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Section 23000 et. seq. The City of California City will serve as the lead agency pursuant to CEQA.

II. APPLICABLE GENERAL PLAN AND ZONING REGULATIONS

A. General Plan Elements/Policies:

1. **Land Use:** Within the M-1, Light Industrial Zoning District.
2. **Circulation:** Twenty Mule Team Parkway Road (TMTPR) will provide the primary point of ingress and egress as the Project site is currently bifurcated by this roadway, which runs from the central-westerly portion of the Project to the northern-easterly portion of the Project site direction and ultimately intersects with 130th Street – which is orientated in a north-to-south alignment – approximately ¾ of a mile to the east. In order to facilitate circulation, throughout the project site, and accommodate secondary access, required per the City's codified fire code, the City will require the dedication and improvement of at least two commercial driveway approaches which will intersect with TMTPR with at-least a 26-foot commercial driveway width that will intersect TMTPR at a 90-degree angle. In addition, to ensure compliance with the City's geometric safety standards, each driveway approach shall be located no less than 200-feet from the closest driveway approach.

3. **Multipurpose Open Space:** The Project is located within a land use transitional area, between the urbanizing areas of downtown California City and the less dense portions of the City's northeastern quadrant, which primarily includes larger lot, and less urbanized, development projects, vacant but recorded subdivisions, and rural desert. Due to the industrial agricultural nature of the Project, and the lack of substantial new populations of families, suburban housing, or the generation of new school sites, the project will not create a need for additional open space and/or active park recreational facilities that are primarily utilized by the aforementioned constituent groups. Furthermore, the Project does not preclude or remove any active parkland and/or passive open space, trails, bike paths, or other similar facilities. The project is located southwesterly of a designated conservation area and will need to address possible interface guidelines set forth by the California Department of Fish & Wildlife (CDFW) and the USFWS.

4. **Safety:** The Project is not located upon, or within, an area of hazardous materials as detailed within the applicable state and federal resource maps. The Project is not located on any mapped area that is subject to seismic hazards that are serious enough to warrant reporting through the Department of Conservation Data Viewer. Seismic Hazards Zones can include, but not be limited to Alquist-Priolo Fault or Fault Hazard, Landslide, Liquefaction, or Ground Shaking potential zones. The Project is not located within the Sphere of Influence (SOI) or Airport Influence Area (AIA) of the California City Municipal Airport Comprehensive Land Use Plan (CLUP). According to the City's Geographic Information System (GIS), the Project is located approximately 5-miles from the closest portion of the airport runway. As such, the Project will not impact airport operations in any manner. The Project will not create any dangerous or hazardous circulation geometrics which would cause a concern for the motoring public.

5. **Noise:** As previously mentioned, the Project is located within General Plan Sub-Area Plan 5, which is located immediately to the east of Planning Sub-area 1 and the central core area of the City. Access to this area is provided by Twenty Mule Team Parkway which has existing utilities consisting of sewer, water, and electrical power. In addition, the Southern California Gas Company is in the process of extending natural gas lines from the central core area of the City. Access to this area is provided by Twenty Mule Team Parkway which has existing utilities consisting of sewer, water, and electrical power. In addition, the Southern California Gas Company is in the process of extending natural gas lines from the central core area to the prison which is located to the south of Twenty Mule Team Parkway in the eastern portion of Planning Sub-area 5. This will allow for future development in this area to connect to natural gas service instead of the continued reliance on individual propane tanks. Planning Sub-area 5 is currently experiencing some development, consisting of residential subdivisions north of Twenty Mule Team Parkway. The proposed cannabis operation consists of low-profile buildings (typically one-story) that will operate within the compliance ranges of both state and locally mandated noise levels. The Project is not located within one ¼ mile from a sensitive receptor (i.e., church, park, playground, school, pre-school, senior center, and/or nursing home facility or use that is substantially similar). As such, the Project will not generate noise impacts, in excess of the adopted standards that are comfortable to the human ear (about 65 d(BA). The Project may create an increase in the levels of ambient noise given the adjacency to an existing area of land conservation and will need to address possible interface guidelines set forth by the California Department of Fish & Wildlife (CDFW) and the USFWS.

6. **Housing:** The Project is located on vacant land, within the M-1 (Light Industrial Zoning District) and does not propose to remove or displace any housing, of any type that is currently located on, or adjacent to, the Project boundaries, as no dwelling units exist either on the Project site. The Project site is surrounded by vacant land in all directions, with planned commercially zoned properties located to the east, Controlled Development (O/RA) and M-1 zoning is located to the north, south, and west, with a smaller portion of property (APN: 350-153-40) being zoned as M-1, also located to the west. The Project is subject to the California City Municipal Code (CCMC), Articles 21 and 29, which requires all cultivation buildings to be located at-least 200-feet from any residentially zoned property; however, no residential zoning currently exists or is anticipated to be changed on, near, or adjacent to the Project site. The nearest residential zoning (R-3) is located on APN: 350-040-35 and is in excess of 1,300 linear-feet (LF) from the closest boundary of the Project site. According to City records, no residential projects exist at this location. As such, the Project complies with the City's distance requirements.

7. **Air Quality:** The Project will not substantially increase the baseline air quality emissions resulting from either the construction or operations of the cannabis cultivation and manufacturing facility. The Project is not anticipated to produce pollutants of concern in excess of SCAQMD thresholds for elements such as NO_x; SO_x; or O^3. The Project will require the use of generators (powered by compressed natural gas) during construction and/or initial operations. Generators shall be certified by the California Air Resources Board (CARB) and obtain a permit from the East Kern Air Pollution Control District (EKAPCD), as applicable. Southern California Edison (SCE) will provide the project site with both temporary and permanent power service.

8. **Healthy Communities:** The Project does not contribute and will not impede or impact aspects of the City's Healthy Community strategies. The City's Health Communities goals include, but are not limited to, decreasing the total Vehicle Miles Traveled (VMT); which in turn reduces emissions (having a positive benefit upon public health); increases in transit ridership; and expansion of healthy grocery items, including Certified Farmer's Markets and other similar opportunities.

B. General Plan Area Plan(s): M-1 (Light Industrial Zoning District)

C. Land Use Designation(s): Medium Density Residential – 6 D.U./1 Acre (sewered) – 2 D.U./1Acre (unsewered)

D. Overlay(s), if any: N/A

E. Policy Area(s), if any: N/A

F. Adjacent and Surrounding:

1. **Land Use Designation(s):** Light Industrial
2. **Overlay(s), if any:** N/A
3. **Policy Area(s), if any:** N/A

G. Adopted Specific Plan Information

1. **Name and Number of Specific Plan, if any:** N/A
2. **Specific Plan Planning Area, and Policies, if any:** N/A

H. Existing Zoning: M-1 (Light Industrial Zoning District)

I. Proposed Zoning, if any: N/A

J. Adjacent and Surrounding Zoning: Controlled Development (O/RA) to the north, south, and west. Light Industrial (M-1) to the west as well and Community Commercial (C-2) to the east.

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below (x) would be potentially affected by this Project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Hazards & Hazardous Materials	☐ Recreation
☐ Agriculture & Forest Resources	☒ Hydrology / Water Quality	☐ Transportation / Traffic
☒ Air Quality	☐ Land Use / Planning	☒ Utilities / Service Systems
☒ Biological Resources	☐ Mineral Resources	☒ Tribal Cultural Resources
☐ Cultural Resources	☒ Noise	☐ Other:
☒ Geology / Soils	☐ Population / Housing	☐ Mandatory Findings of Significance
☒ Greenhouse Gas Emissions	☒ Public Services	

IV. DETERMINATION

On the basis of this initial evaluation:

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS NOT PREPARED
☐ I find that the proposed Project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
☒ I find that 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, described in this document, have been made or agreed to by the Project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.
☐ I find that the proposed Project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

A PREVIOUS ENVIRONMENTAL IMPACT REPORT/NEGATIVE DECLARATION WAS PREPARED
☐ I find that although the proposed project could have a significant effect on the environment, **NO NEW ENVIRONMENTAL DOCUMENTATION IS REQUIRED** because (a) all potentially significant effects of the proposed project have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, (b) all potentially significant effects of the proposed project have been avoided or mitigated pursuant to that earlier EIR or Negative Declaration, (c) the proposed project will not result in any new significant environmental effects not identified in the earlier EIR or Negative Declaration, (d) the proposed project will not substantially increase the severity of the environmental effects identified in the earlier EIR or Negative Declaration, (e) no considerably different mitigation measures have been identified and (f) no mitigation measures found infeasible have become feasible.
☐ I find that although all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration pursuant to applicable legal standards, some changes or additions are necessary but none of the conditions described in California Code of Regulations, Section 15212 exist. An **ADDENDUM** to a previously certified EIR or Negative Declaration has been prepared and will be considered by the approving body or bodies.
☐ I find that at least one of the conditions described in California Code of Regulations, Section 15212 exist, but I further find that only minor additions or changes are necessary to make the previous EIR adequately apply to the Project in the changed situation; therefore, a **SUPPLEMENT TO THE ENVIRONMENTAL IMPACT REPORT** is required that need only contain the information necessary to make the previous EIR adequate for the Project as revised.
☐ I find that at least one of the following conditions described in California Code of Regulations, Section 15212, exist and **a SUBSEQUENT ENVIRONMENTAL IMPACT REPORT** is required: (1) Substantial changes are proposed in the Project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (2) Substantial changes have occurred with respect to the circumstances under which the Project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or (3) New information of substantial importance, which was not known and could not have

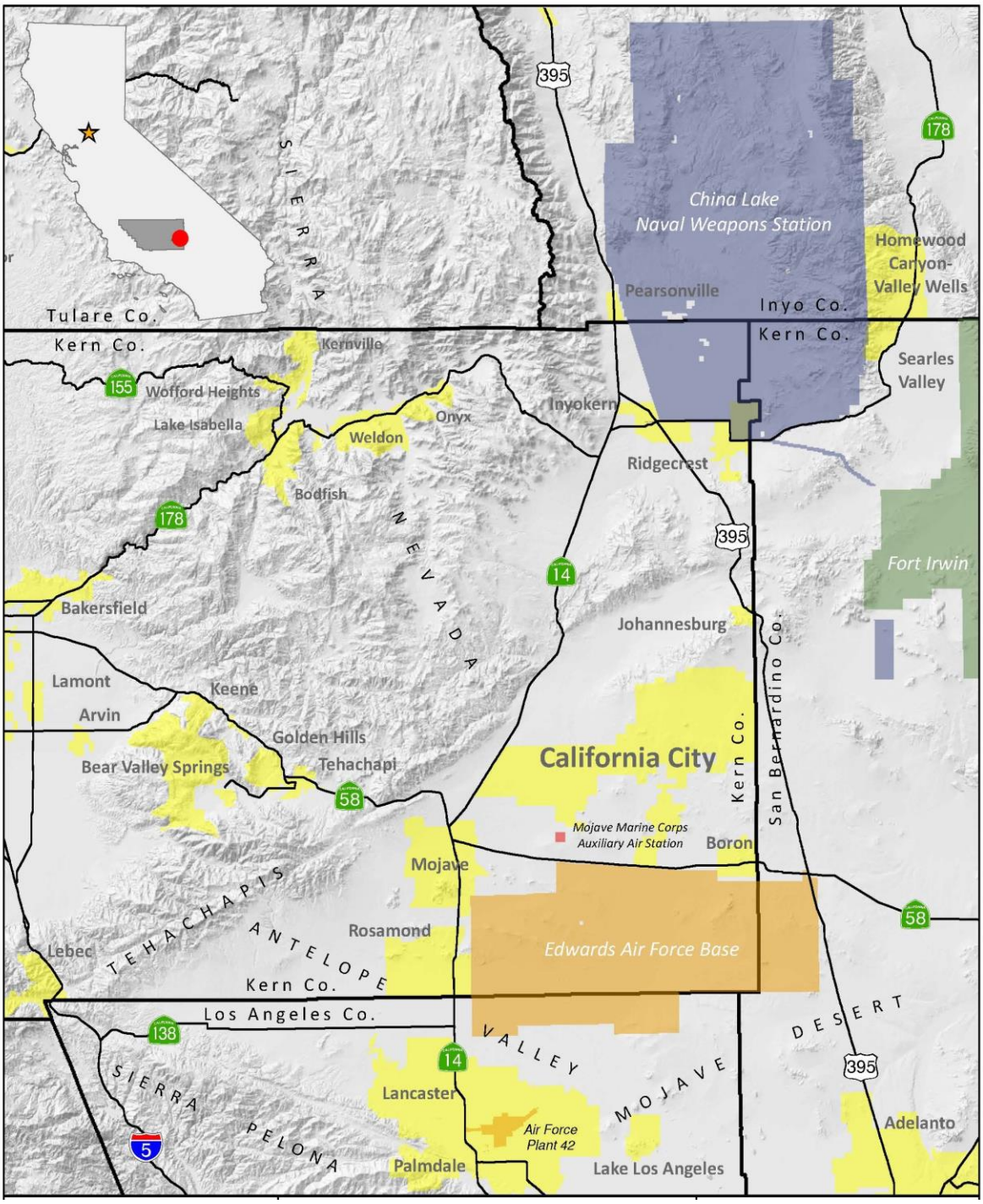
been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any the following:(A) The Project will have one or more significant effects not discussed in the previous EIR or negative declaration;(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR or negative declaration;(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the Project, but the Project proponents decline to adopt the mitigation measures or alternatives; or,(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR or negative declaration would substantially reduce one or more significant effects of the Project on the environment, but the Project proponents decline to adopt the mitigation measures or alternatives.

Signature

Date

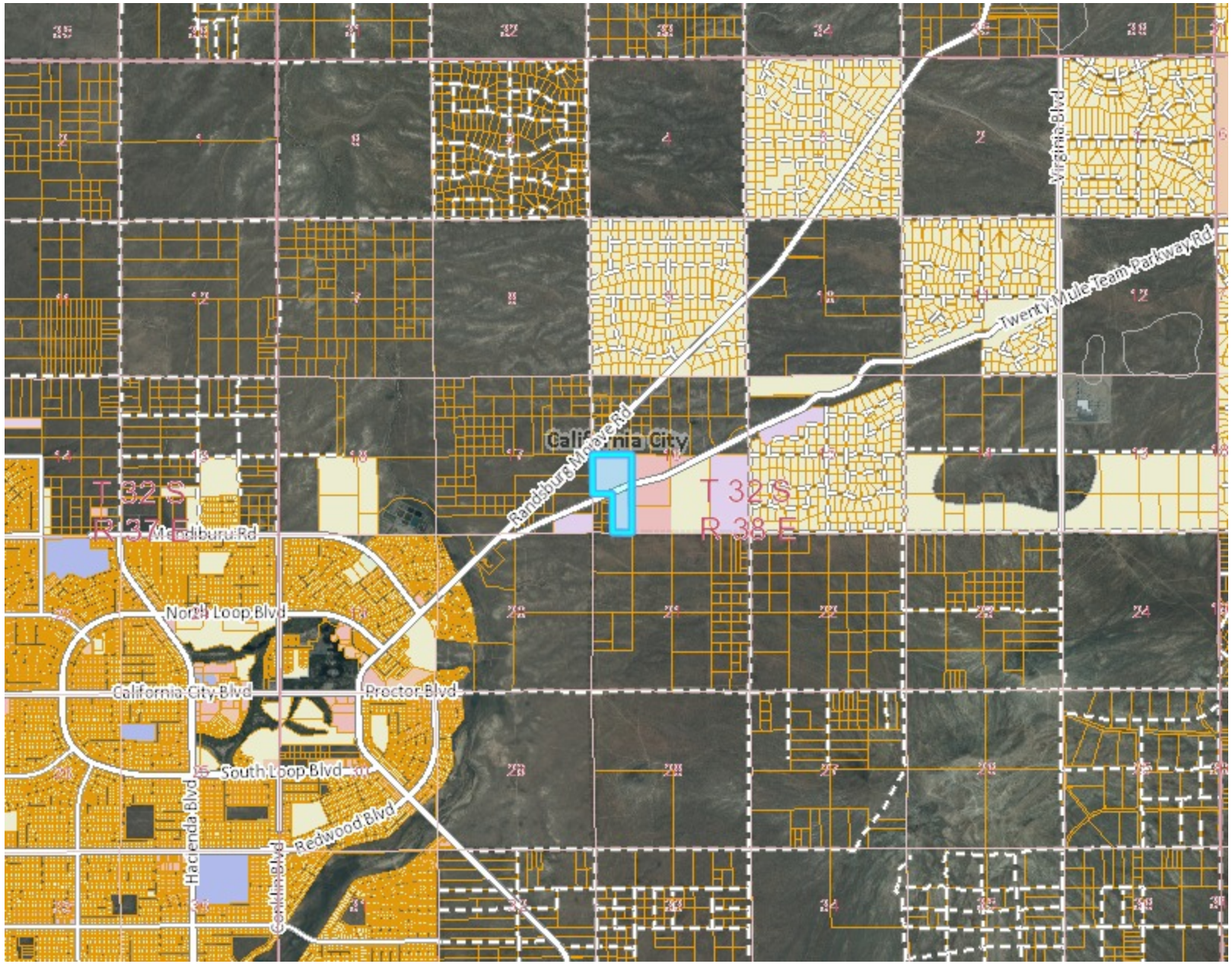
Printed Name

Regional Location Map



Cumulative Project Setting Map (APN: 350-140-01)

Kern County Online Mapping System



Legend

- Townships
- Sections
- Roads 50k-100k
  - Freeway
  - Highway
  - Local
  - Major
  - Minor
  - Ramp
  - Unpaved
- County
- City Incorporated 100k
  - CITIES
  - CITY OF BAKERSFIELD
- Parcels Land
- Zoning CalCity
  - C1
  - C2
  - C3
  - C4
  - C5
  - CMC
  - G
  - M1
  - M2
  - O/RA

1: 72,224

2.3 0 1.14 2.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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This map is a user generated static output from an Internet mapping site and is for general reference only. The County of Kern assumes no liability for damages, incurred by the user of this information, which occur directly or indirectly as a result of errors, omissions or discrepancies in the information.

Notes

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 250-21178.1), this Initial Study has been prepared to analyze the proposed Project to determine any potential significant impacts upon the environment that would result from construction and implementation of the Project. In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, City of California, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS Would the Project				
1. Scenic Resources a) Have a substantial effect upon a scenic highway corridor within which it is located?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; Project Materials.

Findings of Fact: According to the California City General Plan, the City is located within the Eastern Mojave Desert, which is characterized by gentle rolling ground surfaces, with low to moderate topographical relief across the desert floor. Landforms, surrounding the Project site consists of moderately sloping alluvial plains with a series of steep rock buttes and several arroyos, including Cache Creek, which lies approximately 5.1-miles southwest of the project site. The City is settled between several mountain ranges, both to the north and the south; more specifically by the San Gabriel Mountains located 117-miles to the south, Tehachapi Mountains located 47.4-miles to the west, and the Rand Mountains located 16.5-miles to the north which create various scenic vistas throughout California City (California City General Plan, 2009).

The Project site plan is designed to conform with the CCMC, including maximum building height, which will not obstruct line of site to the features referenced above. The adjacent parcels south, east and west of the project, area currently vacant and undisturbed with scattered vegetation. From the project site, views of the Tehachapi Mountains to the west are the most prominent but will not be obscured by the proposed height or massing of the proposed buildings given compliance with the maximum height standards of the M-1, Light Industrial zone.

The Project proposes to develop a 265,000 SF for a cannabis cultivation and manufacturing facility. The building construction type, architectural style and massing, as well as the proposed building elevations, materials, roof pitch will conform and be consistent with the theme and style of surrounding parcels and the general environment of the immediately surrounding Project area.

According to the California Scenic Highway Mapping System, the two closets state highways, being Kern County Highways 14 and 58, are not designated as State Scenic Highways. However, these same highways are listed as Eligible State Scenic Highways, yet not official designated as such and are located several miles from the Project site to be substantially impacted in any manner. However, the Project is not visable from either highway location or alignment and will not preclude or impact the aesthetic view from motorists.

The project shall comply with the standards outlined within the California City General Plan and Municipal Code Zoning Classification M-1 (Light Industrial Zoning District), as well as the regulations set forth in CCMC, Title 5 and Title 9, Articles 21 and 29. The Project is required to go through a Site Plan Review process, which is administered by the City, as part of the development process, in which the proposed site design will be reviewed by the Community Development Department. The Site Plan Review process includes the installation of landscaping within the project site which provides enhancement to the surrounding character of the project site. The project's compliance with these standards ensures that impacts effecting the existing visual character or quality of the site and its surroundings are less than significant.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

2. Nighttime Lighting Interference a) Interfere with the nighttime observance of stellar activities, as protected through City Ordinance?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; Project Materials.

Findings of Fact: The project is proposed within the M-1 (Light Industrial Zoning District) where the current sources of light are primarily attributed to vehicle traffic along TMTPR and Randsburg Mojave the existing residential uses, located southwesterly within the City's Central-Core area, and to a lesser extent, scattered single-family residential lots surrounding the Project site. These current sources of light include illumination from vehicular traffic in the area, as well as existing lighting fixtures above building entrances, in parking lots, and around existing signage. All lighting standards shall be fixed and directed downward upon the project parking lot and common areas. In addition, all lighting is required to be shielded to prevent light spillage and be measured at zero lumens at the property boundary. The public street, adjacent to the Project site, does not contain any existing traffic signals or streetlamps; only utility poles are located adjacent to the eastbound lane of TMTPR. No additional sources of lighting exist that could impact the project.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

3. Other Lighting Issues a) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
b) Expose residential property to unacceptable light levels?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; Project Materials.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact: The California City Municipal Code requires that signage shall not be directly illuminated, internally or externally, except the name and address of the business may be illuminated at night (Municipal Code Section 5-6.1301). These standards will ensure the amount of lighting that is created from the project site does not substantially affect the surrounding area.

Pertaining to daytime glare, the project will not involve building materials with highly reflective properties that would disrupt day-time views. The proposed structures will consist of prefabricated metal buildings with beige, brown and off-white colored stucco and glint-and-glare resistant windows located within the building's façade. The proposed use will not substantially increase glint, glare, or light pollution given the small size of the property, the relatively small footprint or the use, and the minimum amount of exterior lighting required. Notwithstanding this minimal impact, the project shall comply with City standards regarding lighting and glare in industrial facilities and M-1 zones. Therefore, less than significant impacts are anticipated to result from the proposed project.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

AGRICULTURE & FOREST RESOURCES Would the Project				
4. Agriculture 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 agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a County or City designated Agricultural Preserve?	☐	☐	☐	☒
c) Cause development of non-agricultural uses within 5 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm")?	☐	☐	☐	☒
d) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; Kern County GIS Resources: (SoilWeb An Online Soil Survey Browser California Soil Resource Lab, Williamson Act Ag Preserve Parcels, & DLRP Important Farmland Finder); Project Materials.

Findings of Fact: The proposed Project will not disturb or convert any designated farmland or other form of agricultural resource. According to the 2021 California Farmland Mapping and Monitoring Program the property is designated as "Nonagricultural or Natural Vegetation". The subject site and surrounding land to the north, east, and south is of the same designation and is not categorized as Prime Farmland, Unique Farmland, or Farmland of Local Statewide Importance. According to the California Department of Conservation – Important Farmland Finder, parcels located within the existing open space zoning and to generally to the west of the Project site are designated as "nonagricultural or natural vegetation"; however, no farmland currently exists or has been present for some time. The Project site is a compilation of various soil types, including *Neuralia* (85%)*, Alko (4%), Garlock (4%), Cajon (4%), and the balance consists of 3% unnamed soils.* In addition, these parcels are not located

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

within property that is designated as a Williamson Act property, as such no impacts are expected. The Project site is not located in an existing zone for agricultural use or classified as farmland. According to the Williamson Act records, no portion of land within a one-mile radius is recognized as being under a Williamson Act Contract. The proposed Project will not impact or remove land from the City or County's agricultural zoning or agricultural reserve. No impacts are expected.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

5. Forest	☐	☐	☐	☒
a) 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 Govt. Code section 5154(g))?				
b) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in con-version of forest land to non-forest use?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; Project Materials; UC Davis/NRCS *SoilWeb* GIS parcel surveyor

Findings of Fact: The Project is located within an existing urbanizing desert environment that is currently zoned for non-forest related uses, which include residential, commercial, and light industrial zoning classifications. The Project site, and the surrounding vicinity, does not contain any forest land, timberland or Timberland Production Zones (TPZ) that have occurred or will occur on the Project site or in the surrounding area because forest vegetation is not characteristic of the Eastern Kern County desert environment. No impacts are anticipated. The Project will occur in an existing urban desert setting zoned for industrial uses. No forest land, timberland or Timberland Production zoning occurs on the Project site or in the surrounding area because forest vegetation is not characteristic of the Eastern Kern County desert environment. No impacts are anticipated. As previously described, the Project site and vicinity are designated by the California City General Plan and Zoning map as Light Industrial and Research. The proposed indoor cultivation and processing facilities will not result in conversion of any farmland or forest land because no farmland or forest land is situated within or adjacent to the Project. No impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

Would the Project				
6. Air Quality Impacts	☐	☒	☐	☐
a) Conflict with or obstruct implementation of the applicable air quality plan?				
b) Violate any air quality standard or contribute substantially to an existing or Projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-	☐	☒	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d) Expose sensitive receptors which are located within 1 mile of the Project site to Project substantial point source emissions?	☐	☒	☐	☐
e) Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter?	☐	☒	☐	☐
f) Create objectionable odors affecting a substantial number of people?	☐	☒	☐	☐

Source: Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; Project Materials; Kern County Air Pollution Control District (EKAPCD); CalEEMod v2016.3.1. Modeling Run Analysis for Project

Findings of Fact: California City is located within the Mojave Desert Air Basin and is under the jurisdiction of the Kern County Air Pollution Control District (EKAPCD). There are over 3,700-square miles in the eastern portion that Kern County APCD controls, located on the western edge of the Mojave Desert. The high summer temperatures and radiation from the sun can encourage photochemical ozone formation when local sources or transported volatile organic compounds (VOC's) and oxides of Nitrogen (NOx) precursors are present. Kern County is within the jurisdiction of both the San Joaquin Valley Air Pollution Control District (SJVAPCD) in the San Joaquin Valley Air Basin (SJVAB) and the Eastern Kern Air Pollution Control District (EKAPCD) in the Mojave Desert Air Basin (MOAB).

Projects are evaluated for consistency with the local air quality management plans, which link local planning and individual Projects to the regional plans developed to meet the ambient air quality standards. The assessment takes into consideration whether the Project forms part of the expected conditions identified in local plans (General Plan Land Use and Zoning) and whether the Project adheres to the City's air quality goals, policies, and local development assumptions factored into the regional California Air Resources Board (CARB). As previously discussed, the undeveloped Project property has a Light Industrial Zoning (M-1) District classification, which has been established to permit the development of a wide spectrum of industrial and manufacturing uses. In its current condition, the undeveloped Project site is surrounded by mostly vacant land and is not located within proximity of existing residential uses or other densely populated areas of the City or County. The Project will not require a Planning Area Amendment or Zone Change that would provide directly or indirectly for increased population growth above the level projected in the adopted California Air Resources Board. The Project will not interfere with the ability of the region to comply with federal and state ambient air quality standards. Projects that are consistent with local General Plans are considered consistent with the air quality related regional plans including the current CARB, the PM-10 and other applicable regional plans. The proposed Project is a permitted use in the existing zone and shall comply with the corresponding development standards. Development is consistent with the growth projections in the City of California City General Plan and is to be consistent with CARB.

The Project would not result in or cause violations to the National Ambient Air Quality Standards or California Ambient Air Quality Standards. The Project's proposed land use designation for the subject site does not materially affect the uses allowed or their development intensities as reflected in the

adopted City General Plan. The Project is therefore considered to be consistent with the AQMP and impacts related to air quality plans are expected to be less than significant following implementation of standard conditions within the plan and including but not limited to:

- Development of the proposed Project will comply with the provisions of Eastern Kern County Air Pollution District.
- A Fugitive Dust Control Plan will be prepared for the Project outlining required control measures throughout all stages of construction.

In the event that the electricity purveyor (Southern California Edison) cannot immediately supply service concurrently with the City's issuance of occupancy permits and business licenses, the project may utilize on-site generators to achieve operational capacity prior to full electrification by SCE. In this circumstance, the project anticipates the utilization of no more than thirty-three (33) – 5.8 kHP, 8.1LT, 125 kWe 6-Cylinder – Inline generators, to provide temporary power in lieu of delaying project operations and awaiting the completion of infrastructure development by Southern California Edison (SCE). The proposed generators will operate 8-hours per day, for at-least one year (365 days), with approximately 2,920 operational hours per year. While the timeframe of electrical infrastructure by SCE is undetermined, the generator being utilized is certification process by CalEPA and CARB for commercial use in the manner described. In addition, an CalEEMod air quality modeling analysis was completed, and the results are described below in Tables 2-1 through 2-4, and as shown in the tables below, the Project does not exceed the daily thresholds for criteria pollutants as set forth by the Kern County/Mohave Air District.

TABLE 2-1: PROJECT CONSTRUCTION EMISSIONS (*Unmitigated*)

Pollutant	Daily Maximum Emissions (lbs./day)	EKAPCD Maximum Daily Threshold* (lbs./day)	Exceeds EKAPCD Threshold?
Reactive Organic Gas (ROG)	**185.24**	**N/A**	**N/A**
Oxides of Nitrogen (NO_x)	**40.54**	**N/A**	**N/A**
Carbon Monoxide (CO)	**21.91**	**N/A**	**N/A**
$PM_{2.5}$	**11.85**	**N/A**	**N/A**
SO_2	**0.05**	**N/A**	**N/A**

Source: http://www.kernair.org/Main_Pages/Subpages/Rules_Sub/CEQA_Guidelines.html

TABLE 2-2: PROJECT CONSTRUCTION EMISSIONS (*Mitigated*)			
Pollutant	**Daily Maximum Emissions (lbs./day)**	**EKAPCD Maximum Daily Threshold* (lbs./day)**	**Exceeds EKAPCD Threshold?**
Reactive Organic Gas (ROG)	**185.24**	**137**	**YES**
Oxides of Nitrogen (NO_x)	**25.33**	**137**	**NO**
Carbon Monoxide (CO)	**23.37**	**548**	**NO**
$PM_{2.5}$	**3.80**	**82**	**NO**
SO_2	**0.05**	**148**	**NO**

Source: CalEEMod v2016.3.1. & http://www.kernair.org/Main_Pages/Subpages/Rules_Sub/CEQA_Guidelines.html

TABLE 2-3: PROJECT OPERATIONAL EMISSIONS (*Unmitigated*)			
Pollutant	**Daily Maximum Emissions (lbs./day)**	**EKAPCD Maximum Daily Threshold* (lbs./day)**	**Exceeds EKAPCD Threshold?**
Reactive Organic Gas (ROG)	**9.64**	**137**	**NO**
Oxides of Nitrogen (NO_x)	**35.78**	**137**	**NO**
Carbon Monoxide (CO)	**30.25**	**548**	**NO**
$PM_{2.5}$	**2.94**	**82**	**NO**
SO_2	**0.19**	**148**	**NO**

Source: CalEEMod v2016.3.1. & http://www.kernair.org/Main_Pages/Subpages/Rules_Sub/CEQA_Guidelines.html

TABLE 2-4: PROJECT OPERATIONAL EMISSIONS (*Mitigated*)			
Pollutant	**Daily Maximum Emissions (lbs./day)**	**EKAPCD Maximum Daily Threshold* (lbs./day)**	**Exceeds EKAPCD Threshold?**
Reactive Organic Gas (ROG)	**21.87**	**137**	**NO**
Oxides of Nitrogen (NO_x)	**34.11**	**137**	**NO**
Carbon Monoxide (CO)	**56.33**	**548**	**NO**
$PM_{2.5}$	**2.28**	**82**	**NO**
SO_2	**0.17**	**148**	**NO**

Source: CalEEMod v2016.3.1. & http://www.kernair.org/Main_Pages/Subpages/Rules_Sub/CEQA_Guidelines.html

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation:

As shown in Table 2-2, emissions associated with Reactive Organic Gases (ROG) that result from architectural coatings would exceed numerical thresholds established by the EKAPCD, so the following mitigation measure is required:

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

AQ-2: Article 11, Section 5-6.1301 of the City Municipal Code requires the reduction and elimination of odors resulting from the processing, cultivation, and the commercial sale of cannabis and cannabis related products. The Project is required to implement, maintain in good repair, and comply with City monitoring and enforcement, as necessary. Furthermore, compliance with City Code is required of all projects and is not considered unique mitigation.

AQ-3: Development of the proposed Project will comply with the provisions of Eastern Kern County Air Pollution District.

AQ-4: A Fugitive Dust Control Plan will be prepared for the Project outlining required control measures throughout all stages of construction

AQ-5: The project proponent shall install a sign, no less than four feet by eight feet in area, and no more than six feet in height. The sign shall provide the name and number of a 24/7 contact for concerns relating to construction noise or dust.

Monitoring: The City Code Enforcement Department will monitor and enforce odor, noise, and other similar complaints. The City Planning Division will monitor compliance of the mitigation measures set forth in the CalEEMOD report and analysis.

BIOLOGICAL RESOURCES Would the Project				
7. Wildlife & Vegetation a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	☐	☒	☐	☐
b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	☐	☒	☐	☐
c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a	☐	☒	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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. Wildlife Service?				
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) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	☐	☒	☐	☐
f) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Biological Resources Assessment & Endangered Species Report (dated April 30, 2020); Project Materials.

Findings of Fact: The Project is approximately 60 acres; more specifically, is located northerly and southerly of Twenty Mule Team Parkway, as this road bisects the Project site. The property is located at the following township coordinates: T32S, R38E, the NW1/4 of the SW1/4 and the E1/2 of the SW1/4 of the SW1/4 of Section 16, M.D.B.M. A Habitat Assessment was prepared in accordance with the USFWS and CDFS Protocol Surveys, with lines transect surveys conducted on 18 and 19 December 2020 to inventory biological resources. The proposed project area is characteristic of a disturbed creosote (*Larrea tridentata*) bush scrub habitat. Given the historical grubbing activities that took place within the study site, the level of revegetation that has occurred, particularly in the northern portion, is remarkable. Fifty-six plant species and twenty-six wildlife species or their sign were observed during the line transect survey. No desert tortoises (*Gopherus agassizii*) or their sign were observed during the field survey. Suitable habitat for desert tortoises was present within and adjacent to the study site. Suitable habitat for Mohave ground squirrels (*Xerospermophilus mohavensis*) was present within and adjacent to the study site. A Mohave ground squirrel was sighted in 2009 within 984 feet (300 m) north of the project site. No desert kit foxes (*Vulpes macrotis*) were observed within the study site. Old desert kit fox scat and two associated dens were observed within the study site. No American badgers (*Taxidea taxus*) or their sign were observed within the study site. No burrowing owls (*Athene cunicularia*) were observed during the field survey. One very old burrowing owl pellet was observed associated with one of the desert kit fox dens. No sensitive plants, specifically, alkali mariposa lily (*Calochortus striatus*), desert cymopterus (*Cymopterus deserticola*), and Barstow woolly sunflower (*Eriophyllum mohanense*) are expected to occur within the study area due to lack of suitable habitat. Prairie falcons (*Falco mexicanus*) and other raptors may fly over the site but there are no nesting or roosting opportunities available within the study site. Vegetation within the study area provides potential nesting sites for migratory birds. No other state or federally listed species are expected to occur within

the proposed project area. Blue line streams were observed within the study site on the topographic map. Several ephemeral washes were observed within the study site. Protection measures are recommended for sensitive species and protected resources. The USGS topographic map indicated the potential presence of two streams within the study area. Aerial photographs suggested the potential presence of three washes within the study area. Two major ephemeral washes and smaller ephemeral washes were observed during the field survey within the study site. The area topography is characterized by low rises oriented east west. Topography of the northern section of the study site ranged from 2,201 feet to 2,416 feet (710 m to 779 m) above sea level. Topography of the southern section of the study site ranged from 2,195 feet to 2,420 feet (708 m to 781 m) above sea level.

Based on the condition of the habitat, and results of the survey, this project is not expected to result in a potentially significant adverse impact to biological resources if recommended protection measures are implemented. Development would include installation of buildings, parking areas, fencing, etc. Development would include installation of access roads and utilities (water, sewer, electric, etc.). The entire project area would be graded prior to construction activities. A Pre-Construction survey shall be conducted prior to any development project.

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

The California Department of Fish & Wildlife (CDFW) began planning for the establishment of, and acquisition of private lands for the conservation of the Mohave Ground Squirrel (MGS). In 2007, CDFW determined that an essential component of any conservation strategy, for the state-listed MGS. The service has identified four “core areas” that have historically supported relatively abundant and widespread MGS populations. There is evidence that these populations will continue to persist given adequate conservation efforts and mitigation strategies. As a Land Mitigation Bank does not currently exist, mitigation credits are reserved for future conservation efforts. The four core areas currently recognized are detailed as follows:

(i) Coso Range NW to Olancha. Most of the area is within the China Lake NAWS military reservation, with a mixture of BLM, LADWP, and private lands to the west (Inyo County).
(ii) Little Dixie Wash (from Inyokern SW to Red Rock Canyon State Park). Most of the area is publicly managed by BLM, with some private and state ownerships as well (Kern County).
(iii) Edwards Air Force Base, east of Rogers Dry Lake. This core area is entirely on the United States Air Force (USAF) military reservation; the surrounding lands are in private and BLM ownership (Kern and San Bernardino County).
(iv) Coolgardie Mesa to Superior Valley. Land ownership was primarily BLM and in private ownership; however, much of the northern portion of this core area is not included within the Fort Irwin Wester Expansion Area (WEA) (San Bernardino County).
(v) The Project is located approximately 50-miles from the Little Dixie Wash conservation area, which is sufficient distance removed from the conservation area

CDFW provides additional analysis to support this potential incremental impact upon MGS habitat, through their Mohave Ground Squirrel Technical Advisory Group (MSG TAG); which is a long-standing committee of MGS technical experts, land management, and regulatory agencies. CDFW remains concerned that the urbanizing effects of the Project will contribute to the diminishment; albeit incremental, upon the MGS habitat. The TAG published a list of conservation priorities in December of

2010 and sets forth five primary conservation priorities intended to support the ongoing conservation of the MGS. These priorities are detailed as follows[2]:

1) Maintain Functional Habitat Connections between Known Populations
2) Protect Known Core Areas
3) Identify Development Zones with Minimal Impact on MGS Habitat
4) Conduct Research to Clarify the Distribution and Status of the MGS
5) Conduct Research to Improve Mohave Ground Squirrel Detection Capabilities

b) – g) A total of 62 line transects were walked within the study site. Twenty line transects were walked within the southern section on 18 December 2020. Weather conditions consisted of warm temperatures (estimated 50 to 70 degrees F), 0% cloud cover, and slight to moderate winds. Forty-two line transects were walked within the northern portion of the study site on 18 and 19 December 2020. Weather conditions on 19 December 2020 consisted of warm temperatures (estimated 50 to 70 degrees F), 0% cloud cover, and no wind to a slight breeze. Sandy loam surface soil texture was observed throughout the study area.

The USGS topographic map indicated the potential presence of two streams within the study area. Aerial photographs suggested the potential presence of three washes within the study area. Two major ephemeral washes and smaller ephemeral washes were observed during the field survey within the study site. The area topography is characterized by low rises oriented east west. Topography of the northern section of the study site ranged from 2,201 feet to 2,416 feet (710 m to 779 m) above sea level. Topography of the southern section of the study site ranged from 2,195 feet to 2,420 feet (708 m to 781 m) above sea level.

The proposed project area was characteristic of a disturbed creosote bush scrub habitat (Barbour and Major 1988, Barbour et.al. 2007). Fifty-six plant species were observed during the line transect survey[3]. A high diversity and number of native perennial shrubs were present within the study site. The dominant perennial shrub species throughout the study area was creosote bush. A high diversity of native annual plant species was observed within the study site. No alkali mariposa lilies, Barstow woolly sunflowers, or desert cymopterus or suitable habitat for these species were observed within the study site.

Twenty-six wildlife species, or their sign were observed during the line transect survey. No desert tortoises or their sign were observed during the field survey. No Mohave ground squirrels observed or audibly detected during the field survey. No desert kit foxes were observed during the field survey. Two desert kit fox dens with old desert kit fox scat were observed within the study site. No burrowing owls were observed within the study site during the field survey. One very old burrowing owl pellet was observed in association with one of the desert kit fox dens. One inactive bird nest was observed in the silver cholla (*Opuntia echinocarpa*) within the study area. No American badgers or their sign were observed within the study site.

Motorcycle and quad tracks were observed within the study site particularly in the ephemeral washes. An off-highway vehicle (OHV) trail, oriented east-west, was observed within the study site. Sheep (*Ovis* sp.) scat was observed throughout the study site. A recent sheep bed down area, approximately 0.5 acre (0.2 ha), was observed in the southeast corner of the study site. Two small borrow areas were present within the northwest corner of the southern section of the study site. An unspent high caliber

[2] https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83973&inline
[3] Biological Resources Assessment of APN 350-140-01, California City, California, Pages 7-8

bullet and a potential monitoring well were observed within the study area (Appendix A-6). A fire hydrant and waterline valve were also observed. A list of plant species, that were observed during the line transect survey of APN 350-140-01, are referenced within the report.

Due to the proximity of the project site to existing occurrence records for burrowing owl, pre-construction burrowing owl clearance surveys should be conducted by a qualified biologist to ensure that burrowing owls remain absent from the project site and impacts to burrowing owls do not occur. In accordance with the Staff Report on Burrowing Owl Mitigation (CDFW, 2012), two (2) pre-construction clearance surveys should be conducted 14-30 days and 24 hours prior to any vegetation removal or ground disturbing activities. Documentation of surveys and findings shall be submitted to the City of California City for review and file. If no burrowing owls or occupied burrows are detected, project activities may begin. If an occupied burrow is found within the development footprint during pre-construction clearance surveys, a burrowing owl exclusion and mitigation plan will need to be prepared and submitted to CDFW for approval prior to initiating project activities. Although Burrowing Owl was not observed during the field survey, the project site is located within the immediate vicinity of areas that do have the potential for sufficient habitat to occur, even though no owls have been observed. provides marginal habitat and occurs within the vicinity of known populations. The Project is found to have a less than significant impact, upon biological resources, with the following mitigation measures incorporated.

Mitigation:

BIO-1: The Project proponent shall conduct two (2) pre-construction clearance surveys should be conducted 14-30 days and 24 hours prior to any vegetation removal or ground disturbing activities. Documentation of surveys and findings shall be submitted to the City of California City for review and file. If no burrowing owls or occupied burrows are detected, project activities may begin. If an occupied burrow is found within the development footprint during pre-construction clearance surveys, a burrowing owl exclusion and mitigation plan will need to be prepared and submitted to CDFW for approval prior to initiating project activities.

BIO-2: If positive findings are determined, through the pre-construction surveys conducted under Mitigation Measure BIO 1, which qualify as suitable habitat is observed, and/or the presence of endangered or threatened species is also observed, then the Project proponent shall conduct the appropriate protocol surveys, prior to any development occurs within the project site to confirm the presence/absence of said species. Protocol surveys shall consist of three (3) separate 5-night trapping sessions conducted during specific terms between March 15th and July 15th.

BIO-3: If the protocol surveys conducted as part of Mitigation Measure BIO 2 and qualifying species are found to occupy the project site and/or the construction clearance areas of the Project site, then proponent shall file for, and process to completion, an *Incidental Take Permit*, in compliance with CDFW's discretionary authority as defined by Title 14 of the California Code of Regulations (Section 15357 of the CEQA Guidelines). Under this *Incidental Take Permit*, CDFW will review and determine the necessary minimization and mitigation measures; including, but not limited to, the purchase of credits from a CDFW approved conservation or mitigation bank.[4]

BIO-4: The Project has the potential to impact ephemeral streams identified on the Biological Resources report. As such, development of buildings, and other site improvements required to construct the Project shall avoid incursion into the jurisdictional area of the streams identified.

[4] https://wildlife.ca.gov/Conservation/Planning/Banking/Approved-Banks

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Monitoring: The California Department of Fish and Wildlife (CDFW) will monitor and establish the mitigation/conservation credit agreement and the City of California City shall monitor the grading permit process and require written clearance, from CDFW, prior to the issuance of a grading permit.

CULTURAL RESOURCES Would the Project				
8. Historic Resources a) Alter or destroy an historic site?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Open Space Element.

Findings of Fact: According to the California City General Plan Cultural Resources Section, there are five recorded historic archaeological sites within the City. According to Table 5-3, of the City's Cultural Resources Element, specifically the *Archeological Studies and Previously Recorded Prehistoric Sites*, a list of previously recorded historic sites is listed. However, all sites set forth in Table 5-3 are located within Township 11 – North, Range 11 – West whereas the proposed Project is located in Section 16 of Township 32-south, Range 38-east and nowhere within the vicinity of the aforementioned sites. Furthermore, the potential archeological sites mentioned in General Plan Table 5-4 pertain specifically to the *Proposed Facility Area* which is not within vicinity of the proposed project and a review of the USGS 7.5-minute Series Topographic Quadrangle Map failed to reveal any correlation between sites identified in the General Plan Open Space Element and the Project site. The historical, cultural, and archaeological resources surveys outlined within the California City General Plan indicate that the project site is not listed or eligible for listing in the California Register of Historical Resources or in a local register. Therefore, no impacts are anticipated with project implementation. Chert rocks and flakes that appeared to show signs of tool making, and a stone which appeared to have been used for grinding were observed within the study site. Additionally, the California City General Plan states that the City had no Native American Sacred Sites within the City's boundary. Therefore, project implementation is not expected to have a substantial adverse change in a significant cultural resource. Less than significant impacts are anticipated.

Mitigation: **CUL-1:** The Project proponent understands that California state law may apply, and the proponent will take appropriate action under California Public Resources Code Section 5097.98 or successor statues. The PARTIES understand and agree that federal law may apply, and the proponent will take appropriate action under the Native American Graves Protection and Repatriation (NAGPRA) or successor statutes. It is understood by the proponent that, unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed (California Government Code Section 6254(r)) or successor statutes.

Monitoring: Cultural Resources Mitigation shall be monitored by the Planning Department through review prior to the issuance of a grading permit.

9. Archaeological Resources a) Alter or destroy an archaeological site.	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
d) Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☒	☐
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 2574?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; Project Materials.

Findings of Fact: The approximate 60-acre project site is characterized by relatively flat, undisturbed desert land, with scattered vegetation. The Project is located in the M-1, Light Industrial Zoning District, within the northeasterly portion of City of California City, south of Randsburg Mojave Road and bifurcated by Twenty Mule Team Parkway Road. The Project site is not recognized near, adjacent to, or within a unique archeological feature (as defined by the California City General Plan). Furthermore, the Project site is not located within a sub-area (or other similarly defined planning area) where unearthed human remains, have been known to occur. These include those human remains that were interred outside of formal cemeteries, have been identified or located; or a site that contains any existing religious or sacred uses. The General Plan requires that if a unique archeological resource or site or human remains are found during excavation during any grading or earth-moving activities, all work will be suspended until the area has been thoroughly examined by a qualified archeologist.

Pursuant to the California Health and Safety Code Section 7050.5, and the CEQA Guidelines Section 15064.5, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until the County Coroner has examined the remains. If the coroner determines the remains to be Native America or has reason to believe that they are Native American, the coroner shall contact by telephone within 24-hours of the Native American Heritage Commission to determine the Most Likely Descendent (MLD). Pursuant to the aforementioned California Health and Safety Code, proper actions shall take place in the event of a discovery or recognition of any human remains during project construction activities. Less than significant impacts are expected following the standard conditions which do not address any unique circumstances regarding the proposed site.

Findings of Fact: According to General Plan Table 5-3, *Archeological Studies and Previously Recorded Prehistoric Sites*, a list of previously recorded historic sites is listed; however, all sites set forth in Table 5-3 are located within Township 11-North, Range 11-West whereas the proposed Project is located in Section 16, Township 32-south, Range 38-east and nowhere within the vicinity of the aforementioned sites. Furthermore, the potential archeological sites mentioned in Table 5-4 of the General Plan pertain specifically to the *Proposed Facility Area* which is not within vicinity of the proposed project and a review of the USGS 7.5-minute Series Topographic Quadrangle Map failed to reveal any correlation between sites identified in the General Plan Open Space Element and the Project site. The historical, cultural, and archaeological resources surveys outlined within the California City General Plan indicate that the project site is not listed or eligible for listing in the California Register of Historical Resources or in a local register. Therefore, no impacts are anticipated with project implementation. Additionally, the California City General Plan states that the City had no Native American Sacred Sites within the City's boundary. Therefore, project

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

implementation is not expected to have a substantial adverse change in a significant Tribal cultural resource. Less than significant impacts are anticipated.

As previously discussed above, the land surveys prepared for the California City General Plan did not indicate the presence of historic resources, cultural resources, and archaeological resources on or near the project site. The California City General Plan states that the City had no Native American Sacred Sites within the City's boundary. Therefore, project implementation is not expected to have a substantial adverse change in a significant Tribal cultural resource. Less than significant impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

10. Energy Conservation a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Open Space Element.

Findings of Fact: The Project will reduce its GHG emissions to the maximum extent feasible through energy conservation measures and implementation of the current California Green Building Standards Code in addition to the use of natural light for plant growth and waterefficient irrigation for irrigation and landscape design. No impact is anticipated to adopted Energy Conservation plans.

a. Less than Significant Impact. The Project would have a potentially significant impact if it would result in the substantial adverse effect due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation. During plan check, the City reviews plans for compliance with building code requirements specified in CCMC Chapter 8, Building Regulations. As noted on the site plans, the Project shall comply with the California Building Code, California Green Building Standards Code, and the California Energy Code. The California Green Building Standards Code enhances the design and construction of buildings to reduce negative environmental impacts through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. Compliance with California Energy Code ensures energy efficiency within new and existing buildings. As Project design features, the Project will install high efficiency electric lighting. Based on CalEEMod Outputs shown in Tables 2-1 and 2-2 below, the proposed Project would use 264,205 kilowatt hours per year (kWh/yr.) of electricity and 4,555,350 kilo-British thermal units per year (kBTU/yr.) of natural gas.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

TABLE 2-1: ENERGY by LAND USE – NATURAL GAS

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	4.55535e+006	0.0246	0.2233	0.1876	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	243.0908	243.0908	4.6600e-003	4.4600e-003	244.5354
Parking Lot	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		**0.0246**	**0.2233**	**0.1876**	**1.3400e-003**		**0.0170**	**0.0170**		**0.0170**	**0.0170**	**0.0000**	**243.0908**	**243.0908**	**4.6600e-003**	**4.4600e-003**	**244.5354**

TABLE 2-2: ENERGY by LAND USE – ELECTRICITY

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.64205e+006	841.8137	0.0348	7.1900e-003	844.8254
Parking Lot	11910.2	3.7948	1.6000e-004	3.0000e-005	3.8084
Total		**845.6086**	**0.0349**	**7.2200e-003**	**848.6338**

Project-related vehicle trips would also use fuel or electricity. In addition, construction of the Project would involve fuel and electricity use from construction equipment and hauling, worker and vendor trips. The Project is located in a rural subregion, commonly known as "Second City", which is characterized by Randsburg-Mojave Road and TMTPR, the latter of which bisects the Project site. The mix of land uses would allow for multi-purpose trips, saving on overall vehicle miles traveled. Further, as evaluated in Greenhouse Gas Emissions resource section, the Project is consistent with the CARB Scoping Plan for AB32, as well as local Kern County Greenhouse Gases Emissions Reduction Measures[5]. Compliance with the codes cited above, as noted on the site plans, as well as compliance with these such plans will reduce the potential impacts due to wasteful, inefficient, or unnecessary consumption of energy resources resulting in no impact.

b. Less than Significant Impact. The Project would result in a potentially significant environmental impact if it would conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As regulatory requirement, the Project would be reviewed for consistency with applicable state and local plans for renewable energy and efficiency. As stated above, the Project would comply with the California Building Code, California Green Building Standards Code, and the California Energy Code. Compliance with these regulatory standards and compliance with the aforementioned reduction measures will reduce the impacts of the building through the use of measures such as increasing

[5] Kern Council of Governments (KernCOG) GHG Emission Reduction Measures (https://www.kerncog.org/?s=GHG), Accessed Aug. 4, 2021.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

energy efficiency through installing energy-efficient lighting, consistent with KernCOG Kern County GHG Inventory[6].

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

GEOLOGY AND SOILS Would the Project				
11. Alquist-Priolo Earthquake Fault Zone or City/County Fault Hazard Zones a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?	☐	☐	☒	☐
b) Be subject to 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?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: According to the Safety Element in the California City General Plan, a fault is defined as a fracture in the earth's crust forming a boundary between rock masses that have shifted. Fault rupture is a break in the ground's surface and associated deformation resulting from the movement of a fault. Rupture would be a potential problem within California City if a strong earthquake occurs along a known or unknown fault within or near the City. According to the California City General Plan, the City is not located in an Alquist- Priolo Earthquake Fault Zone. The closest Alquist-Priolo Earthquake Fault Hazard Zone lies approximately 29-miles northeast of the project site, near the Garlock Fault.

According to the Safety Element, of the City's General Plan, the project property shows no mapped faults on-site per maps prepared by the California Geologic Survey and published by the International Conference of Building Officials (ICBO). The project area is not located within an earthquake fault zone, and no evidence of surface faulting was observed on the property during the site reconnaissance.

California City, and the project site, is in the Mojave Block, also referred to as the Eastern California Shear Zone (ECSZ). The ECSZ is an area of increased seismic activity which stretches from the San Andreas Fault in the Coachella Valley, north-northeast across the Mojave Desert, and northward to the Owens Valley. The numerous faults in the region may accommodate as much as 5 to 20 percent of the relative motion between the North American and Pacific Plates, and according to the California City General Plan, the closest fault to the City is the Garlock Fault, which lies approximately 29-miles northeast of the Project site. The nearest significant active fault is the San Andreas Fault Zone, which is located approximately 134-miles from the proposed site. As a result, California City has the potential to experience seismic shaking and seismic-related hazards.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

[6] Ibid.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Liquefaction Potential Zone a) Be subject to seismic-related ground failure, including liquefaction?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: The Safety Element in the California City General Plan states that liquefaction is the phenomenon in which loose, saturated, granular soils temporarily behave similarly to a fluid when subjected to high intensity ground shaking. Liquefaction occurs when three general conditions are present: shallow groundwater, low-density, silty or fine sandy soils, and high intensity ground motion. Areas of shallow groundwater have a higher susceptibility to liquefaction. According to the Figure 7: California City, Existing Water Wells Location Exhibit (LAMP, 2018) groundwater levels were measured at approximately 270 linear feet (lf), at Well #10 which is the closest well to the Project site.[7] The General Plan Safety Element states that groundwater in the Planning Area ranges from 600-feet to 800-feet below the ground surface.[8]. Therefore, the Project shall ensure implementation of General Plan Safety Element Policy S-2, which in part requires implementation of design elements that directly result from geotechnical engineering studies prepared for the implementing construction plans. Pursuant to this General Plan compliance, the potential for liquefaction occurring at the project site is considered low. Less than significant impacts are anticipated.

Mitigation: **GEO-1:** The Project applicant shall prepare soils report, for review and by the City Public Works Department, prior to issuance of a grading permit.

Monitoring: The City Public Works Department shall monitor implementation of mitigation measures.

13. Ground-shaking Zone a) Be subject to strong seismic ground shaking?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: As the Project is in southern California, it is likely that the project site will experience at least one moderate to severe earthquake and associated seismic shaking during the Project useable life, as well as periodic slight to moderate earthquakes. In order to ensure the safety of the project site, the proposed cultivation facility shall be constructed in a manner that reduces the risk of seismic hazards (Title 24, California Code of Regulations). Standard Conditions of Approval require compliance with the most current seismic design coefficients and ground motion parameters and all applicable provisions of the 2019 California Building Code (CBC). No impact is anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

[7] City of California City Local Agency Management Program for Onsite Wastewater Treatment System California City, California (January 2018), Page 79, Figure 3.

[8]

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Landslide Risk a) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: The California City Slope of Terrain Map in the General Plan (Figure 6-4) classifies the project site's location as having a 0 to 15 percent slope. The City lists two notable slopes within the City being Galilee Hill and Twin Buttes, approximately 13-miles northeast and 8-miles southeast of the project site, respectively. Moreover, there are no significant slopes proposed as part of the proposed development; either on-site or being affected through any off-site grading activities. Based upon the Project's associated earthmoving activities, it is concluded that risks associated with slope instability at the project property are considered low to negligible. In that vein, potential hazards associated with landslide risks are unlikely at the project site and less than significant impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

15. Ground Subsidence a) 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 ground subsidence?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: The Safety Element in the California City General Plan states that land subsidence is the gradual, local settling or sinking of the earth's surface with little or no horizontal motion. Although a seismic event can trigger subsidence, it can also occur because of gas, oil, or water extraction, hydrocompaction, or peat oxidation. The southern portion of the Planning Area has been undergoing gradual land subsidence, with up to four feet of subsidence over a 40-year period. Although subsidence is not a significant hazard damage to wells, foundations, and underground utilities may occur. The Project site is in the central to western portion of the City and is not as greatly affected by ground subsidence as those properties located in the southern portions of the City. Per the findings within the California City General Plan and the project-specific Geotechnical Investigation, the potential for ground subsidence occurring at the project site is considered low. Less than significant impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

16. Other Geologic Hazards a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact: The property is not subject to any additional geological hazard such as seiche, mudflow, or volcanic hazard. As stated herein, the property is not located near, or within the general vicinity of a lake or partially enclosed body of water which would be affected by oscillation in the water level (e.g., seiche). As stated in the section on landslide risks, for which mudflow would be a concern. Lastly, the Project is not located near or within a volcano. No impact is anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

17. Slopes				
a) Change topography or ground surface relief features?	☐	☐	☐	☒
b) Create cut or fill slopes greater than 2:1 or higher than 5 feet?	☐	☐	☐	☒
c) Result in grading that affects or negates subsurface sewage disposal systems.	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: As stated in above in resource section 14, the California City Slope of Terrain Map in the General Plan (Figure 6-4) classifies the Project site's location as having a 0 to 15 percent slope, which is the category of least slope available in the City's General Plan. The Project does not propose to alter or modify the topography or ground surface feature in a way that will substantially alter the topography or ground surface relief features; including changes that will possibly impact the operation of subsurface sewage disposal systems. The Project also does not propose to create cut or fill slopes greater than 2:1 or higher than 30-feet; therefore, risks associated with irregular or excessive slopes are considered negligible. No impact is anticipated

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

18. Soils				
a) Result in substantial soil erosion or the loss of topsoil?	☐	☒	☐	☐
b) Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	☐	☒	☐	☐
c) Have soils incapable of adequately supporting use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: As expansive soils dry, the soil shrinks; when moisture is reintroduced into the soil, the soil swells. To reduce post-construction soil movement and provide uniform support for the

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

buildings to be constructed at the subject site, over excavation and recompaction within the proposed building footprint areas should be performed to a minimum depth of five (5) feet blow existing grades or three (3) feet below bottom of the proposed footing, whichever is deeper. Any undocumented fill encountered during grading shall be removed and replaced with engineered fill, under a grading permit issued by the City. In compliance with the City's General Plan Safety Element, and the CCMC, construction of underground utilities will be required, and the Project is also required to interconnect with the City's master sewer and water systems. According to the *City Sewer Density Zone Map* (Figure 4), of the City's Local Agency Management Plan (LAMP), the Project is not located within a Sewer Density Zone. However, according to and Figure 7, entitled *Existing Sewer System*, indicates that a 24-inch main line currently exists within the Right-of-Way (R/W) of TMTPR. This sewer main trunk line is available within a reasonable distance to the Project site, as the line is located within TMTPR which bifurcates the Project site. The Project will be required to prepare engineered sewer plans, which provide a lateral connection from the Project site to this 24-inch sewer main line facility.

The Project engineer shall incorporate portable restroom facilities within the construction drawings in compliance with industry regulations until the construction of the permanent facilities and connection to the existing infrastructure. Design for all disposal systems shall comply with industry regulations, as well as the standards outlined in Title 7, Chapter 2 within California City Municipal Code. No septic systems are proposed. Less than significant impacts are anticipated.

Mitigation: **SOL-1:** Construction drawings shall be prepared to connect to the 24-inch sewer main line located in Twenty Mule Team Parkway Road. Lateral connections shall be completed prior to occupancy of the first cultivation or manufacturing building, whichever comes first.

Monitoring: Compliance shall be monitored by the Department of Public Works/City Engineer.

19. Erosion a) Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake?	☐	☐	☒	☐
b) Result in any increase in water erosion either on or off site?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: The project is located within the Mojave Desert Air Basin (MOAB), under the jurisdiction of the Eastern Kern Air Pollution Control District (EKAPCD). Air quality within this region is influenced by the regional climate as well as the temperature, wind, humidity, precipitation, and amount of sunshine. California City is in the high desert with an elevation range of 2,500 to 4,000 feet above sea level. Its climate is semi-arid, rainfall for the area is less than 6-inches annually, which provides for warm, dry weather in the summer and mild cooler weather in the winter.

Impacts of windborne and waterborne soil erosion at the project site will be controlled during project operation after adequate paving, landscaping, and other means of stabilization is incorporated. The proposed plan indicates that offsite run-off to the site is collected and conveyed through to retention basins in-between buildings, and underground retention facilities under the eastern parking lots, to avoid onsite flooding. The drainage condition of the project site is subject to the completion of percolation/infiltration studies conducted during the grading process. If infiltration is infeasible, the Regional Water Quality Control Board Guidebook requires compliance with secondary or tertiary treatment measures. Upon completion of the project, the site will have both hardscape and softscape

surfaces including the main industrial building and Project site landscaping including irrigation, surrounding the buildings and project perimeter. Following the implementation of the fugitive dust emission control strategies and the SWPPP, as well as the compliance with the adopted procedures for grading, erosion at the project site is anticipated to be less than significant.

Compliance with the City's General Plan Safety Element, construction of underground utilities will be required to interconnect to existing facilities, to the extent available In compliance with the City's General Plan Safety Element, construction of underground utilities will be required to interconnect to the extent available. According to the *City Sewer Density Zone Map* (Figure 4), of the City's Local Agency Management Plan (LAMP), the Project is not located within a Sewer Density Zone. However, according to Figure 7, entitled *Existing Sewer System*, a 24-inch main line currently exists within the right-of-way (R/W) of TMTPR and is available within a reasonable distance to the Project site. The Project will be required to prepare engineered sewer plans, which provide a lateral connection from the Project site to this 24-inch sewer main line facility.

The construction site plan will utilize a portable toilet service in compliance with industry regulations until the construction of the permanent facilities and connection to the existing infrastructure. Design for all disposal systems shall comply with industry regulations, as well as the standards outlined in Title 7, Chapter 2 within California City Municipal Code. No septic systems are proposed. Less than significant impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

20. Wind Erosion and Blowsand from Project either on or off site. a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Department of Conservation; Project Materials.

Findings of Fact: Impacts of windborne and waterborne soil erosion at the project site will be controlled during project operation after adequate paving, landscaping, and other means of stabilization is incorporated. Upon completion of the project, the site intends to have both hardscape and softscape surfaces including the industrial and manufacturing uses building, and landscaping (consisting of decomposed granite with soil stabilizers) surrounding the buildings and project perimeter. The Project would be required to comply with SCAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion (SCAQMD, 2005). With mandatory compliance to the requirements identified in the Project's SWPPP, as well as applicable regulatory requirements, the potential for water and/or wind erosion impacts during Project construction would be less than significant.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
21. Paleontological Resources a) Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Project Materials.

Findings of Fact: A significant impact would occur if the Project would directly or indirectly destroy a unique paleontological resource or site or unique geological features. Paleontological resources are fossilized remains of organisms from the geologic past and the accompanying geologic strata. The potential for fossils depends on the rock type exposed at the surface. Sedimentary rocks contain the bulk of fossils in the City, although metamorphic rocks may also contain fossils. The Project is located within the Transverse Ranges of southern California, specifically located southwesterly of three distinctive geological areas: (1) the Fremont Valley; (2) the Peerless Valley; and (3) the Rand Mountains. In addition, the General Plan details that Red Rock Canyon State Park, which is located north of California City along State Route 14 and is known for its rock formations and surrounding desert mountains. In addition to its scenic qualities, the canyon is known for its geological, archaeological and paleontological history. Off-highway vehicles are allowed on designated four-wheel drive routes located in the park. However, the State Park is located more than 21-miles from the Project site and General Plan does not identify any other areas of high or medium paleontological sensitivity. Therefore, less than significant impacts to paleontological resources are anticipated.

Previous record searches have confirmed the Project site is near areas considered minimal for paleontological resources; as such, the recommended monitoring of substantial extractions (e.g., excavated soil) is not necessary.

Mitigation: **PALEO-1:** If a unique paleontological resource or site or unique geologic feature are found during excavation, all work will be suspended until the area has been thoroughly examined.

Monitoring: Mitigation Measures will be monitored and implemented by the City Planning Department.

GREENHOUSE GAS EMISSIONS Would the Project				
22. Greenhouse Gas Emissions 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?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; CalEEMod v. 2016 Modeling Analysis (dated August 4, 2021); Project Materials.

Findings of Fact: Greenhouse Gas (GHG) is a gaseous compound in the earth's atmosphere that is capable of absorbing infrared radiation, thereby trapping and holding heat in the atmosphere. Common greenhouse gases in the earth's atmosphere include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NO_x), ozone, and to a lesser extent chlorofluorocarbon. Carbon dioxide is the main GHG thought to contribute to climate change. In response to growing concern for long-term adverse impacts associated with global climate change, California's Global Warming Solutions Act of 2006 (AB 32) requires California Air Resource Board (CARB) to reduce statewide emissions of greenhouse gases to

1990 levels by 2020. In 2021, Governor Jerry Brown signed Senate Bill 32 (SB32) that requires California to reduce GHG emissions to 40 percent below 1990 levels by 2030. In general, the Project will generate GHG emissions through Project-related area sources, energy usage, mobile sources, solid waste disposal, water usage, and wastewater treatment.

Greenhouse Gas (GHG) Emissions (Overall Construction):

Carbon Dioxide equivalents (CO2e) over a Project "life-span" measured at a maximum of twenty (20) years The proposed use will create approximately 414.57 MT/yr. of CO_{2e} (unmitigated) or 398.33 MT/yr. of CO_{2e} (unmitigated), on an annual basis. The CARB 32 Scoping Plan permits an amortization of the construction-related greenhouse gas emissions over the Project lifespan, conservatively measured at 20-years, which results in approximately 20.73 of MT/yr. of CO2e (unmitigated) or 19.67 of MT/yr. of CO_{2e}(mitigated). Both measurements are well below any accepted or adopted threshold for construction related GHG emissions.

Table 3-2: Overall Construction (Unmitigated/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
Year	tons/yr										MT/yr					
2021	0.1481	1.4358	1.0853	2.3800e-003	0.1979	0.0659	0.2637	0.0947	0.0612	0.1560	0.0000	211.5372	211.5372	0.0433	0.0000	212.6187
2022	2.0601	1.9307	1.8934	4.6300e-003	0.1187	0.0778	0.1964	0.0322	0.0731	0.1053	0.0000	412.9543	412.9543	0.0645	0.0000	414.5673
Maximum	**2.0601**	**1.9307**	**1.8934**	**4.6300e-003**	**0.1979**	**0.0778**	**0.2637**	**0.0947**	**0.0731**	**0.1560**	**0.0000**	**412.9543**	**412.9543**	**0.0645**	**0.0000**	**414.5673**

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					
2021	0.0905	1.1920	1.0962	2.3800e-003	0.0915	0.0336	0.1251	0.0377	0.0322	0.0700	0.0000	206.0786	206.0786	0.0426	0.0000	207.1424
2022	2.0236	2.0593	1.8309	4.6300e-003	0.1039	0.0597	0.1636	0.0286	0.0571	0.0857	0.0000	396.7670	396.7670	0.0626	0.0000	398.3317
Maximum	**2.0236**	**2.0593**	**1.8309**	**4.6300e-003**	**0.1039**	**0.0597**	**0.1636**	**0.0377**	**0.0571**	**0.0857**	**0.0000**	**396.7670**	**396.7670**	**0.0626**	**0.0000**	**398.3317**

	ROG	NOx	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	4.27	3.42	1.73	0.00	38.26	35.00	37.25	47.77	33.47	40.41	0.00	3.47	3.47	2.46	0.00	3.46

Greenhouse Gas (GHG) Emissions (Overall Operations):

Based upon the CalEEMod Annual Modeling Analysis, the annual emissions generation results in approximately 2,428.41 MT/yr. of CO_{2e}. Although the threshold, adopted by both CARB and the EKAPCD, is set at 3,000 MT/yr. of CO_{2e} only for residential projects, the milestone is an accepted threshold of significance that can be utilized in the absence of an adopted Climate Action Plan (CAP) or similar type of plan. As such, the long-term, operational, impacts related to GHG emissions will exceed the recommended threshold for residential projects of 3,000 MT/yr. of CO_{2e}. It is important to note that according to the CARB, AB 32 – Scoping Plan shows that a residential development project will typically produce more operational emissions than commercial or industrial projects. As such, the Project must implement mitigation measures to reduce the annual operational emissions to below the

3,000 MT/yr. of CO_{2e} threshold. The project will operate under the mandatory regulations found in the most recent Cal Green Building Standards Code for non-residential uses.

Table 3-2: Operational Detail – Mobile Sources:

	ROG	NOx	CO	SO2	Fugitive 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	0.3713	4.5372	3.3137	0.0208	1.0669	0.0105	1.0774	0.2870	9.8400e-003	0.2968	0.0000	1,936.6348	1,936.6348	0.1257	0.0000	1,939.7773
Unmitigated	0.4139	4.9349	4.0966	0.0260	1.4318	0.0136	1.4454	0.3851	0.0128	0.3979	0.0000	2,425.0194	2,425.0194	0.1356	0.0000	2,428.4096

California's Global Warming Solutions Act of 2006 (AB32) requires California to reduce its GHG emissions to 1990 levels by 2020. California Air Resource Board (CARS) has identified measures to achieve this goal as set forth in the CARB Seeping Plan. The EKAPCD adopted the interim GHG significance threshold for stationary/industrial sources on December 5, 2008, which applies to Projects where the EKAPCD is the lead agency. SB 32 adopted in 2021 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2035, a reduction target that was first introduced in Executive Order B-10-15. The project will reduce its GHG emissions to the maximum extent feasible through energy conservation measures and implementation of the current California Green Building Standards Code in addition to the use of natural light for plant growth and water efficient irrigation for plans and landscape design. The project will not interfere with the state's implementation of AB 32 or SB 32. As previously indicated, the project would not exceed the air basin threshold, therefore the project's GHG emissions would not conflict with plans and policies adopted for reducing GHGs emissions. Less than significant impacts, with mitigation, are expected.

Mitigation Measures/Monitoring:

GHG MM NO.[9]	MITIGATION MEASURE	IMPLEMENTATION MILESTONE	ENFORCEMENT AGENCY
Table 4-1: Mitigation Measures Mobile			
GHG 4-1	Improve Destination Accessibility	SPR/CUP[10]	Planning Manager
GHG 4-2	Provide Traffic Calming Measures	SPR/CUP	Planning Manager
GHG 4-3	Implement NEV Network	SPR/CUP	Planning Manager
GHG 4-4	Expand Transit Network	SPR/CUP	Planning Manager
GHG 4-5	Increase Transit Frequency	SPR/CUP	Planning Manager
GHG 4-6	Implement Trip Reduction Program	SPR/CUP	Planning Manager
GHG 4-7	Transit Subsidy	SPR/CUP	Planning Manager
GHG 4-8	Encourage Telecommuting and Alternative Work Schedules	SPR/CUP	Planning Manager
GHG 4-9	Market Commute Trip Reduction Option	SPR/CUP	Planning Manager
GHG 4-10	Employee Vanpool/Shuttle	SPR/CUP	Planning Manager

[9] *Greenhouse Gas Mitigation Measure (GHG, MM)*

[10] *Site Plan Review (SPR)/Conditional Use Permit (CUP)*

GHG 4-11	Provide Ride-Sharing Program	SPR/CUP	Planning Manager
Table 4-2: Mitigation Measures Energy			
GHG 5-1	Exceed Title 24	Prior to Building Permit	Dept. of Building & Safety
GHG 5-2	Install High Efficiency Lighting	Prior to Building Permit	Dept. of Building & Safety
Table 4-3: Mitigation Measures Area:			
GHG 6-1	Use Electric Lawnmower	During Project Operations	Code Enforcement
GHG 6-2	Use Electric Leaf blower	During Project Operations	Code Enforcement
GHG 6-3	Use Electric Chainsaw	During Project Operations	Code Enforcement
GHG 6-4	Use Low VOC Paint - Residential Interior	Prior to Certificate of Occupancy (CO)	Dept. of Building & Safety
GHG 6-5	Use Low VOC Paint - Residential Exterior	Prior to Certificate of Occupancy (CO)	Dept. of Building & Safety
GHG 6-6	Use Low VOC Paint - Non-Residential Interior	Prior to Certificate of Occupancy (CO)	Dept. of Building & Safety
Table 4-4: Mitigation Measures Water			
GHG 7-1	Apply Water Conservation Strategy	Prior to Certificate of Occupancy (CO)	Department of Public Works
GHG 7-2	Use Reclaimed Water	Prior to Certificate of Occupancy (CO)	Department of Public Works
GHG 7-3	Install Low Flow Bathroom Faucet	Prior to Certificate of Occupancy (CO)	Department of Public Works
GHG 7-4	Install Low Flow Kitchen Faucet	Prior to Certificate of Occupancy (CO)	Department of Public Works
GHG 7-5	Install Low Flow Toilet	Prior to Certificate of Occupancy (CO)	Department of Public Works
GHG 7-6	Install Low Flow Shower	Prior to Certificate of Occupancy (CO)	Department of Public Works
GHG 7-7	Turf Reduction	Prior to Certificate of Occupancy (CO)	Department of Public Works
GHG 7-8	Use Water Efficient Irrigation System	Prior to Certificate of Occupancy (CO)	Planning Manager
GHG 7-9	Use Water Efficient Landscaping	Prior to Certificate of Occupancy (CO)	Planning Manager
GHG 7-10	Apply Water Conservation Strategy	Prior to Certificate of Occupancy (CO)	Planning Manager

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS Would the Project				
13. Hazards and Hazardous Materials a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
c) 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?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
e) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
f) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Project Materials.

Findings of Fact: The project site is approximately 60-acres (gross) of vacant desert land and proposes to construct a 265,000 SF agriculture and commercial uses. The project will not involve the use or storage of hazardous materials other than organic certified fertilizers and California approved natural pesticides and fungicides. These materials will be stored and applied according to manufacturer's instructions to mitigate the potential for incidental release of hazardous materials or explosive reactions. The Code of Federal Regulations (CFR Title 40, Part 261 & 112) defines hazardous materials based on ignitability, reactivity, corrosivity, and/or toxicity properties. The State of California defines hazardous materials as substances that are toxic, ignitable, or flammable, reactive and/or corrosive, which have the capacity of causing harm or a health hazard during normal exposure or an accidental release. As a result, the use and management of hazardous or potentially hazardous substances is regulated under existing federal, state, and local laws. State law requires that cannabis, and cannabis-related waste products are properly disposed of through a qualified vendor. California City Municipal Code mirrors the same requirements, as such, cannabis cultivation facilities will be required to contract with a qualified disposal service to effectuate the necessary disposal in compliance with state and local laws.

In addition, other hazardous waste materials, requiring special handling and disposal, must comply with applicable Cal-EPA, Cal-OSCHA, and MSDS protocols[11] to reduce their potential to damage public health and the environment. Manufacturer's specifications also dictate the proper use, handling, and disposal methods for the specific substances. Construction of the project is expected to involve the temporary management and use of potentially hazardous substances and petroleum products. The nature and quantities of these products would be limited to what is necessary to carry out construction of the project. Some of these materials would be transported to the site periodically by vehicle and would be stored in designated controlled areas on a short-term basis. When handled properly by trained individuals and consistent with the manufacturer's instructions and industry standards, the risk involved with handling these materials is considerably reduced.

The Project site does not contain any emergency facilities, nor does it serve as an emergency evacuation route. Under long-term operational conditions, the proposed Project would be required to maintain adequate emergency access for emergency vehicles on-site as required by the City.

Furthermore, the Project would not result in a substantial alteration to the design or capacity of any existing public road that would impair or interfere with the implementation of evacuation procedures.

[11] California Environmental Protection Agency (Cal-EPA); California Occupational Safety and Health Agency (Cal-OSHA); Material Data Safety Sheet (MSDS)

Because the Project would not interfere with an adopted emergency response or evacuation plan, no impact would occur.

To prevent a threat to the environment during construction, the management of potentially hazardous materials and other potential pollutant sources will be regulated through the implementation of control measures required in the Stormwater Pollution Prevention Plan (SWPPP) for the project. The SWPPP requires a list of potential pollutant sources and the identification of construction areas where additional control measures are necessary to prevent pollutants from being discharged. Best Management Practices (BMPs) are necessary for Spill Prevention, Control, and Countermeasure Regulation (SPCC)[12]. These measures outline the required physical improvements and procedures to prevent impacts of pollutants and hazardous materials to workers and the environment during construction. For example, all construction materials, including paints, solvents, and petroleum products, must be stored in controlled areas and according to the manufacturer's specifications. In addition, perimeter controls (fencing with wind screen), linear sediment barriers (gravel bags, fiber rolls, or silt fencing), and access restrictions (gates) would help prevent temporary impacts to the public and environment. Implementation is ensured through the filing of a Notice of Intent (NOI), with the State Regional Water Quality Control Board – Region 5F and the production of a SWPPP to be reviewed and approved by the City's Public Works Department. With such standard measures in place, less than significant impacts are anticipated during construction.

Pursuant to the City's General Plan Safety Element – Implementation Measure S-7 – which states that the City shall require commercial and industrial businesses to meet the procedures for the proper transport, use, storage and disposal of hazardous waste as required by the Kern County Waste Management Department, the California City Fire Department, and Kern County Department of Environmental Health Services. Additionally, the California City Fire Department shall require a detailed chemical inventory in accordance with the fire code to determine the hazards and classifications of the materials used in the proposed cannabis cultivation facility. Less than significant impacts related to the routine transport, use or disposal of hazardous materials are expected.

The project site is located within the M-1, Light Industrial Zone, which is used to naturally segregate from residential neighborhoods or other densely populated land uses. As previously discussed, the project is not expected to handle any significant quantities of hazardous materials. Any other use of potentially hazardous· substances, is expected to occur in small quantities and managed on-site with the proper containment and facilities, as required by the fire department and other applicable industry standards. The Project will not include any volatile extraction of cannabis products.

The General Plan Safety Element addresses safety within the City through goals, policies, and implementation measures that seek to reduce the potential for the loss of life, injuries and property damage associated with natural and human-induced hazards. Fire services are provided to the project area by the California City Fire Department (CCFD). The fire department operates out of a single location, located at 20890 Hacienda Blvd, California City, CA 93505, approximately 2.6-miles from the Project site. The station has four paid fire fighters on duty per day. The CCFD maintains a fleet of two structure engines (one front-line and one reserve), one brush engine, one brush patrol, one squad/off-road rescue, and two staff SUV's. The CCFD maintains mutual aid and automatic aid agreement with Kern County Fire and Edwards Air Force Base Fire, resulting in the ability of three engines being dispatched; a standard duty response that ensures a minimum number of firefighters arrive at scene

[12] United States Environmental Protection Agency (EPA), Spill Prevention, Control, and Countermeasure (SPCC) Regulation, 40 CFR part 112 (https://www.epa.gov/sites/default/files/documents/spccbluebroch.pdf) Accessed, August 4, 2021.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

per National standards. Mutual aid is an agreement among emergency responders to lend assistance across jurisdictions provided resources are available and is not to the detriment of their own service area. The project proposes the development of the 60-acre site. 20890 Hacienda Blvd, California City, CA, which does not create a substantial increase in the need for additional fire suppression and planning services.

Development of the project increases demand on fire services, however based on the site proximity to the City's existing fire station, the proposed project could be adequately served without the expansion of a new fire facility and adequate response times would be met. Additionally, the project would be required to implement all applicable and current California Fire Code Standards. This would include installation of fire hydrants as well as sprinkler systems inside the buildings. Furthermore, the project will be reviewed by City and Fire officials to ensure adequate fire service and safety because of project implementation. The project will also be required to comply with the City's Development Impact Fees (DIF) to assist with the funding of public facilities and services, including fire, therefore, less than significant impacts are expected.

The project site proposes improvements to TMTPR (including a newly proposed curb-and-gutter) and accessing the project site from TMTPR Primary access intends to be located on the northerly portion of the property, adjacent and south of TMTPR, which follows a general circulation pattern as an east-west major highway as shown on the City's General Plan Circulation Element. The site plan configuration of the proposed development includes fire truck accessible drive aisles and a commercial driveway of at-least 24-feet in width, to ensure adequate emergency response can utilize sufficient ingress/egress. The proposed design would be subject to a standard review process by the Fire Department to ensure that the site-specific emergency access, water pressure, and other pertinent criteria are met by the project. Less than significant impacts are expected.

Toxic cleaning compounds, sanitizing agents, solvents, and potentially flammable materials may also be involved within the proposed facilities. The use of these products would also be subject to the manufacturer's specifications, as well as local, state, and federal regulations that would help protect against accidental release, explosive reactions, injury, and contamination. The project operator would be required to provide the proper storage facilities and containers designed to protect and isolate these substances, therefore minimizing the threat to the public or the environment. Facility employees shall be trained on safety rules to prevent personal or public risk. Solid waste produced by the project will be stored in a designated staging area with enclosures and less than significant impacts are expected.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

14. Airports a) Result in an inconsistency with an Airport Master Plan?	☐	☐	☐	☒
b) Require review by the Airport Land Use Commission?	☐	☐	☐	☒
c) 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 for people residing or working in the Project area?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) For a Project within the vicinity of a private airstrip, or heliport, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; California Municipal Airport Compatibility Land Use Plan; Caltrans Aeronautics Handbook, Project Materials.

Findings of Fact: The California City Municipal Airport, located northwest of the Project and spans over 200-acres within the City. The Kern County Airport Land Use Compatibility Plan maps five zones; related to noise and safety levels, for each airport under their jurisdiction. According to this Plan, the Project site is not located within California City's Airport Influence Area, as the closest point of the airport runway is located approximately 5.25-miles from the furthest northwesterly section of the Project site. For land use Projects that are located within the Municipal Airport land use compatibility plan, building heights can be restricted to 35-feet or less, measured from the finished grade. Additional conditions can be placed upon new development projects in an effort to prevent hazards to the safe landing or take-off of aircrafts. Nevertheless, the Project is located outside of the Airport Compatibility Zones and the 65 CNEL noise contour zone, which indicate that the Project shall not create any impact upon either safety or noise compatibility issues associated with the proposed development.

The project is not subject to the Airport AIA as it is not located within AIA. Less than significant impacts are anticipated. The project is not located in the vicinity of a private airstrip. No impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

15. Hazardous Fire Area a) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Chapter 8 – State Hazard Mitigation Plan (SHMP), Cal Fire FHSZ Viewer; Project Materials.

Findings of Fact: The California City General Plan indicates that major wildland fires are uncommon within the City area due to the vegetation type, the sparseness of the vegetation and the lack of available ground fuel. According to Chapter 8 of the SHMP, and the Cal Fire Hazard Severity Zone (FHSZ) Viewer, the Project are located within a Local Responsibility Area (LRA) and are outside of the Very High and High Fire Hazard Severity Zone (FHSZ).

As mentioned previously, the California City Fire Department is located at 20890 Hacienda Boulevard, approximately 2.6 driving miles southwest of the Project site. Additionally, the City has a mutual aid agreement with Kern County Fire Department, the East Kern Airport District Fire Department, and the Bureau of Land Management. Less than significant impacts related to wildland fire are expected.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. 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 deplete groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☒	☐	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i) Result in substantial erosion or siltation on-or offsite. ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources or 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 water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Chapter 8 – State Hazard Mitigation Plan (SHMP); FEMA Flood Map Service Center; Project Materials.

Findings of Fact: The proposed project is located within the Fremont Hydrologic Unit of the South Lahontan Basin in the Lahontan Region 6V (https://www.waterboards.ca.gov/waterboards_map.html). Within Region 6V, the approved Water Quality Control Plan, prepared by SWRCB, provides guidelines for protecting the beneficial uses of state waters within the Region by preserving and protecting their water quality. The project site is located within the Fremont Hydrologic Unit. The receiving water is the Kohen Dry Lake. Beneficial uses of Kohen Lake includes municipal and domestic supply, agricultural supply, industrial process supply, industrial service supply, groundwater recharge, water contact recreation, noncontact water supply, warm freshwater habitat, Inland saline water habitat and wildlife habitat.

According to the California City 2009 Final Environmental Impact Report (SCH # 1992062069), the only named blue line stream is identified as Cache Creek, which runs through California City from the west towards the northeast, and eventually terminates just south of the Koehn Lakebed outside of the City boundary. Cache Creek lies approximately 5-miles southwest of the Project, and Koehn Lakebed is approximately 18-miles northeast of the project site. The nature and size of the proposed development prompts compliance requirements with the existing regulations pertaining to water quality standards and waste discharge requirements.

The proposed project will result in temporary and permanent disturbance in excess of one acre in gross area. The developer will comply with the State's most current Construction General Permit (CGP). Compliance with the CGP involves the development and implementation of a project-specific Storm Water Pollution Prevention Plan (SWPPP) designed to reduce potential adverse impacts to surface water quality during the period of construction. The required plan will identify the locations and types of construction activities requiring Best Management Practices (BMPs) and other necessary compliance measures to prevent soil erosion and stormwater runoff pollution. The plan will also identify the limits of allowable construction-related disturbance to prevent any off-site exceedances or violations.

During construction, the project will also be required to comply with the Eastern Kern Air Pollution Control District (EKAPCD) Rule 402, which requires the project property to implement fugitive dust emission control strategies. Implementation of the control strategies primarily pertains to air quality, but also supports water quality protection through the requirement of soil stabilization measures to prevent sediment erosion and track-out. The concurrent implementation of the required SWPPP and fugitive dust emission control strategies will prevent the potential construction-related impacts to water quality at the site and its surroundings, therefore resulting in less than significant impacts.

The project will be designed with on-site stormwater detention facilities that, during the life of the project, will comply with the City's drainage requirements by preventing site discharge and transport of untreated runoff. The project will be required to comply with the most current State standards, as well as the standards outlined in the City of California City Urban Water Management Plan and the Water Quality Control Plan for Lahontan Region (Region 6V). The site plan, grading design, storm drain design, and retention facilities of the project must be factored in the project- specific WQMP development and documentation. Runoff from throughout the impervious surfaces (buildings, hardscape, and pavement) of each drainage management area will be conveyed via surface and piped flows to either corresponding underground retention chambers or retention basins. Each of the retention basins and underground facilities will be sized to retain the incremental increase between the pre-development and post-development volume per City requirements.

As proposed, the stormwater retention and management strategy are expected to comply with local and regional requirements for protecting surface water quality and preventing waste discharge violations. Less than significant impacts are expected. According to the California City Water Master Plan, California City obtains its water from five groundwater wells and an imported surface water supply from the Antelope Valley-East Kern Water District (AVEK). As previously mentioned, the Project is located within the Fremont Valley Groundwater Basin (FVGB). Historic water levels of groundwater wells between 1955 and 1958 indicates that the FVGB is a closed groundwater basin (without subsurface outflow). Long term groundwater level data obtained from the USGS Ground Water Data water levels indicated the groundwater levels in the FVGB have declined significantly since 1955, probably due to the prolonged drought period from 1945 to 1964 and excessive groundwater extraction in the FVGB in the late 1950s, 1960s and 1970s. The most important storage system is the groundwater aquifer, which holds water at a depth of approximately 250 to 290-feet below ground surface.

According to the California City General Plan, the City primarily relies on underground water supplies. Groundwater wells in California City produced over 93-percent (%) of the water supply in 2000 to 2001. Per the Urban Water Management Plan, water source well #10 is the closest facility within the vicinity of the project site and is located approximately 2,500 feet southeasterly of California City Blvd., which is approximately 4-miles to northeasterly of the Project site. According to the General Plan, water demands will be met through expansion of the City’s groundwater purveyance and delivery system.

The California City Municipal Code also outlines the importance of water conservation (California City Municipal Code Chapter 1, Article 4, Section 7-1.431). Within this code, the City states that water conservation is a goal of high importance to be consistent with State of California and City legal responsibilities to the utilization of water resources. All irrigation within the City complies with the State Model Water Efficiency Landscape Ordinance (MWELO) and City Municipal Code that implement water efficiency standards. Additional conservation efforts include the use of drought tolerant landscaping, and new, low flow plumbing fixtures. Water conserving fixture installations shall be subject to compliance inspection, prior to issuance of final occupancy permits, for the industrial facility. Given the use, and projected low water and wastewater demands, the Project not expected to interfere with groundwater recharge conditions. Infiltration opportunities are also provided in the form of BMPs and pervious cover areas in and landscaping design within sufficient densities that will mitigate excess evaporation and evapotranspiration. To support this conclusion, soil types are derived from the NRCS SoilWeb Data Server, which identifies that at-least 85% of the Project soils consist primarily of Geomorphic Soil Positions including: alluvial fans / Backslope, and sandy loam soil types[13]. By definition, these soil types qualify as Group "A" type soils, as detailed in the City's LAMP. According to Section 3 – Page 19, the General Plan identifies Soil Types "A" through "D", with Group "A" soils are classified as having high infiltration rates even when thoroughly wetted, consisting chiefly of deep, well to excessively drained sands and/or gravel. These soils have a high rate of water transmission and would result in a low runoff potential.[14] Since the soils of the Project site consists of sandy soils, with historically high infiltration rates, a less than significant impact upon the depletion of groundwater and local aquifers, as the infiltration rates identified are within the maximum thresholds required by the LAMP.

The proposed projected is in the within the M-1, Light Industrial Zoning District, which by designation under the California City Zoning Map is allocated to support general and specialty industrial and manufacturing uses facilities, including cannabis cultivation and manufacturing facility. The general vicinity surrounding the Project area also includes undeveloped properties with relatively flat topography and scattered vegetation, like that found on the Project site. The local hydromorphology is influenced by the presence of intermittent surface drainages originating from the mountains to the west and carrying flows predominantly in a northeasterly direction toward the valley floor. Cache Creek is located approximately four miles upstream of the project, and Koehn Lakebed is approximately 19-miles northeast of the project site.

The project is located primarily in Zone with smaller portions of Zone A, as shown in FEMA FIRM panel designation 06029-C2960E which are typically determined to be areas to avoid the construction of permanent structures. FEMA Zone X is defined as areas determined to be outside the 0.2-percent (%) annual chance floodplain, whereas FEMA Zone A is defined as having a 1% Annual Chance of Flood Hazard[15]. The current designation encompasses most of the City's undeveloped and developed properties within the Project area and will. involve permanent site improvements introducing impervious surfaces in the form of buildings, paving, and hardscape to the previously undeveloped (pervious) land. The Project includes a conceptual site plan, which does not utilize the entire property to accommodate the proposed facilities and operations through the construction of buildings, parking lot, drive aisles, etc. As a result, opportunities to minimize imperviousness using landscaping, natural areas or other pervious surfaces are ample and are subsequently integrated into Project site plan. To prevent changes to local

[13] UC Davis: Agricultural and Natural Resources (NRCS), SoilWeb server, https://casoilresource.lawr.ucdavis.edu/gmap/ (Accessed, August 3, 2021).
[14] City of California City Local Agency Management Program, Section 3, Page 19.
[15] FEMA's National Flood Hazard Layer (NFHL) Viewer, Accessed on August 4, 2021.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

drainage conditions (patterns, quantities, or velocities) and adverse erosion and sedimentation impacts, the Project will implement a storm drain design with flood control facilities sized to handle the project-specific conditions.

The proposed grading and hydrology improvement plans will be subject to review and approval by the City and Kern County Floodplain Management Division to ensure that the proposed grading and drainage conditions are acceptable to the City standards. As a result, following implementation of an approved grading plan, the project is not anticipated to alter any local drainage course, stream, or wash in a manner that would result in erosion or siltation on-site or off-site. Following the standard regulations and project design features, less than significant impacts are expected related to the existing drainage patterns and erosion or siltation conditions. The National Wetlands Inventory, from the USFWS, indicates that there is evidence of an intermittent riverine/riparian feature that is located east of the project site, which is also easterly from the future extension of TMTPR, but is well off-site of the proposed Project. A riverine, as defined by the National Wetlands Inventory, includes all wetlands and deepwater habitats contained within a channel, except for: wetlands dominated by trees and shrubs, and habitats with water containing ocean derived salts of 0.5 ppt or greater. However, the intermittent riverine is not considered waters of the United State because it does not connect to another source of water and furthermore is not connected with the Project site.

The proposed project would introduce impervious surfaces (hardscape, asphalt, rooftops, etc.) to a presently undeveloped (pervious) ground condition. In particular, the Project anticipates developing over 50-percent (%) of the project site with impervious materials and coverage. This conversion would typically result in a site-specific increase in the rate and quantity of surface runoff. To manage this on-site condition, the project includes a proposed storm drain design (subject to approval by the City Engineer) with surface and piped conveyances draining into retention basins and underground retention structures.

Furthermore, the project involves street improvements including curb and gutter at the TMTPR frontage. This aspect of the Project will introduce engineered surface stability to the previously unimproved road shoulders by intercepting and properly conveying off-site flows toward the existing and future street improvements. Less than significant impacts are expected.

Mitigation:

HYD-1: The Project development will avoid permanent development buildings and/or structures within areas located in a Zone “A” flood zone as described on FEMA FIRM Panel 06029-C294E.

HYD-2: The Project shall comply with the NPDES General Permit and BMP guidance for Region 6

Monitoring: The City’s Public Works Department will review final drainage plans and implement hydrology mitigation measures.

17. Floodplains				
Degree of Suitability in 100-Year Floodplains. As indicated below, the appropriate Degree of Suitability has been checked. NA - Not Applicable ☒ U - Generally Unsuitable ☐ R - Restricted ☐				
a) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☒	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Changes in absorption rates or the rate and amount of surface runoff?	☐	☒	☐	☐
c) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area)?	☐	☒	☐	☐
d) Changes in the amount of surface water in any water body?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Safety Element; Chapter 8 – State Hazard Mitigation Plan (SHMP), Chapter 7 – Hydrologic Soil Groups: FEMA Flood Map Service Center, Natural Resources Conservation Service (NRCS); Project Materials.

Findings of Fact: The Project includes stormwater capture, detention, and on-site treatment that will prevent any substantial increase in the rate, velocity, or quantity of runoff generated from the Project as compared to the existing undeveloped, and pervious, site condition. Runoff, from the Project, shall comply with the NPDES General Permit and BMP guidance for Region number 6 – Lahontan basin, which are covered in Attachment "C" of Board Order 6-00-03. In addition, Project's shall provide for drainage conditions that provide for a post-development condition that perpetuates the existing drainage condition, which flows off-site to the northeast. Runoff will be conveyed primarily via surface flows through biofiltration BMPs and eventually to storm drain inlets with inlet filters. The runoff will subsequently be directed to the detention basins or carried via proposed piped flow to the corresponding underground infiltration structures located under the drive aisles. The City will require that BMPs be incorporated into a Final WQMP, to be reviewed and approved by the City.

Through this required compliance, the project will prevent impacts to the local receiving waters and avoid violations to the established water quality standards and waste discharge requirements. Less than significant impacts relative to the substantial degradation of water quality are expected.

The Project is not located near an existing levee or dam; therefore, no impacts are expected pertaining to this topic. The project includes areas located within a 100-year flood zone based on FEMA FIRM panel 06029-C294E, effective September 26, 2008. The Project will be designed to avoid areas identified within the FEMA flood zone "A", of the California City Firm panel 06029-C2964E. As such, less than significant impacts are expected. The project site is not located near a body of water that would pose potential seiche or tsunami impacts. The project site is underlain by Hydrologic Soil Type "A", which is characterized for having a slow infiltration rate when thoroughly wet. Type "A" soils consist chiefly of moderately deep or deep, moderately well drained, or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission. With the relatively shallow gradients that characterize the vicinity, the erosive nature and mudflow potential is reduced. Only flows more than the project's retention requirements would be allowed to exit the project area, therefore, less than significant impacts are expected.

The project site is not located near a body of water that would pose potential seiche or tsunami impacts. The project site is underlain by Hydrologic Soil Type Group "A", which is characterized for having a moderate infiltration rate, during most weather conditions. Type "A" soils consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission. With the relatively shallow gradients that characterize the vicinity, the erosive nature and mudflow potential is reduced.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Only flows more than the project's retention requirements would be allowed to exit the project area, therefore, less than significant impacts are expected.

Mitigation:

HYD-1: The Project development will avoid permanent development buildings and/or structures within areas located in a Zone "A" flood zone as described on FEMA FIRM Panel 06029-C294E.

HYD-2: The Project shall comply with the NPDES General Permit and BMP guidance for Region 6

Monitoring: The City's Public Works Department will review final drainage plans and implement hydrology mitigation measures.

LAND USE/PLANNING Would the Project				
18. Land Use				
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?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028

Findings of Fact: The proposed project site sits on 60 gross acres of vacant desert land, located both north and south of TMTPR, as the Project site is bifurcated by TMTPR. Further to the southeast of Project site, Randsburg Mojave Road is located and runs in a southwest-to-northeast direction. The project proposes to construct and operate a 265,000 square-foot industrial agricultural facility, on the subject property, within the City's M-1, Light Industrial Zoning District. The Project proposal is consistent and authorized by Title 5: Chapter 6 and Title 9: Chapter 29, and the underlying zoning classification provides for an industrial and manufacturing uses; pursuant to the authorized uses set forth in the M-1 zone. As such, the Project is consistent with the planned land use zoning and land use patterns of the property and its surrounding property conditions. Based upon this analysis, a Less Than Significant Impact is anticipated.

The Project proposes an industrial agricultural operation intended for the cultivation of commercial cannabis and cannabis-related products. These uses are found consistent with the underlying M-1, Light Industrial zone. The surrounding zones are a combination of C-2, Community Commercial to the east; O/RA, Controlled Development to the north, west, and south, except for a single parcel (APN: 350-153-40) that is zoned M-1, Light Industrial. The Project site is not located adjacent to, or within 200-feet from residentially zoned parcels. The Project is surrounded by the O/RA, Controlled Development zone in three directions; however, pursuant to Ordinance No. 21-783, the 200-foot setback does not apply to the O/RA zoning district[16]. As such, impacts to the surrounding zoning patterns are consistent with the land use expansion visions associated with the City's General Plan. The anticipated land use patterns, of the General Plan Sub-Area 5, and the surrounding land uses, which are compatible with the proposed Project, as a centralized community core within a planned residential neighborhood. There are no established community patterns in the project vicinity that would be divided by the Project. Therefore, no impacts relative to the division of an established community is expected. As discussed previously, the proposed M-1 (Light Industrial Zoning District), is designated for service industrial and manufacturing uses and neighborhood commercial facilities and land uses, which do not have potential

[16] https://library.municode.com/ca/california_city/ordinances/code_of_ordinances?nodeId=1068480

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

for detrimental impacts on surrounding properties. The 60-acre Project one cannabis retail, commercial, and agricultural uses which are either permitted or conditionally permitted in the M-1 zone, according to California City Municipal Code Title 5 and 9 and is not located within a uniquely establishment community or area of interest. No impacts are anticipated to land use or planning zoning or land use standards. The Project is consistent with the M-1 zone and will not create a new impact or divide any established community, as such the Project will have a Less Than Significant Impact upon planning and land use resources.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

MINERAL RESOURCES Would the Project				
19. Mineral Resources a) Result in the loss of availability of a known mineral resource that would be of value to the region or 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?	☐	☐	☐	☒
c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?	☐	☐	☐	☒
d) Expose people or property to hazards from proposed, existing, or abandoned quarries or mines?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; General Plan Open Space and Conservation Element; Chapter 5; Figure 5-3: Mojave Desert Designated Areas Map; Project Materials.

Findings of Fact: According to Chapter 5, of the California City General Plan, the Kern County Mineral Resources GIS mapping resources and the Department of Conservation Maps Data Viewer, there are no mineral resources within the City's General Planning Area. In the eastern portion of the Mojave area, it contains areas with mineral resources consisting of several gravel pits. In the western portion of the North Edwards Specific Plan is a mineral extraction owned by Rio Tinto (Borax) Mine that is the world's largest sodium borate deposit. This includes the world's largest open pit borax mining operation (more than 600 feet deep) near the community of Boron. According to the California Geological Study (CGS) Mineral Land Classifications, no areas or sites of mineral resource and/or SMARA study areas exist on, or within the vicinity, of the Project site. The property is not listed as an active or historical mineral resources mine. In addition, the Project site is not located within an active or potential area of aggregate extraction pursuant to Map Sheet 52, which was updated in 2018 providing guidance on aggregate sustainability areas within the state. The nature of the project does not involve the extraction of mineral deposits. Construction of the proposed cultivation and processing facility would rely on existing local and regional aggregate resources from permitted facilities within the region. The project is not expected to result in a considerable extraction and/or loss of known mineral resources that are considered important to the region or residents of California. Additionally, there are no specific known mineral resource deposits or facilities on or near the project. No impacts are expected related to the loss of availability of known mineral resources. As previously discussed, there are no mineral resources within the City of California City. The closest mineral resource to California City is located in the City of Mojave, approximately 46-miles southwest of the project site. As determined in the previous

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

discussion, the project site is located within an area that is not designated, has not been evaluated or studied, and is not historically known to contain mineral and/or aggregate deposits of value. This zone designation applies to areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources. Overall, the project site is not recognized as a mineral resource recovery site delineated in the City of California City General Plan or the resource maps prepared pursuant to SMARA. No impacts are expected.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

20. NOISE Would the Project result in				
Definitions for Noise Acceptability Ratings				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excess groundborne vibration of 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 private agency airport, would the Project expose people, working in the area to execessive noise levels?	☐	☐	☒	☐

Source: City of California City Municipal Code (CCMC); City of California City Final General Plan; City of California City General Plan Noise Element; FHWA Noise Barrier Design Handbook.

The following summary introduces key terms and concepts for a basic understanding of sound, noise, and Project impacts.

This noise analysis evaluates the sound levels in terms of Equivalent Noise Level (Leq) and Community Noise Equivalent Level (CNEL). Leq is the average noise level on an energy basis for any specific time period. The Leq for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound. Leq can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. Because CNEL accounts for human sensitivity to sound, the CNEL 24-hour figure is always a higher number than the actual 24-hour average. For example, if a noise source produces a noise level of 90 dBA at a reference distance of 50 feet, then the noise level is 84 dBA at a distance of 100-feet from the noise source, 78 dBA at a distance of 200 feet. Noise generated by a mobile source (e.g., a car or truck) decreases by approximately 3 dBA over hard surfaces and 4.8 dBA over soft surfaces for each doubling of the distance between the source and the receptor. Generally, noise is most audible when the source is in a direct line-of-sight with the receiver. Barriers, such as walls, berms, or structures which are able to break the line-of-sight between a noise source and a receptor significantly reduce noise levels from the source since sound can only reach the receiver by bending over the top of the barrier. However, if a barrier is not sufficiently high or long to break the line-of-sight from the source to the receiver, its effectiveness is significantly reduced.

Local Noise Regulations and Existing Noise Levels

The City has established policies and regulations for the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. Chapter 7, Noise Element, identifies certain major noise sources (including military and private aircraft, railway, major roadways, and industrial land uses) and areas containing noise sensitive land uses, and identifies noise exposure contours for current and Projected levels of activity within the community. There is an expectation that the General Plan will promote housing and open space; provide for jobs; accommodate traffic and vehicle movement; and reduced noise and air pollution. This requires the balancing of these and many other expectations that drive the General Plan. The General Plan specifies goals to regulate the hours of operation, exterior and interior noise standards, and maximum noise level increases, which are summarized as follows:

Goals:

- To protect residents and workers in the City form the harmful and annoying effects of exposure to excessive noise.
- To protect the economic base of the City by preventing incompatible noise-sensitive land uses from encroaching upon existing or planned noise-producing land uses.
- To preserve the tranquility of residential areas by preventing noise-producing land uses from encroaching upon existing or planned noise-sensitive uses.
- To educate the residents and business owners in the City concerning the effects of exposure to excessive noise and the methods available for minimizing such exposure.

The General Plan Noise Element sets forth the following Noise-related policies applicable to the Project:

- The Noise Element of the General Plan contains the City's adopted noise land-use compatibility guidelines for community noise environments. These guidelines state that environments with noise levels ranging up to 60 dBA CNEL are considered "normally compatible" for residential uses. Environments with ambient noise levels greater than 60 dBA and up to 70 dBA CNEL are considered "conditionally compatible" for residential areas.
- The City's established interior noise level standard for receiving residential land uses is 45 dBA CNEL and its exterior noise standard is 65 dBA CNEL.
- Noise created by new transportation noise sources, including roadway improvement Projects, shall be mitigated so that the resulting noise levels at noise-sensitive land uses, after application of appropriate noise reduction measures, do not exceed the City's noise standards of 65 dBA CNEL within the outdoor activity areas and 45 dBA CNEL within the interior spaces as defined in the Noise Element.
- Require proposed residential development to comply with Title 24 Standards of the State Health and Safety Code. These standards establish maximum interior noise levels, requiring that sufficient insulation be provided to reduce interior ambient noise levels to 45 dBA CNEL.

In order to achieve compliance with the General Plan – Noise Element, the following Implementation Measures (IMs) are applicable to the Project, through compliance with the City's General Plan Noise Element. These IMs are not considered Mitigation Measures as they do not apply specifically to the Project and are applicable to all types of development Projects within the City:

NOI-1. The City shall review public and private development proposals to determine conformance with the policies of the Noise Element.

NOI-2. For development proposals subject to a discretionary approval (General Plan Amendment, Zone Change, or subdivision) and environmental review, an acoustical analysis shall be required as a part of

the environmental review process. The requirements for the content of an acoustical analysis are provided in Exhibit 2 to the Noise Element.

NOI-3. The City shall develop and employ procedures to ensure that noise mitigation measures required as a result of an acoustical analysis are implemented in the development review and building permit process.

NOI-4. The City shall develop and employ procedures to monitor compliance with the policies of the Noise Element after completion of Projects where noise mitigation measures have been required.

NOI-5. The City shall enforce the State Noise Insulation Standards (California Cide of Regulations, Title 254) and Chapter 35 of the Uniform Building Code (UBC) concerning interior noise exposure for multifamily housing, hotels, and motels.

NOI-8. The City shall require noise attenuation measures (such as setbacks, clustering, berming, and sound walls) as conditions of Project approval prior to or as part of construction in areas subject to excessive noise.

NOI-9. The City shall require that development proposals implement noise attenuation measures as conditions of Project approval prior to or as a part of construction to reduce the impact of vehicle-related noise on development in areas adjacent to roadways.

NOI-10. The City shall restrict the hours of activity per Title 5, Article 4, Noise and Vibration, Section 5-1.407 of the CCMC.

NOI-11. The City adopted a Community Noise Control Code to address noise complaints and to provide local industry with performance standards for future development and equipment modifications. The Code is consistent with the "Model 1977 with modifications made to reflect local concerns and conditions. The Code shall be periodically reviewed and updated.

a. Less than Significant with Mitigation Incorporated. A significant impact will occur if the Project would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Construction activity would result in a temporary increase to ambient noise levels within the Project area, but on an intermittent basis. Typical noise levels, from various types of equipment, that may be used during construction are listed in Table 5-1 below:

Table 5-1: Mximum Noise Level of Common Construction Machinery

: Maximum Noise Level of Common Construction Machinery		
	Noise Level (dBA)	
Noise Source	50 feet	100 Feet
Auger Drill	77.4	71.3
Backhoe	73.6	67.6
Compressor	73.7	67.8
Concrete Mixer Truck	74.8	68.8
Concrete Pump Truck	74.4	68.4
Concrete Saw	82.6	76.6
Drum Mixer	77.0	71.0
Dump Truck	72.5	66.5
Excavator	76.7	70.7
Mounted Impact Hammer (Hoe Ram)	83.3	77.3
Front End Loader	75.1	69.1
Generator	77.6	71.6
Gradall	79.4	73.4
Grader	81.0	75.0
Man Lift	67.7	61.7
Scraper	79.6	73.6
Tractor	80.0	74.0
Vacuum Street Sweeper	71.6	65.6
Welder Torch	70.0	64.0
Source: Southern California Noise Services 2021.		

Although short-term increases in noise levels may occur, the Project would comply with the City's noise ordinance and no construction would occur outside of the permitted hours of 7:00 a.m. to 8:00 p.m., as specified in Municipal Code Section 7-2. The Project would result in a less-than-significant impact related to on-site construction noise with mitigation incorporated.

Off-Site Construction Noise

In addition to on-site construction activities, noise would be generated off-site by construction-related trucks and construction worker vehicles. Trucks associated with construction activity would incrementally increase noise levels along the haul route. However, the proposed Project is not anticipated to include the amount of excavation or materials export related truck traffic to substantially increase the existing traffic volumes in the Project area and it is not anticipated that these trips would audibly increase traffic noise levels, as the site grading is proposed to be balanced. Truck trips would be largely limited to equipment and materials delivery. These truck trips are not anticipated to substantially increase off-site noise levels and would be limited throughout the day. Therefore, the Project would result in a less-than-significant impact related to off-site construction noise.

Off-Site Vehicle Operation Noise

An audible 3 dBA noise level increase from automobile traffic generally requires an approximate doubling in traffic volumes. The CalEEMod data prepared for the air quality analysis was used to provide trip estimates. The Project would generate 1,810 daily weekday trips, 660 Saturday trips, and 194 Sunday trips[17]. The City's General Plan Circulation Element classifies TMTPR as a major arterial that provides a southwesterly to northeasterly arterial connection to the City core. connection. Major arterials are designed to carry over 30,000 vehicles per day. When the roadway is operating at capacity, the proposed Project could increase vehicle volumes by approximately 4%. This increase would not double roadway volumes, and therefore traffic generated by the proposed Project would not be capable of generating an audible increase in roadway volumes. Therefore, the proposed Project would result in a less-than-significant impact related to mobile source noise.

On-Site Stationary Operation Noise

Potential stationary noise sources related to long-term operations of the Project includes mechanical equipment (e.g., HVAC equipment), which would be designed to be located within an enclosure. Parking noise, such as door slams, may occur intermittently in the above grounding parking lot. It is important to note that the proposed Project site is already developed and has existing parking noise that is anticipated to be substantially similar to the proposed Project. Parking noise is expected to not increase as compared to previous operations located at the proposed Project site. Therefore, the analysis below is considered conservative and analyzing a worst-case scenario.

The operation of the ground level and parking would periodically result in noise events associated with car alarms, car horns, slamming of car doors, engine revs, and tire squeals. Based upon the FHWA Noise Barrier Design Handbook and City's General Plan Noise Element, automobile movements are expected to generate noise levels of approximately 58.1 dBA Leq at a distance of 50 feet. As described in the Planning/Zoning resource section, the Project is not adjacent to, or surrounded by, any sensitive receptors. In any event, these noise increases would not exceed the 5 dBA incremental increase threshold. Therefore, the Project would result in a less-than-significant impact related to stationary mechanical noise.

[17] CalEEMod Annual Modeling Results, v. 2016, prepared by Rush Environmental, LLC (dated August 6, 2021)

Mechanical equipment would be located outside of the manufacturing and cultivation buildings; however, equipment will be located either within an enclosed room or surrounded by a minimum six (6) foot block wall or other similar noise barrier as approved by the City's Building Official. Most of the commercially available mechanical equipment typically generates noise levels of approximately 60 dBA Leq at 50-feet. This noise level is reduced by approximately 10 dBA when the equipment is enclosed within a structure or shielded. Mechanical equipment will be required to comply with the City's Standard Conditions of Approval which require that all new mechanical equipment comply with Municipal Code Sections 8-11 and 9-2. Stationary equipment noise levels could result in a maximum noise level increase of 0.3 dBA, which would not exceed the 5 dBA incremental increase threshold. Furthermore, HVAC noise is not typically audible when located on a building that has a roof height much higher than sensitive receptors. Therefore, the Project would result in a less-than-significant impact related to stationary mechanical noise.

b. Less than Significant Impact. A significant impact would occur if the Project would result in exposure of people to or generation of excessive ground-borne vibration.

Construction Vibration

Construction activities generate varying degrees of vibration, depending on the type of construction equipment in use, the construction activity, and how many pieces of equipment are being used simultaneously. High levels of vibration may cause physical personal injury or damage to buildings. However, construction vibration rarely affects human health. Construction equipment generates vibration that spreads through the ground and attenuates with distance from the source. Unless heavy construction activities are conducted extremely close (within a few feet) to the neighboring structures, vibrations from construction activities rarely reach the levels that damage structures. Construction-related vibration is often a short-term and intermittent annoyance, and the following analysis focuses on building damage. According to the Federal Transit Administration (FTA), heavy equipment (e.g., a large bulldozer and hoe ram) generate vibration levels of 0.089 inches per second peak particle velocity (PPV). The Project would not require pile driving and this activity is not assessed in the following analysis. The foundation would be constructed using drilled piles. This analysis includes representative vibration levels at varying distances from the Project site.

Operational Vibration

The Project would not include significant stationary sources of ground-borne vibration, such as heavy equipment operations. Operational ground-borne vibration in the Project vicinity would be generated by vehicular travel on the local roadways. According to the FTA, vibration from rubber-tired vehicles is rarely perceptible, except under poor road conditions (e.g., potholes) Roadways near the Project site is well maintained, and vibration generated by Project-related traffic would not be perceptible by sensitive receptors. Therefore, the Project would result in a less-than-significant impact related to operational vibration.

c. Less than Significant Impact. A significant impact would occur if the Project would expose people residing or working in the Project area to excessive noise levels from a public airport or public use airport or private air strip.

The Federal Aviation Administration requires airports to prepare noise contour maps to assess the effects of aircraft noise to surrounding land uses. The California Municipal Airport is located approximately in excess of 5-miles west of the Project site. The Project site is located outside of the

Airport Influence Area (AIA) and the Sphere of Influence (SOI) of the Airport, which places the Project outside of both the 65 dB noise contour boundary

The Project would not change the location or exposure of nearby sensitive receptors to existing airport noise contours. The Project site would accommodate travelers already traveling to the local area and region and is not anticipated to be an independent generator of tourism. The Project will not generate air traffic. The Project site is located adjacent to vacant properties and setbacks will be implemented to ensure noise levels will not impact adjacent property if future development occurs. Therefore, the Project would result in a less than significant impact related to increases in aircraft noise within two miles of a public airport.

The Project is not within the vicinity of a private airstrip, and travel to the Project site is not anticipated to increase air traffic to or from private airstrips. Therefore, the Project would not expose people working or residing in the Project area to excessive noise levels from a private airstrip. Therefore, the Project would result in a less than significant impact related to increases in aircraft noise within two miles of a public airport.

Mitigation Measures:

NOI-1 On-site noise generating construction and demolition activities shall be restricted to the hours of 7:00 a.m. to 8:00 p.m. Exceptions require that a permit be obtained beforehand from the Permits and Licenses Committee of the City.

NOI-2 The construction contractor shall ensure that all powered construction equipment shall be equipped with appropriate mufflers. The construction contractor shall ensure that all equipment is properly maintained to prevent additional noise due to worn or improperly maintained parts. The construction contractor shall use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than metal-tracked equipment), wherever possible.

NOI-3 The construction contractor shall locate construction staging areas as far as possible from sensitive uses near the Project's northern and western boundary.

NOI-4 Use of temporary noise control barrier/sound curtain which blocks the line of site with adjacent uses. These barriers could reduce construction related noise by 10 decibels or more for ground-level receptors with no line-of-sight to construction activity. The noise control barrier/sound would remain in place until all windows have been installed and all activities on the Project site are complete. Although the noise control barrier would not provide significant noise reductions for more elevated construction activity, generally heavy pieces of equipment that generate loud noise levels occur at ground level or subterranean stages of construction, such as grading or demolition.

NOI-5 The construction contractor shall establish a noise disturbance coordinator. The noise disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The noise disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable corrective measures such that the complaint is resolved. Notices sent to residential units within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the noise disturbance coordinator.

Monitoring: Mitigation measures shall be implemented through compliance with the permit review and issuance process.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING Would the Project				
21. Housing a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
b) Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?	☐	☐	☒	☐
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐
d) Affect a City Redevelopment Project Area?	☐	☐	☒	☐
e) Cumulatively exceed official regional or local population Projections?	☐	☐	☒	☐
f) 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)?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Housing Element.

Findings of Fact: The California City planning area is comprised of 201 square miles. This represents an increase of 11,200 acres resulting from the 1991 Municipal Reorganization #9-1-1 that comprised a 21,000-acre annexation and 4,800-acre detachment. The total 201 square miles planning area also represents the official City limits of California City. California City completed the 2002 Annexation, Detachment, Sphere of Influence Amendment (the City has Jurisdictional Boundaries and Coterminous Sphere of Influence), Redevelopment Area Expansion General Plan Update (Including the Housing Element), and Automotive Test Course Project. This action did not impact the availability of parcels for housing. It detached some environmentally sensitive areas and annexed some land suitable for economic development.

Based upon the 2009-2028 General Plan, the total of all single and multiple-family residential land designations represents 25 percent (33,500 acres) of the California City planning area. The residential land use designations of the General Plan and related zoning classifications show approximately 21,474 available (vacant) residential lots in the Central Core. The current population of California City is 13,972 as of July 1, 2017, and according to the General Plan, the City is approximately 60% built out. Sufficient housing availability exist to accommodate future residents

The proposed facility consists of a 265,000 SF of commercial cannabis cultivation and related, but ancillary cannabis processing and manufacturing. The Project is compatible with operations and uses permitted in the M-1, Light Industrial Zoning District with approval of a site plan review. The facility is estimated to staff approximately 250 employees with multiple shifts. The proposed Project may encourage relocation for employment.

The Project does not have a residential component. Improvements to roads and other infrastructure associated with the Project would not induce substantial growth to the area. Less than significant impacts are expected.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

The entire property is currently vacant land designated by the City General Plan and zoning for commercial and industrial activity and would not displace any existing housing or require replacement housing. No impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

PUBLIC SERVICES Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
22. Fire Services	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Safety Element.

Findings of Fact:

Fire services are provided to the project area by the California City Fire Department (CCFD). The fire department operates out of a single location, located at 20890 Hacienda Blvd, California City, CA 93505, approximately 2.6-miles from the project site. The station has four paid fire fighters on duty per day. The CCFD maintains a fleet of two structure engines (one front-line and one reserve), one brush engine, one brush patrol, one squad/off- road rescue, and two staff SUV's. The CCFD maintains mutual aid and automatic aid agreement with Kern County Fire and Edwards Air Force Base Fire, resulting in the ability of three engines being dispatched; a standard duty response that ensures a minimum number of firefighters arrive at scene per National standards. Mutual aid is an agreement among emergency responders to lend assistance across jurisdictions provided resources are available and is not to the detriment of their own service area. The project proposes the development of the 60-acre site. 20890 Hacienda Blvd, California City, CA, which does not create a substantial increase in the need for additional fire suppression and planning services.

Development of the project increases demand on fire services, however based on the site proximity to the City's existing fire station, the proposed project could be adequately served without the expansion of a new fire facility and adequate response times would be met. Additionally, the project would be required to implement all applicable and current California Fire Code Standards. This would include installation of fire hydrants as well as sprinkler systems inside the buildings. Furthermore, the project will be reviewed by City and Fire officials to ensure adequate fire service and safety because of project implementation. The project will also be required to comply with the City's Development Impact Fees (DIF) to assist with the funding of public facilities and services, including fire, therefore, less than significant impacts are expected.

Mitigation: **PUB-1**: The project will also be required to comply with the City's Development Impact Fees (DIF) to assist with the funding of public facilities and services, including fire, therefore, less than significant impacts are expected.

Monitoring: The City Building Department will collect the applicable impact fees prior to the Certificate of Occupancy.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
23. Police Services	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Safety Element.

Police services are provided to the project area by the California City Police Department (CCPD). The police department operates out of a single location and is located at 21000 Hacienda Blvd, approximately 2.6-miles from the project site. Per the Police Department website, the CCPD has 13 sworn officers and 6 support staff, totaling 19 positions. Based on the 2020 Census, California City has a population of 14,198 persons, resulting in an officer to resident ratio of 0.75 per 1,000 population. At buildout, the facility will have an approximate area of 265,000 SF: under a Class B and Class M Occupancies.

A suite of safety and security measures will be incorporated into the project. A more detailed, comprehensive security plan is required by the City during the regulatory permit phase. This will include specific locations and areas of coverage by security cameras; location of audible interior and exterior alarms; location of exterior lighting; name and contact information of Security Company monitoring the site and any additional information required by the City.

Although the project may require additional demand for police services, the demand is not expected to hinder the City's ability to provide police protection services and adequate response times would be met. Furthermore, the project will be reviewed by City and Police officials to ensure adequate fire service and safety because of project implementation. The project will also be required to comply with the City's Development Impact Fees (DIF) to assist with the funding of public facilities and services, including police, therefore, less than significant impacts are expected.

Mitigation: **PUB-2**: The project will also be required to comply with the City's Development Impact Fees (DIF) to assist with the funding of public facilities and services, including fire, therefore, less than significant impacts are expected.

Monitoring: The City Building Department will collect the applicable impact fees prior to the Certificate of Occupancy.

24. Schools	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Safety Element.

Findings of Fact: The proposed project falls under the Mojave Unified School District (MUSD). Development of the project would not create a direct demand for school service. At buildout, the facility will have an approximate area of 265,000 SF; under a Class B and Class M Occupancies. Employment generated by the project would not be expected to draw a substantial number of new residents that would generate school age children requiring public education or substantially alter school facilities or the demand for public education and no new facilities would need to be constructed. Additionally, any future development will be required to pay Development Impact Fees (DIF) to the Mojave Unified School District, developer impact fees to assist in offsetting impacts to school facilities. At the time of writing, current development fees are $0.61 per square foot for commercial/industrial projects (Level I Developer Fee Study for Mojave Unified School District, 2018). Less than significant impacts to school services are expected. As discussed below in Section 41 and 42, the proposed project would not create

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

substantial demand for public school facilities, nor result in the need to modify existing or construct new school facilities. No impacts are expected to the MUSD.

Mitigation: **PUB-3**: The project will also be required to comply with the City's Development Impact Fees (DIF) to assist with the funding of public facilities and services, including fire, therefore, less than significant impacts are expected.

Monitoring: The City Building Department will collect the applicable impact fees prior to the Certificate of Occupancy.

25. Libraries	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Safety Element.

Findings of Fact: Library services are provided by the Kern County Library system with the nearest branch located in the City at 9507 California City Boulevard. The Kern County Library provides a full range of services and resources to over 850,000 people in every city and unincorporated area of Kern County through a network operated at Kern County Library Headquarters. The Kern County Library system includes 24 branches and 2 book mobiles available to serve the County population. Development of the project would not create a direct demand for school service. At buildout, the facility will have an approximate area of 265,000 SF; under a Class B and Class M Occupancies. Employment generated by the project would not be expected to draw a substantial number of new residents that would generate school age children requiring library services. According to the Kern County employment projections, the majority of new employees to the City would qualify as mid-low- or low-income workers and are considered unlikely to substantially alter existing library branch facilities or the demand for new facilities would need to be constructed.

Mitigation: **PUB-4**: The project will also be required to comply with the City's Development Impact Fees (DIF) to assist with the funding of public facilities and services, including fire, therefore, less than significant impacts are expected.

Monitoring: The City Building Department will collect the applicable impact fees prior to the Certificate of Occupancy.

26. Health Services	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Safety Element.

Findings of Fact: According to the City Fire Chief, there are multiple choices for hospital care to serve City residents. These choices depend upon the severity and type of medical treatment required. In addition, hospital related care also depends on bed availability and the patients' preference, if not emergent. Since California City spans approximately 201 square miles, there are a number of hospitals that a patient could be transferred to for minor issues such as less critical conditions, stabilizing patience, and minor surgeries. These minor incidences are typically served by Adventist Health-Tehachapi Valley in Tehachapi, which is located approximately 20-miles from the City's western edge. Furthermore, Ridgecrest Regional Hospital is located approximately 9-miles from the east edge of the city and even Barstow Community Hospital; which is located approximately 50-miles from the southwest

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

edge of town also provides non-trauma related care. If trauma level care is necessary, patients are transported to the Antelope Valley Hospital in Lancaster, which is located approximately 8-miles from the south edge of the city. While the City does not have any Mutual Aid Agreements in terms of Hospitals in the area; City fire does have Mutual aid for Fire with Kern County and Edwards AFB as requested by the California City Fire Chief.

Mitigation: **PUB-5**: The project will also be required to comply with the City's Development Impact Fees (DIF) to assist with the funding of public facilities and services, including fire, therefore, less than significant impacts are expected.

Monitoring: The City Building Department will collect the applicable impact fees prior to the Certificate of Occupancy.

RECREATION				
27. Parks and Recreation a) Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
b) Would the Project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
c) Is the Project located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Open Space Element.

Findings of Fact: As discussed herein, the proposed project would not create substantial additional demand for public park facilities, nor result in the need to modify existing or construct new park facilities. No impacts are expected to park. As previously discussed, the Project proposes to construct a 265,000 square foot commercial cannabis cultivation and ancillary manufacturing uses, which includes about 60-acres of open space within the project area. Properties immediately to the north, east, south, and west of the project are all vacant. Approximately 250 employees will be generated by the Project, the addition of which is not anticipated to cause a substantial increase to the current existing neighborhood community, regional or pocket parks. Therefore, no impacts are expected relative to use or deterioration of existing parks. The construction of the proposed cultivation and processing facility within the proposed M-1 zoning district will not substantially degrade any existing or planned recreational facility. No construction or expansion of other recreational facilities is required for Project implementation and no impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

28. Recreational Trails	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Open Space Element.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact: The City's Municipal Code has adopted the Farm Animal Overlay and the Equestrian Overlay Zones (EOZ). California City Municipal Code Section 9-2.2408 Equestrian Overlay Zone permits the riding of equines along equestrian trails and roadways, if they do not cause any traffic impediment. According to Figure 3-1 and 3-2, of the City's Circulation Element, development of the project does not require the bikeways, equestrian, or multi-modal trail systems The Project will not negatively affect the General Plan goals of providing safe and convenient access to equestrian trails and roadway use as none are required or anticipated, by the General Plan, for the Project area. The property, in addition to the surrounding property, were previously analyzed in both the City's General Plan EIR and as part of the KernCOG 2018 Regional Transportation Plan (RTP). The City's General Plan Circulation Element also requires implementation of a planned street system that operates to its maximum efficiency by providing for multi-modal use of streets. This shall be accomplished by the following: Develop bikeways in accordance with the City Bikeway Plan, adopted October 2008[18]. According to Figure 3-1, of the General Plan Circulation Map, there are no equestrian trails located adjacent or within the project vicinity. Similarly, Figure 3-2, of the General Plan Primary Bikeway System Map, does not indicate the location of any Class 1, 2, or 3 bikeways along any of the adjacent roadway systems (e.g., TMTPR or Randsburg Blvd.) As such the Project will not increase or require the need for bike trails, as a function of its proposed use as detailed the City's Bikeways Master Plan or in the Class I Bike Trail Plan TMTPR impacts are not anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

TRANSPORTATION/TRAFFIC Would the Project				
29. Circulation a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Alter waterborne, rail or air traffic?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Open Space Element.

REGULATORY FRAMEWORK

State

Senate Bill 743

SB 743, which was signed into law in 2013, initiated an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA, with the goal of better measuring the actual transportation-related environmental impacts of any given project. Under CEQA, cities, counties,

[18] California City General Plan, page 3-14, 3-18

and other public agencies must analyze real estate and transportation projects to determine whether they may have a significant impact on the environment. One key determination under CEQA is the transportation impact of these projects. Traditionally, transportation impacts have been evaluated by examining whether the project is likely to cause automobile delay at intersections and congestion on nearby individual highway segments, and whether this delay will exceed a certain amount (this is known as Level of Service or LOS analysis). Automobile delay, as described solely by LOS or similar measure of traffic congestion, is no longer considered a significant impact under CEQA, except in locations specifically identified in the Guidelines. (Pub. Resources Code, § 21099(b)(2).) This provision took effect when the update to the CEQA Guidelines was certified in late 2018. (Guidelines, § 15064.3.)

Guideline section 15064.3 specifies that VMT analyses are voluntary until July 1, 2020. A recent appellate court decision (*Citizens for Positive Growth and Preservation v. City of Sacramento* (2019) 43 Cal.App.5th 609) confirmed that traffic congestion is no longer an environmental impact under CEQA, and VMT is not a required element of transportation analyses until July 1.

Regional Setting:

At the center of the transportation planning process is the **Regional Transportation Plan** (*RTP*). Updated on a 4-year cycle, the RTP is a long-term (20+ year) blueprint for the region's transportation system, and encompasses projects for all types of travel, including freight, intermodal and aviation. The plan includes the **Sustainable Community Strategy** (*SCS*) designed to help reduce emissions from passenger vehicle travel. The plan is accompanied by a program level environmental document that analyzes cumulative impacts, and the regional air quality conformity analysis required by federal regulations. Included in the 2018 RTP is the Sustainable Communities Strategy (SCS) required by California's Sustainable Communities and Climate Protection Act, of Senate Bill (SB) 375. The California Air Resources Board (CARB) set Kern greenhouse gas (GHG) emissions reductions from passenger vehicles and light-duty trucks at 5 percent per capita by 2020 and 10 percent per capita by 2035 as compared to 2005. In addition, SB 375 provides for closer integration of the RTP/SCS with the Regional Housing needs Allocation (RHNA) ensuring consistency between low-income housing need and transportation planning. Kern COG engaged in the RHNA process concurrently with the development of the 2014 RTP. Current and recent transportation plan goals generally focus on balanced transportation and land use planning that:

- Maximize mobility and accessibility for all people and goods in the region.
- Ensure travel safety and reliability for all people and goods in the region.
- Preserve and ensure a sustainable regional transportation system.
- Maximize the productivity of our transportation system.
- Protect the environment and health of residents by improving air quality and encouraging active transportation (e.g., bicycling and walking).

Local

City of California City – General Plan Circulation Element

The Circulation Element of the General Plan contains policies and objectives that are considered applicable to the proposed Project as identified below.

Policies:

- Provide an arterial system that serves the major centers of activity within the urbanized areas and provides capacity for the highest traffic volumes and longest trip lengths. To the extent feasible, direct access onto arterials from individual parcels should be restricted.

- Require that new development of major traffic generating projects restrict direct access onto arterials or collectors through the project design, which may include any combination of the following measures deemed acceptable by the City:
    - Access to other surrounding streets.
    - The limitation on the number and location of direct access point; and/or
    - The use of reciprocal access easements with other adjoining properties.
- The City shall require the completion of planned arterial and collector streets as they become necessary to serve new development or to meet cumulative traffic demands in the City.
- This shall be accomplished by the following:
    - Adopt a street improvement program based on a current surface maintainability and traffic impact priority system.
    - Coordinate the street improvement of necessary street facilities as a condition of land development.

THRESHOLDS OF SIGNIFICANCE

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

a. *Conflict with a program, plan, ordinance, or policy addressing the circulation system, considering all modes of transportation including transit, roadway, bicycle, and pedestrian facilities?*
b. *Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*
c. *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
d. *Result in inadequate emergency access*

a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The Project is required to detail compliance with the City's *Final California City General Plan Circulation Element (Chapter 3)*, by providing a balance circulation system to meet the needs of the residents, businesses, and visitors to California City. According to Figure 3-1 and Figure 3-2, of the General Plan, the Project is not subject to any transit, bicycle, pedestrian, or other multi-modal elements established by the City's General Plan. Furthermore, the Project is required to make improvements to both Kennedy and Lincoln Blvds., which are designated as Arterial roadways pursuant to the same exhibit referenced in the General Plan.

Furthermore, each county in California is required to develop a Congestion Management Program (CMP) that analyzes at the links between land use, transportation and air quality. The Kern County Council of Governments (KERNCOG) is the County's Congestion Management Agency. The KERNCOG prepares and periodically updates the County's CMP to meet federal Congestion Management System guidelines and state CMP legislation. The most recent CMP is included within KERNCOG's Long Range Transportation Plan (LRTP), and was completed in April 2012, does not indicate any roadways or multi-modal improvements established in the KERNCOG CMP, relative to the Project area. According to Appendix A of the LRTP, in the 2011 Kern County Congestion Management Program, Highway 14 and Highway 58 are the only roads in proximity to the Project site listed as part of the CMP System of Highways and Roadways. These roads are not directly adjacent to the Project site. Thus, the Project will not conflict with a CMP due to the distance between the Project site and these covered roadways and their apportionment of traffic trips have been built into the build-out assumptions for the overall city land uses. The GP identifies that sidewalks, bike lanes, off-street trails

and golf cart routes are especially important along major roadways in the community. Within the City, adequate public transportation choices including expanded bus routes and service and other transit choices such as shuttles, light rail, and rail where feasible. The City currently provides service through existing public transportation opportunities such as include public transit, Amtrak, and other private carriers such as Greyhound. Transit services include intracity, demand-responsive, and fixed-route operations**.** The Project will not produce a need for increases in transit services or require the substantial alteration of existing facilities and/or services**.** As no facilities currently exists, and the expansion of which is not required or contemplated by the proposed project then no conflict will occur upon any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, the Project will have a less than significant impact.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt Vehicle Miles Traveled (VMT) as a replacement for automobile delay-based level of service (LOS) as the new measure for identifying transportation impacts for land use projects. This statewide mandate took effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December of 2018) (Technical Advisory).

VMT Analysis Methodology

At the time of the preparation of this Initial Study, the City has not formally adopted its own VMT analysis guidelines and thresholds. Therefore, for the purposes of this analysis the recommended VMT analysis methodology and thresholds recommended by the Technical Advisory and supported by OPR's Guidelines have been used. As outlined in the Technical Advisory, mixed-use projects such as the proposed Project need to evaluate each component of the project independently and apply the relevant significance threshold for each project type (i.e., office, retail, etc.). For the purposes of this VMT analysis, the evaluation of VMT will focus on the industrial/manufacturing uses (i.e., commercial cannabis cultivation uses) only. Consistent with Technical Advisory recommendations, local serving retail that is typically less than 50,000 sf will tend to improve retail destination proximity and short trips, which in turn reduces VMT. According to the Technical Advisory, uses such as the lodging, retail, and destination-orientated uses, proposed by the Project are presumed to create a less-than-significant impact.

The Technical Advisory provides for the following recommended threshold for industrial land use projects which used for the Project: *A proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.*

Project Screening Analysis

The Technical Advisory provides details on appropriate "screening thresholds" that can be used to identify when a proposed land use project is anticipated to result in a less-than-significant impact without conducting a more detailed analysis. Screening thresholds are broken into three types:

- Project Type Screening
- Map Based Screening based on Low VMT Area
- Transit Priority Area (TPA) Screening

For the purposes of this analysis, the initial VMT screening process has been conducted with using the Map Based Screening based on Low VMT Screening Tool (Screening Tool), which uses screening criteria consistent with the screening thresholds recommended in the Technical Advisory.

Project Type Screening

Projects that are consistent with the current Sustainable Communities Strategy (SCS) or general plan, and that generate fewer than 110 daily vehicle trips be presumed to have a less-than- significant impact on VMT. Based on the Project's trip generation (see Attachment A), the Project is not consistent with the City's general plan and would generate more than 110 daily vehicle trips, therefore, the Project would not be eligible to screen out based on project type screening.

The Project Type screening threshold is not met.

Table 6-1: Trip Summary Information[19]

Land Use	Average Daily Trip Rate		
	Weekday	Saturday	Sunday
Industrial Park	1,809.95	659.85	193.45
Parking Lot	0.00	0.00	0.00
Total	1,809.95	659.85	193.45

Source: Annual CalEEMOD Analysis Results_20210806

Low VMT Area Screening

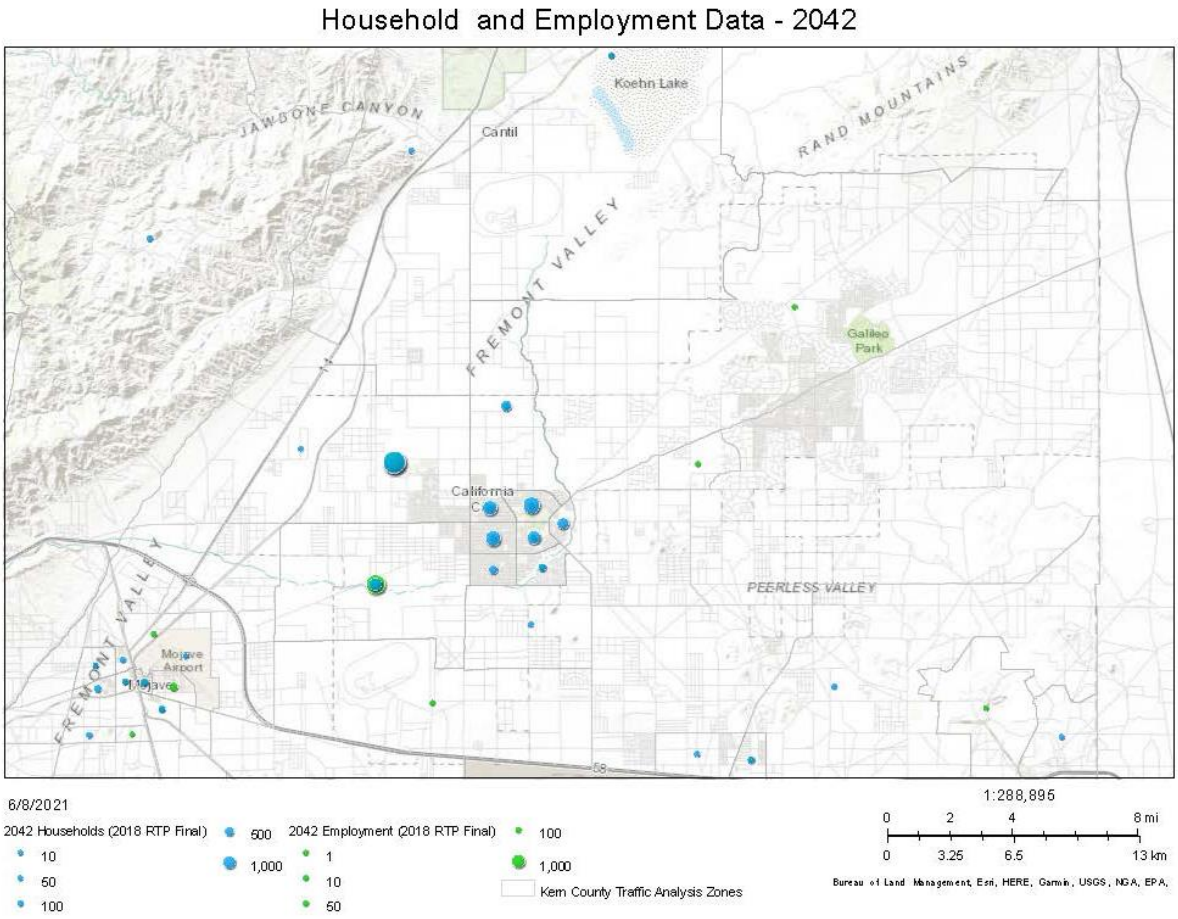
The Screening Tool uses the sub-regional Kern COG – VMIP 2 Model Development Report to measure VMT performance within individual traffic analysis zones (TAZ's) within the Kern COG region. The Project's physical location based on parcel number was selected within the Screening Tool to determine the relevant TAZ's VMT as compared to the jurisdictional average. The Project boundary is located in TAZ 1464 and appears to be within a low VMT generating TAZ based on daily total VMT per service population. As measured by the baseline year of 2015, the total of 8 households and 23, non-farm labor related jobs, were identified. The Kern COG model does not anticipate an increase in either households or employment, located within TAZ 1464, by the year 2042.

Figure B: 2042 Household and Employment Data

Kern County TAZ 1464	
Acres	56,650.10
TAZ	1464.00
2015 Households	8
2042 Households	23
2015 Employment	8
2042 Employment	23

[19] CalEEMod (v. 2016) Annual Modeling Analysis, Rush Environmental, LLC

Figure C: 2042 Household and Employment Data



Based on a review of the land use information contained within TAZ 1464 for the KERNCOG Trip Generation base year (2015) model, the zone includes exceptionally low levels of employment and low amounts of population and household data. The proposed Project would increase the number and type of employment uses within the TAZ. However, the increases are considered incremental as the 60-acre project area is 0.11% of the total TAZ area and therefore is consistent with the underlying assumptions considered in TAZ 1464**.**

The Low VMT Area screening threshold is met.

Conclusions

The Project is located within a Low VMT Traffic Analysis Zone (TAZ) and will not significantly increase the amount of employment or households as compared to the underlying assumptions in the 15,000-acre TAZ. Project VMT does not require mitigation measures to reduce trips and levels that would be less-than-significant.

Level of Significance: Less than Significant

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed Project does not propose any design features that would increase traffic hazards, as the Project is consistent with the City's General Plan Circulation Element, and project-level infrastructure

improvements will be established as Conditions of Approval to improve adjacent roadways**.** The Project is bisected by TMTPR, which is classified as an Arterial Highway in the General Plan Circulation Element (Figure 3-1). An Arterial Highway is a divided road with four through lanes, providing for the movement of traffic to and from the planning area; the movement of traffic to and from activity centers within the planning area and the planning sub-areas; and the distribution of traffic to and from the highways. The Project is proposing to construct at-least two (2) access driveways on TMTPR which will be constructed to City standards. The primary driveway will be signalized. The driveways do not have the potential to change the geometric design of TMTPR in a manner that would substantially increase hazards due geometric design feature (e.g., sharp curves or dangerous intersections). The completion of a Site Plan Review process will require incorporation of the aforementioned designed elements.

Level of Significance: Less than Significant

d) Result in inadequate emergency access?

The proposed Project does not propose any design features that would increase traffic hazards, as the Project is consistent with the City's General Plan Circulation Element, and project-level infrastructure improvements will be established as Conditions of Approval to improve TMTPR**.** The Project is bisected by TMTPR; which is roadways are classified as Arterial Highways in the General Plan Circulation Element (Figure 3-1). An Arterial Highway is a divided road with four through lanes, providing for the movement of traffic to and from the planning area; the movement of traffic to and from activity centers within the planning area and the planning sub-areas; and the distribution of traffic to and from the highways. The Project is proposing to construct at-least two (2) access driveways on TMTPR which will be constructed to meet City standards. The primary driveway will be signalized. The driveways do not have the potential to change the geometric design of TMTPR in a manner that would substantially increase hazards due geometric design feature (e.g., sharp curves or dangerous intersections). Impacts are less than significant. As a standard condition of approval for future development, access roads shall be provided to within 150-feet to all portions of the exterior building walls and shall have an unobstructed width of not less than 24-feet. The construction of the access roads shall be all weather and capable of sustaining 40,000 lbs. over two axles for areas of residential development and 60,000 lbs. over two axels for commercial developments. Approved vehicle access, either permanent or temporary, shall be provided during construction.

Level of Significance: Less than Significant

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

30. Tribal Cultural Resources a) Would the Project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 2574 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is: Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1 (k); 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 subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c). of Public Resources Code Section 5024.1 for the purpose of this paragraph, the lead agency shall consider the significance to a California Native tribe.				

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Open Space Element.

Findings of Fact: According to the California City General Plan Cultural Resources Section , there are five recorded historic archaeological sites within the City. According to Table 5-3, *Archeological Studies and Previously Recorded Prehistoric Sites*, a list of previously recorded historic sites are listed; however, all sites set forth in Table 5-3 are located within Township 11 – North, Range 11 – West whereas the proposed Project is located in Township 32-South, Range 38-East and nowhere within the vicinity of the aforementioned sites. Furthermore, the potential archeological sites mentioned in Table 5-4 of the General Plan pertain specifically to the *Proposed Facility Area* which is not within vicinity of the proposed project and a review of the USGS 7.5-minute Series Topographic Quadrangle Map failed to reveal any correlation between sites identified in the General Plan Open Space Element and the Project site. The historical, cultural, and archaeological resources surveys outlined within the California City General Plan indicate that the project site is not listed or eligible for listing in the California Register of Historical Resources or in a local register. Therefore, no impacts are anticipated with project implementation. Additionally, the California City General Plan states that the City had no Native American Sacred Sites within the City's boundary. Therefore, project implementation is not expected to have a substantial adverse change in a significant Tribal cultural resource. Less than significant impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

UTILITY AND SERVICE SYSTEMS Would the Project				
31. Water c) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☒	☐	☐
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City Stormwater Masterplan, dated 2015.

California City Water Department provides domestic water service to the existing areas of development within the City; however, there is currently no potable water service to the Project site. As such, new facilities are required to ensure adequate health and safety standards are met. According to Figure III-1, of the City's 2015 Urban Water Management Plan (UWMP), a 20-inch water main line is located within the right-of-way for TMTPR. Therefore, the Project is required to prepare interconnection plans in the same method described below for sanitary sewer facilities, detailing the connection from the Project site, and connecting with TMTPR at a future interconnection point. (See Figure III-1, of the City's Storm Water Masterplan). The City provides approximately 4,410 active service water connections to its incorporated area (203 square miles). The City maintains approximately 313 miles of water main

lines ranging in size from 4 to 21 inches in diameter, and a 20-inch transmission line connects the City wells to the reservoirs located in the foothills. As stated in the prior discussion, the California City Wastewater Treatment Facility, which is designed to treat an average flow of 1.5 million gallons per day, and peak flow of 3.0 MD. The approximately 60-acre project site is currently vacant and undeveloped, with scattered vegetation. Existing facilities such as water and electricity currently run along TMTPR The proposed Project will connect to an existing 6-inch water main line, which is currently available in TMTPR and served by the City.

The wastewater from the proposed project is expected to be minimal and accommodated given the size and nature of the project. The Project will require sub-surface or onsite waste disposal systems (OTWS) as there are no sewer facilities located within this portion of TMTPR Construction of OTWS will comply with the requirements of the State Regional Water Control Board, Kern County Department of Environmental Health, and the City Public Works Department. OTWS are required to comply with the Fremont Valley Integrated Regional Water Management Group (IRWMG), consisting of California City, Mojave Public Utility District (MPUD), and the Antelope Valley East Kern Water Agency (AVEK). The review by these groups will ensure wastewater capacity and compliance. Additionally, OTWS installation and connection fees in place at the time of development or connection would be collected by California City. Therefore, less than significant impacts are expected.

Groundwater is the primary source of domestic water supply in California City. According to the Urban Water Management Plan, California City currently uses six groundwater wells and surface water purchased from the Antelope Valley East Kern Water Agency (AVEK) for its groundwater supply. The project property lies within the Fremont Valley Groundwater Sub-basin, within the Lahontan Region (Region 6). The project site is managed by the Fremont Valley Groundwater Basin Integrated Regional Water Management Group (IRWMG), which consists of California City, Mojave Public Utility District (MPUD), and the Antelope Valley East Kern Water Agency (AVEK).

As stated in prior discussions, the groundwater wells in California City produced over 93-percent (%) of the water supply in 2000 to 2001. Per the Water Master Plan, Well No. 10A is the closest well to the project site, south of California City Blvd., approximately 1.5 miles northwest of the Project site. According to the California City General Plan, future water demands for the City will be met by the construction of new water wells and through additional purchase of AVEK water. According to the 2015 Urban Water Management Plan (UWMP) updated in 2017, the addition of two new wells will assist in the City's goal in meeting future water demands from 2020 through 2040. These wells include Well No. 10 in 2018 and Well No. 11 in 2019. As stated in the UWMP, it is projected that in 2040 the City will be using 82.3 percent of the current water production capacity. It is noted that 82.3 percent capacity utilization in 2040 is conservative and that for the foreseeable future, the City has excess production capacity that will handle system demands year around and during worst case summer demand months.

As required by the policies of the General Plan, the City will continue to cooperate with IRWMG and other agencies/jurisdictions in implementing a groundwater replenishment and ensuring the viability of the Fremont Valley Sub-basin. The proposed development will be expected to follow water conservation guidelines to mitigate impacts to public water supplies. Examples of these water conservation methods include water conserving plumbing fixtures, drought tolerant landscaping, and drip irrigation systems. The project proposes to connect to the existing water line located in TMTPR. Additional domestic water improvements necessary to serve this development will be identified by IRWMG and approved by the City of California City. Less than significant impacts to water supply are expected.

Mitigation:

WRT-1: The Project shall cause a potable water interconnection study to be performed and submitted to the City Public Works Department for review. This study will evaluate the sewer connection point, from the Project to the nearest sanitary sewer location currently within the TMTPR right-of-way.

WRT-2: The Project shall cause final working drawings (construction-level) for irrigation, landscaping, and final planting plans to be prepared, submitted, and installed pursuant to said plans.

WRT-3: The Project shall apply for and retain Will Serve Letters, from the California City water department, prior to the issuance of building permits.

Monitoring: The City Public Works Department will review the necessary plans and issue the necessary permits required for the sewer line construction.

32. Sewer a) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☒	☐	☐
b) Result in a determination by the wastewater treatment provider that serves or may service the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?	☐	☒	☐	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Land Use Element, Final-15415-LAMP (2018)

Findings of Fact: The City of California City operates one wastewater treatment plant located at 5835 Nelson Drive, which according to the Kern County GIS database, is approximately 1.4-miles southwest of the Project site. All City sewage is collected into sewage mains and is delivered to the 1.5 Million Gallon per Day (MGD) sanitary facility. Sewage flows by gravity to the existing treatment plant facilities. Future master plan for sewer line is designed to forecast potential growth within the first community. Population projections were utilized to determine future sewer capacity demand. The future master plan has been designed to serve the geographic area of central and southern part of the City Core, where the housing development is growing[20]. Currently, approximately 30 percent of the City is served by the WWTP, where onsite septic systems serve the remaining areas. According to the UWMP, areas of the City with high usage of septic system that near approaching the two (2) equivalent dwelling units per acre where also considered in designing the future sewer master plan.[21] The City is currently identifying funding source for expansion of Wastewater Treatment Plant, the "Backbone" component of the sewer system project. Currently the City continue to allow OWTS for new construction with the understanding that such systems will no longer be allowed once the overall City density meets or exceeds the maximum 2 equivalent dwelling unit/acre density. This restriction is mandated by the Regional Water Quality Control Board (RWQCB) and further stated in City Ordinance No. 89-414 (Appendix E). Once this threshold is met, then municipal sewer systems will be required for all future development projects.

The existing California City Wastewater Treatment Facility is designed to treat an average flow of 1.5 MGD and peak flow of 3.0 MGD. Currently, the average influent flow is 0.8 MGD; which provides sufficient capacity to accommodate future development applications. The Project anticipates the use of municipal wastewater/sewer facilities provided the expansion of new facilities from the Project to the nearest sewer interconnection point which current resides within Twenty Mule Team Parkway Road (TMTPR). According to Figure 4: City Sewer Density Zone Map of the City's Local Agency Management Plan (LAMP), the Project is not located within a Sewer Density Zone. However, according to Figure 6: Existing Sewer System Map, a 24-inch sewer main trunk line is located to the south of Project site. This sewer main line is located within Twenty Mule Team Parkway Road (TMTPR), which is located adjacent to the Project site. Based upon the nature of the proposed development, the Project will be required to

[20] California City Stormwater Masterplan, 2015 Update (dated April 2017), Page 20
[21] Ibid, Pg. 47

connect to the City's municipal sewer system, thus constructing an 8-12" sewer line from the southeasterly boundary of the project site to an interconnection point at TMTPR.

Since the anticipated sewer location will be within the existing right-of-way for TMTPR, which is an existing facility previously contemplated for municipal infrastructure improvements, the resulting impacts are anticipated to be less than significant with the following mitigation measures incorporated. Less than significant impacts to wastewater treatment are expected.

Mitigation:

SWR-1: The Project shall cause a sewer interconnection study to be performed and submitted to the City Public Works Department for review. This study will evaluate the sewer connection point, from the Project to the nearest sanitary sewer location currently within the TMTPR right-of-way.

SWR-2: The Project shall apply for and retain Will Serve Letters, from the California City water department, prior to the issuance of building permits.

Monitoring: The City Public Works Department will review the necessary plans and issue the necessary permits required for the sewer line construction.

33. Solid Waste a) Is the Project served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐
b) Does the Project comply with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (City Integrated Waste Management Plan)?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Safety Element.

Findings of Fact: Solid waste disposal and recycling services for the City of California City are provided by Waste Management (WM), which is a publicly traded national corporation providing municipal waste hauling services for both residential and commercial projects. However, Waste Management does not provide removal of cannabis byproducts or waste generated from the manufacturing, testing, and packaging processes, due to regulations set forth by the Cannabis Control Bureau. As such, the Project is required to contract with a waste haul provider licensed by the state of California to haul cannabis related waste resulting from the harvesting and manufacturing processes. Commercial waste and recycling collected from the proposed Project will be hauled to the CA City Recycling and Transfer Station (15-AA-0401). Waste from this transfer station is then sent to a permitted landfill or recycling facility within Kern County. These include Bena, Boron, Mojave-Rosamond, Ridgecrest, Shafter-Wasco, Taft, and Tehachapi Landfills. Cal Recycle data indicates that these landfills have 3 to 90-percent (%) of their remaining estimated capacity, with the Mojave-Rosamond Sanitary Landfill having the lowest remaining capacity, 3-percent (%), and the Boron Sanitary Landfill with approximately 90-percent (%) remaining capacity. Additionally, solid waste generated by a cannabis facility would be minimal and would comply with all cannabis waste regulations. Less than significant impacts to solid waste are expected. For non-cannabis related waste projects, such as solid waste generated by the project consisting of standard commercial and office related waste and byproducts generated from uses such as commercial kitchens, hotel and motel lodging facilities, and similar type of uses, the removal by Waste Management is acceptable and not anticipated to create or cause any substantial increase in service or severely hamper the ability to adequately provide service. Solid waste disposal and recycling services for the City of California City are provided by Waste Management (WM). Solid waste generated by the project would consist of standard

household/office waste. The City of California City contracts with Waste Management to serve the solid waste disposal needs of the city, including the project. The project will comply with all applicable solid waste statutes and guidelines. No impacts are expected relative to solid waste statues and regulations.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

34. Utilities

Would the Project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

a) Electricity?	☐	☐	☒	☐
b) Natural gas?	☐	☐	☒	☐
c) Communications systems?	☐	☐	☒	☐
d) Storm water drainage?	☐	☐	☒	☐
e) Street lighting?	☐	☐	☒	☐
f) Maintenance of public facilities, including roads?	☐	☐	☒	☐
g) Other governmental services?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Safety Element; Sempra Energy So-Cal Gas Transmission Pipeline Interactive Mapping.

Findings of Fact: The Project may require the extension and/or construction of municipal utility infrastructure, the implementation of which may result in effecting the project area and the surrounding environment.

a) Electricity: Southern California Edison (SCE) does not currently serve the project site, as the site, and the surrounding environment, consist of either vacant or fallow lands. However, SCE does have an obligation to serve the project with electric utility infrastructure at the soonest opportunity feasible. The timeframe in which electric utility infrastructure is anticipated is much longer than the development timelines anticipated by the Project applicant. Therefore, reliance on CARB-certified generators is an acceptable, short-term, solution to providing the necessary electrical service to operate critical elements of the Project.

b) Natural Gas: According to the Sempra Energy So-Cal Gas Transmission Pipeline Interactive Mapping software, the Project will not impact or disrupt any high-pressure transmission or distribution lines as there are none available or located within several miles of the project site. However, the project will eventually require the extension of natural gas infrastructure if reliance upon alternative fuel sources is not feasible (e.g., solar, wind, or propane, just to name a few).

c) Communications systems: California City is served by several telecommunications and wireless providers with telephone, broadband, and wireless communications all operating within the municipal boundary. Based upon the Project description, and its anticipated use, the expansion of critical telecommunications infrastructure will not exceed the anticipated growth projections set forth by the City or it's telecommunication providers. Furthermore, the California Public Utilities Commission (CPUC) approved several projects in late 2020 and early 2021 that will add to reliability and interoperability within the City and more especially, within the project area. As such less than significant uses are anticipated.

d) Storm water drainage: The City owns and maintains over 200 storm drain structures, which is provided through 40-plus miles of drainage pipe and their associated ditches of which the City is responsible for ongoing maintenance and repair. The ultimate construction and operation of

the proposed project will require the extension of storm drain facilities to an existing interconnection point located easterly within TMTPR. The construction of this facility will need to occur prior to the first occupancy or final inspection of the first completed unit or structure located on-site. The resulting storm drain improvements are all within existing City R/W, which have been previously analyzed and anticipate development of streets, storm drains, and other dry and wet utilities within the existing R/W.

e) Street lighting: The streetlights will be maintained by the City Public Works Department through the assessment of fees through an allocation property taxes within the applicable assessment district. Maintenance of public facilities, including roads: The project anticipates that improvements will be completed for the full width of TMTPR, as the Project bifurcates the site. Once street improvement conditions are completed to the City's satisfaction, the developer shall dedicate in fee title, the specified roadways to the City. Once accepted by the City, maintenance obligations are funded through a variety of mechanisms, including the primary source being from gas taxes.

f) Other governmental services: The Project will not create an undue burden or cause existing facilities to be expanded and/or new facilities to be constructed outside of those reference and discussed herein.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

35. WILDFIRE. If located in or near state responsibility areas classified as very high hazard severity zone, 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 pollutant concentrations from a wildlife or uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Safety Element. California Department of Forestry and Fire Protection: State Responsibility Areas for Fire Protection.

Findings of Fact: The California City Fire Department continues to interface with the citizens and community leaders, and to provide a solid base for stable long-term emergency response and disaster preparedness. Many hours have been spent revamping and relaunching programs such as the Community Emergency Response Team, Youth Fire Explorer Program, and Reserve Fire Fighters. As these programs get underway, we look forward to many more new and exciting programs for the community. More specifically, the total incident responses, for the last reportable year (2019) were 2,857, which was an increase of 52.4% over the previous decade (2009 – 2019). Given the increasing population and development within the City, the Fire Department does not anticipate a significant drain

or reduction of service as these trends do not exceed the projections for reasonable growth and expansion previous anticipated by the City. According to the Cal-Fire, Fire Hazard Severity Zone (FHSZ) Map Viewer, the Project site is located in a Local Responsibility Area (LRA). The nearest Very High Severity Zone (VHSZ) is located approximately 27-miles from the Project site.

a)-d) According to the California City Fire Rescue Operational Report (dated, June 2016), the Project will not result in an impact to an adopted emergency response plan or emergency evacuation plan as identified in either the 2016 Operational Report or the 2019 CCFD Annual Report. The City's Operational Division is currently budgeted for three Captains, three Fire Fighter-Engineers, and six Fire Fighters for an estimated Operational Budget in the amount of $1,381,435. The City's annual reporting addresses and analyzes all potentially new and recently approved projects and estimates an anticipated growth rate based upon this data. Furthermore, firefighter staff is trained to respond to structure fires, Wildland fire, medical emergencies, special rescues, vehicle collisions, hazardous materials, and a wide variety of other service calls. Given that the presence of adequate fuel to initiate a wildland fire is low, given the surrounding topography, climate, and ecology specific to the City, the adherence to required California Building Codes (v. 2019), which includes the amended and updated fire code, is considered adequate to significantly reduce (if not eliminate altogether) a significant risk from wildland fires. According to the NRCS SoilWeb database, the Project site contains minimal and sparse vegetation, and contains primarily sandy loam-type soils which are not conducive to the production of trees or forest vegetation.

MANDATORY FINDINGS OF SIGNIFICANCE					
36.	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, 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?	☐	☐	☒	☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan.

Findings of Fact: As concluded in the Biological and Cultural Resources sections of this document, the proposed project expansion would result in less than significant impacts with mitigation to these resources.

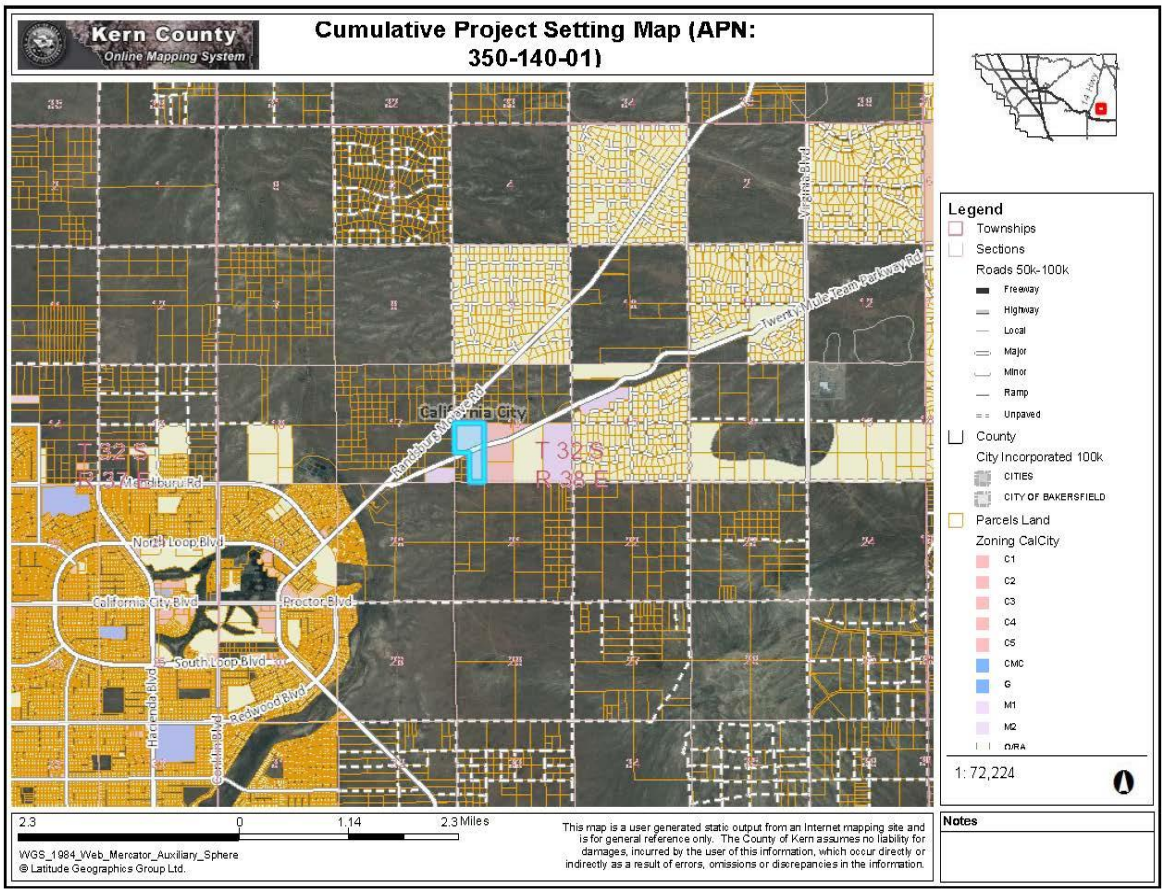
Based upon the programmatic biological report, the Project will require an Incidental Take Permit (ITP) to be prepared in conjunction with approved grading and engineering plans. The biological report indicated that potential habitat and a single species of Mojave Ground Squirrel (MGS) were located on the Project site and therefore focused protocol surveys were suspended in favor of an ITP.

The project is compatible with the City of California City General Plan land use designation and its surroundings. The project will not significantly degrade the overall quality of the region's environment, or substantially reduce the habitat of a wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number, or restrict the range of a rare of endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Less than significant Impacts with mitigation is expected.

37.	Does the Project have impacts which 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, other current Projects and probable future Projects)?	☐	☐	☒	☐

Source: Staff review, Project Application Materials

Findings of Fact: The project is in a partially developed setting designated with a mixture of commercial to the east, residential to the northeast, and open space to the south and west. Further within the surrounding Project area, the site is surrounded by larger developed lots of previously recorded, but unbuilt residential communities. While the surrounding environment primarily consist of open desert, with the closest developed area being the “silver saddle” resort area and is bifurcated by Twenty Mule Team Parkway Road. The surrounding project settings holds limited potential for future residential developments, which is detailed on the exhibit referenced below:



Cultivation of commercial cannabis is allowed within the proposed from M-1 (Light Industrial) Zoning District, along with a concurrent cultivation regulatory permit issued by the City of California City. In addition, the Project is required to comply with all applicable state and local laws and regulations pertaining to the industrial, commercial, and manufacturing of cannabis and cannabis-related products. The proposed Cannabis Cultivation facility is compatible with the existing and future land uses within the M-1 zone. As stated in the General Plan, Appendix 7 (Page 1), the California Department of Fish and Wildlife (CDFW) State of California Department of Fish and Game recommended development of a comprehensive biological mitigation plan for the redevelopment project area. The City’s General Plan

requires that Biological Resource Assessment and/or Focused Studies are required on all projects except for single family residential home, duplex and tri-plex. As such, a programmatic biota study has been conducted for the Project and pursuant to the mitigation measures incorporated therein, the Project will have less than significant impacts to Biological Resources.

Based upon the information and mitigation measures provided-within this Initial Study and implementation of the proposed cultivation-and processing facility is not expected to result in impacts that, when considered in relation to other past, current, or probable future projects, would be cumulatively considerable. Less than significant impacts, with mitigation incorporated, are expected.

38.	Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Source: Staff review, Project application, Materials used in earlier analysis.

Findings of Fact: As discussed in the various sections throughout this Initial Study, the proposed project would not include a land use that could result in substantial adverse effects on human beings. The City of California City has established regulations pertaining to commercial cannabis facilities to ensure these businesses do not conflict with the City's General Plan, its surrounding uses, or become detrimental to the public's health, safety, and welfare. The City's review process of cannabis facilities and facility operations will ensure that the regulations are fully implemented. Based upon the findings provided in this document, and mitigation measures and standard conditions incorporated into the project, less than significant impacts are expected.

V. EARLIER ANALYSES

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 as per California Code of Regulations, Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:

Earlier Analyses Used, if any:

- City of California City General Plan Environmental Impact Report (http://www.californiacity-ca.gov/CC/index.php/planning/planning-publications)
- City of California City Municipal Code (CCMC), Title 9, Land Use and Development (https://library.municode.com/ca/california_city/codes/code_of_ordinances)
- Kern County GIS (https://maps.kerncounty.com/H5/index.html?viewer=KCPublic&layerTheme=0&scale=72223.819286&basemap=&center)
- 2012 California City Transit Development Plan (https://www.californiacity-ca.gov/CC/index.php/planning/informational-guides)
- 2017 California Climate Change Scoping Plan (https://ww2.arb.ca.gov/sites/default/files/classic//cc/scopingplan/scoping_plan_2017.pdf
- Site Development Review (SDR) Process Information (https://www.californiacity-ca.gov/CC/index.php/planning/informational-guides)
- KernCOG 2018 Regional Transportation Plan (https://www.kerncog.org/category/docs/rtp/)

Location Where Earlier Analyses, if used, are available for review:

City of California City
250 Hacienda Boulevard
California City, CA 93505-2293
(760) 373-8661

VI. AUTHORITIES CITED

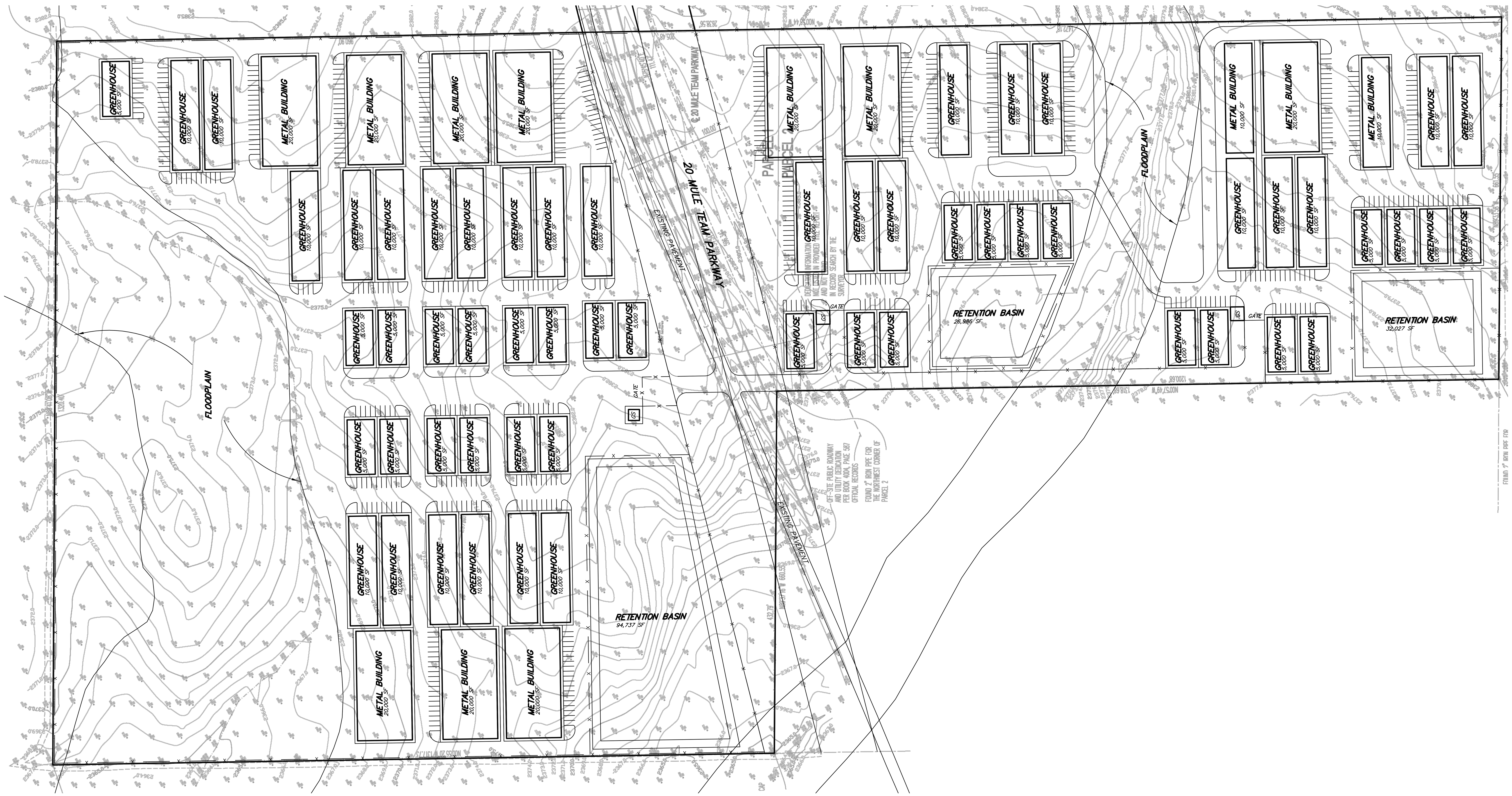
Authorities cited: Public Resources Code Sections 2583 and 2583.05; References: California Government Code Section 65088.4; Public Resources Code Sections 2580(c), 2580.1, 2580.3, 2582.1, 2583, 2583.05, 2583.3, 2593, 2594, 2595 and 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *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) 121 Cal.App.4th at 159; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 52 Cal.App.4th 656.

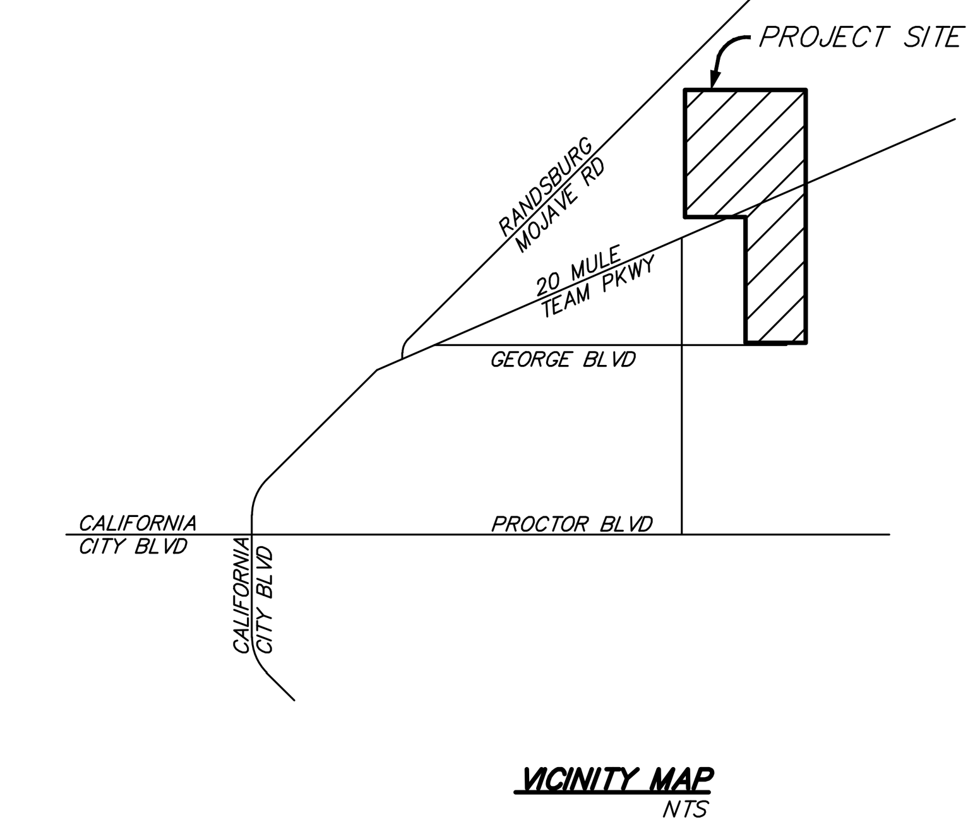
APPENDIX A

SITE PLAN

(APN: 350-140-01*)*

CONCEPTUAL SITE PLAN
APN: 350-140-01





VICINITY MAP
NTS

DEVELOPER

LELAND KRELLE/ DOUG NAGY
INNOVATIVE REAL ESTATE INVESTMENTS
200 VALLEY BLVD.
TEHACHAPI, CA 93561
PHONE: (760) 403-6087

CIVIL ENGINEER

ARROW ENGINEERING SERVICES INC.
42140 TENTH STREET WEST
LANCASTER, CA 93534
PHONE: (661) 940-0043

SYMBOL LEGEND

- TR — TRASH ENCLOSURE
- HANDICAP STRIPING
- CONCRETE SIDEWALK
- GS — GUARD SHACK
- S — SAFE ROOM
- M — MANUFACTURING
- -X- — FENCE
- — — — 200' SETBACK LINE
- — S — SEWER LINE
- — W — WATER LINE
- EDGE OF PAVEMENT
- BLOCK WALL
- CONTOUR LINE
- FIRE HYDRANT

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

GENERAL NOTES:

EXISTING USE:	VACANT
PROPOSED USE:	LIGHT INDUSTRIAL
EXISTING ZONE:	R1
PROPOSED ZONE:	M-1
GENERAL PLAN DESIGNATION:	LIGHT INDUSTRIAL
GROSS ACREAGE:	±60.0 ACRES
AREA OF DEDICATION:	TBD
ASSESSOR'S PARCEL NUMBER:	350-140-01
SANITARY SEWERS:	PUBLIC SEWER AVAILABLE
WATER:	CALIFORNIA CITY
ELECTRICITY:	SOUTHERN CALIFORNIA EDISON (760)375-1853
GAS:	SO. CALIFORNIA GAS CO. (818)701-2564
FIRE DEPT:	CALIFORNIA CITY FIRE DEPT (760)373-4841
FLOOD ZONE	ZONE X - FIRM 06029C2920E, EFFECTIVE 9/26/2008
TOPOGRAPHY	FEMA 20' CONTOURS

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AESI

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42140 TENTH STREET WEST
LANCASTER, CA 93534
PHONE: (661) 940-0043

SIGNATURE DATE

DRAWING NAME: 196778-SITEPLAN-60-AC PLOT DATE: 3/4/2019

CONCEPTUAL SITE PLAN
APN 350-140-01

LELAND KRELLE/ DOUG NAGY
INNOVATIVE REAL ESTATE
200 VALLEY BLVD.
TEHACHAPI, CA 93561

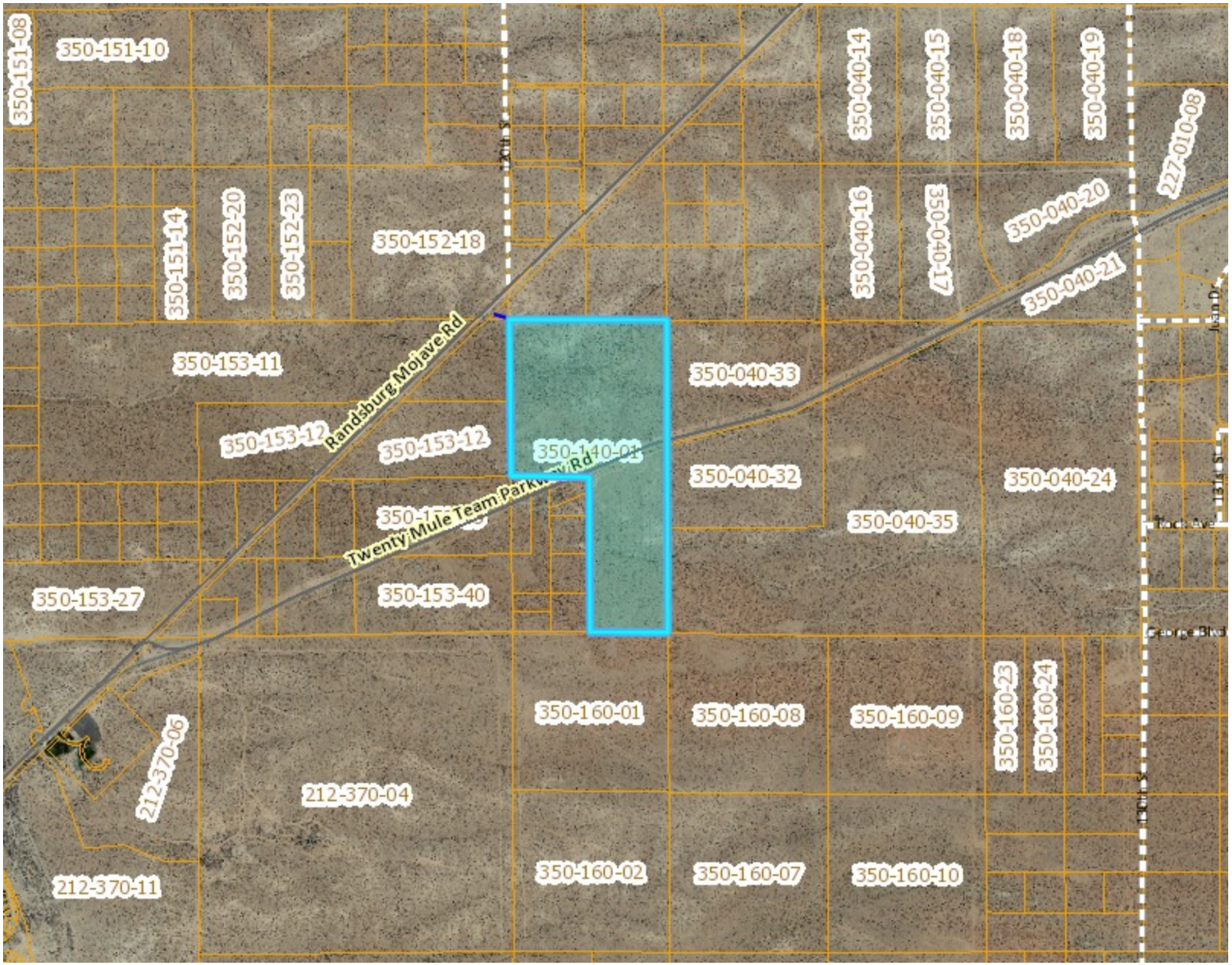
APPENDIX B

PROJECT EXHIBITS

(APN: 350-140-01*)*

Kern County
Online Mapping System

2016 AERIAL MAPPING (APN 350-140-01)



Legend

Parcels Land

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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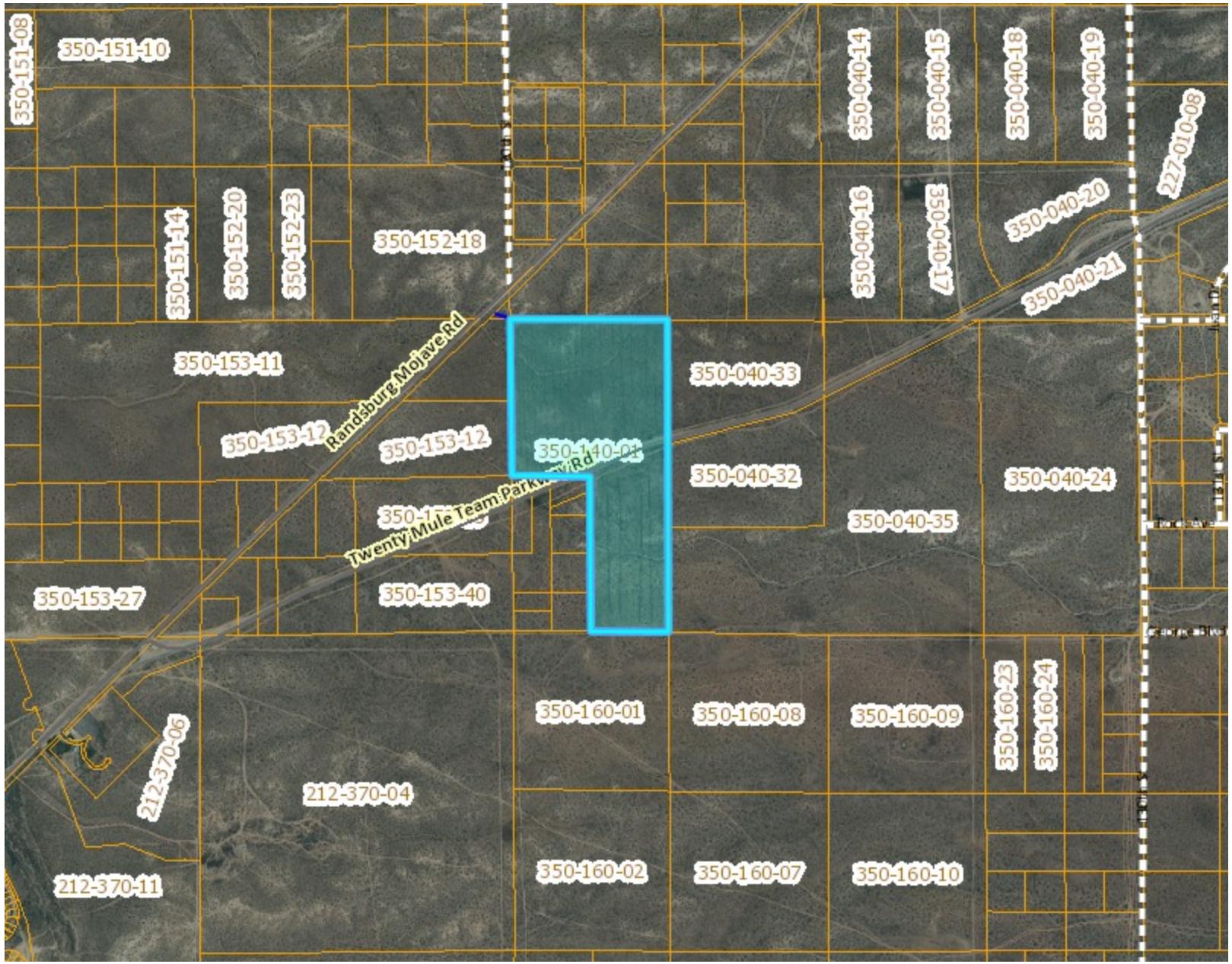
This map is a user generated static output from an Internet mapping site and is for general reference only. The County of Kern assumes no liability for damages, incurred by the user of this information, which occur directly or indirectly as a result of errors, omissions or discrepancies in the information.

Notes

AERIAL MAPPING (APN 350-140-01)



Legend

Parcels Land

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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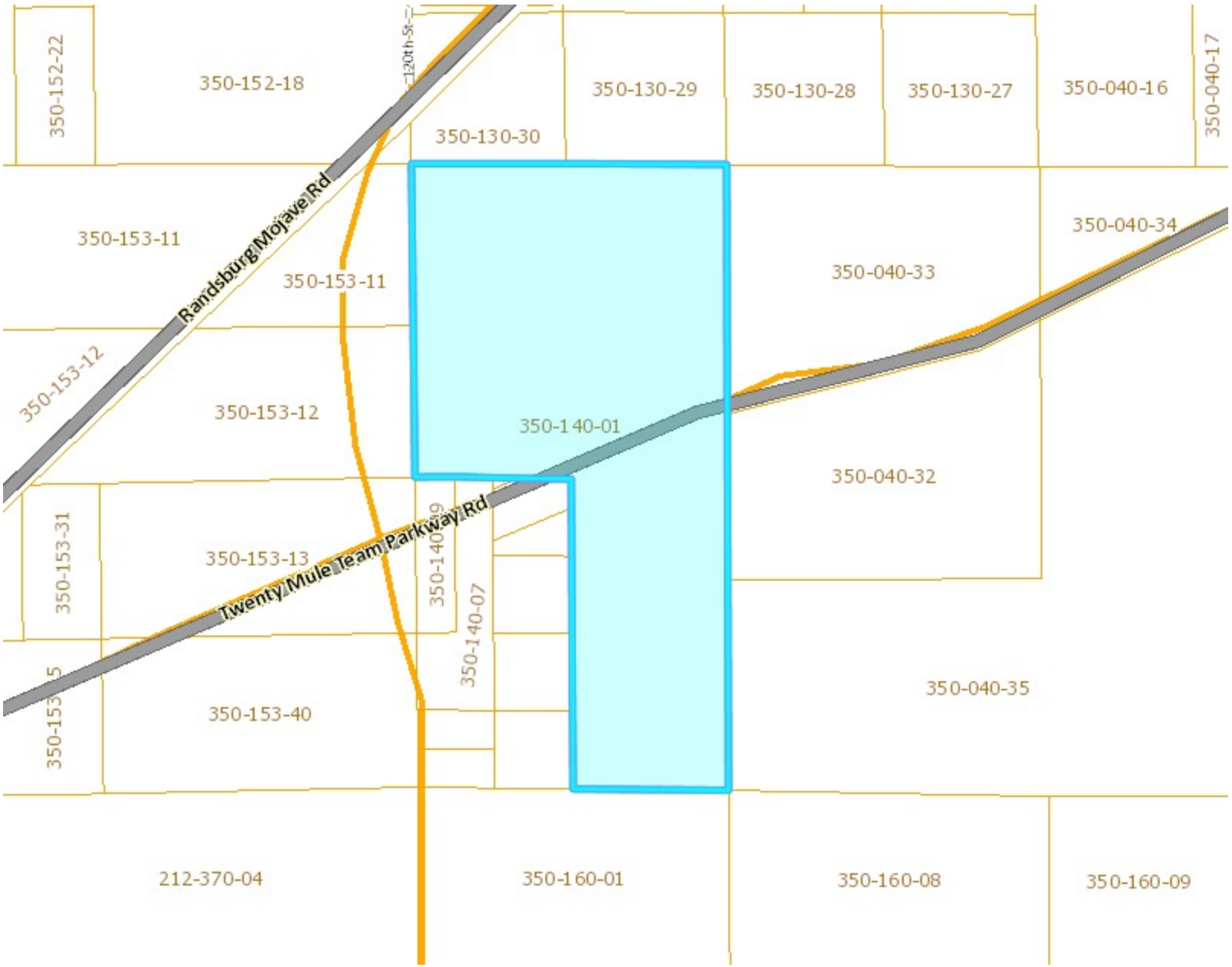
Notes

Circulation/Roadway Maps (APN: 350-140-01)



Legend

- County Maintained Roads
- Roads 5k-10k
  - Freeway
  - Highway
  - Major
  - Minor
  - Local
  - Ramp
  - Unpaved
- Parcels Land
- Kern Circulation Element
  - arterial/major highway
  - arterial/major hwy (6 lanes)
  - collector
  - freeway/expressway
  - future freeway
  - local
  - railroad
- County Facilities

1: 9,028

0.3 0 0.14 0.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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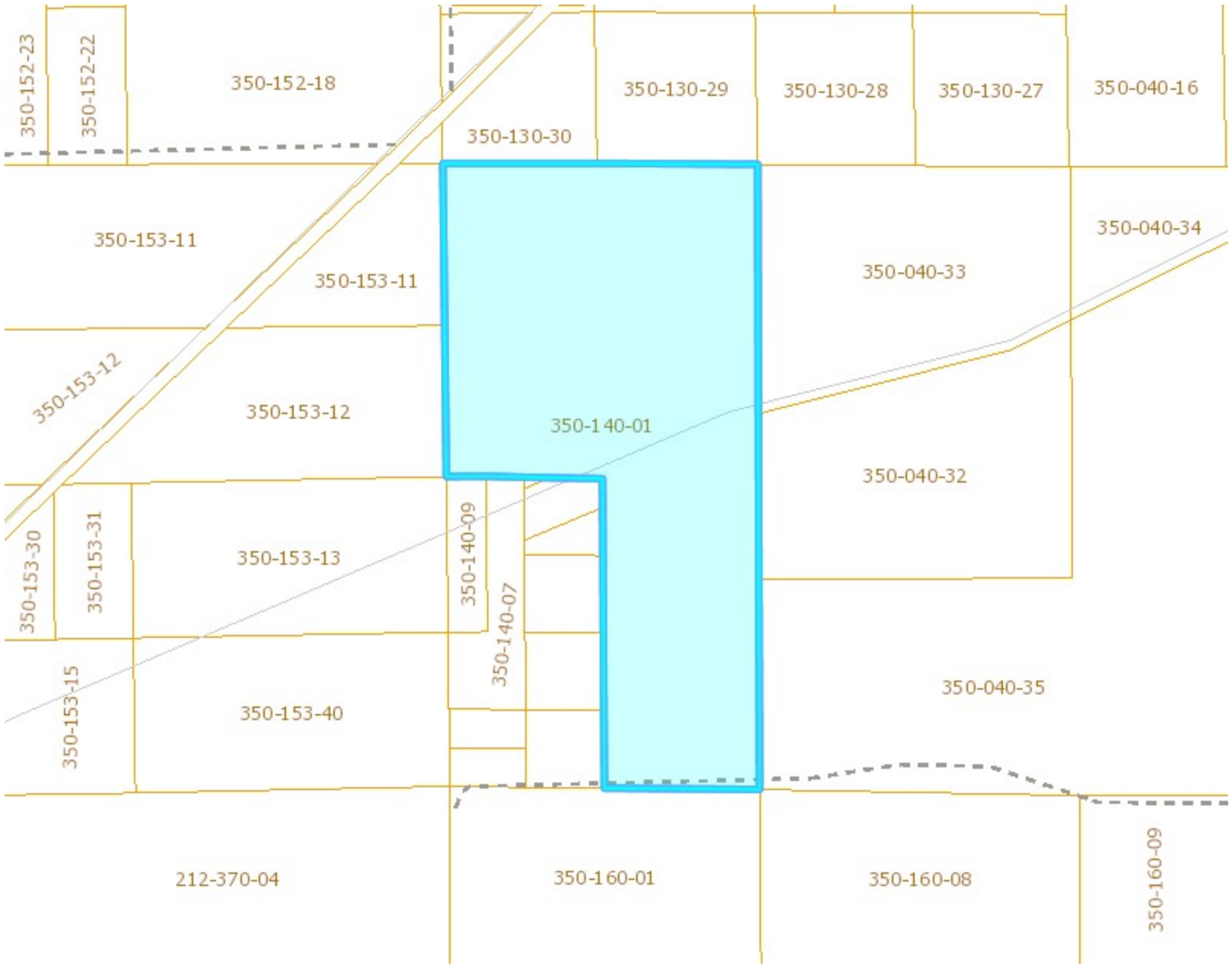
Notes

Circulation Misc. Mapping (APN: 350-140-01)



Legend

- County Maintained Roads
- Speed Limits
  - No Info
  - 25
  - 30
  - 35
  - 40
  - 45
  - 50
  - 55
- Road Restrictions
  - DIAG PARK
  - HANDICAP
  - NO PARKING
  - NO STOPPING
- Functional Classification
- Traffic Signals
  - DARREN TRUE
  - FLASHER
  - RJ CASTILLO
- Misc Dirt Roads
- Adopt A Road
- Alleys
- Parcels Land
- County Facilities

1: 9,028

0.3 0 0.14 0.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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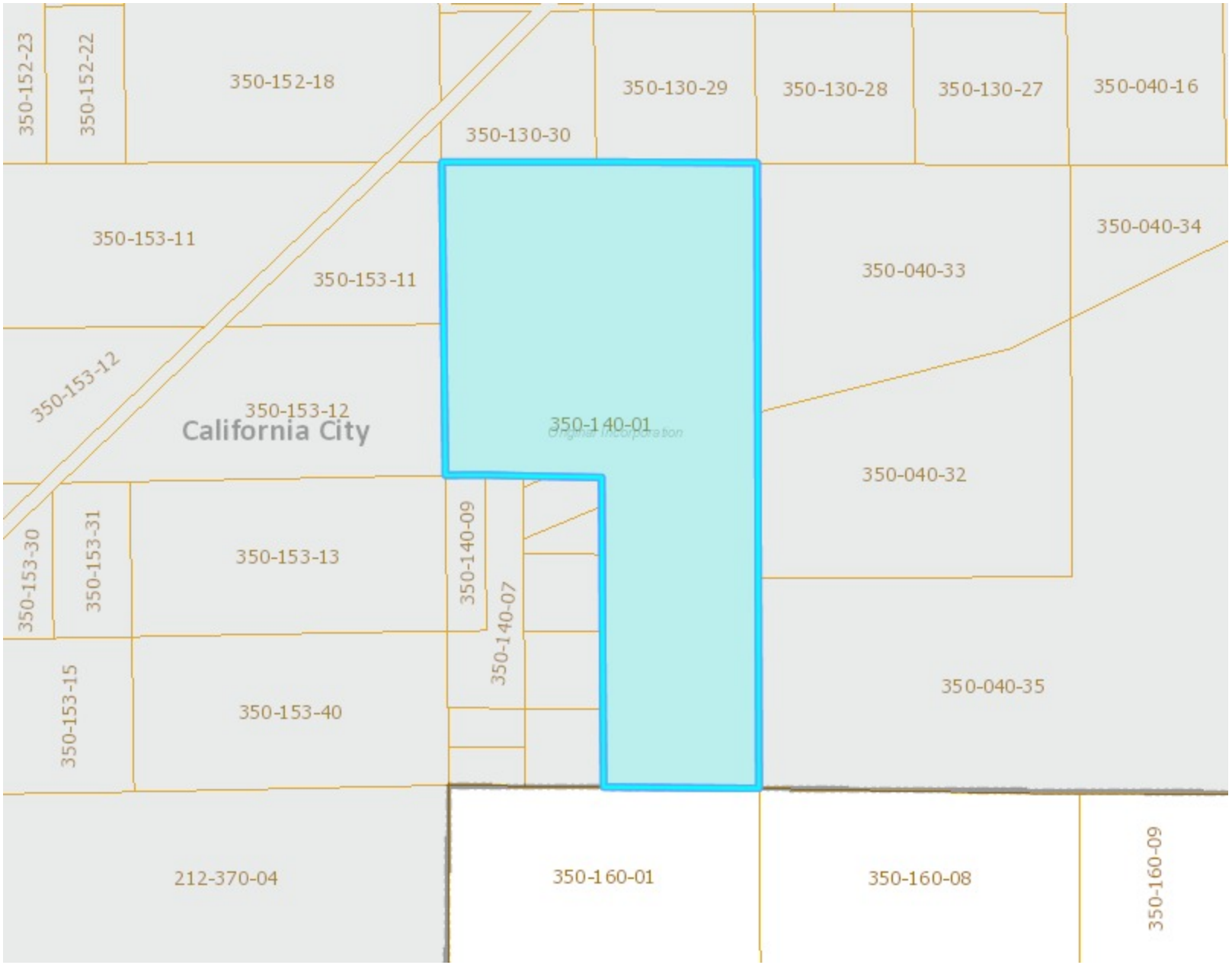
Notes

Cities/Counties/Annexation (APN: 350-140-01)



Legend

- City Spheres of Influence
- City Incorporated
- Annexations Cities
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
- California Counties
- Parcels Land
- County Facilities

1: 9,028

0.3 0 0.14 0.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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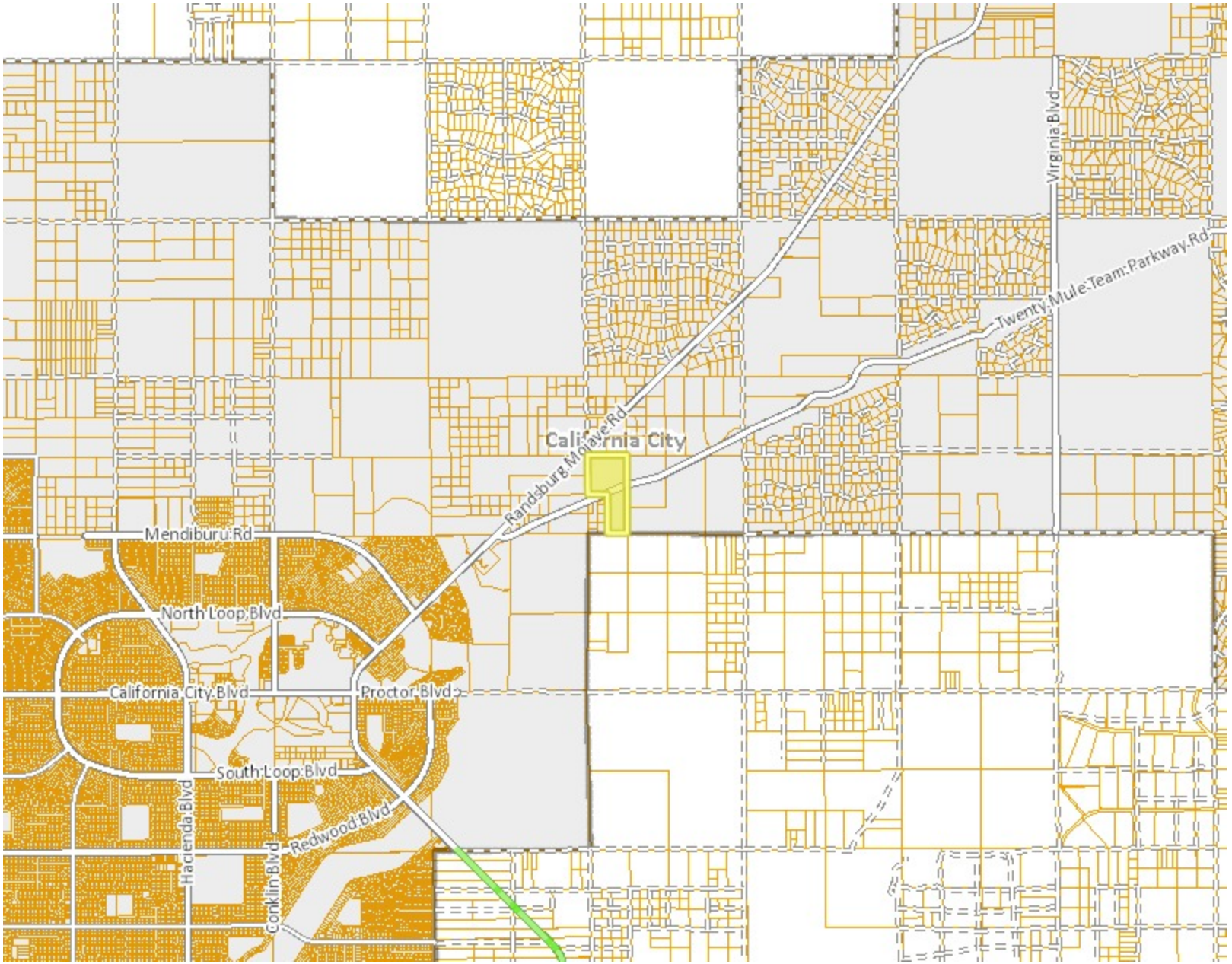
Notes

Kern County
Online Mapping System

CITY LIMITS & SOI (APN 350-140-01)



Legend

- County Maintained Roads
- Roads 50k-100k
  - Freeway
  - Highway
  - Local
  - Major
  - Minor
  - Ramp
  - Unpaved
- County
- City Spheres of Influence
- City Incorporated 100k
  - CITIES
  - CITY OF BAKERSFIELD
- Parcels Land

1: 72,224

2.3 0 1.14 2.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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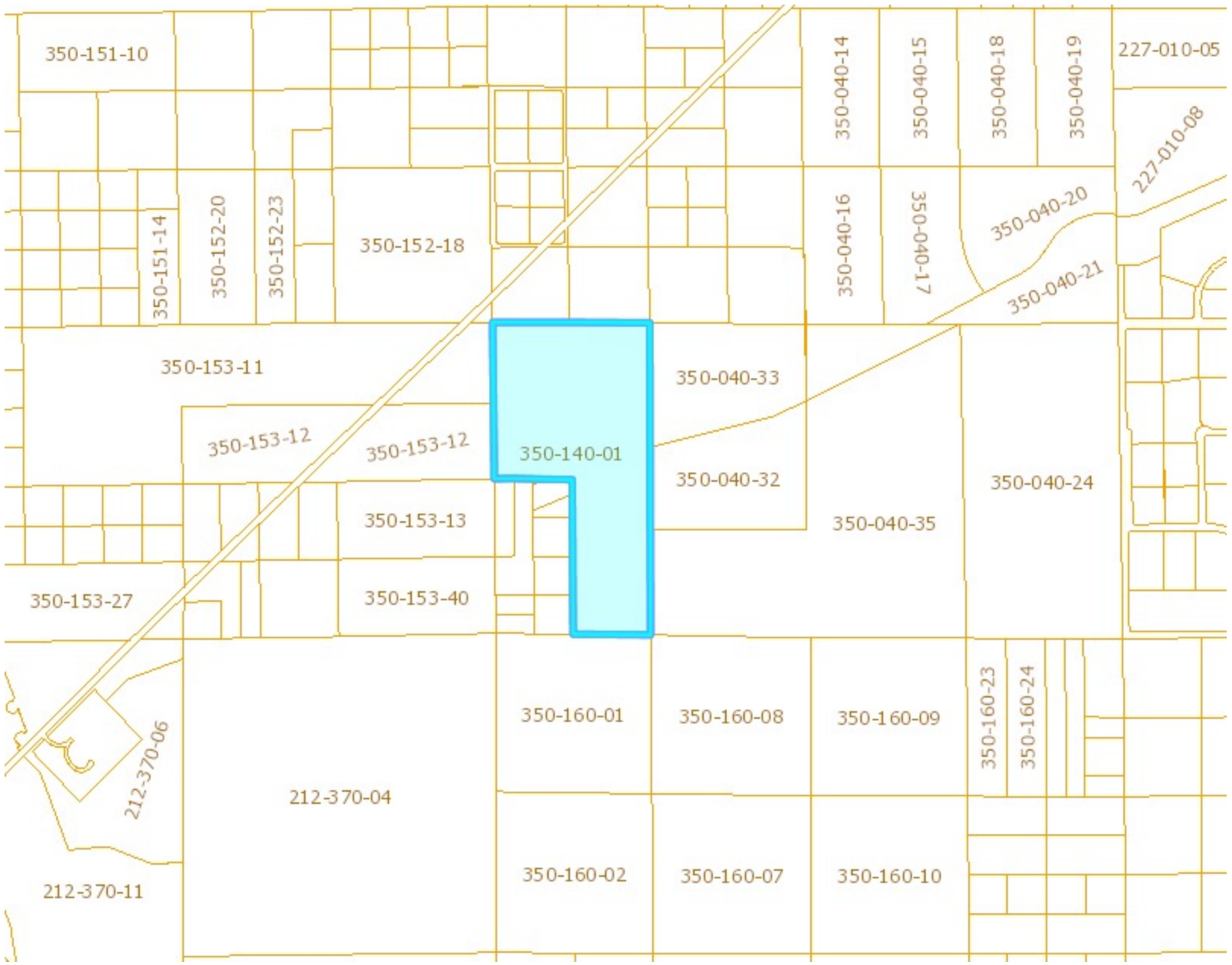
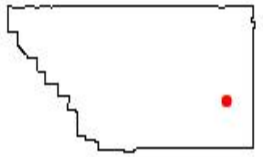
Notes

CSA & SEWER AREAS (APN 350-140-01)





Legend

- CSA-County Service Areas
- CSA Trunk Lines
  - Allen I Trunk-line
  - Allen II Trunk-line
  - Brimhall Trunk-line
  - Coffee Road Trunk-line
  - Olive Drive Trunk-line
  - Renfro Trunk-line
  - Wegis Trunk-line
- CSA-71 Planned Sewer Areas
  - Planned Sewer Area 1
  - Planned Sewer Area 2
  - Planned Sewer Area 3
  - Planned Sewer Area 4
  - Planned Sewer Area 5
  - Planned Sewer Area A
  - Planned Sewer Area B
- Parcels Land

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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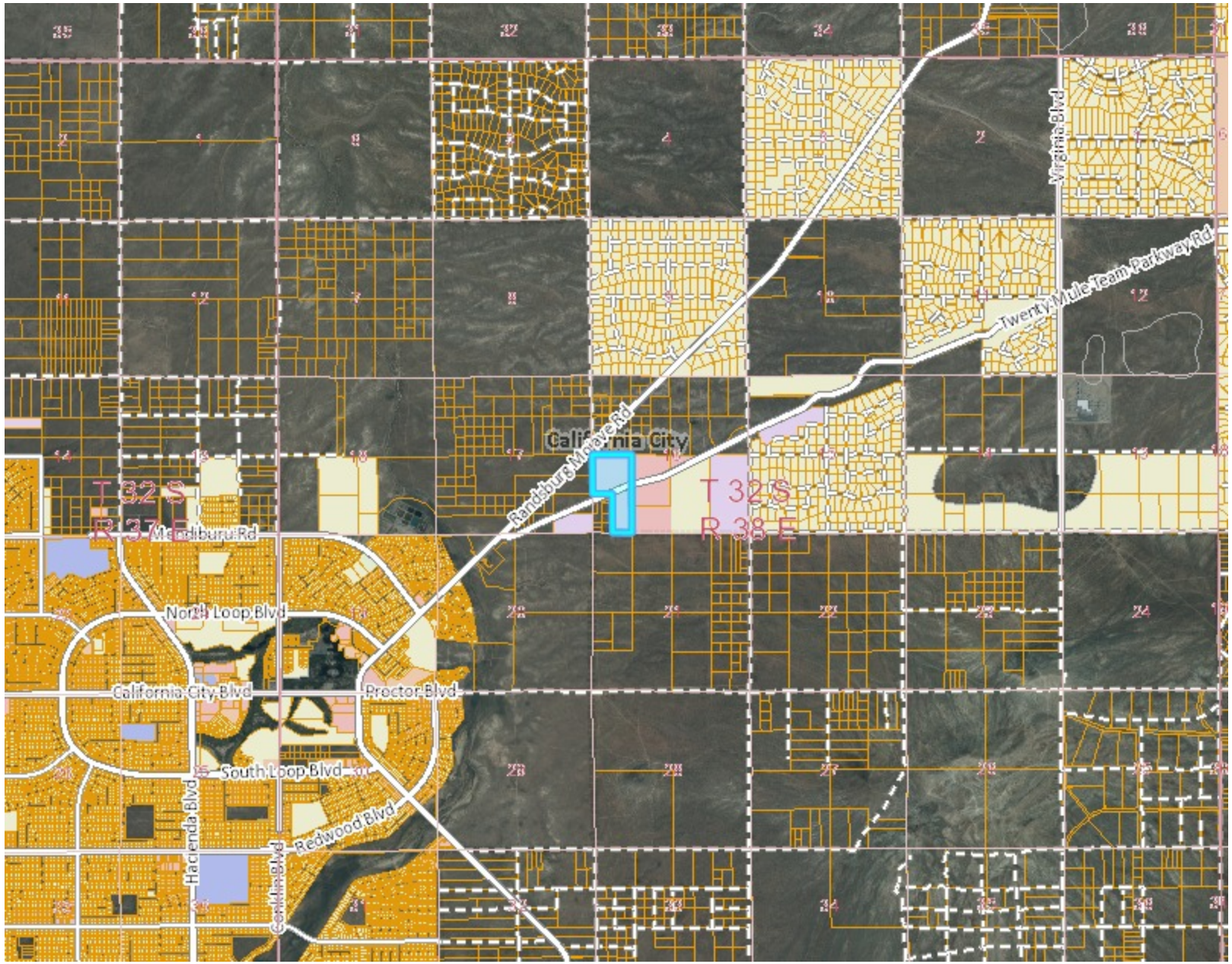
Notes

Cumulative Project Setting Map (APN: 350-140-01)

Kern County Online Mapping System



Legend

- Townships
- Sections
- Roads 50k-100k
  - Freeway
  - Highway
  - Local
  - Major
  - Minor
  - Ramp
  - Unpaved
- County
- City Incorporated 100k
  - CITIES
  - CITY OF BAKERSFIELD
- Parcels Land
- Zoning CalCity
  - C1
  - C2
  - C3
  - C4
  - C5
  - CMC
  - G
  - M1
  - M2
  - O/RA

1: 72,224

2.3 0 1.14 2.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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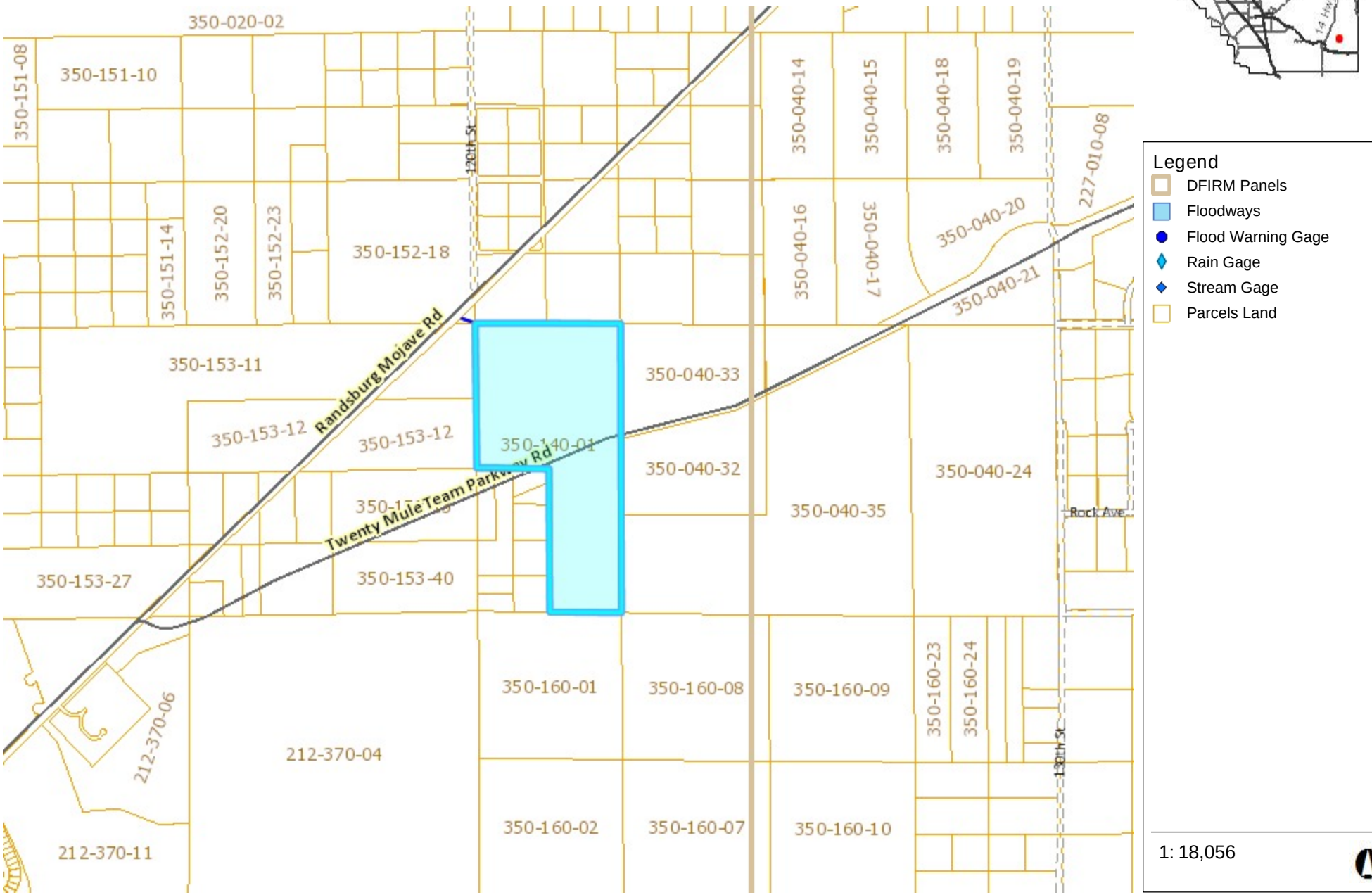
Notes

DFIRM FLOODWAY (APN 350-140-01)



Legend

- DFIRM Panels
- Floodways
- Flood Warning Gage
- Rain Gage
- Stream Gage
- Parcels Land

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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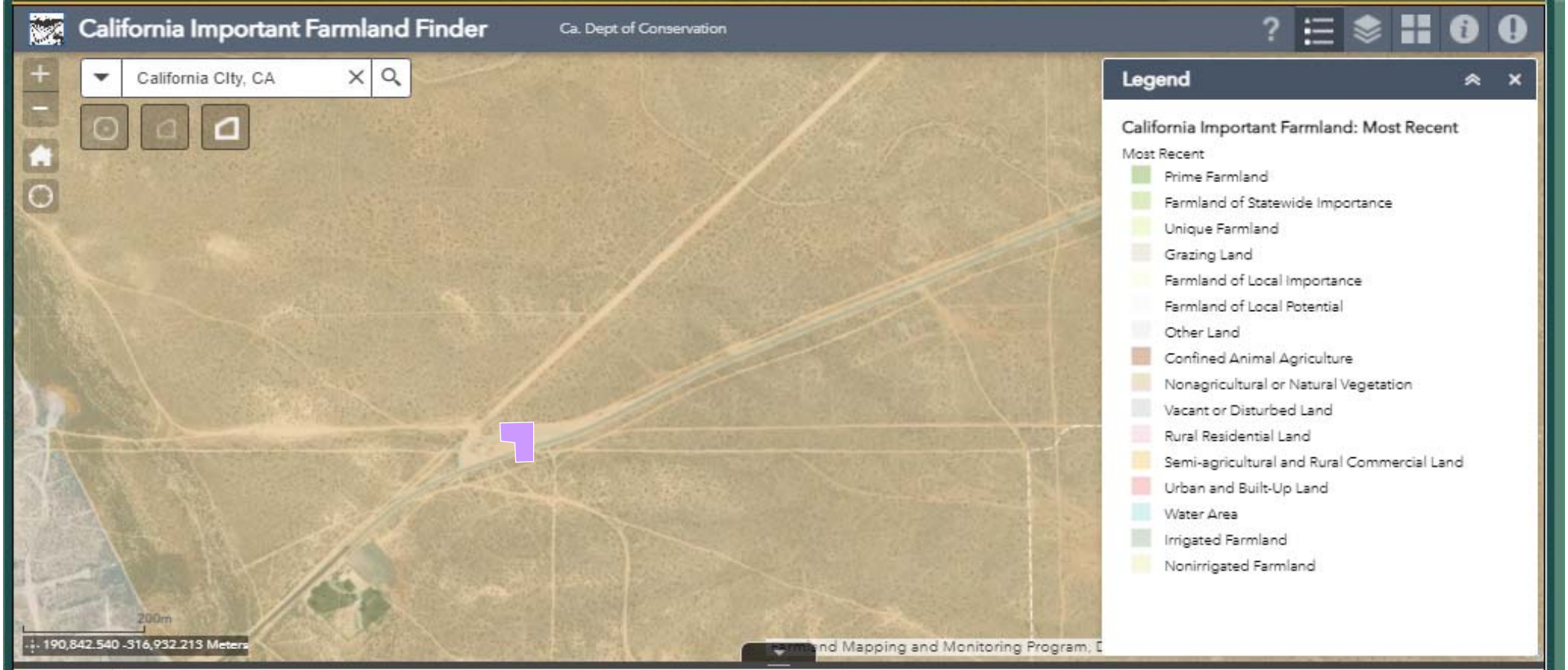
Notes

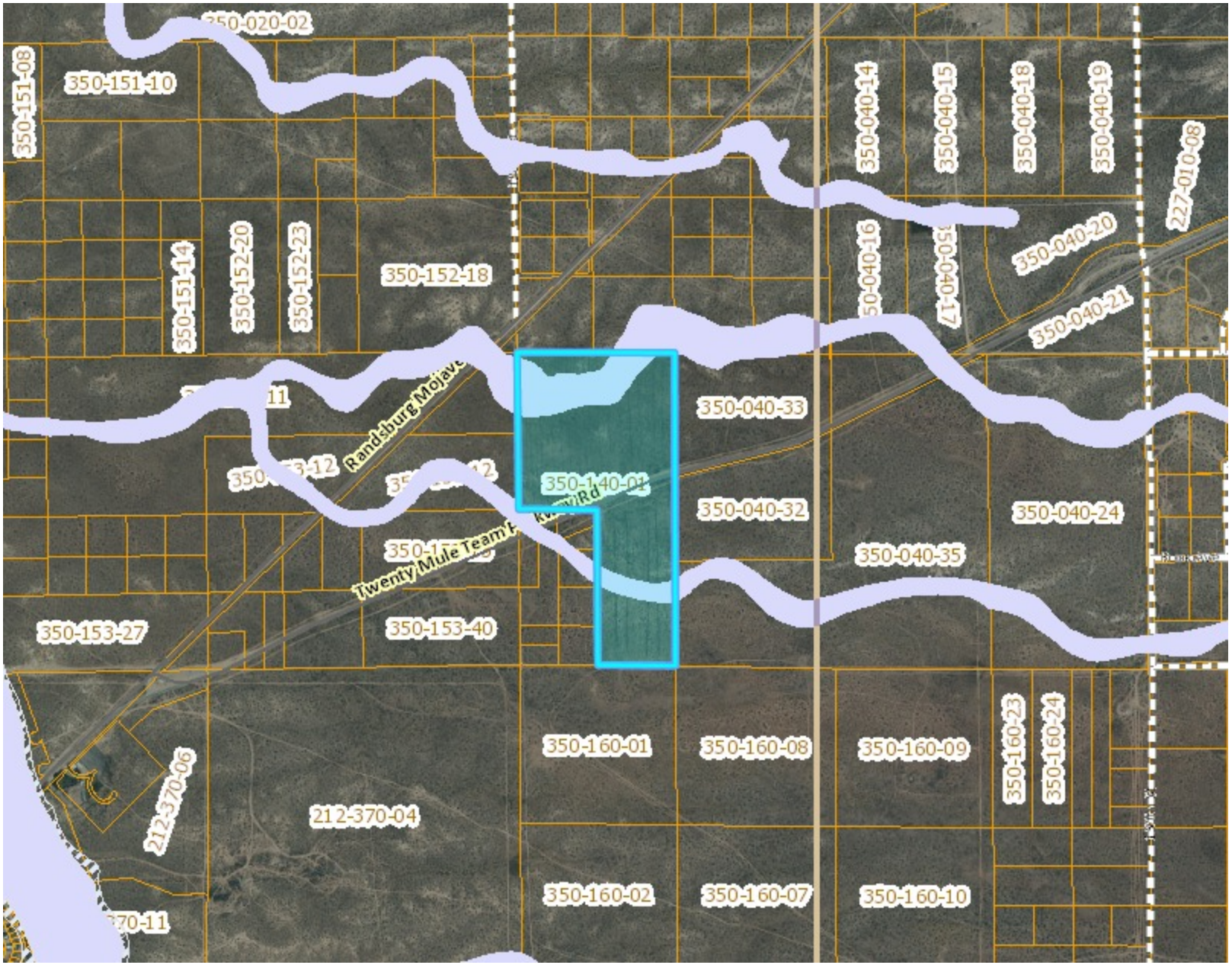


Most Recent

Options | Filter by map extent | Zoom to | Clear selection | Refresh

FEMA FLOOD PLAIN (GIS MAP)

Kern County Online Mapping System



Legend

DFIRM Flood Zones
- 0.2 PCT ANNUAL CHANCE FLOO
- A; AE; AH; AO
- D
- X

DFIRM Panels

Roads 10k-24k
- Freeway
- Highway
- Major
- Minor
- Local
- Ramp
- Unpaved

Parcels Land

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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Notes

FIGURE 1: Map of City of California City, Kern County

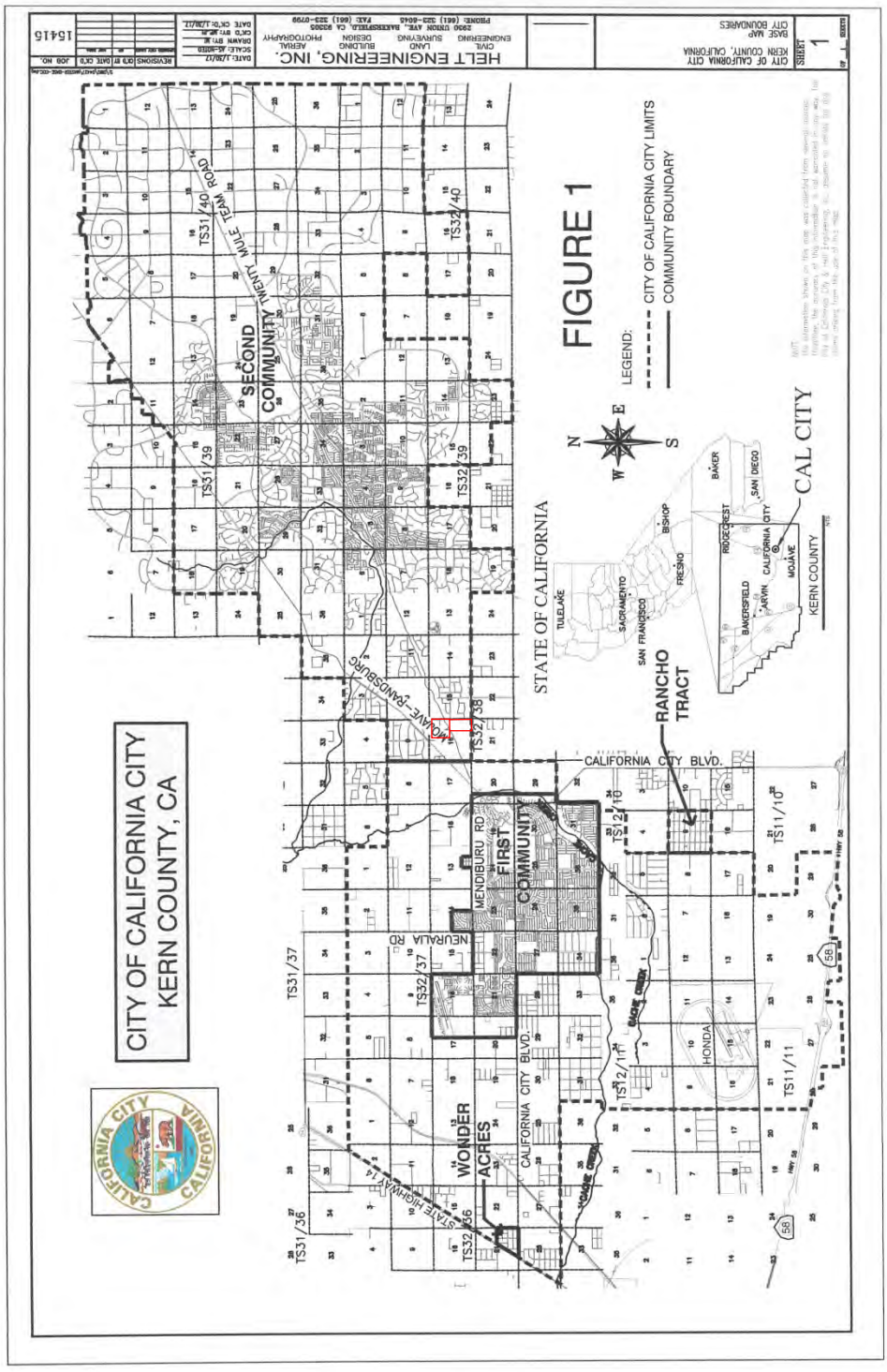


FIGURE 4: City Density Zone Map

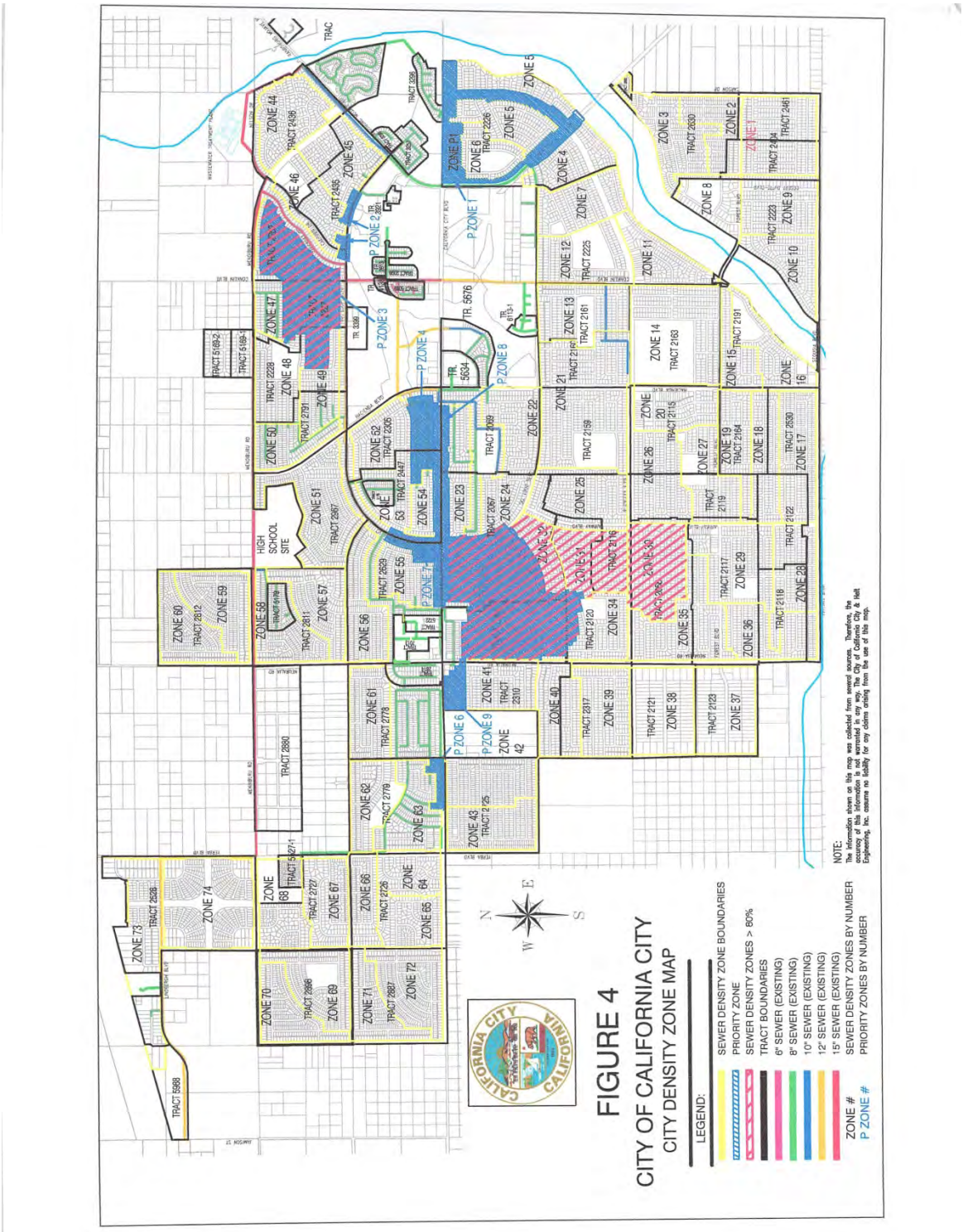


FIGURE 6: California City, Sewer Plan

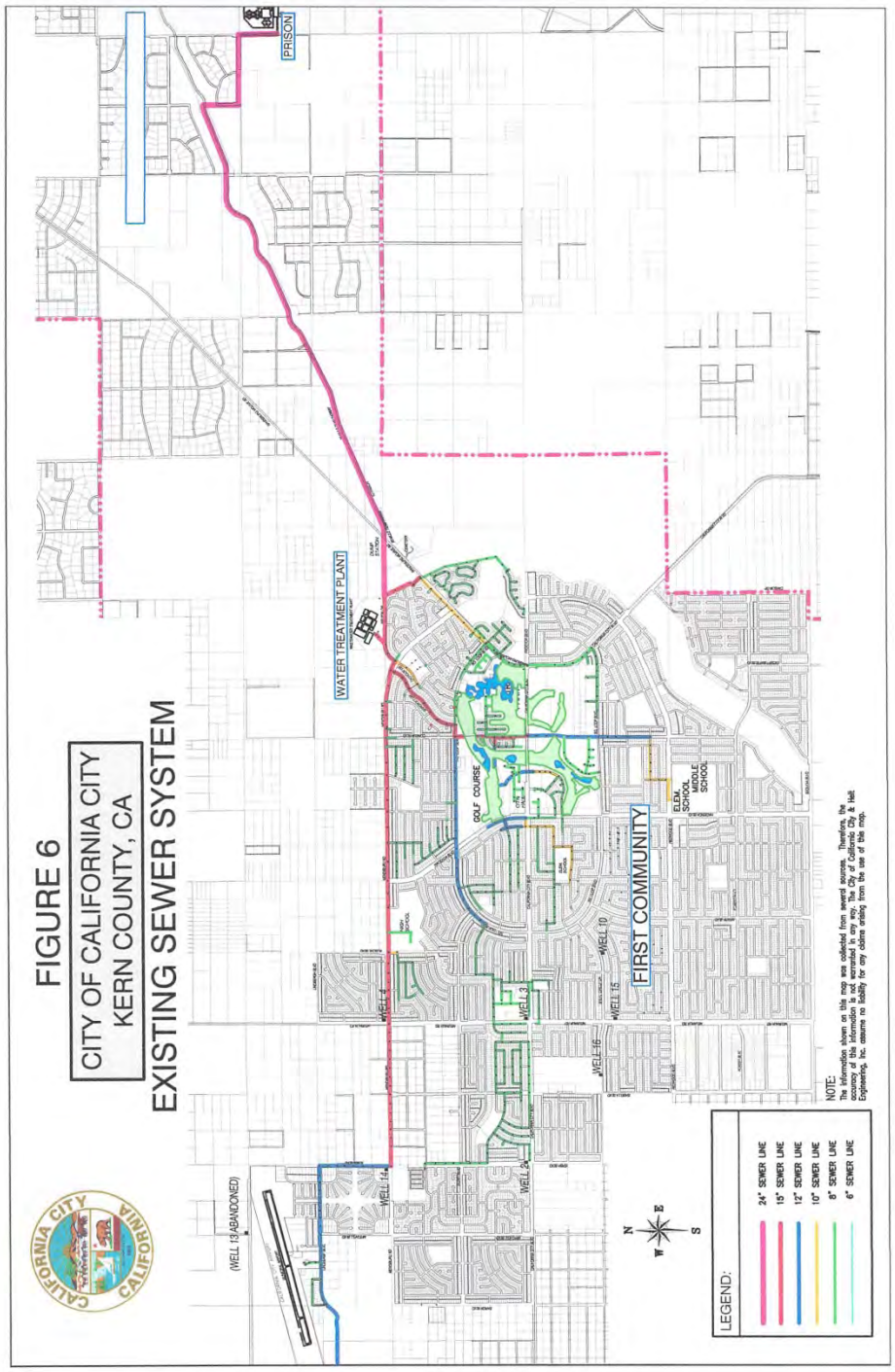
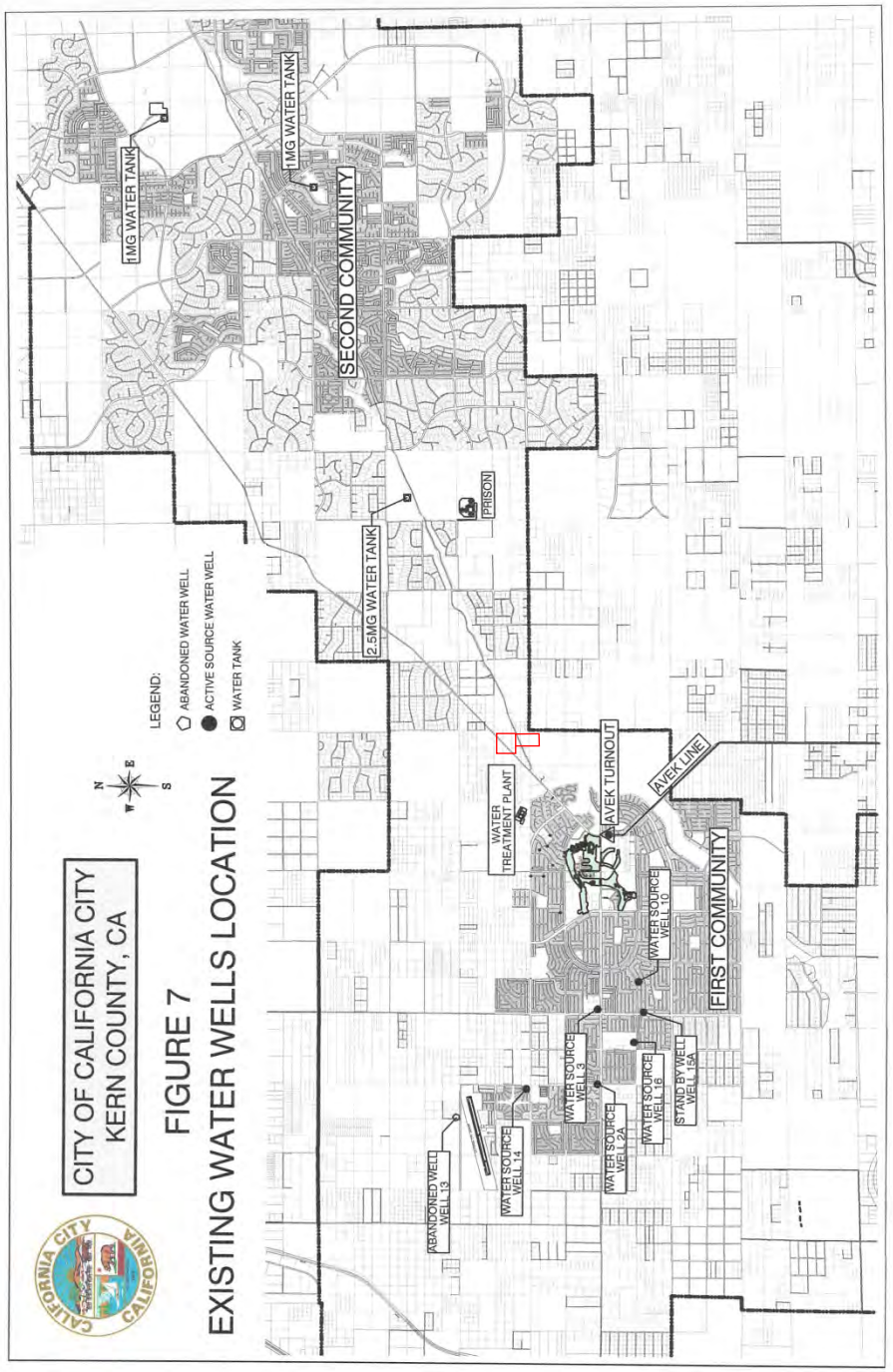


FIGURE 7: California City, Groundwater Wells Location Plan



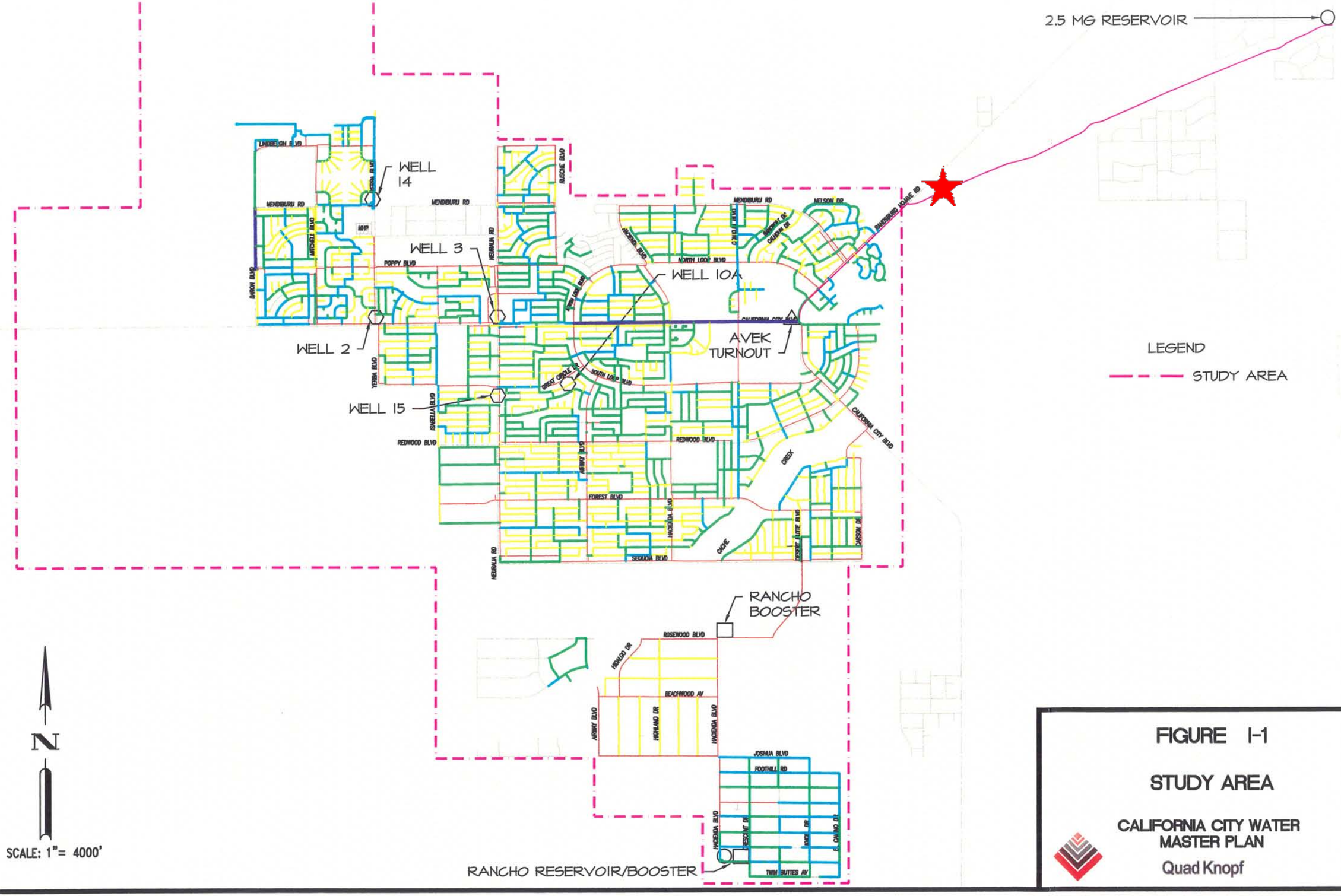


FIGURE I-1

STUDY AREA

CALIFORNIA CITY WATER MASTER PLAN

Quad Knopf

L:\Engineering\1999\99309\GD_&_2I-02\acad\Water\Study Area

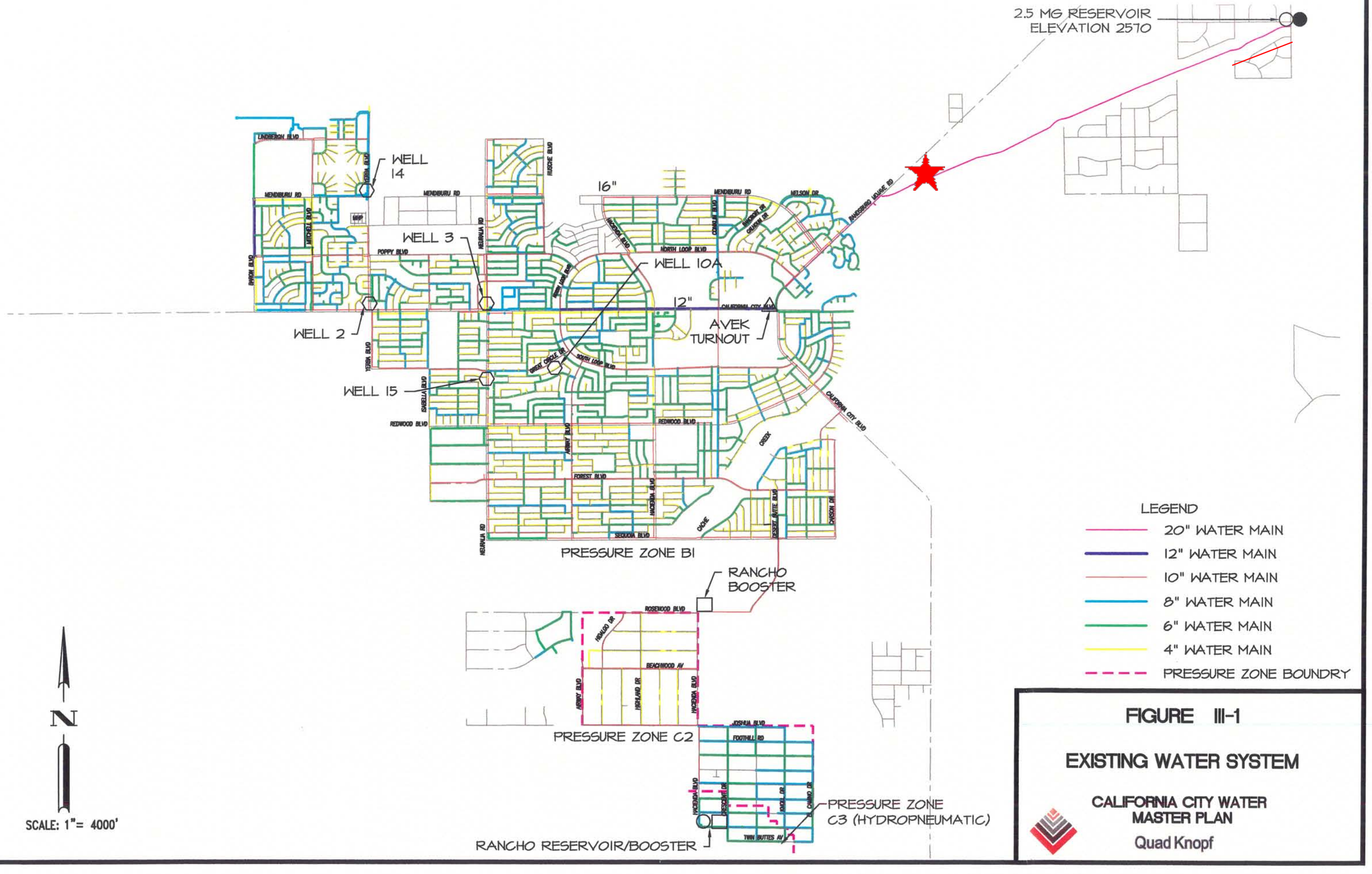
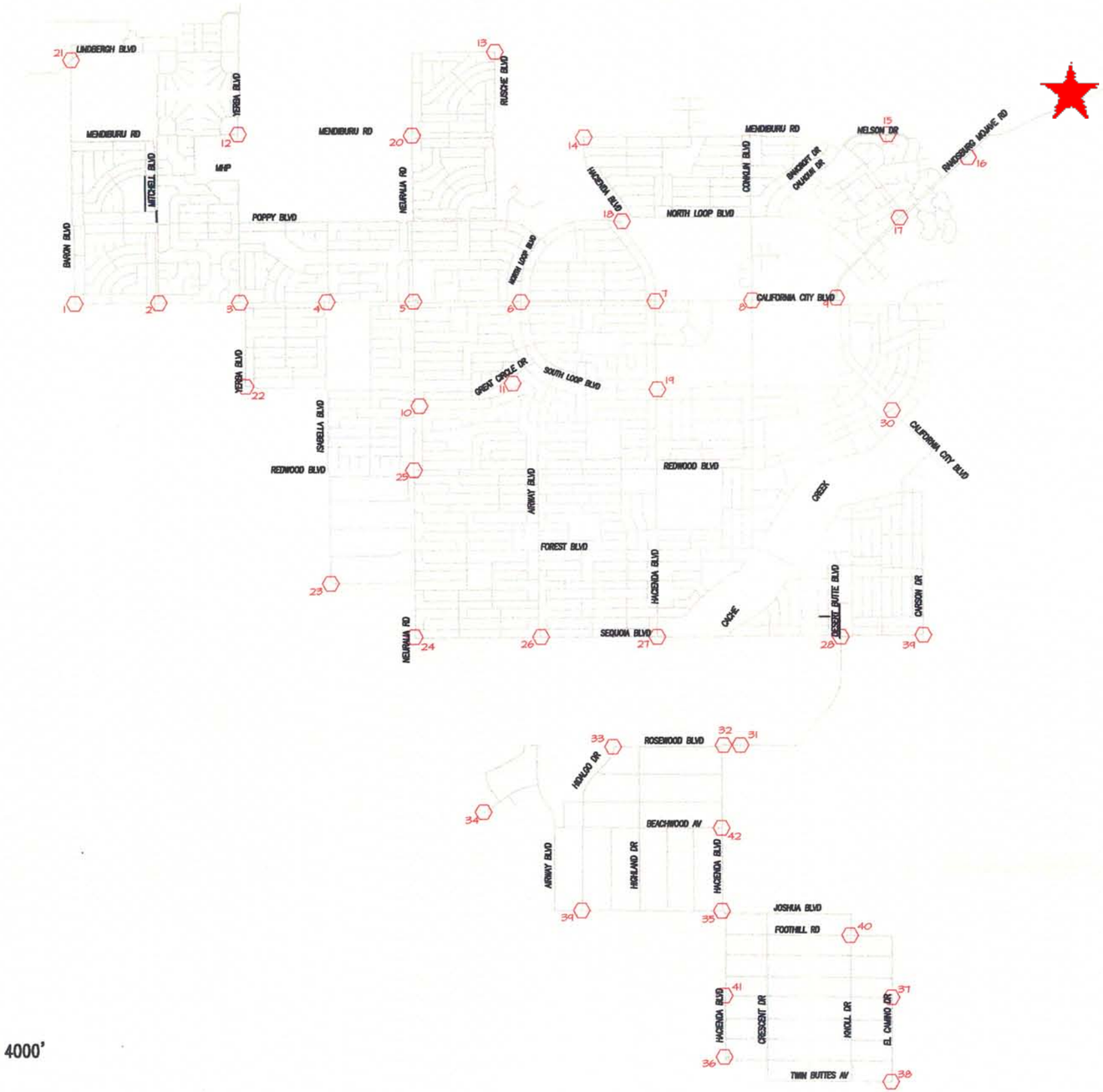


FIGURE III-1

EXISTING WATER SYSTEM

CALIFORNIA CITY WATER MASTER PLAN

Quad Knopf



LEGEND

⬡ KEY JUNCTION

N

SCALE: 1"= 4000'

FIGURE VI-1

KEY JUNCTIONS

CALIFORNIA CITY WATER MASTER PLAN

Quad Knopf

L:\Engineering\1999\99309\GIS_8-21-02\acad\Water\key junction

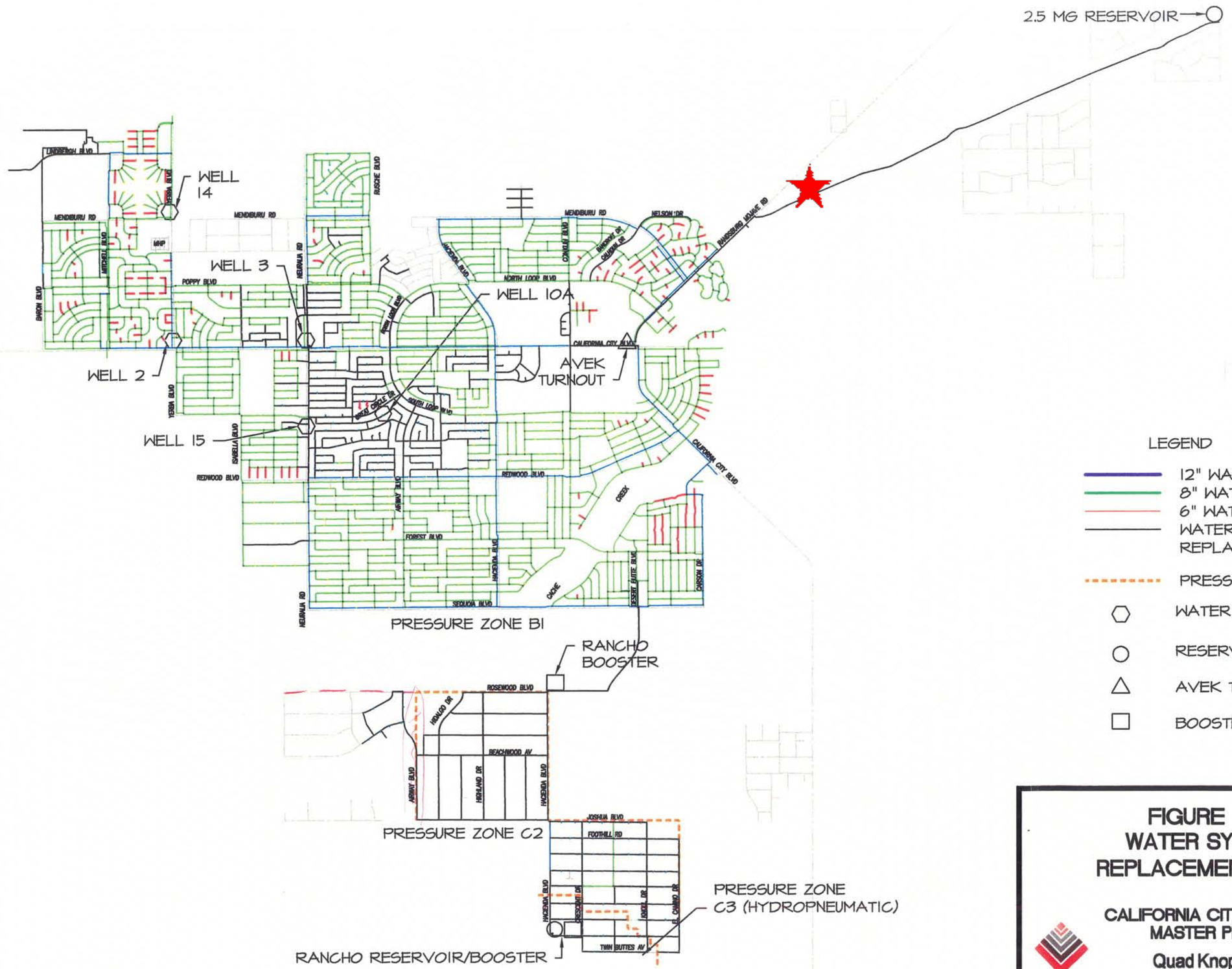


FIGURE VII-1
WATER SYSTEM REPLACEMENT PLAN

CALIFORNIA CITY WATER MASTER PLAN

Quad Knopf

L:\Engineering\1999\99309\CD_8-21-02\acad\Water\wtr sys repl pln

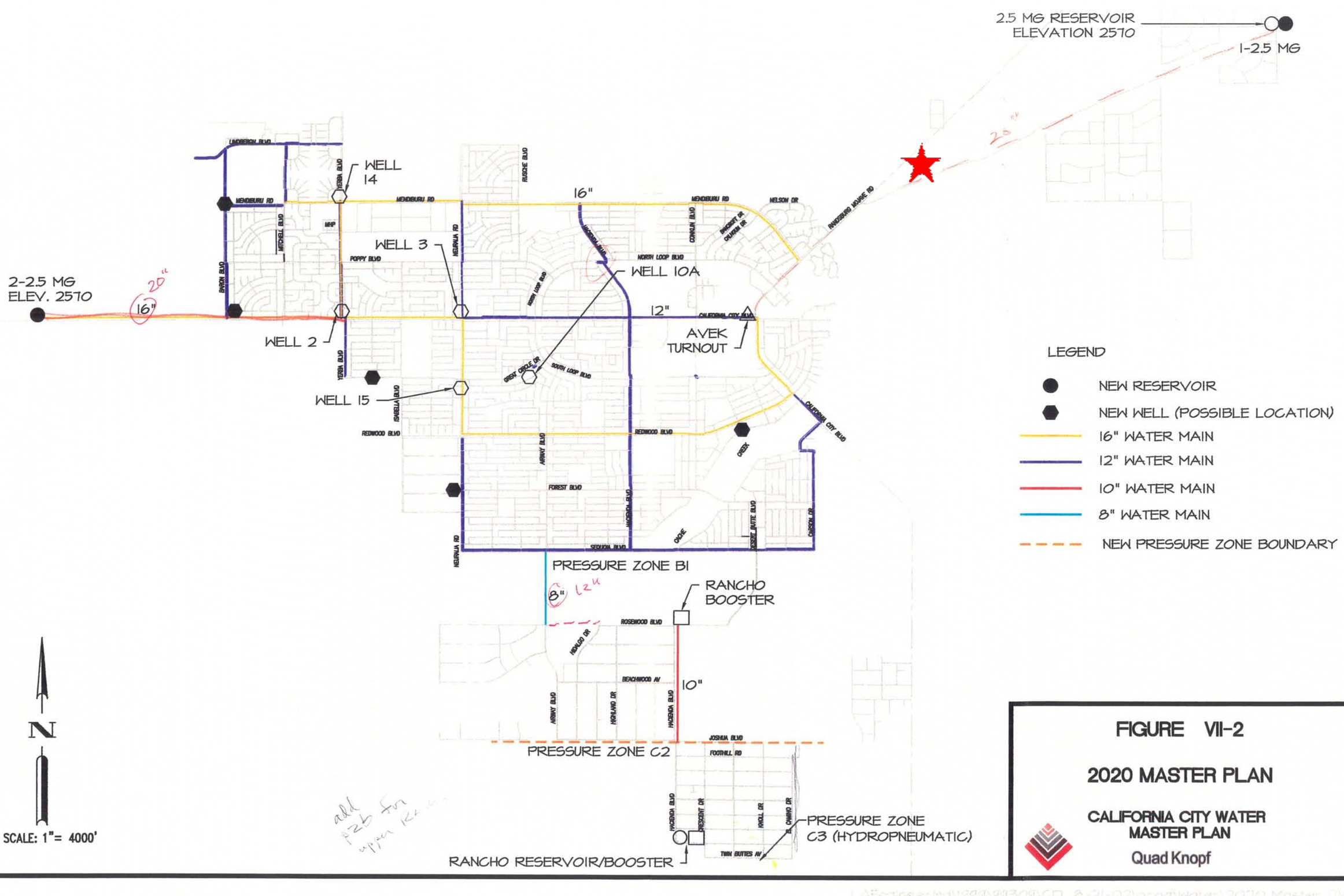


FIGURE VII-2

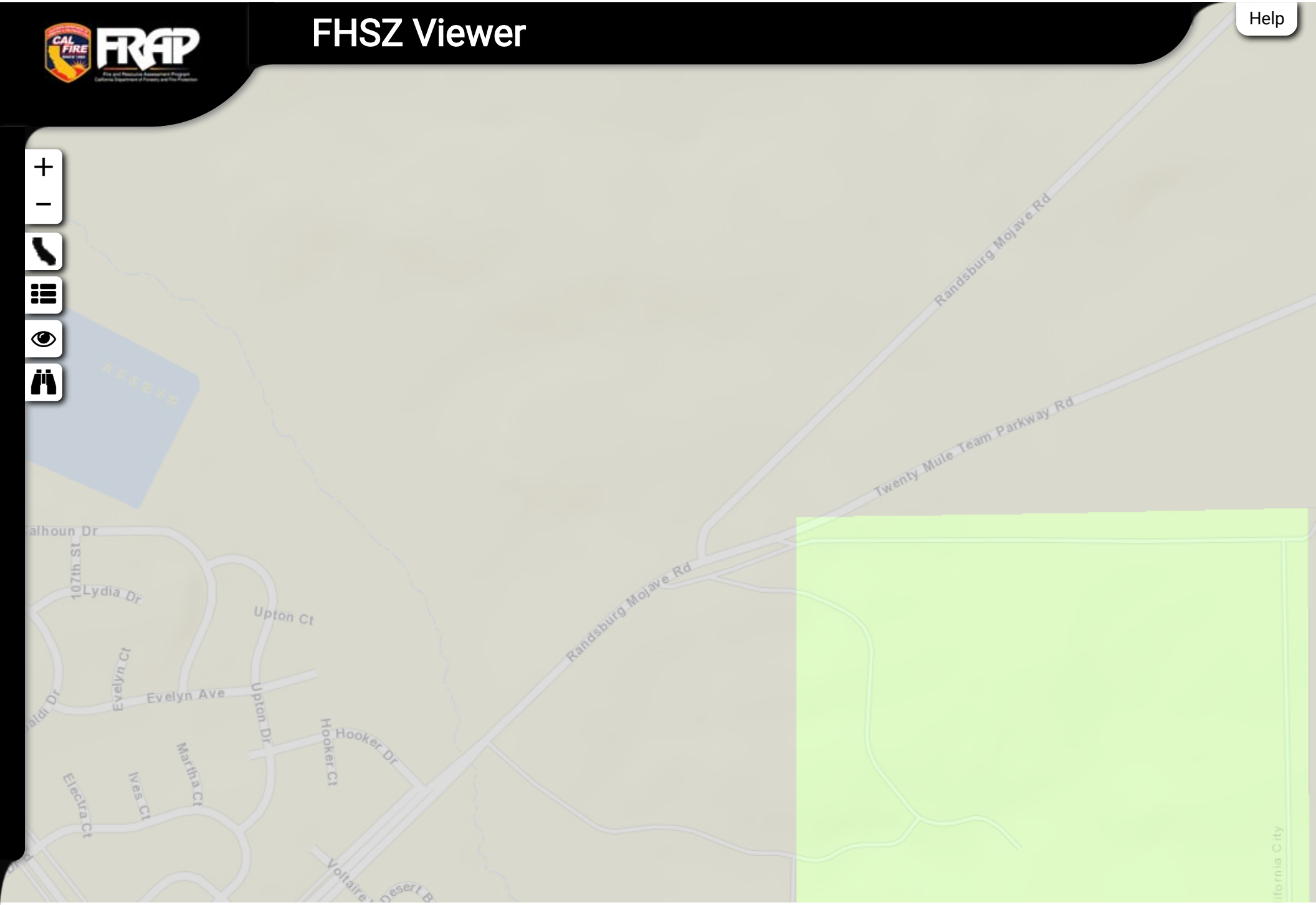
2020 MASTER PLAN

CALIFORNIA CITY WATER MASTER PLAN

Quad Knopf

FHSZ Viewer

Help

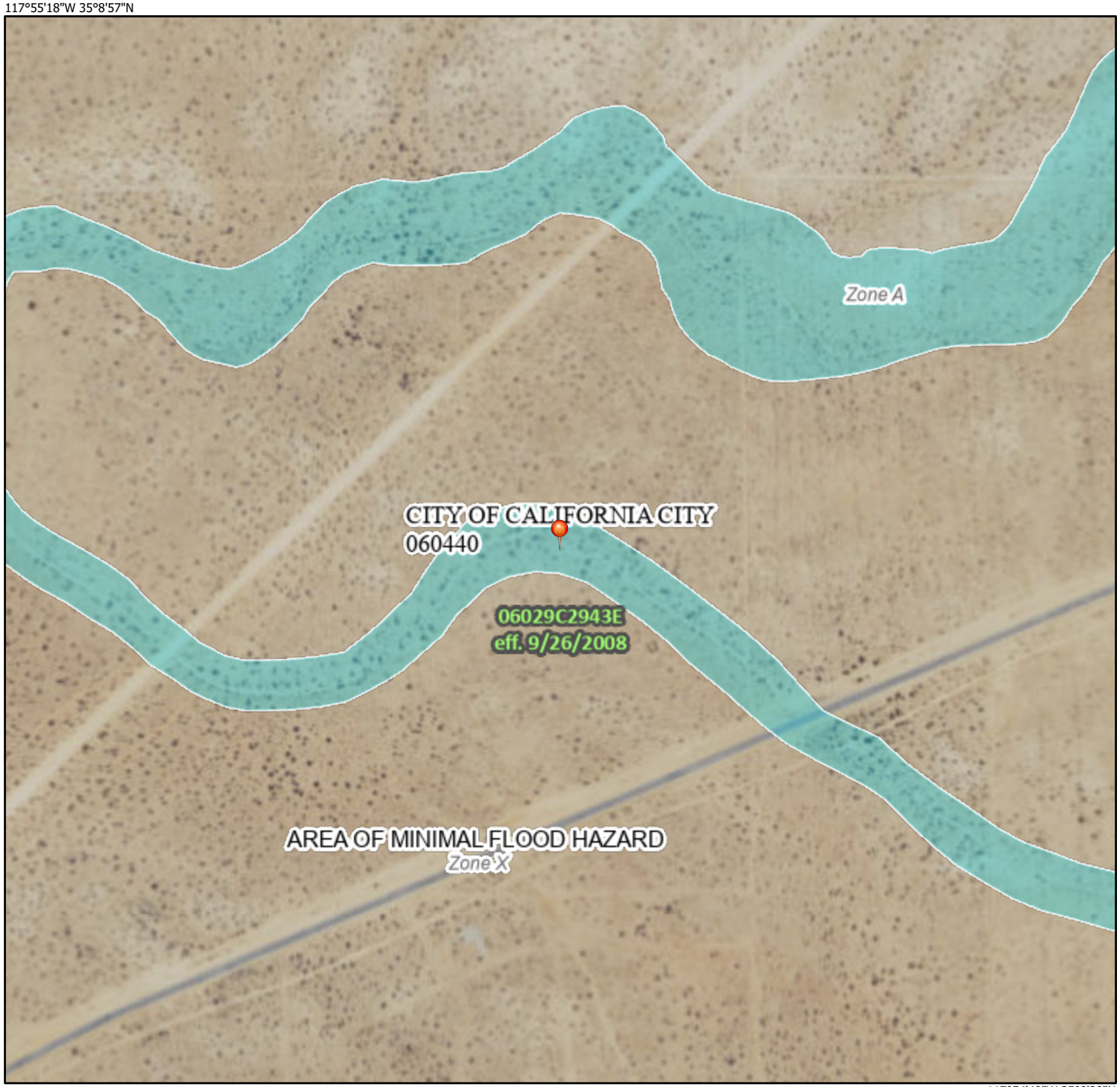


0 300 600ft

National Flood Hazard Layer FIRMette

FEMA

117°55'18"W 35°8'57"N



117°54'40"W 35°8'28"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/10/2021 at 4:48 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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National Flood Hazard Layer FIRMette

FEMA

117°55'9"W 35°9'5"N

117°54'32"W 35°8'36"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
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- Effective LOMRs
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- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

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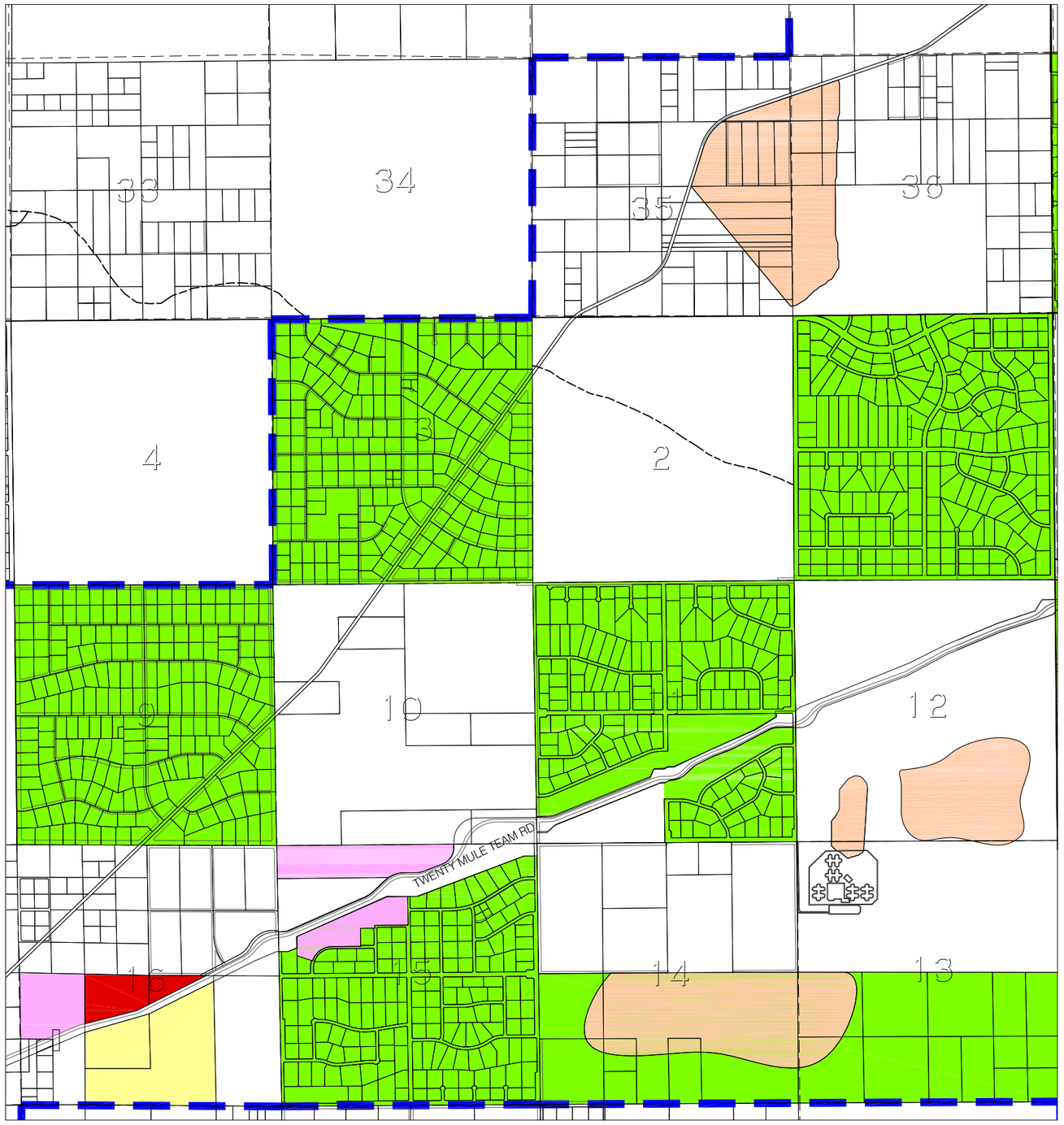


CALIFORNIA CITY GENERAL PLAN 2009-2028

GENERAL PLAN LAND USE DESIGNATIONS	CONSISTENT CALIFORNIA CITY ZONING														
	R-1	R-2	R-3	RM-1	RM-2	C-1	C-2	C-3	C-4	C-5	CMC	M-1	M-2	RA	O
ESTATE DENSITY RESIDENTIAL 1 D.U./TWO ACRES 1 D.U./FIVE ACRES (WONDER ACRES)			●												
RURAL DENSITY RESIDENTIAL 1 D.U./ONE ACRES			●												
LOW DENSITY RESIDENTIAL 2 D.U./ONE ACRES			●												
MEDIUM LOW DENSITY RESIDENTIAL 4 D.U./ONE ACRE (SEWERED) 2 D.U./ONE ACRE (UNSEWERED)		●													
MEDIUM DENSITY RESIDENTIAL 6 D.U./ONE ACRE (SEWERED) 2 D.U./ONE ACRE (UNSEWERED)	●														
HIGH DENSITY RESIDENTIAL 2 D.U. TO 20 D.U./ONE ACRE				●	●										
NEIGHBORHOOD COMMERCIAL						●									
COMMUNITY COMMERCIAL							●								
COMMERCIAL/OFFICE								●							
SERVICE COMMERCIAL									●						
REGIONAL COMMERCIAL										●					
COMMUNITY MEDICAL CENTER											●				
LIGHT INDUSTRIAL AND RESEARCH					●							●			
HEAVY INDUSTRIAL													●		
CONTROLLED DEVELOPMENT	△	△	△	△	△	△	△	△	△	△	△	△	△	●	●
GOVERNMENT (PUBLIC FACILITIES)	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
CONSERVATION LAND														●	●

D.U. = DWELLING UNIT ● = COMPATIBLE △ = CONDITIONALLY COMPATIBLE

(Ord 95-540/GPA 96-03/ZC 156/Adptd 12-3-96/Eftv 1-3-97)

GENERAL PLAN DESIGNATIONS

R1	Medium Density Residential - 6D.U./1 Acre (sewered) - 2 D.U./1 Acre (unsewered)	C4	Service Commercial
R2	Medium Low Density Residential - 4D.U./1 Acre (sewered) - 2 D.U./1 Acre (unsewered)	C5	Regional Commercial
R3	Low Density Residential - 2D.U./1 ACRE	CMC	Community Medical
R4	Estate Density Residential - 1 D.U./2 Acres	M1	Light Industrial and Research
R5	Estate Density Residential - 1 D.U./5 Acres (Wonder Acres)	M2	Heavy Industrial
RA	Rural Density Residential - 1 D.U./1 Acres	G	Government (Public Facilities)
RM1/RM2	High Density Residential - 2 D.U. to 20 D.U./1 Acre	O/RA	Conservation Land
C1	Neighborhood Commercial	O/RA	Controlled Development, Public Parks & Recreation or Public Schools
C2	Community Commercial		
C3	Commercial/Office		

LEGEND:

CITY LIMITS

20 TYP SECTION #

N W E S

0' 2500' 5000'

1"=2500'

The information shown on this map was collected from several sources. Therefore, the accuracy of this information is not warranted in any way. The City of California City & Helt Engineering, Inc. assume no liability for any claims arising from the use of this map.

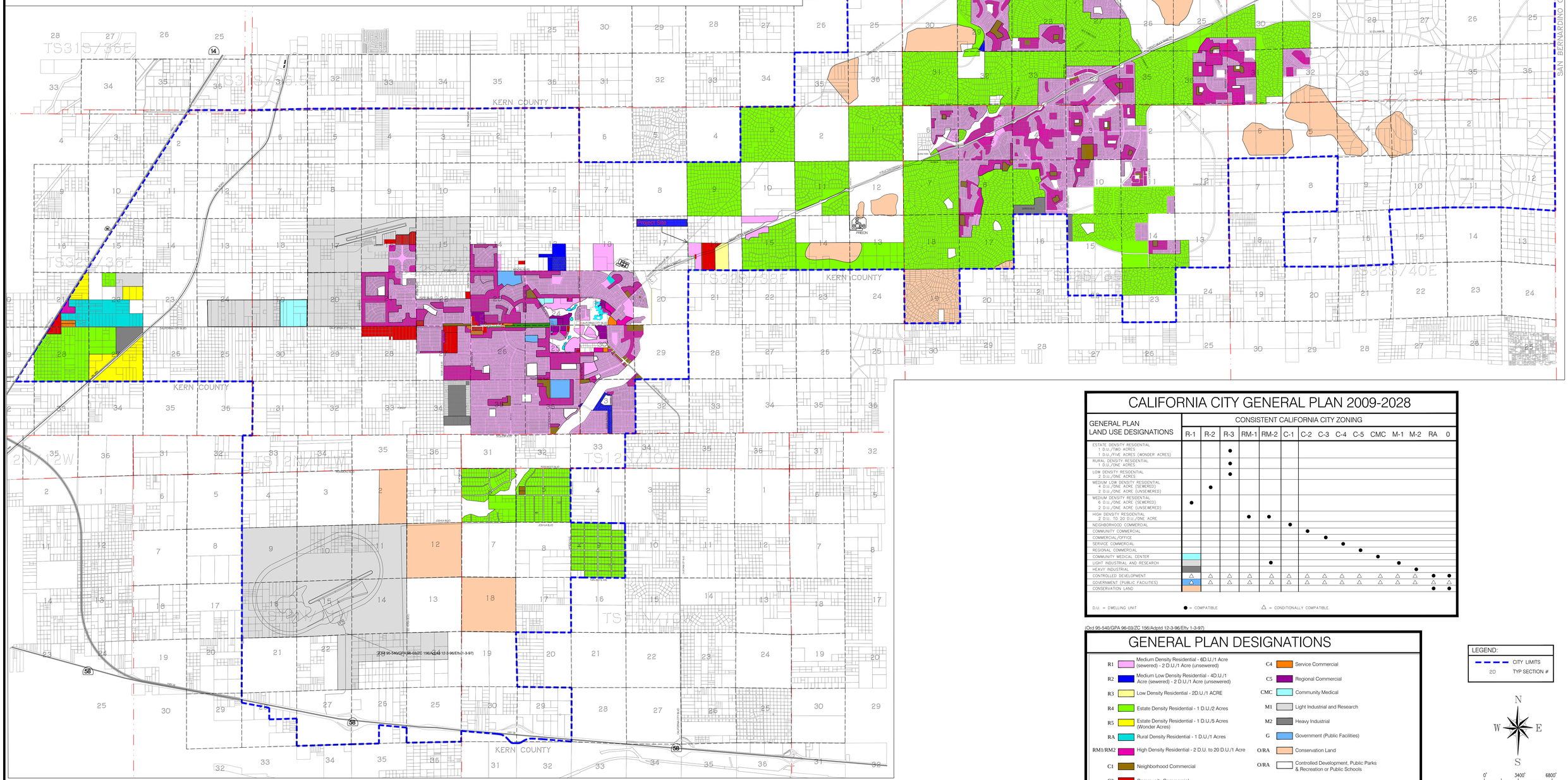
JOB NO.	DATE: 12-14-05
04427	SCALE: AS-NOTED
	DRAWN BY: JW
	CK'D BY: RG
	DATE CK'D: 03/03/09

REVISIONS	CK'D BY	DATE CK'D
LAST UPDATED	RP	05/06/16

HELT ENGINEERING, INC.
CIVIL ENGINEERING LAND SURVEYING BUILDING DESIGN AERIAL PHOTOGRAPHY
2930 UNION AVE., BAKERSFIELD, CA 93305
PHONE: (661) 323-6045 FAX: (661) 323-0799

CITY OF CALIFORNIA CITY
KERN COUNTY, CALIFORNIA
GENERAL PLAN 2009-2028
LAND USE DESIGNATION MP

CITY OF CALIFORNIA CITY
KERN COUNTY, CALIFORNIA
GENERAL PLAN DESIGNATION MAP



CALIFORNIA CITY GENERAL PLAN 2009-2028

GENERAL PLAN LAND USE DESIGNATIONS	CONSISTENT CALIFORNIA CITY ZONING													
	R-1	R-2	R-3	RM-1	RM-2	C-1	C-2	C-3	C-4	C-5	CMC	M-1	M-2	RA	O
ESTATE DENSITY RESIDENTIAL 1 D.U./TWO ACRES 1 D.U./FIVE ACRES (WONDER ACRES)			●												
RURAL DENSITY RESIDENTIAL 1 D.U./ONE ACRES			●												
LOW DENSITY RESIDENTIAL 2 D.U./ONE ACRES			●												
MEDIUM LOW DENSITY RESIDENTIAL 4 D.U./ONE ACRE (SEWERED) 2 D.U./ONE ACRE (UNSEWERED)		●													
MEDIUM DENSITY RESIDENTIAL 6 D.U./ONE ACRE (SEWERED) 2 D.U./ONE ACRE (UNSEWERED)	●														
HIGH DENSITY RESIDENTIAL 2 D.U. TO 20 D.U./ONE ACRE				●	●										
NEIGHBORHOOD COMMERCIAL						●									
COMMUNITY COMMERCIAL							●								
COMMERCIAL/OFFICE								●							
SERVICE COMMERCIAL									●						
REGIONAL COMMERCIAL										●					
COMMUNITY MEDICAL CENTER											●				
LIGHT INDUSTRIAL AND RESEARCH					●							●			
HEAVY INDUSTRIAL													●		
CONTROLLED DEVELOPMENT	△	△	△	△	△	△	△	△	△	△	△	△	△	●	●
GOVERNMENT (PUBLIC FACILITIES)	▲	△	△	△	△	△	△	△	△	△	△	△	△	△	△
CONSERVATION LAND														●	●

D.U. = DWELLING UNIT ● = COMPATIBLE △ = CONDITIONALLY COMPATIBLE

(Ord 95-540/GPA 96-03/ZC 156/Adptd 12-3-96/Effv 1-3-97)

GENERAL PLAN DESIGNATIONS

R1	Medium Density Residential - 6D.U./1 Acre (sewered) - 2 D.U./1 Acre (unsewered)	C4	Service Commercial
R2	Medium Low Density Residential - 4D.U./1 Acre (sewered) - 2 D.U./1 Acre (unsewered)	C5	Regional Commercial
R3	Low Density Residential - 2D.U./1 ACRE	CMC	Community Medical
R4	Estate Density Residential - 1 D.U./2 Acres	M1	Light Industrial and Research
R5	Estate Density Residential - 1 D.U./5 Acres (Wonder Acres)	M2	Heavy Industrial
RA	Rural Density Residential - 1 D.U./1 Acres	G	Government (Public Facilities)
RM1/RM2	High Density Residential - 2 D.U. to 20 D.U./1 Acre	O/RA	Conservation Land
C1	Neighborhood Commercial	O/RA	Controlled Development, Public Parks & Recreation or Public Schools
C2	Community Commercial		
C3	Commercial/Office		

LEGEND:
- CITY LIMITS
- 20 TYP SECTION #

N W E S

0' 3400' 6800'

SCALE 1"=3400'

The information shown on this map was collected from several sources. Therefore, the accuracy of this information is not warranted in any way. The City of California City & Helt Engineering, Inc. assume no liability for any claims arising from the use of this map.

SHEET 1 OF 1 SHEETS

CITY OF CALIFORNIA CITY
KERN COUNTY, CALIFORNIA
GENERAL PLAN 2009-2028
LAND USE DESIGNATION MAP

HELT ENGINEERING, INC.
CIVIL ENGINEERING · LAND SURVEYING · BUILDING DESIGN · AERIAL PHOTOGRAPHY
2930 UNION AVE., BAKERSFIELD, CA 93305
PHONE: (661) 323-6045 FAX: (661) 323-0799

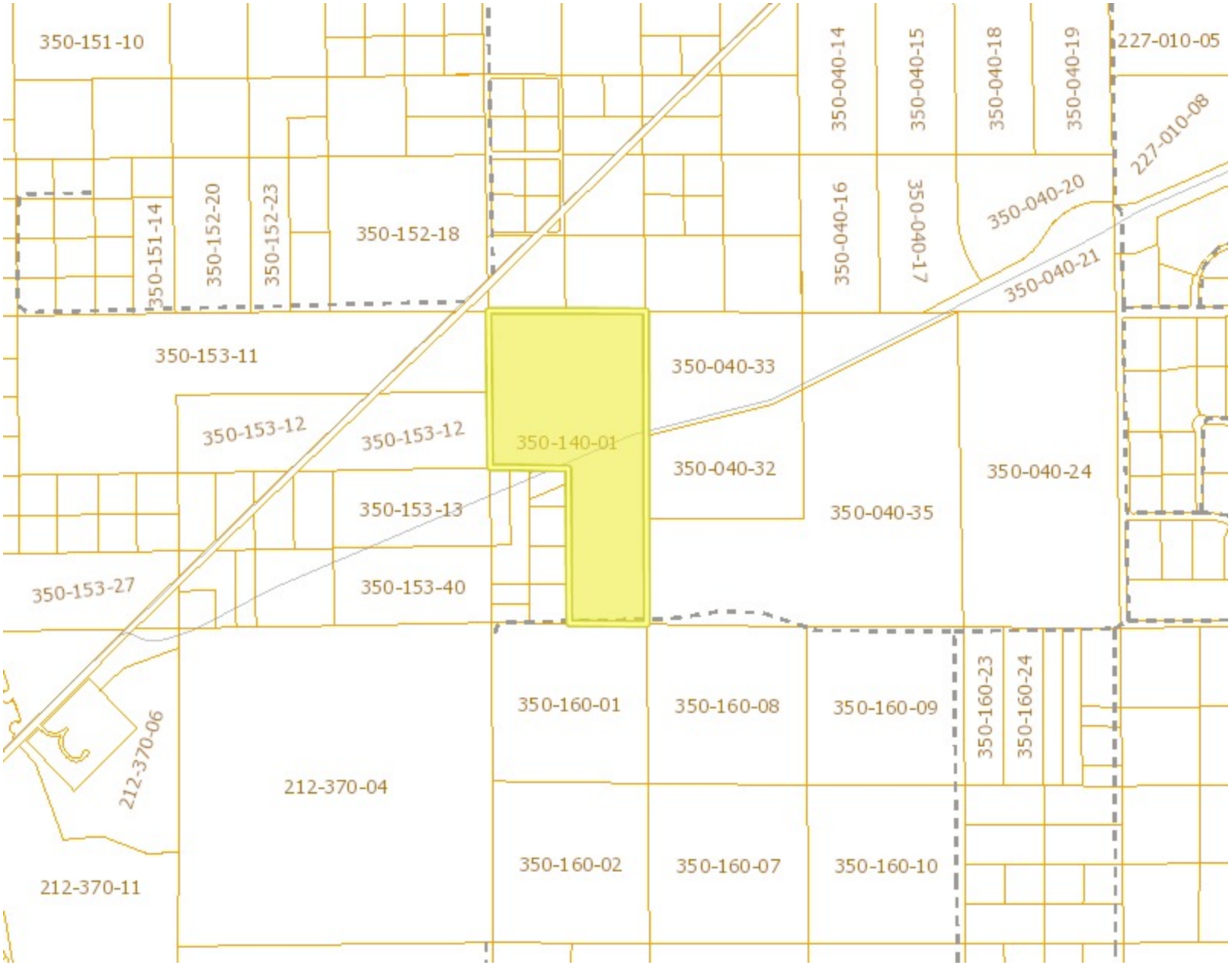
DATE: 05/18/10
SCALE: AS-NOTED
DRAWN BY: RP
CK'D BY: RG
DATE CK'D: 05/07/10

REVISIONS	CK'D BY	DATE CK'D
UPDATED	RP	09/27/12
UPDATED	RP	04/09/13
REVISIONS	R. GREEN	11/10/14

JOB NO. 04427

I:\CAL CITY\CalCity Base Maps\LAND USE\LAND_USE MAP.DWG

ROAD HAZARDS (APN 350-140-01)



Legend

- County Maintained Roads
- Speed Limits
  - No Info
  - 25
  - 30
  - 35
  - 40
  - 45
  - 50
  - 55
- Road Restrictions
  - DIAG PARK
  - HANDICAP
  - NO PARKING
  - NO STOPPING
- Functional Classification
- Traffic Signals
  - DARREN TRUE
  - FLASHER
  - RJ CASTILLO
- Railroad
- Misc Dirt Roads
- Adopt A Road
- Alleys
- Parcels Land

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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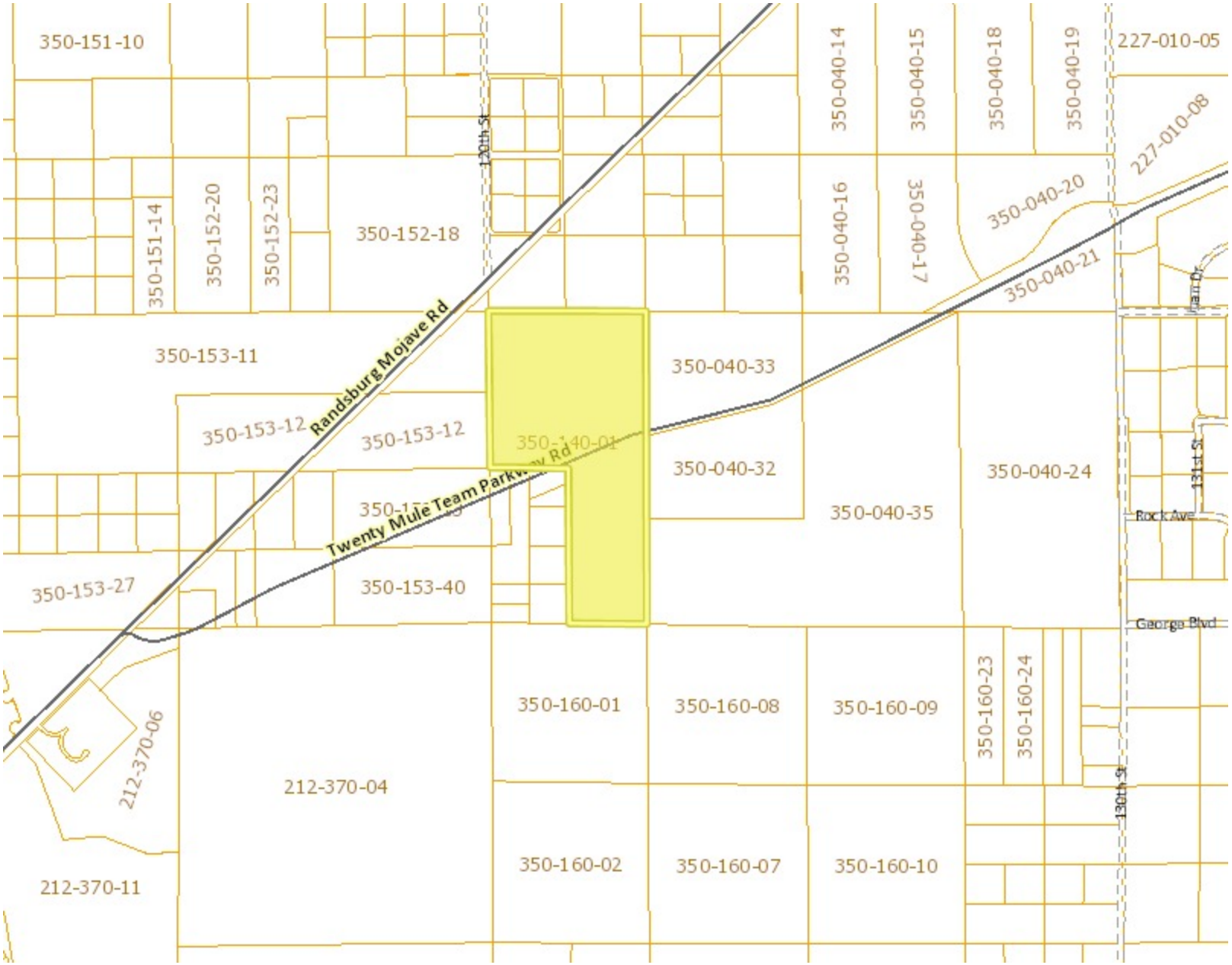
Notes

ROADWAYS (APN 350-140-01)



Legend

- County Maintained Roads
- Roads 10k-24k
  - Freeway
  - Highway
  - Major
  - Minor
  - Local
  - Ramp
  - Unpaved
- Parcels Land

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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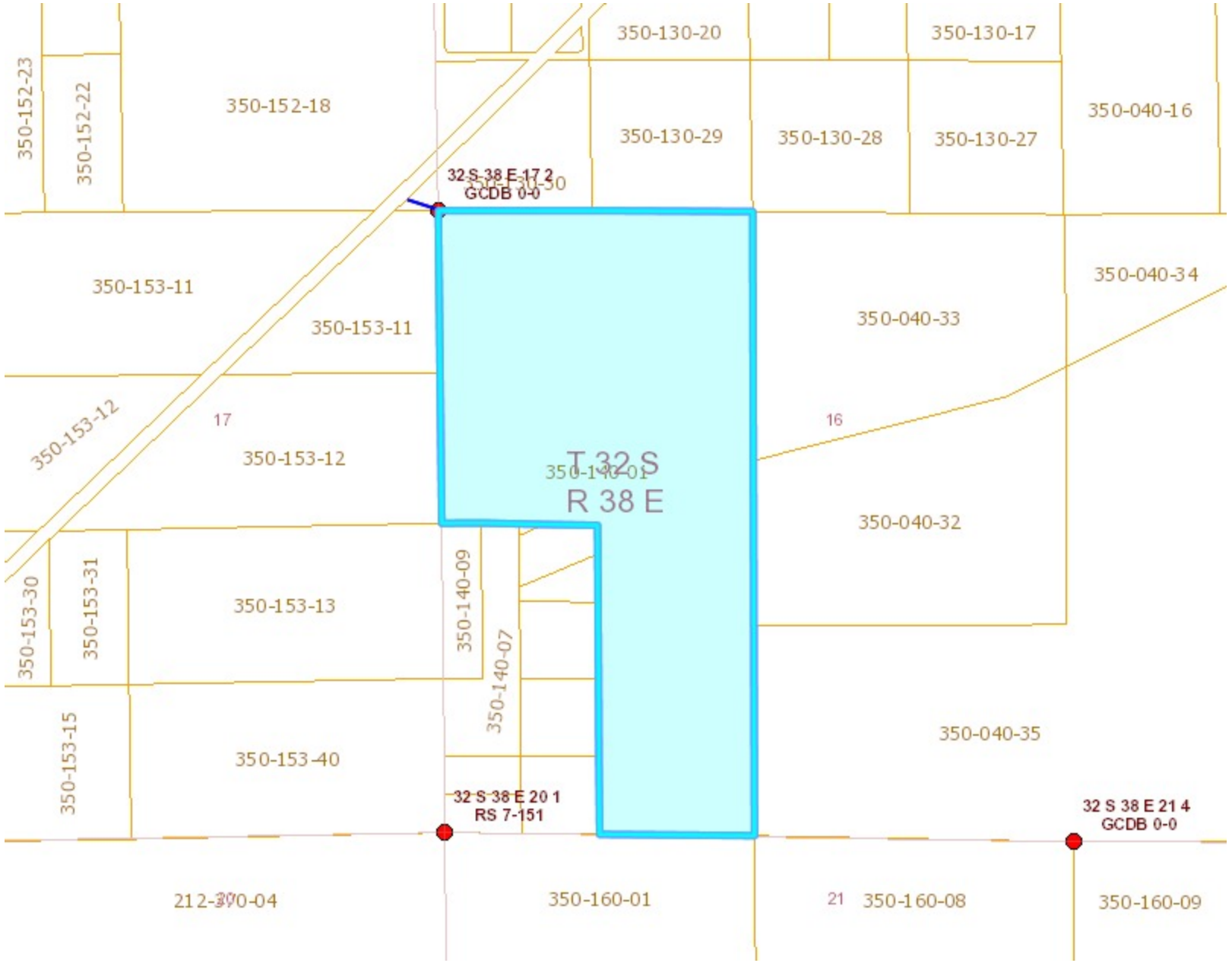
Notes

Kern County
Online Mapping System

SURVEY (APN 350-140-01)



Legend

- Townships
- Sections
- Section Corners
- Parcels Land

1: 9,028

0.3 0 0.14 0.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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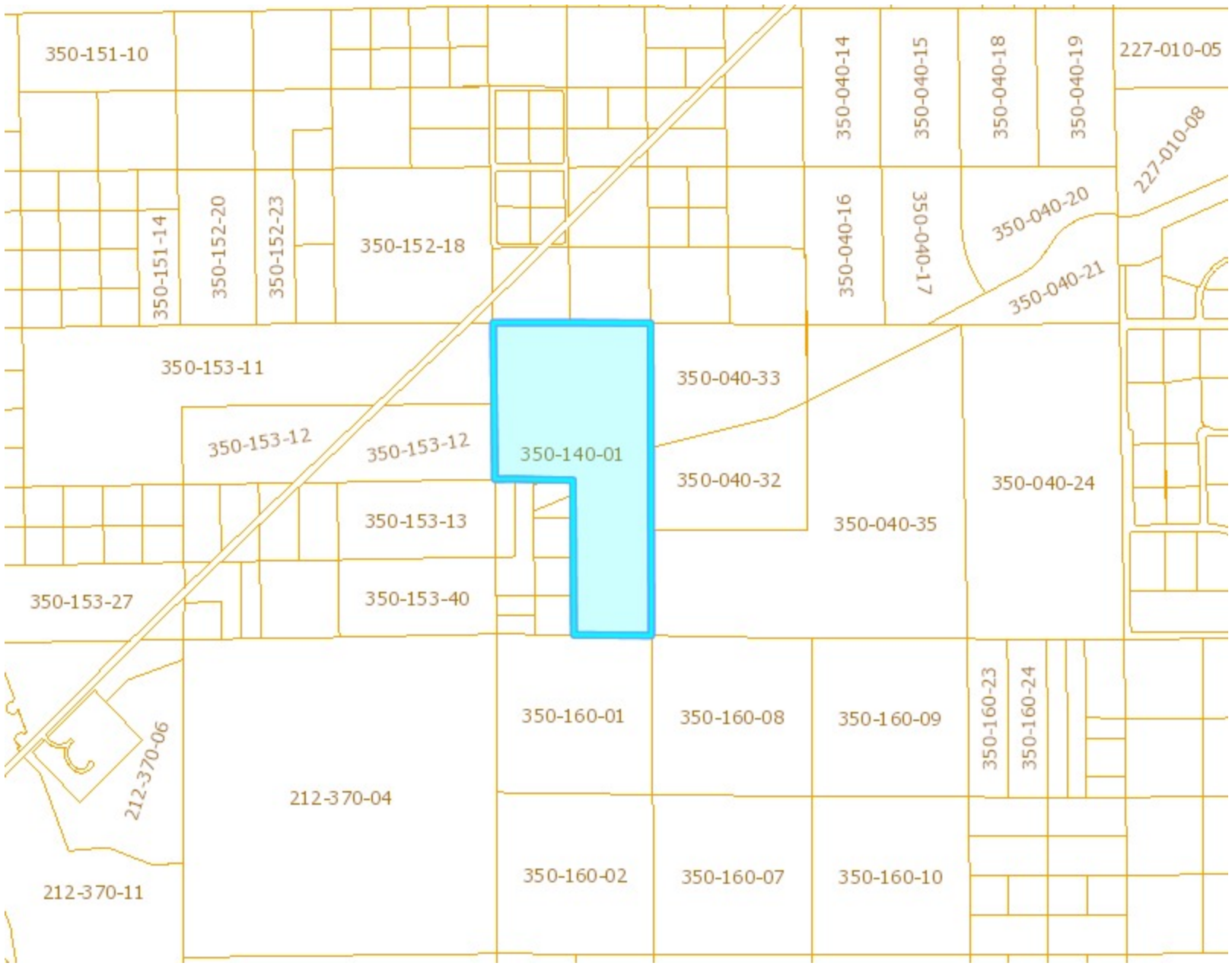
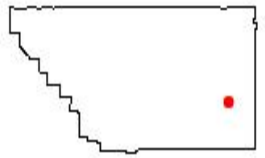
Notes

WIND SPEED AREAS (APN 350-140-01)





Legend

Wind Speeds

- 100 - 120mph
- 110 - 125mph
- 120 - 135mph

Parcels Land

1: 18,056

0.6 0 0.28 0.6 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

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Notes

APPENDIX C

CalEEMOD Modeling Results & Analysis

(Summer, Winter, Annual)

(APN: 350-140-01)

August 6, 2021

Schafer IS/MND (APN: 350-140-01) for 265,000 SF

Kern-Mojave Desert County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	265.00	1000sqft	6.08	265,000.00	250
Parking Lot	0.78	Acre	0.78	34,029.07	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	32
Climate Zone	7			**Operational Year**	2023
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

Architectural Coating - Project Description

Area Coating - Project Description

Area Mitigation - Project Described Mitigation

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00

tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	15
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	33
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	7
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	CNG

tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
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tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblLandUse	LandUseSquareFeet	33,976.80	34,029.07
tblLandUse	Population	0.00	250.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	5.80
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	8.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	1,920.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	33.00

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					
2021	0.1481	1.4358	1.0853	2.3800e-003	0.1979	0.0658	0.2637	0.0947	0.0612	0.1560	0.0000	211.5372	211.5372	0.0433	0.0000	212.6187
2022	2.0601	1.9307	1.8934	4.6300e-003	0.1187	0.0778	0.1964	0.0322	0.0731	0.1053	0.0000	412.9543	412.9543	0.0645	0.0000	414.5673
Maximum	**2.0601**	**1.9307**	**1.8934**	**4.6300e-003**	**0.1979**	**0.0778**	**0.2637**	**0.0947**	**0.0731**	**0.1560**	**0.0000**	**412.9543**	**412.9543**	**0.0645**	**0.0000**	**414.5673**

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					
2021	0.0905	1.1920	1.0962	2.3800e-003	0.0915	0.0336	0.1251	0.0377	0.0322	0.0700	0.0000	206.0786	206.0786	0.0426	0.0000	207.1424
2022	2.0236	2.0593	1.8309	4.6300e-003	0.1039	0.0597	0.1636	0.0286	0.0571	0.0857	0.0000	396.7670	396.7670	0.0626	0.0000	398.3317
Maximum	**2.0236**	**2.0593**	**1.8309**	**4.6300e-003**	**0.1039**	**0.0597**	**0.1636**	**0.0377**	**0.0571**	**0.0857**	**0.0000**	**396.7670**	**396.7670**	**0.0626**	**0.0000**	**398.3317**

	ROG	NOx	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	**4.27**	**3.42**	**1.73**	**0.00**	**38.26**	**35.00**	**37.25**	**47.77**	**33.47**	**40.41**	**0.00**	**3.47**	**3.47**	**2.46**	**0.00**	**3.46**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-4-2021	11-3-2021	1.0423	0.7481
2	11-4-2021	2-3-2022	0.8142	0.8147
3	2-4-2022	5-3-2022	0.7393	0.7594
4	5-4-2022	8-3-2022	0.7634	0.7841
5	8-4-2022	9-30-2022	0.5482	0.5922
		Highest	1.0423	0.8147

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.2228	2.0000e-005	2.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7500e-003	4.7500e-003	1.0000e-005	0.0000	5.0600e-003
Energy	0.0246	0.2233	0.1876	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	1,088.6994	1,088.6994	0.0396	0.0117	1,093.1692
Mobile	0.4139	4.9349	4.0966	0.0260	1.4318	0.0136	1.4454	0.3851	0.0128	0.3979	0.0000	2,425.0194	2,425.0194	0.1356	0.0000	2,428.4096
Waste						0.0000	0.0000		0.0000	0.0000	66.7028	0.0000	66.7028	3.9420	0.0000	165.2534
Water						0.0000	0.0000		0.0000	0.0000	19.4417	254.2418	273.6835	2.0074	0.0493	338.5650
Total	**1.6613**	**5.1582**	**4.2866**	**0.0273**	**1.4318**	**0.0306**	**1.4624**	**0.3851**	**0.0298**	**0.4149**	**86.1445**	**3,767.9654**	**3,854.1099**	**6.1246**	**0.0610**	**4,025.4023**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1448	1.0000e-005	1.4200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.6900e-003
Energy	0.0246	0.2233	0.1876	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	243.0881	243.0881	4.6600e-003	4.4600e-003	244.5327
Mobile	0.3713	4.5372	3.3137	0.0208	1.0669	0.0105	1.0774	0.2870	9.8400e-003	0.2968	0.0000	1,936.6348	1,936.6348	0.1257	0.0000	1,939.7773
Waste						0.0000	0.0000		0.0000	0.0000	33.3514	0.0000	33.3514	1.9710	0.0000	82.6267
Water						0.0000	0.0000		0.0000	0.0000	13.6092	177.9693	191.5785	1.4051	0.0345	236.9955
Total	**1.5407**	**4.7605**	**3.5027**	**0.0221**	**1.0669**	**0.0275**	**1.0943**	**0.2870**	**0.0268**	**0.3138**	**46.9606**	**2,357.6947**	**2,404.6553**	**3.5065**	**0.0390**	**2,503.9348**

	ROG	NOx	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	**7.26**	**7.71**	**18.29**	**19.20**	**25.49**	**10.23**	**25.17**	**25.49**	**9.88**	**24.37**	**45.49**	**37.43**	**37.61**	**42.75**	**36.08**	**37.80**

3.0 Construction Detail

Construction Phase

Schafer IS/MND (APN: 350-140-01) for 265,000 SF - Kern-Mojave Desert County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/4/2021	8/31/2021	5	20	
2	Site Preparation	Site Preparation	9/1/2021	9/14/2021	5	10	
3	Grading	Grading	9/15/2021	10/12/2021	5	20	
4	Building Construction	Building Construction	10/13/2021	8/30/2022	5	230	
5	Paving	Paving	8/31/2022	9/27/2022	5	20	
6	Architectural Coating	Architectural Coating	9/28/2022	10/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0.78

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 397,500; Non-Residential Outdoor: 132,500; Striped Parking Area: 2,042 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	126.00	49.00	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	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 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	0.0317	0.3144	0.2157	3.9000e-004		0.0155	0.0155		0.0144	0.0144	0.0000	34.0008	34.0008	9.5700e-003	0.0000	34.2400
Total	**0.0317**	**0.3144**	**0.2157**	**3.9000e-004**		**0.0155**	**0.0155**		**0.0144**	**0.0144**	**0.0000**	**34.0008**	**34.0008**	**9.5700e-003**	**0.0000**	**34.2400**

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	5.3000e-004	3.5000e-004	3.5300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0698	1.0698	3.0000e-005	0.0000	1.0704
Total	**5.3000e-004**	**3.5000e-004**	**3.5300e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0698**	**1.0698**	**3.0000e-005**	**0.0000**	**1.0704**

3.2 Demolition - 2021

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	0.0149	0.2035	0.2255	3.9000e-004		6.4000e-003	6.4000e-003		6.1500e-003	6.1500e-003	0.0000	34.0007	34.0007	9.5700e-003	0.0000	34.2400
Total	**0.0149**	**0.2035**	**0.2255**	**3.9000e-004**		**6.4000e-003**	**6.4000e-003**		**6.1500e-003**	**6.1500e-003**	**0.0000**	**34.0007**	**34.0007**	**9.5700e-003**	**0.0000**	**34.2400**

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	5.3000e-004	3.5000e-004	3.5300e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0698	1.0698	3.0000e-005	0.0000	1.0704
Total	**5.3000e-004**	**3.5000e-004**	**3.5300e-003**	**1.0000e-005**	**1.0500e-003**	**1.0000e-005**	**1.0600e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**1.0698**	**1.0698**	**3.0000e-005**	**0.0000**	**1.0704**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0903**	**0.0102**	**0.1006**	**0.0497**	**9.4000e-003**	**0.0591**	**0.0000**	**16.7179**	**16.7179**	**5.4100e-003**	**0.0000**	**16.8530**

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	3.2000e-004	2.1000e-004	2.1200e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6419	0.6419	2.0000e-005	0.0000	0.6423
Total	**3.2000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**7.3000e-004**	**0.0000**	**7.3000e-004**	**1.9000e-004**	**0.0000**	**2.0000e-004**	**0.0000**	**0.6419**	**0.6419**	**2.0000e-005**	**0.0000**	**0.6423**

3.3 Site Preparation - 2021

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					0.0317	0.0000	0.0317	0.0165	0.0000	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0500e-003	0.1265	0.1148	1.9000e-004		2.3700e-003	2.3700e-003		2.3700e-003	2.3700e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	**6.0500e-003**	**0.1265**	**0.1148**	**1.9000e-004**	**0.0317**	**2.3700e-003**	**0.0341**	**0.0165**	**2.3700e-003**	**0.0188**	**0.0000**	**16.7178**	**16.7178**	**5.4100e-003**	**0.0000**	**16.8530**

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	3.2000e-004	2.1000e-004	2.1200e-003	1.0000e-005	6.3000e-004	0.0000	6.4000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.6419	0.6419	2.0000e-005	0.0000	0.6423
Total	**3.2000e-004**	**2.1000e-004**	**2.1200e-003**	**1.0000e-005**	**6.3000e-004**	**0.0000**	**6.4000e-004**	**1.7000e-004**	**0.0000**	**1.7000e-004**	**0.0000**	**0.6419**	**0.6419**	**2.0000e-005**	**0.0000**	**0.6423**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0655	0.0000	0.0655	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0655**	**0.0116**	**0.0771**	**0.0337**	**0.0107**	**0.0443**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2644**

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	5.3000e-004	3.5000e-004	3.5300e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0698	1.0698	3.0000e-005	0.0000	1.0704
Total	**5.3000e-004**	**3.5000e-004**	**3.5300e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0698**	**1.0698**	**3.0000e-005**	**0.0000**	**1.0704**

3.4 Grading - 2021

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					0.0230	0.0000	0.0230	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0104	0.1855	0.1834	3.0000e-004		4.2300e-003	4.2300e-003		4.1500e-003	4.1500e-003	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	**0.0104**	**0.1855**	**0.1834**	**3.0000e-004**	**0.0230**	**4.2300e-003**	**0.0272**	**0.0112**	**4.1500e-003**	**0.0153**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2643**

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	5.3000e-004	3.5000e-004	3.5300e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0698	1.0698	3.0000e-005	0.0000	1.0704
Total	**5.3000e-004**	**3.5000e-004**	**3.5300e-003**	**1.0000e-005**	**1.0500e-003**	**1.0000e-005**	**1.0600e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**1.0698**	**1.0698**	**3.0000e-005**	**0.0000**	**1.0704**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0551	0.5055	0.4807	7.8000e-004		0.0278	0.0278		0.0261	0.0261	0.0000	67.1748	67.1748	0.0162	0.0000	67.5800
Total	**0.0551**	**0.5055**	**0.4807**	**7.8000e-004**		**0.0278**	**0.0278**		**0.0261**	**0.0261**	**0.0000**	**67.1748**	**67.1748**	**0.0162**	**0.0000**	**67.5800**

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	4.6700e-003	0.1567	0.0294	4.1000e-004	9.4800e-003	4.2000e-004	9.9000e-003	2.7400e-003	4.0000e-004	3.1400e-003	0.0000	38.7486	38.7486	2.9600e-003	0.0000	38.8227
Worker	0.0130	8.4500e-003	0.0860	2.9000e-004	0.0294	2.0000e-004	0.0297	7.8200e-003	1.9000e-004	8.0100e-003	0.0000	26.0600	26.0600	6.2000e-004	0.0000	26.0755
Total	**0.0176**	**0.1651**	**0.1154**	**7.0000e-004**	**0.0389**	**6.2000e-004**	**0.0396**	**0.0106**	**5.9000e-004**	**0.0112**	**0.0000**	**64.8086**	**64.8086**	**3.5800e-003**	**0.0000**	**64.8982**

3.5 Building Construction - 2021

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	0.0401	0.5106	0.4478	7.8000e-004		0.0200	0.0200		0.0190	0.0190	0.0000	61.7163	61.7163	0.0155	0.0000	62.1037
Total	**0.0401**	**0.5106**	**0.4478**	**7.8000e-004**		**0.0200**	**0.0200**		**0.0190**	**0.0190**	**0.0000**	**61.7163**	**61.7163**	**0.0155**	**0.0000**	**62.1037**

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	4.6700e-003	0.1567	0.0294	4.1000e-004	8.4800e-003	4.2000e-004	8.9000e-003	2.4900e-003	4.0000e-004	2.8900e-003	0.0000	38.7486	38.7486	2.9600e-003	0.0000	38.8227
Worker	0.0130	8.4500e-003	0.0860	2.9000e-004	0.0256	2.0000e-004	0.0258	6.8800e-003	1.9000e-004	7.0700e-003	0.0000	26.0600	26.0600	6.2000e-004	0.0000	26.0755
Total	**0.0176**	**0.1651**	**0.1154**	**7.0000e-004**	**0.0341**	**6.2000e-004**	**0.0347**	**9.3700e-003**	**5.9000e-004**	**9.9600e-003**	**0.0000**	**64.8086**	**64.8086**	**3.5800e-003**	**0.0000**	**64.8982**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1467	1.3430	1.4073	2.3200e-003		0.0696	0.0696		0.0655	0.0655	0.0000	199.2837	199.2837	0.0477	0.0000	200.4773
Total	**0.1467**	**1.3430**	**1.4073**	**2.3200e-003**		**0.0696**	**0.0696**		**0.0655**	**0.0655**	**0.0000**	**199.2837**	**199.2837**	**0.0477**	**0.0000**	**200.4773**

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	0.0129	0.4392	0.0809	1.2000e-003	0.0281	1.0700e-003	0.0292	8.1200e-003	1.0300e-003	9.1500e-003	0.0000	113.8668	113.8668	8.4400e-003	0.0000	114.0778
Worker	0.0356	0.0223	0.2326	8.2000e-004	0.0873	5.8000e-004	0.0879	0.0232	5.4000e-004	0.0237	0.0000	74.4738	74.4738	1.6400e-003	0.0000	74.5147
Total	**0.0485**	**0.4616**	**0.3136**	**2.0200e-003**	**0.1155**	**1.6500e-003**	**0.1171**	**0.0313**	**1.5700e-003**	**0.0329**	**0.0000**	**188.3406**	**188.3406**	**0.0101**	**0.0000**	**188.5925**

3.5 Building Construction - 2022

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	0.1119	1.4320	1.3176	2.3200e-003		0.0539	0.0539		0.0514	0.0514	0.0000	183.0965	183.0965	0.0458	0.0000	184.2417
Total	**0.1119**	**1.4320**	**1.3176**	**2.3200e-003**		**0.0539**	**0.0539**		**0.0514**	**0.0514**	**0.0000**	**183.0965**	**183.0965**	**0.0458**	**0.0000**	**184.2417**

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	0.0129	0.4392	0.0809	1.2000e-003	0.0251	1.0700e-003	0.0262	7.3900e-003	1.0300e-003	8.4100e-003	0.0000	113.8668	113.8668	8.4400e-003	0.0000	114.0778
Worker	0.0356	0.0223	0.2326	8.2000e-004	0.0760	5.8000e-004	0.0766	0.0204	5.4000e-004	0.0209	0.0000	74.4738	74.4738	1.6400e-003	0.0000	74.5147
Total	**0.0485**	**0.4616**	**0.3136**	**2.0200e-003**	**0.1011**	**1.6500e-003**	**0.1028**	**0.0278**	**1.5700e-003**	**0.0294**	**0.0000**	**188.3406**	**188.3406**	**0.0101**	**0.0000**	**188.5925**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	1.0200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0121**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

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	4.9000e-004	3.1000e-004	3.2200e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0309	1.0309	2.0000e-005	0.0000	1.0315
Total	**4.9000e-004**	**3.1000e-004**	**3.2200e-003**	**1.0000e-005**	**1.2100e-003**	**1.0000e-005**	**1.2200e-003**	**3.2000e-004**	**1.0000e-005**	**3.3000e-004**	**0.0000**	**1.0309**	**1.0309**	**2.0000e-005**	**0.0000**	**1.0315**

3.6 Paving - 2022

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	9.3100e-003	0.1509	0.1730	2.3000e-004		3.3300e-003	3.3300e-003		3.3300e-003	3.3300e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	1.0200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0103**	**0.1509**	**0.1730**	**2.3000e-004**		**3.3300e-003**	**3.3300e-003**		**3.3300e-003**	**3.3300e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

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	4.9000e-004	3.1000e-004	3.2200e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0600e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	1.0309	1.0309	2.0000e-005	0.0000	1.0315
Total	**4.9000e-004**	**3.1000e-004**	**3.2200e-003**	**1.0000e-005**	**1.0500e-003**	**1.0000e-005**	**1.0600e-003**	**2.8000e-004**	**1.0000e-005**	**2.9000e-004**	**0.0000**	**1.0309**	**1.0309**	**2.0000e-005**	**0.0000**	**1.0315**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.8495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**1.8516**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

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	8.2000e-004	5.2000e-004	5.3700e-003	2.0000e-005	2.0100e-003	1.0000e-005	2.0300e-003	5.4000e-004	1.0000e-005	5.5000e-004	0.0000	1.7182	1.7182	4.0000e-005	0.0000	1.7192
Total	**8.2000e-004**	**5.2000e-004**	**5.3700e-003**	**2.0000e-005**	**2.0100e-003**	**1.0000e-005**	**2.0300e-003**	**5.4000e-004**	**1.0000e-005**	**5.5000e-004**	**0.0000**	**1.7182**	**1.7182**	**4.0000e-005**	**0.0000**	**1.7192**

3.7 Architectural Coating - 2022

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	1.8495					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**1.8516**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

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	8.2000e-004	5.2000e-004	5.3700e-003	2.0000e-005	1.7500e-003	1.0000e-005	1.7700e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.7182	1.7182	4.0000e-005	0.0000	1.7192
Total	**8.2000e-004**	**5.2000e-004**	**5.3700e-003**	**2.0000e-005**	**1.7500e-003**	**1.0000e-005**	**1.7700e-003**	**4.7000e-004**	**1.0000e-005**	**4.8000e-004**	**0.0000**	**1.7182**	**1.7182**	**4.0000e-005**	**0.0000**	**1.7192**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive 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	0.3713	4.5372	3.3137	0.0208	1.0669	0.0105	1.0774	0.2870	9.8400e-003	0.2968	0.0000	1,936.6348	1,936.6348	0.1257	0.0000	1,939.7773
Unmitigated	0.4139	4.9349	4.0966	0.0260	1.4318	0.0136	1.4454	0.3851	0.0128	0.3979	0.0000	2,425.0194	2,425.0194	0.1356	0.0000	2,428.4096

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,809.95	659.85	193.45	3,709,157	2,763,768
Parking Lot	0.00	0.00	0.00		
Total	1,809.95	659.85	193.45	3,709,157	2,763,768

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.487920	0.030073	0.170877	0.112061	0.016651	0.005572	0.019337	0.146855	0.001612	0.001610	0.005760	0.000912	0.000759
Parking Lot	0.487920	0.030073	0.170877	0.112061	0.016651	0.005572	0.019337	0.146855	0.001612	0.001610	0.005760	0.000912	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Kilowatt Hours of Renewable Electricity Generated

Percent of Electricity Use Generated with Renewable 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	-0.0027	-0.0027	0.0000	0.0000	-0.0027
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	845.6086	845.6086	0.0349	7.2200e-003	848.6338
NaturalGas Mitigated	0.0246	0.2233	0.1876	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	243.0908	243.0908	4.6600e-003	4.4600e-003	244.5354
NaturalGas Unmitigated	0.0246	0.2233	0.1876	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	243.0908	243.0908	4.6600e-003	4.4600e-003	244.5354

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	4.55535e+006	0.0246	0.2233	0.1876	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	243.0908	243.0908	4.6600e-003	4.4600e-003	244.5354
Parking Lot	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		**0.0246**	**0.2233**	**0.1876**	**1.3400e-003**		**0.0170**	**0.0170**		**0.0170**	**0.0170**	**0.0000**	**243.0908**	**243.0908**	**4.6600e-003**	**4.4600e-003**	**244.5354**

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					
Industrial Park	4.55535e+006	0.0246	0.2233	0.1876	1.3400e-003		0.0170	0.0170		0.0170	0.0170	0.0000	243.0908	243.0908	4.6600e-003	4.4600e-003	244.5354
Parking Lot	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		**0.0246**	**0.2233**	**0.1876**	**1.3400e-003**		**0.0170**	**0.0170**		**0.0170**	**0.0170**	**0.0000**	**243.0908**	**243.0908**	**4.6600e-003**	**4.4600e-003**	**244.5354**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	2.64205e+006	841.8137	0.0348	7.1900e-003	844.8254
Parking Lot	11910.2	3.7948	1.6000e-004	3.0000e-005	3.8084
Total		**845.6086**	**0.0349**	**7.2200e-003**	**848.6338**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	-4.25	-0.0014	0.0000	0.0000	-0.0014
Parking Lot	-4.25	-0.0014	0.0000	0.0000	-0.0014
Total		**-0.0027**	**0.0000**	**0.0000**	**-0.0027**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1448	1.0000e-005	1.4200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.6900e-003
Unmitigated	1.2228	2.0000e-005	2.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7500e-003	4.7500e-003	1.0000e-005	0.0000	5.0600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1854					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.3000e-004	2.0000e-005	2.4400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.7500e-003	4.7500e-003	1.0000e-005	0.0000	5.0600e-003
Total	**1.2228**	**2.0000e-005**	**2.4400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.7500e-003**	**4.7500e-003**	**1.0000e-005**	**0.0000**	**5.0600e-003**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1850					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9598					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-004	1.0000e-005	1.4200e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.5600e-003	2.5600e-003	1.0000e-005	0.0000	2.6900e-003
Total	**1.1448**	**1.0000e-005**	**1.4200e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**2.5600e-003**	**2.5600e-003**	**1.0000e-005**	**0.0000**	**2.6900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Turf Reduction

Use Water Efficient Irrigation System

Use Water Efficient Landscaping

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	191.5785	1.4051	0.0345	236.9955
Unmitigated	273.6835	2.0074	0.0493	338.5650

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	61.2813 / 0	273.6835	2.0074	0.0493	338.5650
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**273.6835**	**2.0074**	**0.0493**	**338.5650**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	42.8969 / 0	191.5785	1.4051	0.0345	236.9955
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**191.5785**	**1.4051**	**0.0345**	**236.9955**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	33.3514	1.9710	0.0000	82.6267
Unmitigated	66.7028	3.9420	0.0000	165.2534

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	328.6	66.7028	3.9420	0.0000	165.2534
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**66.7028**	**3.9420**	**0.0000**	**165.2534**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	164.3	33.3514	1.9710	0.0000	82.6267
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**33.3514**	**1.9710**	**0.0000**	**82.6267**

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
Emergency Generator	33	8	1920	5.8	0.73	CNG

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Schafer IS/MND (APN: 350-140-01) for 265,000 SF

Kern-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	265.00	1000sqft	6.08	265,000.00	250
Parking Lot	0.78	Acre	0.78	34,029.07	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	32
Climate Zone	7			**Operational Year**	2023
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

Schafer IS/MND (APN: 350-140-01) for 265,000 SF - Kern-Mojave Desert County, Summer

Project Characteristics -

Land Use - Per the maximum occupancy type per 2019 CBC and Fire Code.

Construction Phase - Property is vacant land

Energy Use -

Stationary Sources - Emergency Generators and Fire Pumps -

Construction Off-road Equipment Mitigation - Project Mitigation Measures to Reduce Construction-related emissions.

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	15
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	33
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	7
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2

tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00

tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	PhaseEndDate	8/31/2021	8/3/2021
tblEnergyUse	LightingElect	0.35	0.35
tblEnergyUse	T24E	2.89	2.89
tblEnergyUse	T24NG	16.11	16.11
tblLandUse	Population	0.00	250.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	5.80
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	8.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	1,920.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	33.00

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					
2021	3.9615	40.5359	21.6542	0.0522	18.2141	2.0455	20.2596	9.9699	1.8818	11.8517	0.0000	5,141.8109	5,141.8109	1.1958	0.0000	5,160.5423
2022	308.5504	20.9060	20.4320	0.0517	1.3673	0.8281	2.1954	0.3702	0.7791	1.1494	0.0000	5,089.5433	5,089.5433	0.7379	0.0000	5,107.9909
Maximum	**308.5504**	**40.5359**	**21.6542**	**0.0522**	**18.2141**	**2.0455**	**20.2596**	**9.9699**	**1.8818**	**11.8517**	**0.0000**	**5,141.8109**	**5,141.8109**	**1.1958**	**0.0000**	**5,160.5423**

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					
2021	2.0546	25.3298	23.4600	0.0522	6.4699	0.7093	6.9439	3.3265	0.6743	3.8005	0.0000	4,934.3331	4,934.3331	1.1958	0.0000	4,952.3892
2022	308.5504	21.9414	19.3899	0.0517	1.1969	0.6455	1.8424	0.3284	0.6155	0.9439	0.0000	4,882.0656	4,882.0656	0.7168	0.0000	4,899.8925
Maximum	**308.5504**	**25.3298**	**23.4600**	**0.0522**	**6.4699**	**0.7093**	**6.9439**	**3.3265**	**0.6743**	**3.8005**	**0.0000**	**4,934.3331**	**4,934.3331**	**1.1958**	**0.0000**	**4,952.3892**

	ROG	NOx	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	**0.61**	**23.06**	**-1.81**	**0.00**	**60.85**	**52.85**	**60.87**	**64.65**	**51.53**	**63.51**	**0.00**	**4.06**	**4.06**	**1.09**	**0.00**	**4.05**

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	7.3746	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0620
Energy	0.1346	1.2233	1.0276	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,467.9688	1,467.9688	0.0281	0.0269	1,476.6922
Mobile	3.4860	34.4076	31.5572	0.1929	10.2536	0.0955	10.3492	2.7536	0.0896	2.8432		19,805.2598	19,805.2598	1.0247		19,830.8768
Stationary	11.6134	1.1181	30.2468	4.0500e-003		0.0641	0.0641		0.0641	0.0641		741.9845	741.9845	1.5514		780.7700
Total	**22.6086**	**36.7492**	**62.8587**	**0.2043**	**10.2536**	**0.2527**	**10.5063**	**2.7536**	**0.2468**	**3.0004**		**22,015.2712**	**22,015.2712**	**2.6044**	**0.0269**	**22,088.4010**

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	lb/day										lb/day					
Area	6.9492	1.4000e-004	0.0157	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0314	0.0314	6.0000e-005		0.0330
Energy	0.1346	1.2233	1.0276	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,467.9688	1,467.9688	0.0281	0.0269	1,476.6922
Mobile	3.1767	31.7668	25.0408	0.1539	7.6402	0.0736	7.7138	2.0518	0.0690	2.1208		15,819.8957	15,819.8957	0.9431		15,843.4729
Stationary	11.6134	1.1181	30.2468	4.0500e-003		0.0641	0.0641		0.0641	0.0641		741.9845	741.9845	1.5514		780.7700
Total	**21.8739**	**34.1084**	**56.3310**	**0.1653**	**7.6402**	**0.2307**	**7.8709**	**2.0518**	**0.2261**	**2.2779**		**18,029.8803**	**18,029.8803**	**2.5227**	**0.0269**	**18,100.9681**

	ROG	NOx	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	**3.25**	**7.19**	**10.38**	**19.08**	**25.49**	**8.71**	**25.08**	**25.49**	**8.38**	**24.08**	**0.00**	**18.10**	**18.10**	**3.14**	**0.00**	**18.05**

3.0 Construction Detail

Construction Phase

Schafer IS/MND (APN: 350-140-01) for 265,000 SF - Kern-Mojave Desert County, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/4/2021	8/3/2021	5	0	
2	Site Preparation	Site Preparation	9/1/2021	9/14/2021	5	10	
3	Grading	Grading	9/15/2021	10/12/2021	5	20	
4	Building Construction	Building Construction	10/13/2021	8/30/2022	5	230	
5	Paving	Paving	8/31/2022	9/27/2022	5	20	
6	Architectural Coating	Architectural Coating	9/28/2022	10/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0.78

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 397,500; Non-Residential Outdoor: 132,500; Striped Parking Area: 2,042 (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	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
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
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
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	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	126.00	49.00	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	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.2 Demolition - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction 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	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0733	0.0388	0.4999	1.5700e-003	0.1479	9.9000e-004	0.1489	0.0392	9.2000e-004	0.0401		156.2960	156.2960	3.7800e-003		156.3906
Total	**0.0733**	**0.0388**	**0.4999**	**1.5700e-003**	**0.1479**	**9.9000e-004**	**0.1489**	**0.0392**	**9.2000e-004**	**0.0401**		**156.2960**	**156.2960**	**3.7800e-003**		**156.3906**

3.3 Site Preparation - 2021

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					6.3413	0.0000	6.3413	3.2920	0.0000	3.2920			0.0000			0.0000
Off-Road	1.2097	25.2910	22.9600	0.0380		0.4731	0.4731		0.4731	0.4731	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**1.2097**	**25.2910**	**22.9600**	**0.0380**	**6.3413**	**0.4731**	**6.8143**	**3.2920**	**0.4731**	**3.7651**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0733	0.0388	0.4999	1.5700e-003	0.1286	9.9000e-004	0.1296	0.0345	9.2000e-004	0.0354		156.2960	156.2960	3.7800e-003		156.3906
Total	**0.0733**	**0.0388**	**0.4999**	**1.5700e-003**	**0.1286**	**9.9000e-004**	**0.1296**	**0.0345**	**9.2000e-004**	**0.0354**		**156.2960**	**156.2960**	**3.7800e-003**		**156.3906**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0611	0.0323	0.4166	1.3100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.6000e-004	0.0335		130.2467	130.2467	3.1500e-003		130.3255
Total	**0.0611**	**0.0323**	**0.4166**	**1.3100e-003**	**0.1232**	**8.3000e-004**	**0.1241**	**0.0327**	**7.6000e-004**	**0.0335**		**130.2467**	**130.2467**	**3.1500e-003**		**130.3255**

3.4 Grading - 2021

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					2.2999	0.0000	2.2999	1.1163	0.0000	1.1163			0.0000			0.0000
Off-Road	1.0373	18.5509	18.3444	0.0296		0.4229	0.4229		0.4146	0.4146	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**1.0373**	**18.5509**	**18.3444**	**0.0296**	**2.2999**	**0.4229**	**2.7228**	**1.1163**	**0.4146**	**1.5309**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0611	0.0323	0.4166	1.3100e-003	0.1072	8.3000e-004	0.1080	0.0287	7.6000e-004	0.0295		130.2467	130.2467	3.1500e-003		130.3255
Total	**0.0611**	**0.0323**	**0.4166**	**1.3100e-003**	**0.1072**	**8.3000e-004**	**0.1080**	**0.0287**	**7.6000e-004**	**0.0295**		**130.2467**	**130.2467**	**3.1500e-003**		**130.3255**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.1581	5.3334	0.9368	0.0143	0.3322	0.0142	0.3464	0.0957	0.0136	0.1093		1,494.3750	1,494.3750	0.1068		1,497.0439
Worker	0.5129	0.2714	3.4995	0.0110	1.0351	6.9600e-003	1.0420	0.2746	6.4100e-003	0.2810		1,094.0720	1,094.0720	0.0265		1,094.7342
Total	**0.6710**	**5.6048**	**4.4364**	**0.0253**	**1.3673**	**0.0212**	**1.3885**	**0.3702**	**0.0200**	**0.3902**		**2,588.4470**	**2,588.4470**	**0.1333**		**2,591.7781**

3.5 Building Construction - 2021

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	1.3836	17.6056	15.4428	0.0269		0.6881	0.6881		0.6543	0.6543	0.0000	2,345.8862	2,345.8862	0.5890		2,360.6111
Total	**1.3836**	**17.6056**	**15.4428**	**0.0269**		**0.6881**	**0.6881**		**0.6543**	**0.6543**	**0.0000**	**2,345.8862**	**2,345.8862**	**0.5890**		**2,360.6111**

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	0.1581	5.3334	0.9368	0.0143	0.2968	0.0142	0.3110	0.0870	0.0136	0.1006		1,494.3750	1,494.3750	0.1068		1,497.0439
Worker	0.5129	0.2714	3.4995	0.0110	0.9001	6.9600e-003	0.9071	0.2414	6.4100e-003	0.2478		1,094.0720	1,094.0720	0.0265		1,094.7342
Total	**0.6710**	**5.6048**	**4.4364**	**0.0253**	**1.1969**	**0.0212**	**1.2181**	**0.3284**	**0.0200**	**0.3484**		**2,588.4470**	**2,588.4470**	**0.1333**		**2,591.7781**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.1474	5.0482	0.8675	0.0142	0.3323	0.0123	0.3445	0.0957	0.0118	0.1074		1,480.9667	1,480.9667	0.1024		1,483.5258
Worker	0.4740	0.2422	3.2011	0.0106	1.0351	6.7700e-003	1.0418	0.2746	6.2300e-003	0.2808		1,054.2431	1,054.2431	0.0236		1,054.8329
Total	**0.6214**	**5.2904**	**4.0686**	**0.0247**	**1.3673**	**0.0191**	**1.3864**	**0.3702**	**0.0180**	**0.3882**		**2,535.2097**	**2,535.2097**	**0.1260**		**2,538.3587**

3.5 Building Construction - 2022

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	1.3015	16.6510	15.3213	0.0269		0.6264	0.6264		0.5975	0.5975	0.0000	2,346.8559	2,346.8559	0.5871		2,361.5338
Total	**1.3015**	**16.6510**	**15.3213**	**0.0269**		**0.6264**	**0.6264**		**0.5975**	**0.5975**	**0.0000**	**2,346.8559**	**2,346.8559**	**0.5871**		**2,361.5338**

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	0.1474	5.0482	0.8675	0.0142	0.2968	0.0123	0.3091	0.0870	0.0118	0.0987		1,480.9667	1,480.9667	0.1024		1,483.5258
Worker	0.4740	0.2422	3.2011	0.0106	0.9001	6.7700e-003	0.9069	0.2414	6.2300e-003	0.2477		1,054.2431	1,054.2431	0.0236		1,054.8329
Total	**0.6214**	**5.2904**	**4.0686**	**0.0247**	**1.1969**	**0.0191**	**1.2160**	**0.3284**	**0.0180**	**0.3464**		**2,535.2097**	**2,535.2097**	**0.1260**		**2,538.3587**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2050**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0564	0.0288	0.3811	1.2600e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		125.5051	125.5051	2.8100e-003		125.5754
Total	**0.0564**	**0.0288**	**0.3811**	**1.2600e-003**	**0.1232**	**8.1000e-004**	**0.1240**	**0.0327**	**7.4000e-004**	**0.0334**		**125.5051**	**125.5051**	**2.8100e-003**		**125.5754**

3.6 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9311	15.0860	17.2957	0.0228		0.3335	0.3335		0.3335	0.3335	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0332**	**15.0860**	**17.2957**	**0.0228**		**0.3335**	**0.3335**		**0.3335**	**0.3335**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0564	0.0288	0.3811	1.2600e-003	0.1072	8.1000e-004	0.1080	0.0287	7.4000e-004	0.0295		125.5051	125.5051	2.8100e-003		125.5754
Total	**0.0564**	**0.0288**	**0.3811**	**1.2600e-003**	**0.1072**	**8.1000e-004**	**0.1080**	**0.0287**	**7.4000e-004**	**0.0295**		**125.5051**	**125.5051**	**2.8100e-003**		**125.5754**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	308.2518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**308.4564**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0941	0.0481	0.6351	2.1000e-003	0.2054	1.3400e-003	0.2067	0.0545	1.2400e-003	0.0557		209.1752	209.1752	4.6800e-003		209.2923
Total	**0.0941**	**0.0481**	**0.6351**	**2.1000e-003**	**0.2054**	**1.3400e-003**	**0.2067**	**0.0545**	**1.2400e-003**	**0.0557**		**209.1752**	**209.1752**	**4.6800e-003**		**209.2923**

3.7 Architectural Coating - 2022

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	308.2518					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**308.4564**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0941	0.0481	0.6351	2.1000e-003	0.1786	1.3400e-003	0.1799	0.0479	1.2400e-003	0.0491		209.1752	209.1752	4.6800e-003		209.2923
Total	**0.0941**	**0.0481**	**0.6351**	**2.1000e-003**	**0.1786**	**1.3400e-003**	**0.1799**	**0.0479**	**1.2400e-003**	**0.0491**		**209.1752**	**209.1752**	**4.6800e-003**		**209.2923**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.1767	31.7668	25.0408	0.1539	7.6402	0.0736	7.7138	2.0518	0.0690	2.1208		15,819.8957	15,819.8957	0.9431		15,843.4729
Unmitigated	3.4860	34.4076	31.5572	0.1929	10.2536	0.0955	10.3492	2.7536	0.0896	2.8432		19,805.2598	19,805.2598	1.0247		19,830.8768

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,809.95	659.85	193.45	3,709,157	2,763,768
Parking Lot	0.00	0.00	0.00		
Total	1,809.95	659.85	193.45	3,709,157	2,763,768

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.487920	0.030073	0.170877	0.112061	0.016651	0.005572	0.019337	0.146855	0.001612	0.001610	0.005760	0.000912	0.000759
Parking Lot	0.487920	0.030073	0.170877	0.112061	0.016651	0.005572	0.019337	0.146855	0.001612	0.001610	0.005760	0.000912	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Kilowatt Hours of Renewable Electricity Generated

Percent of Electricity Use Generated with Renewable 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	0.1346	1.2233	1.0276	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,467.9688	1,467.9688	0.0281	0.0269	1,476.6922
NaturalGas Unmitigated	0.1346	1.2233	1.0276	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,467.9688	1,467.9688	0.0281	0.0269	1,476.6922

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	12477.7	0.1346	1.2233	1.0276	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,467.9688	1,467.9688	0.0281	0.0269	1,476.6922
Parking Lot	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		**0.1346**	**1.2233**	**1.0276**	**7.3400e-003**		**0.0930**	**0.0930**		**0.0930**	**0.0930**		**1,467.9688**	**1,467.9688**	**0.0281**	**0.0269**	**1,476.6922**

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					
Industrial Park	12.4777	0.1346	1.2233	1.0276	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,467.9688	1,467.9688	0.0281	0.0269	1,476.6922
Parking Lot	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		**0.1346**	**1.2233**	**1.0276**	**7.3400e-003**		**0.0930**	**0.0930**		**0.0930**	**0.0930**		**1,467.9688**	**1,467.9688**	**0.0281**	**0.0269**	**1,476.6922**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.9492	1.4000e-004	0.0157	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0314	0.0314	6.0000e-005		0.0330
Unmitigated	7.3746	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0620

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	1.6891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6831					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5100e-003	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0620
Total	**7.3746**	**2.5000e-004**	**0.0271**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0582**	**0.0582**	**1.5000e-004**		**0.0620**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.6891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0700e-003	1.4000e-004	0.0157	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0314	0.0314	6.0000e-005		0.0330
Total	**6.9492**	**1.4000e-004**	**0.0157**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0314**	**0.0314**	**6.0000e-005**		**0.0330**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Turf Reduction

Use Water Efficient Irrigation System

Use Water Efficient Landscaping

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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
Emergency Generator	33	8	1920	5.8	0.73	CNG

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - CNG (0 - 500 HP)	11.6134	1.1181	30.2468	4.0500e-003		0.0641	0.0641		0.0641	0.0641		741.9845	741.9845	1.5514		780.7700
Total	**11.6134**	**1.1181**	**30.2468**	**4.0500e-003**		**0.0641**	**0.0641**		**0.0641**	**0.0641**		**741.9845**	**741.9845**	**1.5514**		**780.7700**

11.0 Vegetation

Schafer IS/MND (APN: 350-140-01) for 265,000 SF

Kern-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	265.00	1000sqft	6.08	265,000.00	250
Parking Lot	0.78	Acre	0.78	34,029.07	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	32
Climate Zone	7			**Operational Year**	2023
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

Architectural Coating - Project Description

Area Coating - Project Description

Area Mitigation - Project Described Mitigation

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	150.00
tblArchitecturalCoating	EF_Parking	250.00	150.00

tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	150.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150
tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	15
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	33
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	7
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	DPF	No Change	Level 2
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	CNG

tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	10.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
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tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	OxidationCatalyst	0.00	25.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2

tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstEquipMitigation	Tier	No Change	Tier 2
tblLandUse	LandUseSquareFeet	33,976.80	34,029.07
tblLandUse	Population	0.00	250.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	5.80
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	8.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	1,920.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	33.00

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					
2021	3.9562	40.5415	21.9070	0.0503	18.2141	2.0455	20.2596	9.9699	1.8818	11.8517	0.0000	4,948.1500	4,948.1500	1.1953	0.0000	4,967.1376
2022	185.2433	20.9714	20.0144	0.0498	1.3673	0.8285	2.1958	0.3702	0.7796	1.1498	0.0000	4,901.2691	4,901.2691	0.7482	0.0000	4,919.9739
Maximum	**185.2433**	**40.5415**	**21.9070**	**0.0503**	**18.2141**	**2.0455**	**20.2596**	**9.9699**	**1.8818**	**11.8517**	**0.0000**	**4,948.1500**	**4,948.1500**	**1.1953**	**0.0000**	**4,967.1376**

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					
2021	2.0265	25.3354	23.3704	0.0503	6.4699	0.7098	6.9439	3.3265	0.6747	3.8005	0.0000	4,740.6723	4,740.6723	1.1953	0.0000	4,758.9845
2022	185.2433	22.0068	18.9723	0.0498	1.1969	0.6459	1.8428	0.3284	0.6159	0.9443	0.0000	4,693.7913	4,693.7913	0.7234	0.0000	4,711.8755
Maximum	**185.2433**	**25.3354**	**23.3704**	**0.0503**	**6.4699**	**0.7098**	**6.9439**	**3.3265**	**0.6747**	**3.8005**	**0.0000**	**4,740.6723**	**4,740.6723**	**1.1953**	**0.0000**	**4,758.9845**

	ROG	NOx	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	**1.02**	**23.04**	**-1.01**	**0.00**	**60.85**	**52.83**	**60.87**	**64.65**	**51.51**	**63.51**	**0.00**	**4.21**	**4.21**	**1.28**	**0.00**	**4.21**

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	6.7016	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0620
Energy	0.1346	1.2236	1.0278	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,468.2836	1,468.2836	0.0281	0.0269	1,477.0089
Mobile	2.8049	34.5579	29.1922	0.1772	10.2536	0.0962	10.3499	2.7536	0.0903	2.8439		18,217.3595	18,217.3595	1.1065		18,245.0225
Total	**9.6410**	**35.7817**	**30.2471**	**0.1845**	**10.2536**	**0.1893**	**10.4430**	**2.7536**	**0.1834**	**2.9370**		**19,685.7013**	**19,685.7013**	**1.1348**	**0.0269**	**19,722.0934**

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	6.2736	1.4000e-004	0.0157	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0314	0.0314	6.0000e-005		0.0330
Energy	0.1346	1.2236	1.0278	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,468.2836	1,468.2836	0.0281	0.0269	1,477.0089
Mobile	2.5075	31.6970	23.9508	0.1410	7.6402	0.0743	7.7145	2.0518	0.0697	2.1215		14,502.5227	14,502.5227	1.0311		14,528.2989
Total	**8.9156**	**32.9207**	**24.9944**	**0.1483**	**7.6402**	**0.1673**	**7.8075**	**2.0518**	**0.1627**	**2.2145**		**15,970.8377**	**15,970.8377**	**1.0593**	**0.0269**	**16,005.3408**

	ROG	NOx	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	**7.52**	**8.00**	**17.37**	**19.64**	**25.49**	**11.63**	**25.24**	**25.49**	**11.28**	**24.60**	**0.00**	**18.87**	**18.87**	**6.66**	**0.00**	**18.85**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/4/2021	8/31/2021	5	20	
2	Site Preparation	Site Preparation	9/1/2021	9/14/2021	5	10	
3	Grading	Grading	9/15/2021	10/12/2021	5	20	
4	Building Construction	Building Construction	10/13/2021	8/30/2022	5	230	
5	Paving	Paving	8/31/2022	9/27/2022	5	20	
6	Architectural Coating	Architectural Coating	9/28/2022	10/25/2022	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0.78

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 397,500; Non-Residential Outdoor: 132,500; Striped Parking Area: 2,042 (Architectural Coating – sqft)

OffRoad Equipment

Schafer IS/MND (APN: 350-140-01) for 265,000 SF - Kern-Mojave Desert County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	126.00	49.00	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	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Alternative Fuel for Construction Equipment

Use Cleaner Engines for Construction Equipment

Use DPF for Construction Equipment

Use Oxidation Catalyst for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 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	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**		**1.5513**	**1.5513**		**1.4411**	**1.4411**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	0.0567	0.0370	0.3420	1.1400e-003	0.1232	8.3000e-004	0.1241	0.0327	7.6000e-004	0.0335		113.2881	113.2881	2.7100e-003		113.3558
Total	**0.0567**	**0.0370**	**0.3420**	**1.1400e-003**	**0.1232**	**8.3000e-004**	**0.1241**	**0.0327**	**7.6000e-004**	**0.0335**		**113.2881**	**113.2881**	**2.7100e-003**		**113.3558**

3.2 Demolition - 2021

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	1.4906	20.3454	22.5507	0.0388		0.6398	0.6398		0.6147	0.6147	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**1.4906**	**20.3454**	**22.5507**	**0.0388**		**0.6398**	**0.6398**		**0.6147**	**0.6147**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

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	0.0567	0.0370	0.3420	1.1400e-003	0.1072	8.3000e-004	0.1080	0.0287	7.6000e-004	0.0295		113.2881	113.2881	2.7100e-003		113.3558
Total	**0.0567**	**0.0370**	**0.3420**	**1.1400e-003**	**0.1072**	**8.3000e-004**	**0.1080**	**0.0287**	**7.6000e-004**	**0.0295**		**113.2881**	**113.2881**	**2.7100e-003**		**113.3558**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0680	0.0444	0.4104	1.3600e-003	0.1479	9.9000e-004	0.1489	0.0392	9.2000e-004	0.0401		135.9457	135.9457	3.2500e-003		136.0270
Total	**0.0680**	**0.0444**	**0.4104**	**1.3600e-003**	**0.1479**	**9.9000e-004**	**0.1489**	**0.0392**	**9.2000e-004**	**0.0401**		**135.9457**	**135.9457**	**3.2500e-003**		**136.0270**

3.3 Site Preparation - 2021

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					6.3413	0.0000	6.3413	3.2920	0.0000	3.2920			0.0000			0.0000
Off-Road	1.2097	25.2910	22.9600	0.0380		0.4731	0.4731		0.4731	0.4731	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**1.2097**	**25.2910**	**22.9600**	**0.0380**	**6.3413**	**0.4731**	**6.8143**	**3.2920**	**0.4731**	**3.7651**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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	0.0680	0.0444	0.4104	1.3600e-003	0.1286	9.9000e-004	0.1296	0.0345	9.2000e-004	0.0354		135.9457	135.9457	3.2500e-003		136.0270
Total	**0.0680**	**0.0444**	**0.4104**	**1.3600e-003**	**0.1286**	**9.9000e-004**	**0.1296**	**0.0345**	**9.2000e-004**	**0.0354**		**135.9457**	**135.9457**	**3.2500e-003**		**136.0270**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.5523**	**1.1599**	**7.7123**	**3.3675**	**1.0671**	**4.4346**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0567	0.0370	0.3420	1.1400e-003	0.1232	8.3000e-004	0.1241	0.0327	7.6000e-004	0.0335		113.2881	113.2881	2.7100e-003		113.3558
Total	**0.0567**	**0.0370**	**0.3420**	**1.1400e-003**	**0.1232**	**8.3000e-004**	**0.1241**	**0.0327**	**7.6000e-004**	**0.0335**		**113.2881**	**113.2881**	**2.7100e-003**		**113.3558**

3.4 Grading - 2021

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					2.2999	0.0000	2.2999	1.1163	0.0000	1.1163			0.0000			0.0000
Off-Road	1.0373	18.5509	18.3444	0.0296		0.4229	0.4229		0.4146	0.4146	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**1.0373**	**18.5509**	**18.3444**	**0.0296**	**2.2999**	**0.4229**	**2.7228**	**1.1163**	**0.4146**	**1.5309**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

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	0.0567	0.0370	0.3420	1.1400e-003	0.1072	8.3000e-004	0.1080	0.0287	7.6000e-004	0.0295		113.2881	113.2881	2.7100e-003		113.3558
Total	**0.0567**	**0.0370**	**0.3420**	**1.1400e-003**	**0.1072**	**8.3000e-004**	**0.1080**	**0.0287**	**7.6000e-004**	**0.0295**		**113.2881**	**113.2881**	**2.7100e-003**		**113.3558**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.1667	5.3736	1.1156	0.0138	0.3322	0.0147	0.3469	0.0957	0.0141	0.1097		1,443.1661	1,443.1661	0.1207		1,446.1844
Worker	0.4762	0.3105	2.8724	9.5400e-003	1.0351	6.9600e-003	1.0420	0.2746	6.4100e-003	0.2810		951.6200	951.6200	0.0228		952.1890
Total	**0.6429**	**5.6841**	**3.9881**	**0.0233**	**1.3673**	**0.0217**	**1.3890**	**0.3702**	**0.0205**	**0.3907**		**2,394.7861**	**2,394.7861**	**0.1435**		**2,398.3734**

3.5 Building Construction - 2021

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	1.3836	17.6056	15.4428	0.0269		0.6881	0.6881		0.6543	0.6543	0.0000	2,345.8862	2,345.8862	0.5890		2,360.6111
Total	**1.3836**	**17.6056**	**15.4428**	**0.0269**		**0.6881**	**0.6881**		**0.6543**	**0.6543**	**0.0000**	**2,345.8862**	**2,345.8862**	**0.5890**		**2,360.6111**

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	0.1667	5.3736	1.1156	0.0138	0.2968	0.0147	0.3115	0.0870	0.0141	0.1010		1,443.1661	1,443.1661	0.1207		1,446.1844
Worker	0.4762	0.3105	2.8724	9.5400e-003	0.9001	6.9600e-003	0.9071	0.2414	6.4100e-003	0.2478		951.6200	951.6200	0.0228		952.1890
Total	**0.6429**	**5.6841**	**3.9881**	**0.0233**	**1.1969**	**0.0217**	**1.2186**	**0.3284**	**0.0205**	**0.3489**		**2,394.7861**	**2,394.7861**	**0.1435**		**2,398.3734**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.1556	5.0788	1.0359	0.0137	0.3323	0.0128	0.3450	0.0957	0.0122	0.1079		1,429.8597	1,429.8597	0.1160		1,432.7599
Worker	0.4417	0.2770	2.6151	9.2000e-003	1.0351	6.7700e-003	1.0418	0.2746	6.2300e-003	0.2808		917.0758	917.0758	0.0202		917.5818
Total	**0.5973**	**5.3558**	**3.6510**	**0.0229**	**1.3673**	**0.0195**	**1.3868**	**0.3702**	**0.0184**	**0.3887**		**2,346.9355**	**2,346.9355**	**0.1363**		**2,350.3417**

3.5 Building Construction - 2022

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	1.3015	16.6510	15.3213	0.0269		0.6264	0.6264		0.5975	0.5975	0.0000	2,346.8559	2,346.8559	0.5871		2,361.5338
Total	**1.3015**	**16.6510**	**15.3213**	**0.0269**		**0.6264**	**0.6264**		**0.5975**	**0.5975**	**0.0000**	**2,346.8559**	**2,346.8559**	**0.5871**		**2,361.5338**

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	0.1556	5.0788	1.0359	0.0137	0.2968	0.0128	0.3095	0.0870	0.0122	0.0992		1,429.8597	1,429.8597	0.1160		1,432.7599
Worker	0.4417	0.2770	2.6151	9.2000e-003	0.9001	6.7700e-003	0.9069	0.2414	6.2300e-003	0.2477		917.0758	917.0758	0.0202		917.5818
Total	**0.5973**	**5.3558**	**3.6510**	**0.0229**	**1.1969**	**0.0195**	**1.2164**	**0.3284**	**0.0184**	**0.3468**		**2,346.9355**	**2,346.9355**	**0.1363**		**2,350.3417**

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2050**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0526	0.0330	0.3113	1.0900e-003	0.1232	8.1000e-004	0.1240	0.0327	7.4000e-004	0.0334		109.1757	109.1757	2.4100e-003		109.2359
Total	**0.0526**	**0.0330**	**0.3113**	**1.0900e-003**	**0.1232**	**8.1000e-004**	**0.1240**	**0.0327**	**7.4000e-004**	**0.0334**		**109.1757**	**109.1757**	**2.4100e-003**		**109.2359**

3.6 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9311	15.0860	17.2957	0.0228		0.3335	0.3335		0.3335	0.3335	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0332**	**15.0860**	**17.2957**	**0.0228**		**0.3335**	**0.3335**		**0.3335**	**0.3335**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

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	0.0526	0.0330	0.3113	1.0900e-003	0.1072	8.1000e-004	0.1080	0.0287	7.4000e-004	0.0295		109.1757	109.1757	2.4100e-003		109.2359
Total	**0.0526**	**0.0330**	**0.3113**	**1.0900e-003**	**0.1072**	**8.1000e-004**	**0.1080**	**0.0287**	**7.4000e-004**	**0.0295**		**109.1757**	**109.1757**	**2.4100e-003**		**109.2359**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	184.9511					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**185.1556**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0877	0.0550	0.5189	1.8200e-003	0.2054	1.3400e-003	0.2067	0.0545	1.2400e-003	0.0557		181.9595	181.9595	4.0200e-003		182.0599
Total	**0.0877**	**0.0550**	**0.5189**	**1.8200e-003**	**0.2054**	**1.3400e-003**	**0.2067**	**0.0545**	**1.2400e-003**	**0.0557**		**181.9595**	**181.9595**	**4.0200e-003**		**182.0599**

3.7 Architectural Coating - 2022

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	184.9511					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**185.1556**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

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	0.0877	0.0550	0.5189	1.8200e-003	0.1786	1.3400e-003	0.1799	0.0479	1.2400e-003	0.0491		181.9595	181.9595	4.0200e-003		182.0599
Total	**0.0877**	**0.0550**	**0.5189**	**1.8200e-003**	**0.1786**	**1.3400e-003**	**0.1799**	**0.0479**	**1.2400e-003**	**0.0491**		**181.9595**	**181.9595**	**4.0200e-003**		**182.0599**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Employee Vanpool/Shuttle

Provide Riade Sharing Program

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	2.5075	31.6970	23.9508	0.1410	7.6402	0.0743	7.7145	2.0518	0.0697	2.1215		14,502.5227	14,502.5227	1.0311		14,528.2989
Unmitigated	2.8049	34.5579	29.1922	0.1772	10.2536	0.0962	10.3499	2.7536	0.0903	2.8439		18,217.3595	18,217.3595	1.1065		18,245.0225

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	1,809.95	659.85	193.45	3,709,157	2,763,768
Parking Lot	0.00	0.00	0.00		
Total	1,809.95	659.85	193.45	3,709,157	2,763,768

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Industrial Park	9.50	7.30	7.30	59.00	28.00	13.00	79	19	2
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Industrial Park	0.487920	0.030073	0.170877	0.112061	0.016651	0.005572	0.019337	0.146855	0.001612	0.001610	0.005760	0.000912	0.000759
Parking Lot	0.487920	0.030073	0.170877	0.112061	0.016651	0.005572	0.019337	0.146855	0.001612	0.001610	0.005760	0.000912	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

Kilowatt Hours of Renewable Electricity Generated

Percent of Electricity Use Generated with Renewable 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	0.1346	1.2236	1.0278	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,468.2836	1,468.2836	0.0281	0.0269	1,477.0089
NaturalGas Unmitigated	0.1346	1.2236	1.0278	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,468.2836	1,468.2836	0.0281	0.0269	1,477.0089

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Industrial Park	12480.4	0.1346	1.2236	1.0278	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,468.2836	1,468.2836	0.0281	0.0269	1,477.0089
Parking Lot	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		**0.1346**	**1.2236**	**1.0278**	**7.3400e-003**		**0.0930**	**0.0930**		**0.0930**	**0.0930**		**1,468.2836**	**1,468.2836**	**0.0281**	**0.0269**	**1,477.0089**

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					
Industrial Park	12.4804	0.1346	1.2236	1.0278	7.3400e-003		0.0930	0.0930		0.0930	0.0930		1,468.2836	1,468.2836	0.0281	0.0269	1,477.0089
Parking Lot	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		**0.1346**	**1.2236**	**1.0278**	**7.3400e-003**		**0.0930**	**0.0930**		**0.0930**	**0.0930**		**1,468.2836**	**1,468.2836**	**0.0281**	**0.0269**	**1,477.0089**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Use Low VOC Cleaning Supplies

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.2736	1.4000e-004	0.0157	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0314	0.0314	6.0000e-005		0.0330
Unmitigated	6.7016	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0620

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	1.0160					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6831					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5100e-003	2.5000e-004	0.0271	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0582	0.0582	1.5000e-004		0.0620
Total	**6.7016**	**2.5000e-004**	**0.0271**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0582**	**0.0582**	**1.5000e-004**		**0.0620**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0134					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0700e-003	1.4000e-004	0.0157	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0314	0.0314	6.0000e-005		0.0330
Total	**6.2736**	**1.4000e-004**	**0.0157**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0314**	**0.0314**	**6.0000e-005**		**0.0330**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Use Grey Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Turf Reduction

Use Water Efficient Irrigation System

Use Water Efficient Landscaping

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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
Emergency Generator	33	8	1920	5.8	0.73	CNG

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX D

Biological Resources Assessment of

APN: 350-140-01

California City, CA

July 6, 2020

Biological Resource Assessment of
APN 350-140-01
California City, California

January 7, 2021

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B.S. Degree, Wildlife Management
Humboldt State University

Biological Resource Assessment of APN 350-140-01, California City, California

Mark Hagan, Wildlife Biologist, 44715 17th Street East, Lancaster, CA 93535

Abstract

Development has been proposed for APN 350-140-01, California City, California. The approximately 60 acre (24 ha) study area was located south of Twenty Mule Team Parkway, T32S, R38E**,** the NW1/4 of the SW1/4 and the E1/2 of the SW1/4 of the SW1/4 of Section 16, M.D.B.M. Protocol line transect surveys were conducted on 18 and 19 December 2020 to inventory biological resources. The proposed project area was characteristic of a disturbed creosote (*Larrea tridentata*) bush scrub habitat. Given the historical grubbing activities that took place within the study site, the level of revegetation that has occurred, particularly in the northern portion, is remarkable. Fifty-six plant species and twenty-six wildlife species or their sign were observed during the line transect survey. No desert tortoises (*Gopherus agassizii*) or their sign were observed during the field survey. Suitable habitat for desert tortoises was present within and adjacent to the study site. Suitable habitat for Mohave ground squirrels (*Xerospermophilus mohavensis*) was present within and adjacent to the study site. A Mohave ground squirrel was sighted in 2009 within 984 feet (300 m) north of the project site. No desert kit foxes (*Vulpes macrotis*) were observed within the study site. Old desert kit fox scat and two associated dens were observed within the study site. No American badgers (*Taxidea taxus*) or their sign were observed within the study site. No burrowing owls (*Athene cunicularia*) were observed during the field survey. One very old burrowing owl pellet was observed associated with one of the desert kit fox dens. No sensitive plants, specifically, alkali mariposa lily (*Calochortus striatus*), desert cymopterus (*Cymopterus deserticola*), and Barstow woolly sunflower (*Eriophyllum mohanense*) are expected to occur within the study area due to lack of suitable habitat. Prairie falcons (*Falco mexicanus*) and other raptors may fly over the site but there are no nesting or roosting opportunities available within the study site. Vegetation within the study area provides potential nesting sites for migratory birds. No other state or federally listed species are expected to occur within the proposed project area. Blue line streams were observed within the study site on the topographic map. Several ephemeral washes were observed within the study site. Protection measures are recommended for sensitive species and protected resources.

Significance: Based on the condition of the habitat, and results of the survey, this project is not expected to result in a significant adverse impact to biological resources if recommended protection measures are implemented.

Development has been proposed for APN 350-140-01, California City, California (Figure 1). Development would include installation of buildings, parking areas, fencing, etc. Development would include installation of access roads and utilities (water, sewer, electric, etc.). The entire project area would be graded prior to construction activities.

An environmental analysis should be conducted prior to any development project. An assessment of biological resources is an integral part of environmental analyses (Gilbert and Dodds 1987). The purpose of this study was to provide an assessment of biological resources potentially occurring within, or utilizing the proposed project area. Specific focus was on the presence/absence of rare, threatened and endangered species of plants and wildlife. Species of

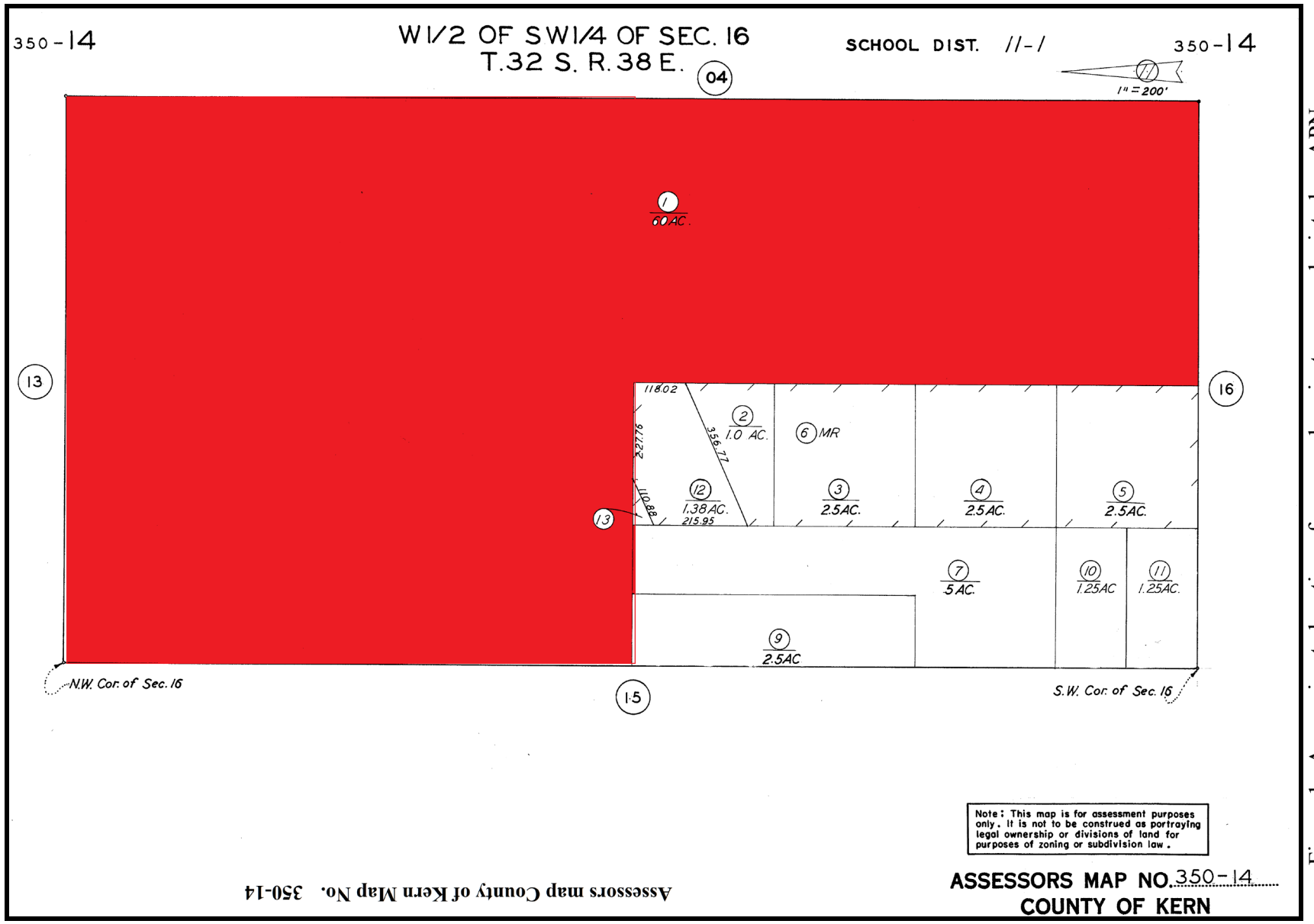

Figure 1. Approximate location of proposed project area as depicted on APN map.

concern included the desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), desert kit fox (*Vulpes macrotis*), American badger (*Taxidea taxus*), burrowing owl (*Athene cunicularia*), prairie falcon (*Falco mexicanus*), desert cymopterus (*Cymopterus deserticola*), Barstow woolly sunflower (*Eriophyllum mohanense*), and alkali mariposa lily (*Calochortus striatus*).

Study Area

The approximately 60 acre (24 ha) study area was located north and south of Twenty Mule Team Parkway, T32S, R38E**,** the NW1/4 of the SW1/4 and the E1/2 of the SW1/4 of the SW1/4 of Section 16, M.D.B.M (Figures 2 and 3). Lindbergh Boulevard, a dirt road, formed the northern boundary of the study site. Creosote bush (*Larrea tridentata*) scrub habitat was present north of Lindbergh Boulevard. Randsburg Mojave Road was present a short distance north of Lindbergh Boulevard. George Boulevard, a dirt road, formed the southern boundary of the study site. Creosote bush scrub habitat was present south of George Boulevard. A degraded desert tortoise exclusion fence enclosed the entire study site except at and along Twenty Mule Team Parkway. A narrow dirt access road was adjacent to the desert tortoise exclusion fence on the eastern and western boundary. Creosote bush scrub habitat was present along the eastern, and western boundary of the study area.

Methods

Protocol line transect surveys were conducted to inventory plant and wildlife species occurring within the proposed project area (Cooperrider et al. 1986, Davis 1990). The USFWS (2010) has provided recommendations for survey methodology to determine presence/absence of desert tortoises. These recommendations were used to guide the methodology for this study site. The study site consisted of two discreet sections, a 40 acre section north of Twenty Mule Team Parkway and a 20 acre section south of Twenty Mule Team Parkway. Line transects were walked in a north-south orientation in each section. Line transects in the north section ranged from 965 to 1,320 feet (311 to 426 m) long and spaced about 30 feet (10 m) apart (U.S. Fish & Wildlife Service 2010). Line transects in the south section ranged from approximately 1,320 to 1,600 feet (426 to 516 m) long and spaced about 30 feet (10 m) apart (U.S. Fish & Wildlife Service 2010). The California Department of Fish and Game (2012) prepared recommendations for burrowing owl survey methodology. Consistent with the survey protocol the entire site was surveyed and adjacent areas were evaluated (CDFG 2012). A habitat assessment was conducted for Mohave ground squirrels to determine shrub species diversity, cover, and forage potential on the study site.

All observations of plant and animal species were recorded in field notes. Field guides were used to aid in the identification of plant and animal species (Arnett and Jacques 1981, Borror and White 1970, Burt and Grossenheider 1976, Gould 1981, Jaeger 1969, Knobel 1980, Robbins et al. 1983, Stark 2000). Observations were aided with the use of 10x50, and 10x42 binoculars. Observations of animal tracks, scat, and burrows were also utilized to determine the presence of wildlife species inhabiting the proposed project area (Cooperrider et al. 1986, Halfpenny 1986, Lowrey 2006, Murie 1974). Aerial photographs, California Natural Diversity Database (CNDD 2018, 2020), previous surveys in the area (Hagan 2017, 2019a-b), and the USGS topographic map were reviewed. Photographs of the study site were taken (Appendix A).

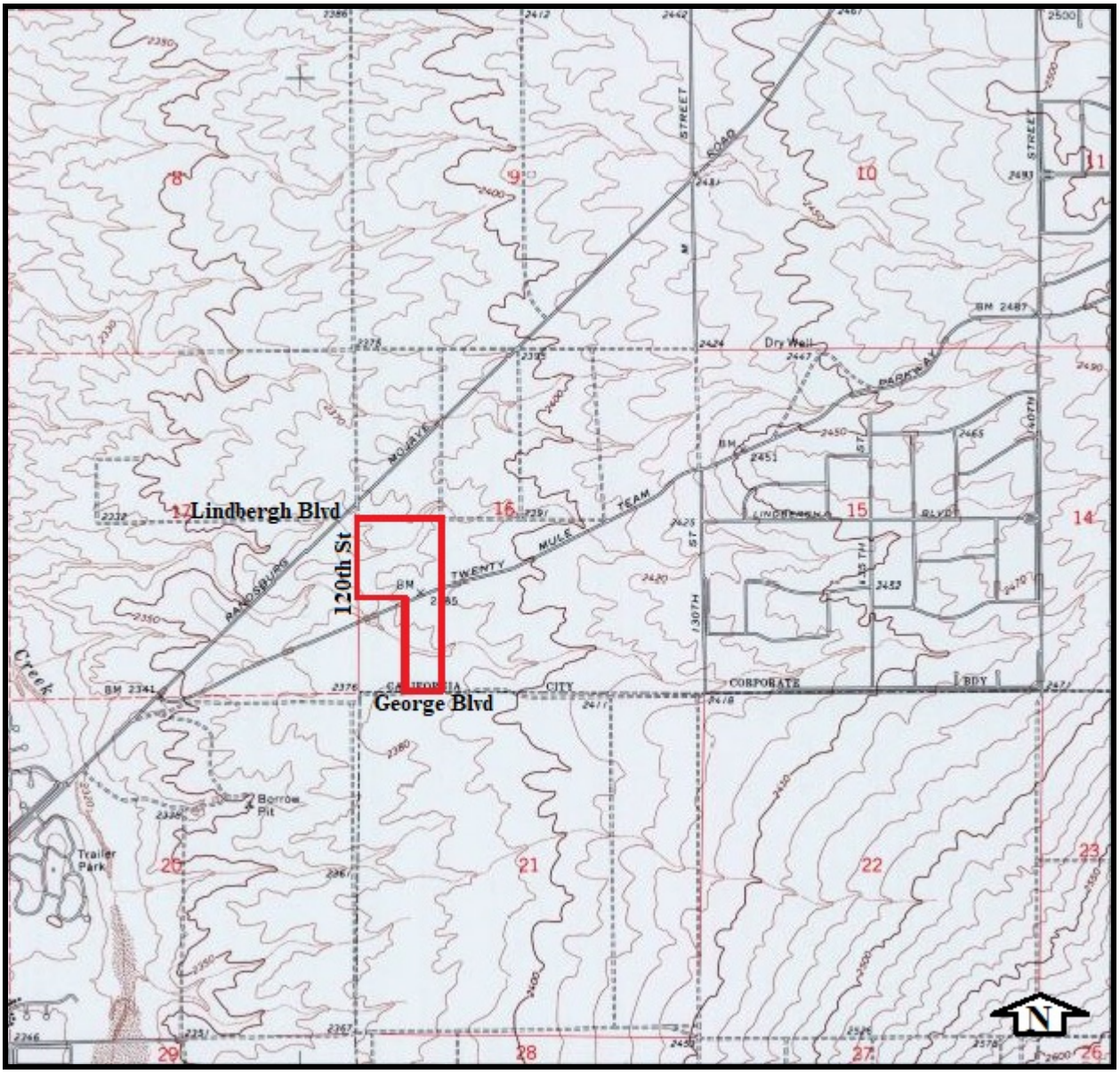

Figure 2. Approximate location of study area as depicted on excerpt from USGS Quadrangle, California City North, Calif., 7.5' 1973.

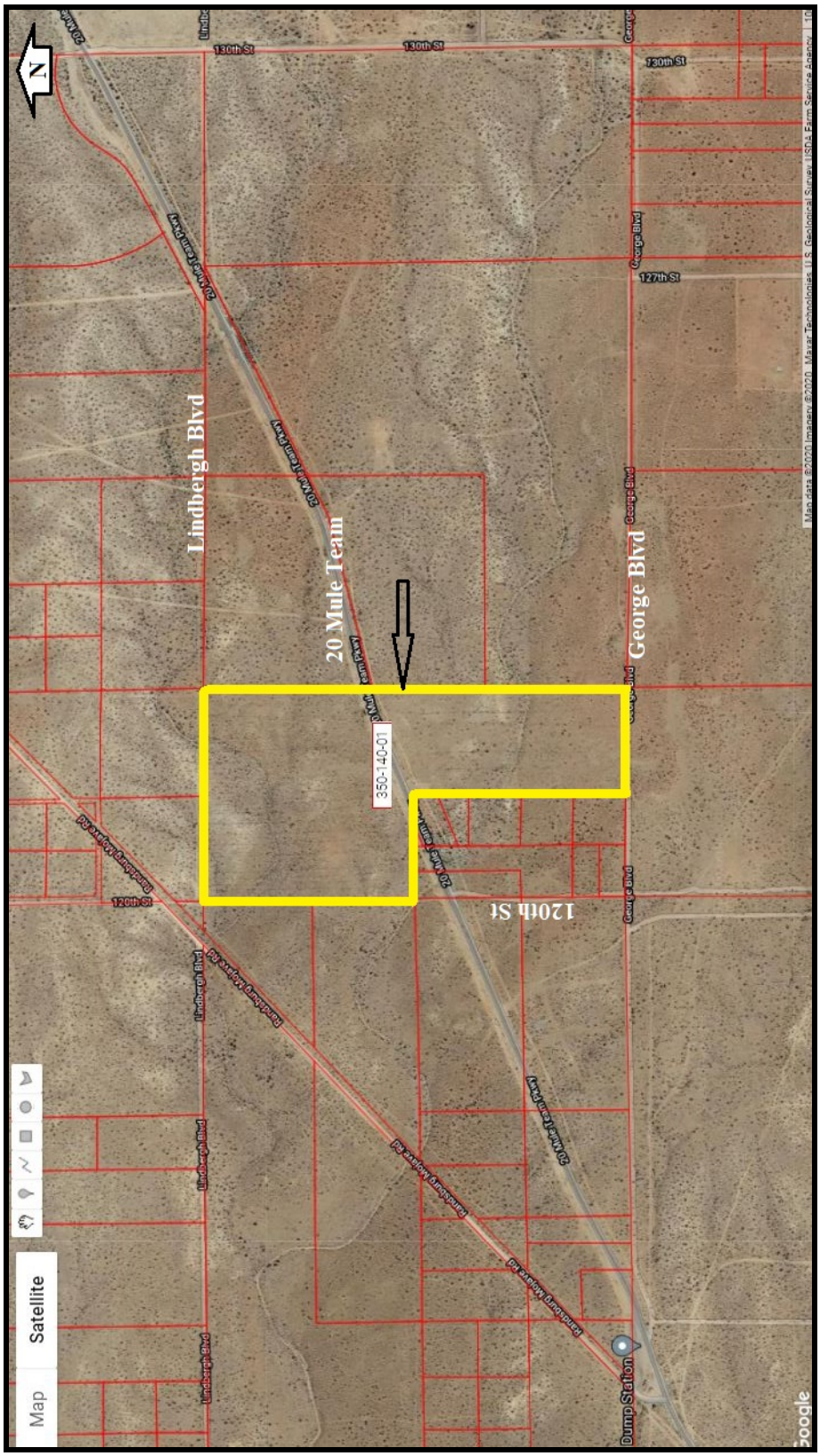

Figure 3. Aerial photograph showing surrounding land use (Kern County Tax Assessor site).

Results

A total of 62 line transects were walked within the study site. Twenty line transects were walked within the southern section on 18 December 2020. Weather conditions consisted of warm temperatures (estimated 50 to 70 degrees F), 0% cloud cover, and slight to moderate winds. Forty-two line transects were walked within the northern portion of the study site on 18 and 19 December 2020. Weather conditions on 19 December 2020 consisted of warm temperatures (estimated 50 to 70 degrees F), 0% cloud cover, and no wind to a slight breeze. Sandy loam surface soil texture was observed throughout the study area.

The USGS topographic map indicated the potential presence of two streams within the study area. Aerial photographs suggested the potential presence of three washes within the study area. Two major ephemeral washes and smaller ephemeral washes were observed during the field survey within the study site. The area topography is characterized by low rises oriented east-west. Topography of the northern section of the study site ranged from 2,201 feet to 2,416 feet (710 m to 779 m) above sea level. Topography of the southern section of the study site ranged from 2,195 feet to 2,420 feet (708 m to 781 m) above sea level.

The proposed project area was characteristic of a disturbed creosote bush scrub habitat (Barbour and Major 1988, Barbour et.al. 2007). Fifty-six plant species were observed during the line transect survey (Table 1). A high diversity and number of native perennial shrubs were present within the study site. The dominant perennial shrub species throughout the study area was creosote bush. A high diversity of native annual plant species was observed within the study site. No alkali mariposa lilies, Barstow woolly sunflowers, or desert cymopterus or suitable habitat for these species were observed within the study site.

Twenty-six wildlife species, or their sign were observed during the line transect survey (Table 2). No desert tortoises or their sign were observed during the field survey. No Mohave ground squirrels observed or audibly detected during the field survey. No desert kit foxes were observed during the field survey. Two desert kit fox dens with old desert kit fox scat were observed within the study site. No burrowing owls were observed within the study site during the field survey. One very old burrowing owl pellet was observed in association with one of the desert kit fox dens. One inactive bird nest was observed in the silver cholla (*Opuntia echinocarpa*) within the study area. No American badgers or their sign were observed within the study site.

Chert rocks and flakes that appeared to show signs of tool making, and a stone which appeared to have been used for grinding were observed within the study site (Appendix A-4). Motorcycle and quad tracks were observed within the study site particularly in the ephemeral washes. An off highway vehicle (OHV) trail, oriented east-west, was observed within the study site. Sheep (*Ovis* sp.) scat was observed throughout the study site. A recent sheep bed down area, approximately 0.5 acre (0.2 ha), was observed in the southeast corner of the study site (Appendix A-5). Two small borrow areas were present within the northwest corner of the southern section of the study site. An unspent high caliber bullet and a potential monitoring well were observed within the study area (Appendx A-6). A fire hydrant and waterline valve were

Table 1. List of plant species that were observed during the line transect survey of APN 350-140-01, California City, California.

Common Name	Scientific Name
Creosote bush	*Larrea tridentata*
Burrobush	*Ambrosia dumosa*
Paper bag bush	*Salazaria mexicana*
Peachthorn	*Lycium cooperi*
Anderson thorn	*Lycium andersonii*
Felt thorn	*Tetradymia stenolepis*
Cotton thorn	*Tetradymia spinosa*
Cheesebush	*Hymenoclea salsola*
Winter fat	*Eurotia lanata*
Rabbit brush	*Chrysothamnus nauseosis*
Cooper goldenbush	*Haplopappus cooperi*
Goldenhead	*Acamptopappus sphaerocephalus*
Silver cholla	*Opuntia echinocarpa*
Desert straw	*Stephanomeria pauciflora*
Desert calico	*Langloisia matthewsii*
Turkey mullein	*Eremocarpus setigerus*
Comet blazing star	*Mentzelia albicaulis*
Lacy phacelia	*Phacelia tanacetifolia*
Blue mantle	*Eriastrum diffusum*
Sapphire woollystar	*Eriastrum sapphirinum*
Crinklemat	*Tiquilia plicata*
Vinegar weed	*Trichostema lanceolatum*
Autumn vinegar-weed	*Lessingia germanorum*
Spotted buckwheat	*Eriogonum maculatum*
Angle-stem buckwheat	*Eriogonum angulosum*
Buckwheat sp.	*Eriogonum* sp.
Desert trumpet	*Eriogonum inflatum*
Punctured bract	*Oxytheca perfoliata*
Fivetooth spineflower	*Chorizanthe watsonii*
Rigid spineflower	*Chorizanthe rigida*
Desert dandelion	*Malacothrix glabrata*
Snakeshead	*Malacothrix coulteri*
Fiddleneck	*Amsinckia tessellata*
Goldfields	*Lasthenia californica*
Blue dicks	*Dichelostemma capitatum*
Thistle sage	*Salvia carduacea*
Chick lupine	*Lupinus microcarpus*
Gilia	*Gilia minutiflora*
Davy gilia	*Gilia latiflora davyi*
Small flowered poppy	*Eschscholtzia minutiflora*
Wishbone plant	*Mirabilis bigelovii*

Table 1 continued. List of plant species that were observed during the line transect survey of APN 350-140-01, California City, California.

Common Name	Scientific Name
Locoweed	*Astragalus* sp.
Layne milkvetch	*Astragalus laynae*
Comb-bur	*Pectocarya recurvata*
Hairy podded pepperweed	*Lepidium lasiocarpum lasiocarpum*
Indian ricegrass	*Oryzopsis hymenoides*
Desert needlegrass	*Stipa comata*
Bud sage	*Artemisia spinescens*
California mustard	*Caulanthus lasiophyllus*
Sahara mustard	*Brassica tournefortii*
Tansy mustard	*Descurainia sophia*
Tumble mustard	*Sisymbrium altisissiimum*
Red stemmed filaree	*Erodium cicutarium*
Cheatgrass	*Bromus tectorum*
Red brome	*Bromus rubens*
Schismus	*Schismus* sp.

Table 2. List of wildlife species, or their sign, that were observed during the line transect survey of APN 350-140-01, California City, California.

Common Name	Scientific Name
Rodents	Order: Rodentia
Pocket gopher	*Thomomys bottae*
Kangaroo rat	*Dipodomys* sp.
Antelope ground squirrel	*Ammospermophilus leucurus*
Desert cottontail	*Sylvilagus auduboni*
Black-tailed jackrabbit	*Lepus californicus*
Desert kit fox	*Vulpes macrotis*
Coyote	*Canis latrans*
Sheep	*Ovis* sp.
California quail	*Callipepla californica*
Mourning dove	*Zenaida macroura*
Burrowing owl (very old sign)	*Athene cunicularia*
Common raven	*Corvus corax*
Black phoebe	*Sayornis nigricans*
Say's phoebe	*Sayornis saya*
Le Conte's thrasher	*Toxostoma lecontei*
Horned lark	*Eremophila alpestris*
Sage sparrow	*Amphispiza belli*
White crowned sparrow	*Zonotrichia leucophrys*
Lizard sp.	Order: Squatmata
Termites	Order: Isoptera
Ants (small, black)	Order: Hymenoptera
Harvester ants	Order: Hymenoptera
Butterfly (small, orange, brown, blue)	Order: Lepidoptera
Moth (small, gray/black)	Order: Lepidoptera
Spider	Order: Araneida

present within the study site near Twenty Mule Team Parkway. The entire study area had been grubbed of vegetation at some time in the historical past. Rows of decomposed vegetation, oriented north-south and approximately 90 feet (29 m) apart were present across the entire study site.

Discussion

Many annual plant species were not visible during the time the field survey was performed. However, a large number of native annuals were still detectable (Table 1). Due to the time of year this survey was performed plant species observed during a previous survey (April 2019) within 660 feet (213 m) of this study site were included and used in the analysis (Table 3). Given the historical grubbing activities that took place within the study site, the level of revegetation that has occurred, particularly in the northern portion, is remarkable. The 2016 aerial photography which shows the area to be highly disturbed does not reflect the revegetation that has occurred and can only be observed on the ground (Figure 4). Although not observed, several wildlife species would be expected to occur within the proposed project area (Table 3).

Human impacts to the area are occurring through OHV use and what appears to be an increase in recent sheep grazing. These impacts are expected to continue over time. Habitat in the general vicinity will continue to become degraded and fragmented. Burrowing animals within the proposed project area are not expected to survive construction activities. More mobile species, such as lagomorphs (rabbits and hares), coyotes (*Canis latrans*), and birds are expected to survive construction activities. Development of this site will result in less cover and foraging opportunities for species occurring within and adjacent to the study area.

The desert tortoise is a state endangered and federally threatened listed species. The proposed project area was located within the geographic range of the desert tortoise. The proposed project site was not located in critical habitat designated for the Mojave population of the desert tortoise. Based on site observations and aerial photography the study site appeared to have been grubbed prior to 1994. What appeared to be a relatively recent sheep bed down area within the southeast portion of the study site severely impacted 0.5 acres (2 ha) removing nearly all annual vegetation and most shrubs (Appendix A, page A-4). A 2019 survey located southwest of this study site noted the "southern portion of the study area appeared to have been heavily grazed by sheep due to the amount of sheep scat and the dominance of fiddleneck." As with the April 2019 survey, no desert tortoises or their sign were observed within the study area. Results of this survey are consistent with studies that looked at the effects of roads on wildlife populations. Hughson and Darby (2013) noted that desert tortoise population depression adjacent to roads has been well-studied and the effect was found to extend from less than 543 feet (175 m) up to 2.8 miles (4.6 km). Twenty Mule Team Parkway cuts through the center of the 60 acre study site. Randsburg Mojave Road, a diagonal road, was 215 to 1,300 feet (69 to 419 m) from the northern boundary of the study site. Vehicle traffic on this road was high during the field survey. Twenty Mule Team Parkway transected the center of the study site. The entire study site is located within an expected zone of depressed tortoise presence. Although this survey was not performed during the best months for desert tortoise detection, their burrows are always present and other recent surveys in the immediate area have been completed with similar results (Hagan 2017, 2019a-b). Given the level of disturbance, the historical desert tortoise

Table 3. List of plant and wildlife species that may occur within the study area, APN 350-140-01, California City, California.

Common Name	Scientific Name
California coreopsis	*Coreopsis californica*
Parry gilia	*Linanthus parryae*
Forget-me-not	*Cryptantha* sp.
Western forget-me-not	*Cryptantha circumscissa*
Evening snow	*Linanthus dichotomus*
Fremont pincushion	*Chaenactis fremontii*
Wallace's woolly sunflower	*Eriophyllum wallacei*
Purple owl's clover	*Castilleja exserta*
Yellow throats	*Phacelia fremontii*
Mojave parsley	*Lomatium mohavense*
Apricot mallow	*Sphaeralcea ambiqua*
Slender keel fruit	*Tropidocarpum gracile*
Royal lupine	*Lupinus odoratus*
Freckled milkvetch	*Astragalus lentiginosus*
Rattlesnake weed	*Euphorbia albomarginata*
Deer mouse	*Peromyscus maniculatus*
Merriam kangaroo rat	*Dipodomys merriami*
Turkey vulture	*Cathartes aura*
Red-tailed hawk	*Buteo jamaicensis*
Western meadowlark	*Sturnella neglecta*
Northern mockingbird	*Mimus polyglottos*
House finch	*Carpodacus mexicanus*
Side blotched lizard	*Uta stansburiana*
Desert horned lizard	*Phrynosoma platyrhinos*
Leopard lizard	*Gambelia wislizenii*
Western whiptail	*Cnemidophorus tigris*
Gopher snake	*Pituophis melanoleucus*
Mojave rattlesnake	*Crotalus scutulatus*
Bees	Order: Hymenoptera
Painted lady butterfly	*Vanessa cardui*
White lined sphinx moth	*Hyles lineata*
Wasp	Order: Hymenoptera
Beetle	Order Coleoptera
Darkling beetle	*Coelocnemis californicus*
Grasshopper	Order: Orthoptera
Ladybird beetle	*Hippodamia convergens*
Dragonfly	Order: Odonata
Tarantula wasp	*Pepsis formosa*

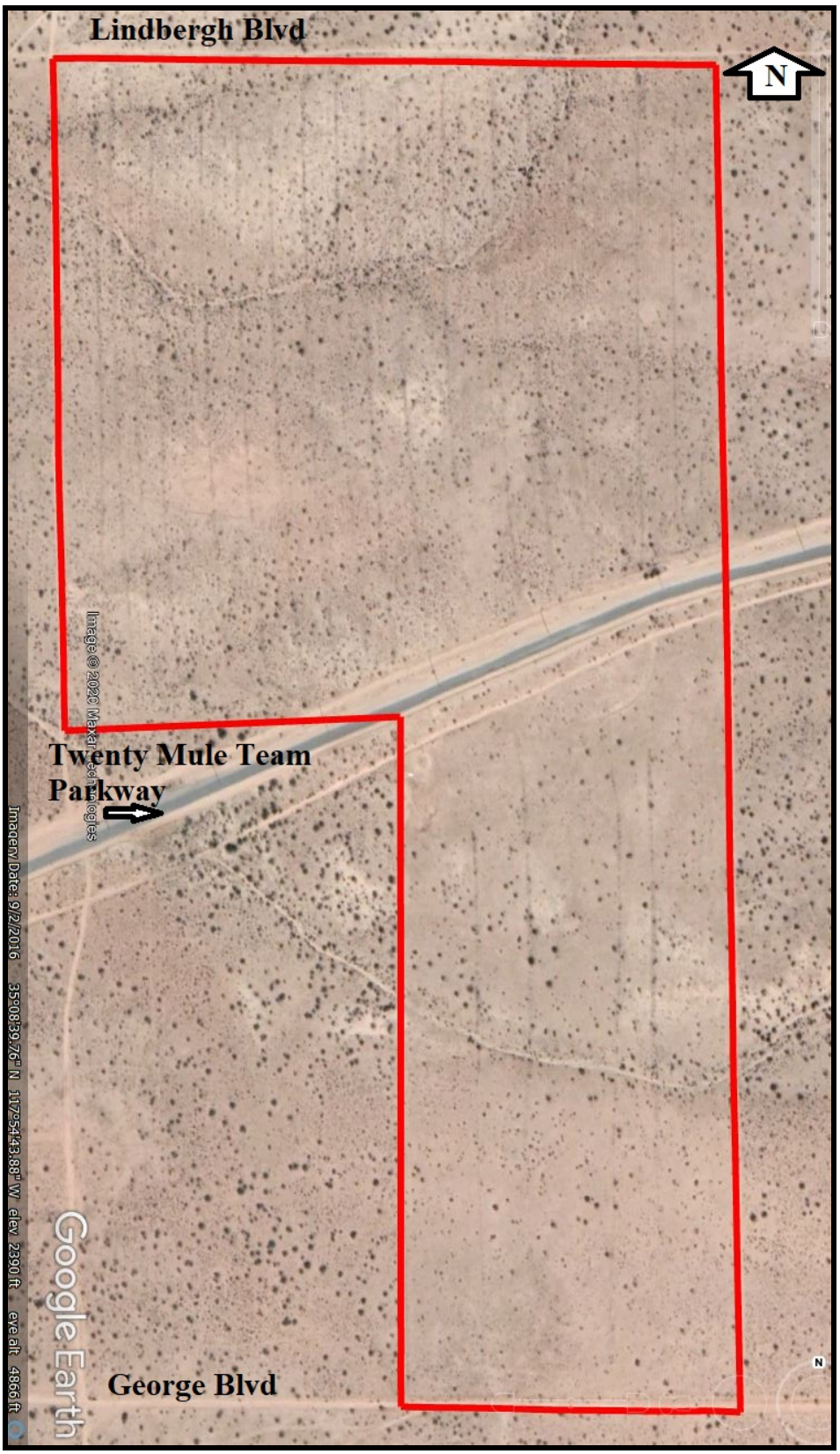

Figure 4. Close up aerial photograph (Google 2016) depicting ground disturbance of study area but not reflective of the revegetation that has taken place. Lines within study area are rows of decomposing vegetation.

exclusion fence which would have prevented desert tortoises from entering the area for a long period of time, and lack of sign it is not expected that desert tortoises are present within the study site. Even so with the Desert Tortoise Natural Area located approximately 4 miles (6 km) to the northeast and the level of revegetation of the creosote scrub habitat now present, and the condition of the desert tortoise exclusion fence, desert tortoise minimization measures are recommended.

Burrowing owls are considered a species of special concern by the California Department of Fish and Wildlife (CDFW). No burrowing owls or recent burrowing owl sign from the last three years are present within the study site. Two suitable cover sites which could be used by burrowing owls are present within the northern section of the study area. Due to the suitable cover sites minimization measures are recommended for burrowing owls.

Many species of birds and their active nests are protected under the Migratory Bird Treaty Act (MBTA). Prairie falcons and other raptors may fly over the site but would not be expected to nest within the study area due to a lack of suitable nesting habitat. The vegetation within the study area offers potential nesting habitat for other migratory birds. Minimization measures are recommended for migratory birds.

The Mohave ground squirrel (MGS) is a state listed threatened species. The proposed project site was located within the geographic range of the MGS. Although it would not be expected to observe or audibly detect MGS during this time of year the habitat can be evaluated for suitability. Twelve different species of shrubs were observed within the study site. A high diversity and large numbers of annual plant species were present within the study site. Low numbers of winterfat (*Eurotia lanata*) were found on the study site. No spiny hopsage (*Grayia spinosa*) were observed within the study site. These two species are considered important forage for MGS. Dr. Leitner determined that combined densities of winterfat and spiny hopsage greater than 250 to 300 per ha (2.5 acres) are associated with occupancy of MGS (Leitner 2008). Dr. Leitner postulated, based on trapping surveys in the southern portion of the MGS range, that densities < 24/ha of spiny hopsage and < 100/ha of winterfat on a site was considered poor forage and may be related to the absence of MGS (Leitner 2008). The importance of these two shrub species across the range of the MGS is further discussed in the "A Conservation Strategy for the Mohave Ground Squirrel" (CDFW 2019). An MGS was observed within 984 feet (300 m) of the northern section of the study site in 2009 (CNDDB 2018). The Desert Tortoise Natural Area, a recognized MGS population area, is located approximately 4 miles (6.5 km) to the northeast. The farthest documented movement of MGS is 3.9 miles (Harris and Leitner 2005). Wildlife corridors may exist between the closest MGS population and the project site. Suitable size desert washes intersect both the northern and southern sections of this study site. MGS presence appears to be tied to desert washes (Logan 2016). Although not all habitat elements required to support a viable MGS population are present, the study site does have a high number and diversity of perennial shrubs and native plant species that may provide enough forage for a low number of dispersing MGS. Due to this and the close proximity to an observed MGS sighting, a core MGS population, and the presence of suitable desert washes MGS minimization measures are recommended.

No suitable habitat for alkali mariposa lily or Barstow woolly sunflower was observed within the study site. Based on the results of the field survey these species are not expected to occur within the study area and no protection measures are recommended. No other state or federally listed species are expected to occur within the proposed project area (California Department of Fish and Wildlife 2015, Smith and Berg 1988, U.S. Fish & Wildlife Service 2016).

An area that has any of the following characteristics: distinct bed, bank, channel, signs of scouring, evidence of water flow, would likely require a Streambed Alteration Permit prior to development activities. The ephemeral washes within the proposed project area appear to have the characteristics that would require a Streambed Alteration Permit. Minimization measures for desert washes are recommended.

Landscape design should incorporate the use of native plants to the maximum extent feasible. Native plants that have food and cover value to wildlife should be used in landscape design (Adams and Dove 1989). Diversity of native plants should be maximized in landscape design (Adams and Dove 1989).

Recommended Protection Measures:

A MGS protocol survey should be conducted to determine presence/absence of the species (CDFG 2003). MGS protocol surveys can only be completed from February through July and require 3 trapping sessions. If negative results are obtained no further action would be required. The survey is typically only good for 1 year. If positive results for MGS presence are obtained consultation with CDFW to process a Section 2081 Incidental Take Permit would be needed.

Another option is to assume MGS are present and begin consultation with CDFW for a Section 2081 Incidental Take Permit and mitigation without accomplishing MGS protocol surveys.

An area that has any of the following characteristics which will be impacted by development: distinct bed, bank, channel, signs of scouring, evidence of water flow, may require a Lake and Streambed Alteration Agreement (LSA) from the CDFW prior to development activities. This project will require consultation with CDFW to determine whether a LSA is required. A jurisdictional delineation of the wash system would be required as part of the LSA process. It would be determined through the LSA process whether mitigation for the wash system is required. Consultation with Lahontan Water Quality Control Board (LWQCB) may be required to determine the need for a Section 401 water quality permit. This project may be able to use the LWQCB's General Permit R6T-2003-0004 for minor streambed/lakebed alteration projects when the federal Clean Water Act is not applicable.

The vegetation within the study area offers potential nesting habitat for migratory birds. If possible, removal of vegetation will occur outside the breeding season for migratory birds. Nesting generally lasts from February to July but may extend beyond this time frame. If vegetation removal will occur during or close to the nesting season, a qualified biologist will

survey all areas to be disturbed as close as possible but no more than one week prior to removal. If active bird nests are found impacts to nests will be avoided by either delaying work or establishing initial buffer areas of a minimum of 50 feet (16 m) around active migratory bird species nests. The project biologist will determine if the buffer areas should be increased or decreased based on the nesting bird response to disturbances.

A preconstruction survey for burrowing owl should be accomplished within 30 days prior to ground disturbing activities to ensure burrowing owls have not moved into the study area. If burrowing owls are discovered the guidance outlined in the publication titled "Staff Report on Burrowing Owl Mitigation" will be used for addressing burrowing owl issues on the study site (California Department of Fish and Game 2012).

Although desert tortoises are not present, they may occur in close proximity to the study area. If protection measures are implemented, take of desert tortoise would be avoided and no agency consultations would be required. If a live desert tortoise is encountered and cannot be avoided by project adjustment, all activities must immediately stop and consultation with the US Fish and Wildlife Service (USFWS) and CDFW should be accomplished prior to development of this study site. Mitigation for desert tortoises would be developed through the consultation process.

The following desert tortoise protection measures will be employed to avoid any possibility of take:

All personnel working or using the site will receive an education program. Videos, brochures, books, and briefings may be used in the educational program. The education program will provide information on the natural history of the desert tortoise, its status, and protection measures to be followed during construction.

A qualified biological monitor will be present during construction activities at least until pre-construction surveys have demonstrated that desert tortoises are not present within the project area and a fence to exclude their entry into the site has been constructed.

Construction areas will be clearly fenced, flagged, or marked to delineate the outer boundaries and define the limit of work activities prior to the initiation of work. Construction areas include parking and equipment staging areas.

Preconstruction surveys will be conducted in work areas. Preconstruction surveys are to be conducted by qualified biologists. If any desert tortoises are found during preconstruction surveys or during construction all work will cease until the desert tortoise leaves the area of its own volition or appropriate permits are obtained to relocate the animal.

All workers will inspect underneath parked vehicles prior to operating them. If a desert tortoise is found beneath a parked vehicle, the vehicle will be left parked until the desert tortoise leaves of its own volition to a safe location.

Construction activities between dusk and dawn will not be permitted in areas supporting native vegetation.

At the end of each workday, all open excavations will be backfilled or otherwise altered to prevent desert tortoises from being trapped in them. While excavations remain open, a biological monitor will check for trapped desert tortoises and other wildlife at least three times each day.

All trash and food items will be promptly contained and regularly removed from work areas to reduce the attraction of common ravens (*Corvas corax*) and other desert tortoise predators to the area.

Significance: Based on the condition of the habitat, and results of the survey, this project is not expected to result in a significant adverse impact to biological resources if recommended protection measures are followed.

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Appendix A

Photographs

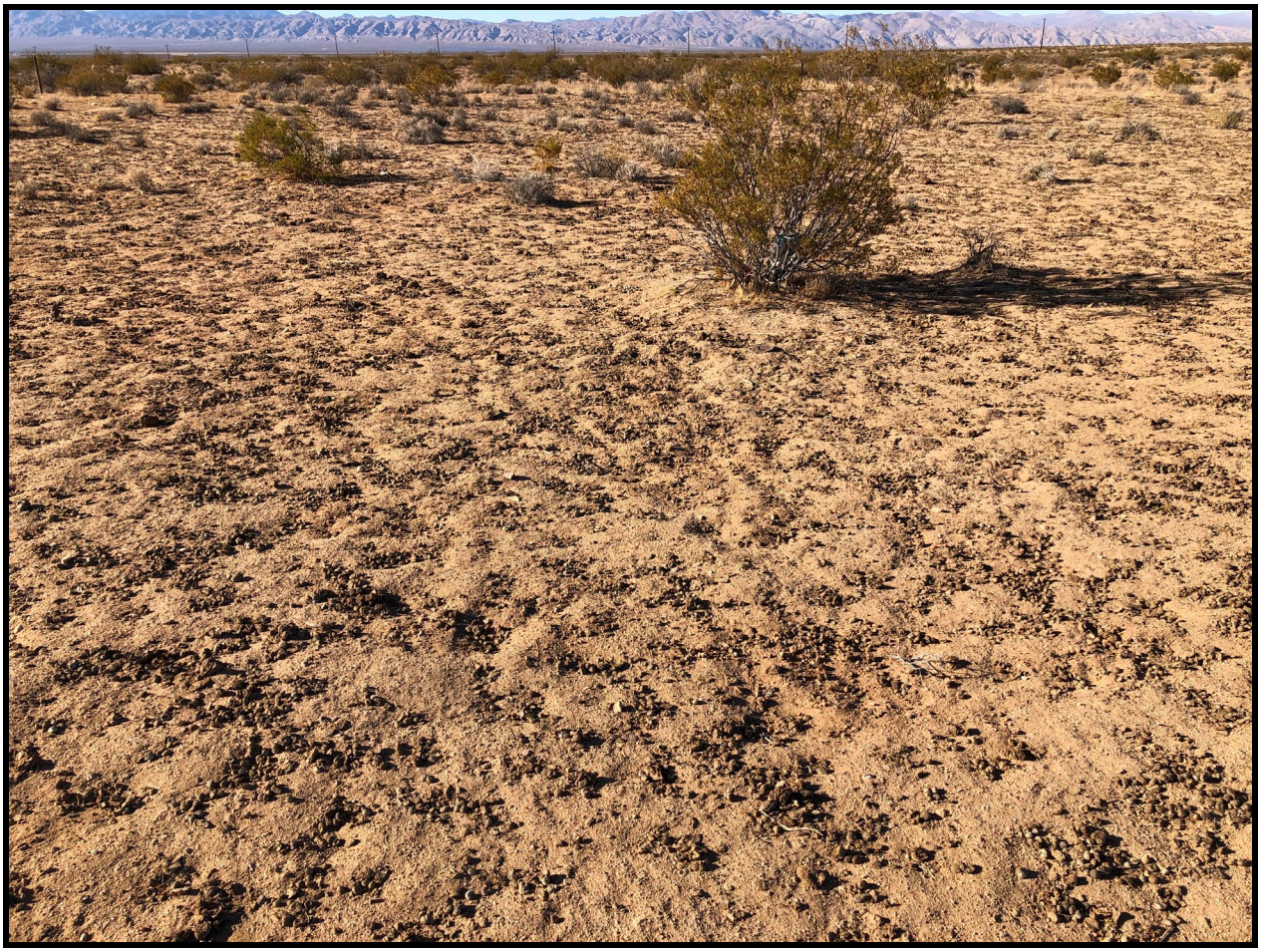
Representative photographs of northern section of the study site. Upper photograph shows one of the washes within the study site.

Representative photographs of southern section of the study site. Bottom photograph shows one of the washes within the study site.

Photograph depicting Twenty Mule Team Parkway which transects the center of the study site.

Potential Mortar (Grinding Stone)

Potentially worked rock



Sheep bed down area in the southwest corner of the study site representative of the damage caused by heavy sheep grazing.

Unspent high caliber bullet

Possible monitoring well