



Rush Environmental, LLC



Initial Study & Mitigated Negative Declaration (IS/MND)

For 384,000 square-feet of cannabis cultivation and manufacturing located easterly of Yerba Blvd. and Northerly of Mendiburu Blvd.

(APN: 302-273-22, -24, & -25)

CITY OF California City

PREPARED BY:

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March 10, 2021

PREPARED FOR:

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**INITIAL STUDY/MITIGATED NEGATIVE DECLARATION FOR 384,000
S.F. CANNABIS CULTIVATION AND MANUFACTURING FACILITY,
LOCATED EASTERLY OF YERBA BLVD. AND NORTHERLY OF
MENDIBURU BLVD. (APNs: 302-273-22, -24, & 25)**

I. Purpose and Authority

Project Description:

This Initial Study has been prepared to construct a commercial cannabis cultivation and manufacturing facility in accordance with adopted City Ordinances pertaining to the location and regulation of cannabis cultivation and manufacturing facility. In 2020, the City of California City adopted a Change of Zone application which converted the zoning of the subject property from Conservation Land (O/RA) to Light Industrial (M-1) which authorizes a commercial cannabis cultivation and manufacturing facility, pursuant to the codified California City Municipal Code as Title 9, Chapter 2, Articles 21 and 29, and Title 5, Chapter 6, of the same. The Project is only subject to a site plan review and building permit, as applicable; however, the use requires the preparation of an Initial Study to review, analyze and evaluate the possible effects resulting upon the surrounding environment. The types of uses, authorized in the M-1 zone include commercial cannabis cultivation, distribution, manufacturing, testing, and ancillary uses necessary thereto. These facilities are subject to all State Law and regulations including the California Code of Regulations, Title 21, Division 42, Bureau of Cannabis Control.

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 located in M-1 – Light Industrial. All cannabis related activities are only permitted in the interior of enclosed structures, facilities, and buildings.

The proposed project ("Project") encompasses approximately 30-acres of vacant land located within the City of California City. More specifically, the property is located adjacent to, and easterly of Yerba Blvd. and approximately 1,600 linear feet north of Mendiburu Road which is generally considered the northwesterly portion of California City, about $\frac{3}{4}$ of a mile, southeasterly of the California City Municipal Airport. The Project is generally surrounded by residential development to the west, and vacant land to the north, south, and east. The Project is identified by Assessor's Parcel Numbers (APNs): 302-273-22, -24, & -25. The Project site is zoned Light Industrial Zoning District (M-1) and carries a General Plan Land Use Designation consistent with General Plan Land policy 1.2.

The Project proposes approximately 384,000 square feet (sf) of commercial cannabis cultivation that is contained within a maximum of six (6) industrial buildings of approximately 64,000 sf each. The Project incorporates a minimum of three (3) retention basins that encompass approximately 2.4-acres of the Project site. The Project will be developed in two phases, the first consisting of approximately 128,000 square-feet dedicated to commercial cannabis cultivation over 4.9-acres. Phase One will include the frontage improvements to Isabella Blvd., 16 commercial (CARB certified) generators, The Project site plan incorporates the future expansion of two internal collector streets, two (2) detention basins consisting of approximately 1.5-acres, fire access roads around the two 64,000 sf buildings, approximately 75 parking spaces, and ancillary landscaping, hardscape, BMPs, and associated grading, paving and site development. Isabella Blvd., which will be constructed during Phase One, will be constructed to its ultimate half-width and offered for dedication to the City for public use. The Second Phase of four (4) buildings, which will consist of 64,000 sf each for a total of 264,000 s.f. of commercial cultivation, approximately 150 parking spaces, 24 generators, the future extension of 72nd Avenue in a north-to-south direction, the Second Phase will also incorporate a retention basin consisting of

approximately 1.1 acres, and a biological set aside consisting of approximately 2.5-acres. The first public street measures about 80-feet in total Rights-of-Way (R/W) and transects the Project site from north to south which bisects the project site along the parcel lines and is known as the future extension of 72nd street. Secondly, the Project includes the future extension of Jay Street (located to the east) to extend an 80-foot R/W collector across the southernly edge of the Project site.

The Project anticipates an extension of a sewer lateral line, into the Project site, from an existing 12-inch sewer trunk line within Yerba Blvd., as well as the extension of potable water, which will be served by an existing 8-inch main line, again, located in Yerba Blvd.

The Project anticipates being served through the use of on-site generators which are CARB certified and will operate continuously until the extension of transmission infrastructure is available to the City by the current electricity provider, Southern California Edison (SCE).

Lastly, the Project incorporates an on-site mitigation areas of approximately 2.5-acres for the permanent preservation and restoration of burrowing owl habitat. This area is detailed on the Project site plan and the project proponent will be required to record a conservation easement, in favor of a viable and competent entity that will provide long-term maintenance in perpetuity of the open space features.

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

B. Total Project Area: 30 acres (1,306,800 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: 30	Lots: 3	Sq. Ft. of Bldg. Area: 384,000 S.F.	Est. No. of Employees (Reg): 30-35
			Est. No. of Employees (Harvest): 50-300

Other: N/A

C. Assessor's Parcel No(s): 302-273-22, -24, & -25

D. Street References: Easterly, and adjacent to Yerba Blvd. and northerly of Mendiburu Blvd.

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

The Project is approximately 30 gross acres and is located within a planned industrial and manufacturing area of the City. The physical development of the project site, and the adjacent public Rights-of-Way (R/W), will be improved in an effort 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 infill nature of the property, combined with a relatively low development footprint, the Project does not have the potential to create an adverse environmental impacts related to city code permitted noise levels, the existing air quality levels, 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#87130918)*
- *Biological Assessment Resources Assessment Report, Michael Baker, International, prepared February 28, 2020 for APN 216-162-06*
- *Kern County Airport Land Use Commission (ALUC)*

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:** M-1 (Light Industrial Zoning District)
2. **Circulation:** Yerba Blvd. will provide the primary point of ingress and egress as this publicly dedicated roadway serves Project. In order to facility 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 the future extension of 72nd Street, which will be a 60-foot public road that traverses from north to south and bisects APN 302-273-22 and 302-273-24, internal to the project boundary. General project circulation will likely occur either from the westerly condition along Yerba Blvd. or from the extension of a future 80-foot R/W publicly dedicated road which traverses the majority of the project site, from Yerba Blvd. to the easterly property line of APN 302-273-25.
3. **Multipurpose Open Space:** The Project is located within a planned industrial area of California City. The project will not create a need for additional open space and/or active park recreational facilities. 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 adjacent to a designated conversation area and will need to address possible interface guidelines set forth by the California Department of Fish & Wildlife (CDFW) and the USFWS. The Project does incorporate an on-site dedication of approximately 2.5 acres to facilitate preservation of potential Burrowing Owl Habitat.
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 located within on-inference zone "C" of the Comprehensive Land Use Plan (CLUP) that is part of the Airport Influence Area (AIA) of the California City Municipal Airport; however, the proposed operations are consistent with the Airport's comprehensive land use plan (CLUP) and has been deemed consistent with the Airport's operations. 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:** The Project is located within a planned industrial area of the City where the majority of ambient noise generation is caused by the Average Daily Trips (ADT) associated with vehicle traffic trips occurring along Yerba Blvd. 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 on, or adjacent to the Project boundaries, as no dwelling units exist either on the project site. The Project site is situated within 50-feet from existing residential properties (R-1 zoning) to the west. The Project will comply with City ordinance which requires all cultivation buildings shall be located at-least 200-feet from this existing residential property. Subject to compliance with City ordinance, the proposed development will not cause an undue impact or burden upon any existing or planned City, State, or Federal housing program or regulation.
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, O₃. The Project will require the use of generators (powered by either gas or diesel fuel) 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): Land Use Policy 1.2

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

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

F. Adjacent and Surrounding:

1. **Land Use Designation(s):** Land Use Policy 1.2

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:** M-1 (Light Industrial Zoning District) located to the north only with Conservation Land located (O/RA) located to the south, east, west, and west.

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.

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Agriculture & Forest Resources | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Transportation / Traffic |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Utilities / Service Systems |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Geology / Soils | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> 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.

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

February 25, 2021

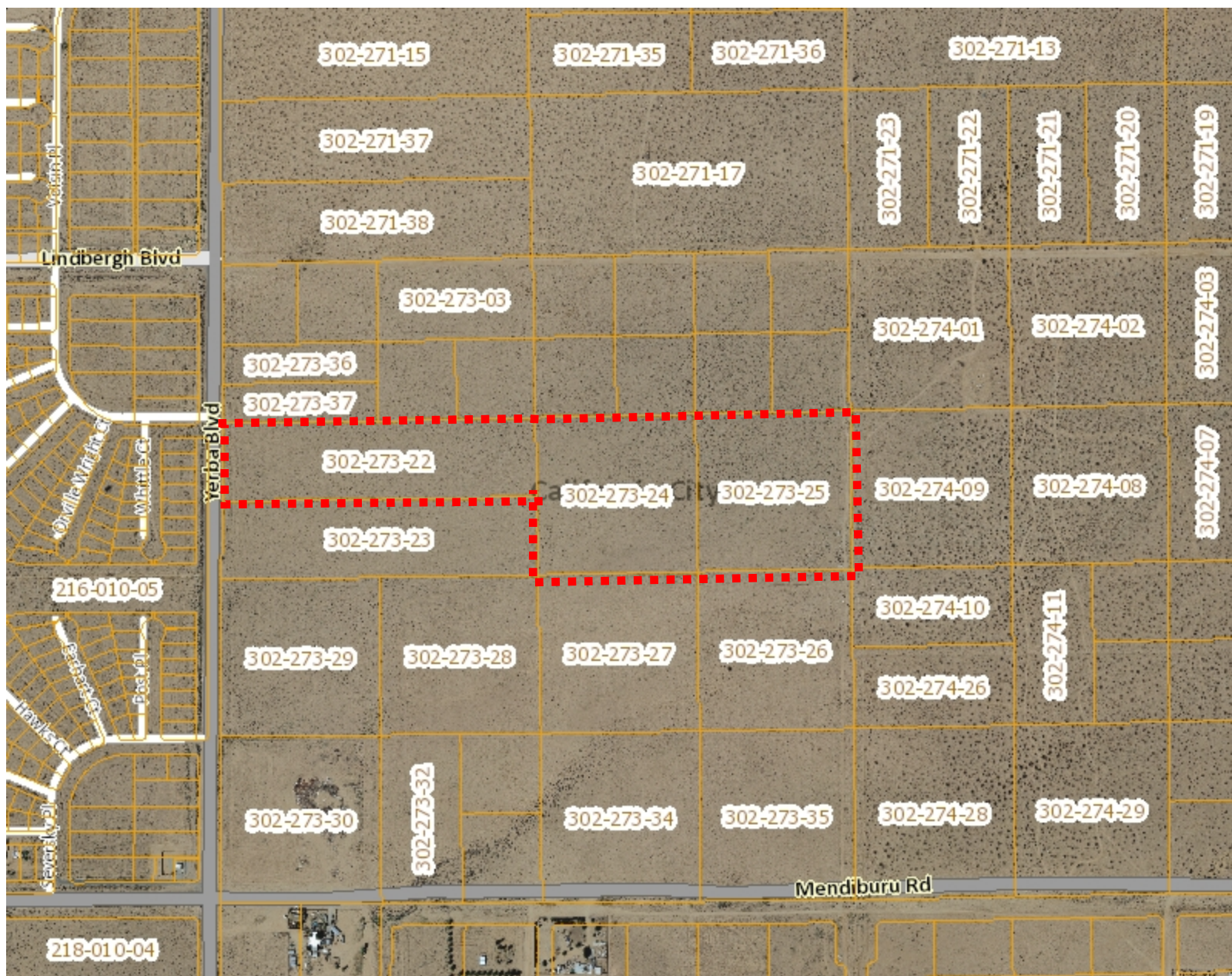
Date

Shawn Monk

Printed Name

For Shawn Monk, City Planner

Traditional-Yerba (APN: 302-273-23, 24, & -25)



Legend

- Parcels Land
- Roads 5k-10k
 - Freeway
 - Highway
 - Major
 - Minor
 - Local
 - Ramp
 - Unpaved
- City Incorporated
- County Facilities

1: 9,028



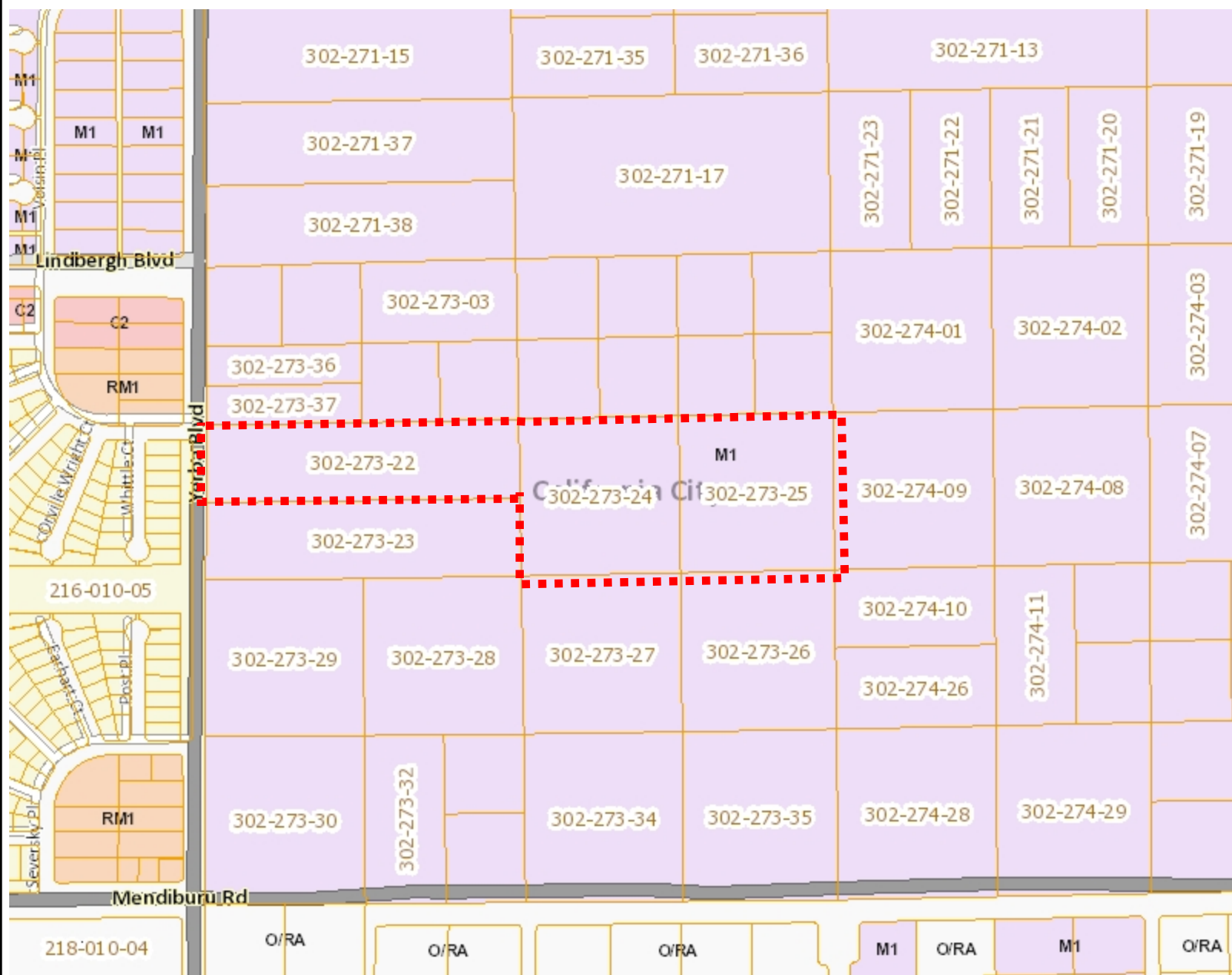
0.3 0 0.14 0.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere
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Notes

Traditional-Yerba (APN: 302-273-23, 24, & -25)



Legend

- Parcels Land
- Roads 5k-10k
- Freeway
- Highway
- Major
- Minor
- Local
- Ramp
- Unpaved
- City Incorporated
- Zoning CalCity**
- C1
- C2
- C3
- C4
- C5
- CMC
- G
- M1
- M2
- O/RA
- R1
- R2
- R3
- R4
- R5

1: 9,028



0.3 0 0.14 0.3 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere
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Notes

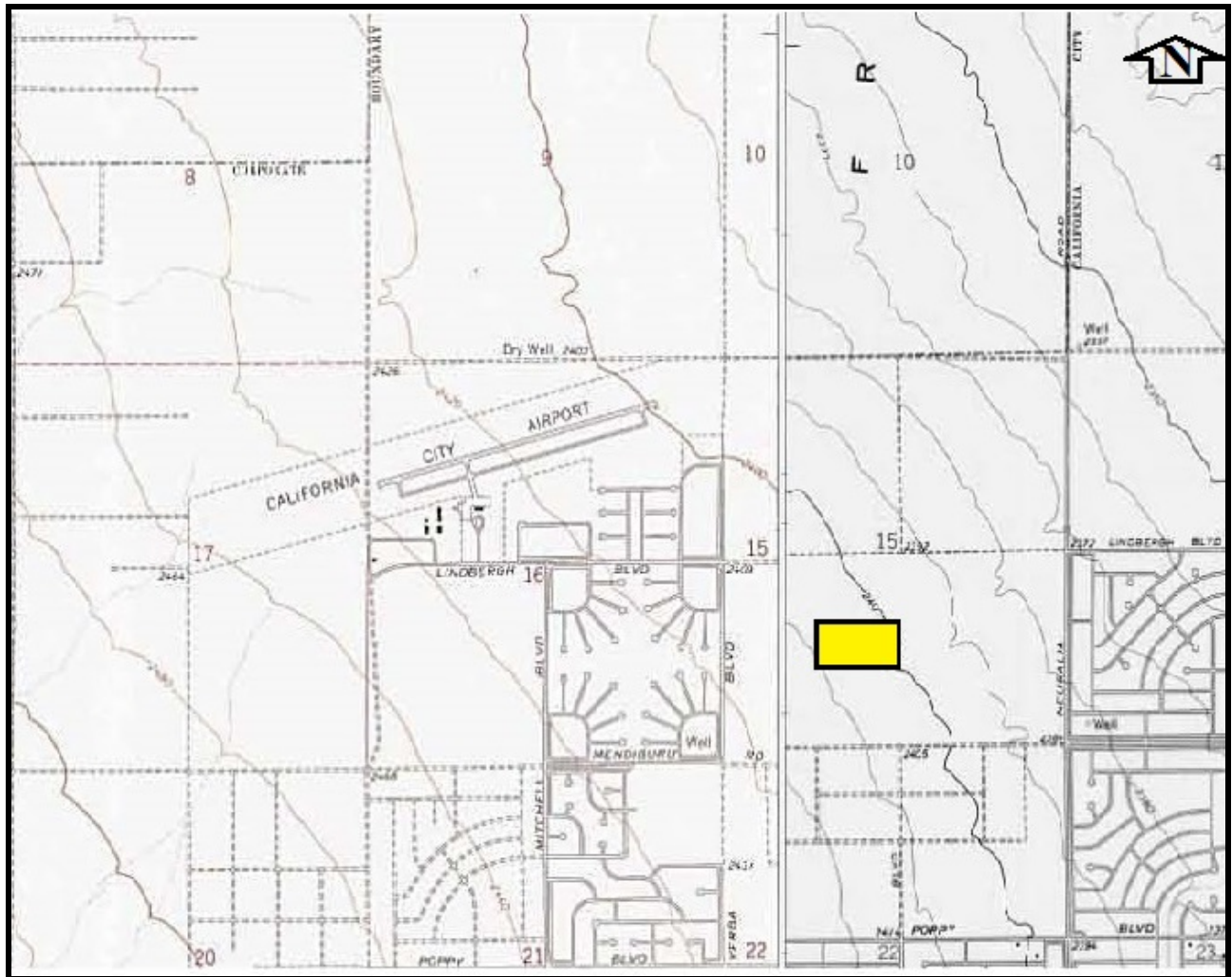


Figure 2. Approximate location of study area as depicted on excerpt from USGS Quadrangle, California City North, Calif., 7.5' 1973.

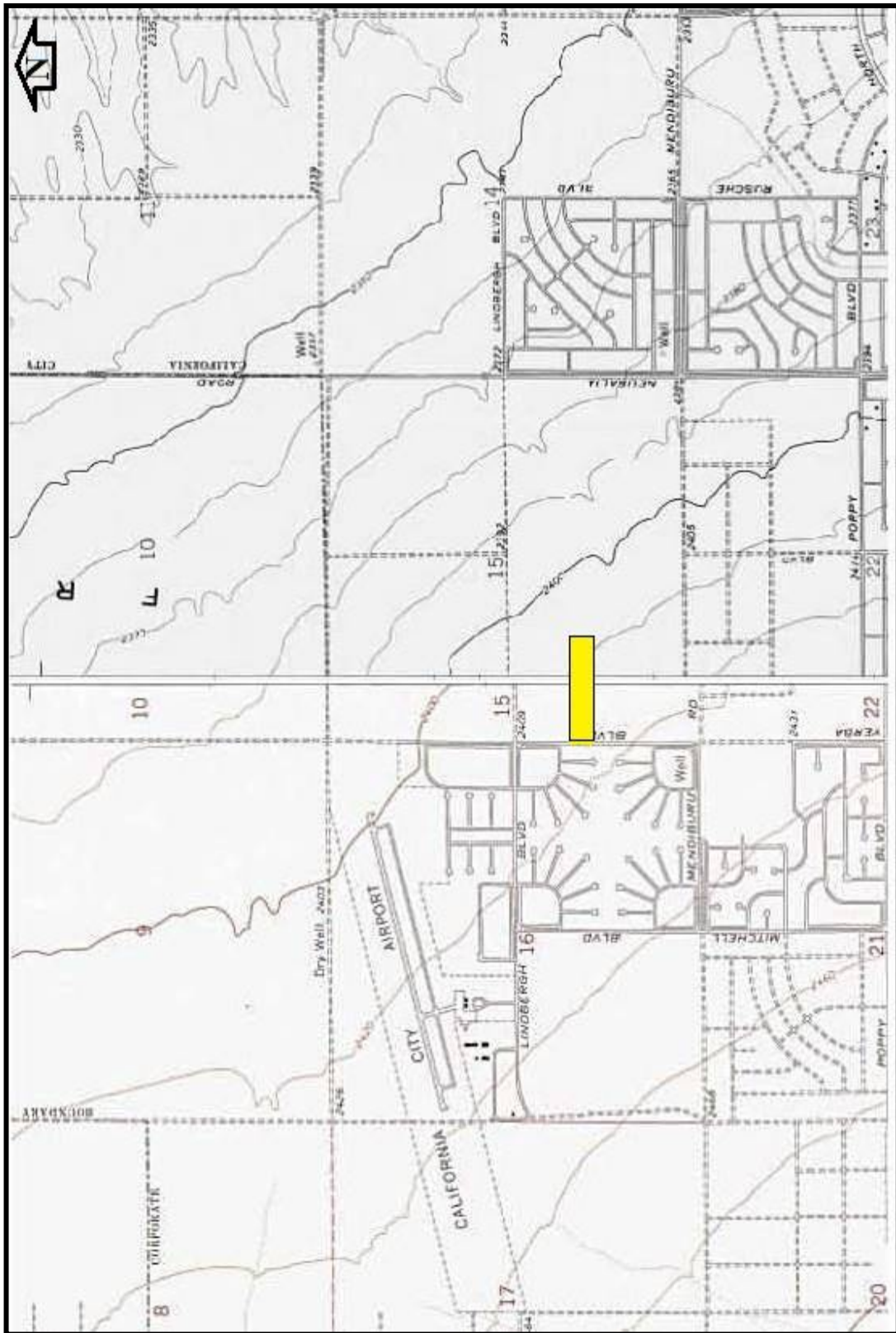


Figure 2. Approximate location of study area as depicted on excerpt from USGS Quadrangle, California City North, Calif., 7.5' 1973.

V. ENVIRONMENTAL ISSUES ASSESSMENT

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 23000-21178.1), 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 Mojave Desert, which is characterized by gentle rolling ground surfaces, with low to moderate topographical relief across the desert floor. The immediate vicinity surrounding the Project consists of moderately sloping alluvial plains with a series of steep rock buttes and several arroyos, including Cache Creek, which lies approximately 3-miles south of the project site; The City is encompassed by the San Gabriel Mountains to the south, Tehachapi Mountains to the west, and the Rand Mountains to the north which create various scenic vistas throughout California City (California City General Plan, 2009).

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.

The Project proposes to develop a 384,000 SF for a cannabis cultivation 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 closest 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.

The project shall comply with the standards outlined within the California City General Plan and Municipal Code Zoning Classification of M-1 (Light Industrial Zoning District), respectfully, as well as, the regulations set forth in City ordinance for cannabis cultivation and manufacturing facility. 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 attributed to the existing industrial facilities to the north. 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 westbound lane of Yerba Blvd. 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.

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 5-6.906). 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 structure will utilize beige, brown and off-white colored

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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 of 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 300 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; 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 "light industrial and research". The subject site and surrounding land to the north, east, south and west is not categorized as Prime Farmland, Unique Farmland, or Farmland of local statewide importance, 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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. Forest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 51304(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Findings of Fact: The Project is located within an existing urbanizing desert environment that is currently zoned for industrial uses. 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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or Projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors which are located within 1 mile of the Project site to Project substantial point source emissions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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).

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 Community Commercial (C2) General Plan Land Use Designation and 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 General Plan Amendment or other revision 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-30 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 an 8.1LT, 125 kW 6-Cylinder Inline generator, to provide temporary power in lieu of delaying project operations and awaiting the completion of infrastructure development by Southern California Edison (SCE). The proposed generator will operate 8-hours per day for at-least one year (365 days), with approximately 2,000 operational hours per year. While the timeframe of electrical infrastructure by SCE is undetermined, the generator being utilized has already undergone a rigorous certification process by CalEPA and CARB for commercial use in the manner described. In addition, an air quality (CalEEMod) analysis was completed, and the results are described below in Table 1-1. The proposed generator does not exceed the daily thresholds for criteria pollutants as set forth by the Kern County/Mohave Air District.

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

Pollutant	Daily Maximum Emissions (lbs./day)	EKAPCD Maximum Daily Threshold* (lbs./day)	Exceeds EKAPCD Threshold?
Reactive Organic Gas (ROG)	98.09	137	NO
Oxides of Nitrogen (NO _x)	82.69	137	NO
Carbon Monoxide (CO)	60.21	548	NO
PM _{2.5}	14.45	82	NO
SO ₂	0.12	148	NO

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

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

Pollutant	Daily Maximum Emissions (lbs./day)	EKAPCD Maximum Daily Threshold* (lbs./day)	Exceeds EKAPCD Threshold?
Reactive Organic Gas (ROG)	4.66	137	YES
Oxides of Nitrogen (NO _x)	17.28	137	NO
Carbon Monoxide (CO)	14.61	548	NO
PM _{2.5}	1.42	82	NO
SO _x	0.09	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
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Consequently, the Project would not substantially contribute to a significant individual or cumulative impact on existing or projected exceedances of the state or federal ambient air quality standards or result in a cumulatively considerable net increase in the emissions of any criteria pollutant for which the Project region is designated nonattainment. Less than significant impacts are anticipated.

Mitigation:

AQ1: 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.

AQ2: 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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 2, 2020); Project Materials.

Findings of Fact: A Biological Assessment was conducted in November of 2020 and as part of this assessment, the lead biologist prepared a line transect survey to inventory biological resources potentially available on-site. The proposed project area was characteristic of a highly impacted desert field. A total of twenty-six (26) plant species and fifteen (15) wildlife species or their sign were observed during the line transect survey. However, in regard to particular species of concern that are currently established as threatened or endangered species on identified at either the federal or state level, none were observed.

More specifically, no desert tortoises (*Gopherus agassizii*) or their sign were observed within the study area. The study site did not provide suitable habitat for Mohave ground squirrels (*Xerospermophilus mohavensis*). However, during the habitat survey a Kit Fox den was identified on-site, towards the furthest eastern portion of the Project site and extending within 302-274-09. No burrowing owls (*Athene cunicularia*), or their sign were observed during the field survey. California ground squirrel burrows (*Citellus beecheyi*) were observed within the study area. California ground squirrel burrows can provide potential future cover sites for burrowing owls. Sensitive plants, specifically, alkali mariposa lily (*Calochortus striatus*), desert cymopterus (*Cymopterus deserticola*), and Barstow woolly sunflower (*Eriophyllum mohanense*) are not 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. Migratory birds would not be expected to nest in the limited vegetation within the study site. No state or federally listed species are expected to occur within the proposed project area. No ephemeral streams or washes were present within the study area.

(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:

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
(i) Coso Range NW to Olancho. 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 Western Expansion Area (WEA) (San Bernardino County).				

The Project is located approximately 43-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. That being said 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 2030 and sets forth five primary conservation priorities intended to support the ongoing conservation of the MGS. These priorities are detailed as follows¹:

- 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 Biological Assessment was conducted in November of 2020 and as part, a habitat assessment/field survey was prepared. This assessment is incorporated herein by reference, to confirm existing site conditions within the project site. The lead biologist extensively surveyed all special-status habitats and/or natural areas, where accessible, which have a higher potential to support special-status plant and wildlife species. Vegetation communities occurring within the project site were mapped on an aerial photograph and classified in accordance with the vegetation descriptions provided in *A Manual of California Vegetation* (Sawyer *et al.*, 2009) and cross referenced with the *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland, 1986). In addition, site characteristics such as soil condition, topography, hydrology, anthropogenic disturbances, indicator species, condition of on-site vegetation communities, and the presence of potentially regulated jurisdictional features were noted. Mark Hagan Biological used Geographic Information Systems (GIS) ArcView software to digitize the mapped vegetation communities and then transferred these data onto an aerial photograph to further document existing conditions and quantify the acreage of each vegetation community. A line transect survey was conducted on 2 September 2019 to inventory biological resources. The proposed project area was characteristic of a disturbed creosote bush (*Larrea tridentata*) scrub plant community. A total of twenty-three plant species and fourteen wildlife species or their sign were observed during the line transect survey. No desert

¹ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83973&inline>

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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tortoises (*Gopherus agassizii*) or their sign were observed during the field survey. No Mohave ground squirrels (*Xerospermophilus mohavensis*) were observed or audibly detected during the field survey. Schismus (*Schismus* sp.), an invasive grass species that appears to be an indicator of poor Mohave ground squirrel habitat, is the dominant annual within and adjacent to the study site. Mohave ground squirrels are not expected due to lack of required forage and cover plant species. The additional details, regarding the Habitat Assessment methodology, can be found in the attached Biological Assessment Report, prepared by Mark Hagan Biological, dated September 30, 2019.

The Biological Assessment indicated that natural habitats (within the project site) have been disturbed as a result of previous grading activities, resulting in a disturbed rubber rabbitbrush vegetation community and heavily disturbed/compacted surface soils throughout. No special-status plant species were observed during the field survey. The disturbed nature of the project site has reduced the potential for it to provide suitable habitat for special-status plant species. Based on the results of the habitat assessment and a review of specific habitat preferences, distributions, and elevation ranges, it was determined that special-status plant species identified by the CNDDDB and CNPS Online Inventory database are not expected to occur within the project site. The project site and surrounding vegetation communities provide limited suitable foraging and nesting habitat for a variety of year-round and seasonal avian residents as well as migrating songbirds that could occur in the area. Nesting birds are protected under the MBTA, the Bald and Golden Eagle Protection Act, and the CFGC. If project-related activities are to be initiated during the nesting season (January 1st to August 31st), a pre-construction nesting bird clearance survey should be conducted by a qualified biologist no more than three (3) days prior to the start of any vegetation removal or ground disturbing activities. The qualified biologist shall survey all suitable nesting habitat within the project impact area, and areas within a biologically defensible buffer zone surrounding the project impact area. If no active nests are detected during the clearance survey, project activities may begin, and no additional avoidance and minimization measures would be required. If an active nest is found, the bird species shall be identified and a "non-disturbance" buffer should be established around the active nest. The size of the "non-disturbance" buffer should be increased or decreased based on the judgement of the qualified biologist and level of activity and sensitivity of the species. It is further recommended that the qualified biologist periodically monitor any active nests to determine if project-related activities occurring outside the "no-disturbance" buffer disturb the birds and if the buffer should be increased. Once the young have fledged and left the nest, or the nest otherwise becomes inactive under natural conditions, project activities within the "no-disturbance" buffer may occur.

Although not identified in the CNDDDB database search of the USGS *California City North, California City South, Mojave NE*, and *Sanborn, California* 7.5-minute quadrangles, California horned lark was the only special-status wildlife species observed during the field survey. Based on the results of the habitat assessment and a review of specific habitat preferences, occurrence records, known distributions, and elevation ranges, it was determined that the project site has a moderate potential to support burrowing owl, prairie falcon, and loggerhead shrike; and a low potential to support Mohave ground squirrel. All remaining special-status wildlife species identified by the CNDDDB database are not expected to occur within the project site.

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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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. Therefore, an area of non-disturbance of approximately 2.5-acres in size, has been provided for as permanent open space on the site plan and will be dedicated in perpetuity subject to the recordation of a permanent conservation easement in favor of a fiscally viably entity, which is acceptable to the City.

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*, CDFE 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.²

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.

² <https://wildlife.ca.gov/Conservation/Planning/Banking/Approved-Banks>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
CULTURAL RESOURCES Would the Project				
8. Historic Resources				
a) Alter or destroy an historic site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Findings of Fact: The project is located on approximately 30 acres of undeveloped land within the M-1 (Light Industrial Zoning District), within California City. The M-1 land use designation provides a broad spectrum of industrial and manufacturing uses that do not have the potential for detrimental impacts on surrounding properties. Existing manufacturing establishments in the vicinity are located north and west of the project site, including the California City Municipal Airport and a storage company. According to the California City General Plan, *historic resources are items that are at least 45 years of age or older that also represents a significant time, place, origin, event, or work of a master.* Historic resources may be identified as structures and as archaeological sites. Five historic archaeological sites are recorded within the City. Recorded historic sites included trash scatter, glass and ceramics and potential WWII desert training or military disposal items. As referenced within the Historic and Cultural resources of the General Plan none of these findings were eligible for inclusion under the California State Office of Historic Preservation (SOHP). The site is vacant, and no historic structures or features have been identified on or adjacent to the project site. In addition, there are no recognizable potential historic resources, as defined in Section 15064.5 of the CEQA Guidelines that would be adversely affected by the proposed project. This includes any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant. Less than significant impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

9. Archaeological Resources				
a) Alter or destroy an archaeological site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Restrict existing religious or sacred uses within the potential impact area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 23074?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Findings of Fact: The approximately 30-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)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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within the City of California City. The Project site is not recognized as a unique archeological features; a site where former human remains, including those interred outside of formal cemeteries, have been identified or located; or a site that contains any existing religious or sacred uses. However, per the California City General Plan, if a unique archeological resource or site or human remains are found during excavation, all work will be suspended until the area has been thoroughly examined.

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 American 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. Pursuant to the mentioned 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: As previously discussed in the Cultural Resources section, there are five recorded historic archaeological sites within the City, according to the California City General Plan. These archaeological sites are not found within the project area. The cultural resource survey was concluded that no cultural resources were found on the project site or with close proximity to the site (discussed in Cultural Resources: Sections 8-9). 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 any local register. Therefore, no impacts are anticipated with project implementation. As previously discussed in the Cultural Resources discussion of this document, there are five recorded historic archaeological sites within the City, according to the California City General Plan. The archaeological sites are not found within the project area.

Therefore, no impacts are anticipated with project implementation. As previously discussed, 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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
46. Energy Conservation				
a) Would the Project conflict with any adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 water efficient irrigation for irrigation and landscape design. No impact is anticipated to adopted Energy Conservation plans.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

GEOLOGY AND SOILS Would the Project				
10. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 Zone lies approximately 5.75 miles northwest of the project site, at 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. Per the findings within the California City General Plan and the project-specific Geotechnical Investigation, surface fault rupture is considered unlikely at the project site. Less than significant impacts are expected.

California City, and the project site, is located 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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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 30 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 30 miles west of the City's core, and 5.75 miles northwest of the project property. The nearest significant active fault is the San Andreas Fault Zone, which is located approximately 37.8 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

11. Liquefaction Potential Zone

a) Be subject to seismic-related ground failure, including liquefaction?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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; however, the groundwater in the City ranges from approximately 350 to 400 feet below ground level, according to the Existing Sewer System Map (Figure 3 – Groundwell #14) in the 2018 California City Local Agency Management Program for Onsite Wastewater Treatment Systems (OWTS), which results in a negligible impact from the effects of liquefaction.

Per the findings within the California City General Plan, the potential for liquefaction occurring at the project site is considered low. Less than significant impacts are anticipated.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

12. Ground-shaking Zone

a) Be subject to strong seismic ground shaking?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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).

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

Monitoring: No Monitoring Necessary

13. 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 15-miles northeast and 6-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

14. 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 as a result 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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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15. Other Geologic Hazards

a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 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.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

16. Slopes

a) Change topography or ground surface relief features?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Create cut or fill slopes greater than 2:1 or higher than 30 feet?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Result in grading that affects or negates subsurface sewage disposal systems?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 section 14a), previously, 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.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

17. Soils

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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. In order to reduce post-construction soil movement and provide uniform support for the 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 below existing grades or three (3) feet below bottom of the proposed footing, whichever is deeper. Any undocumented fill encountered during grading should be removed and replaced with engineered fill.

Compliance with the City's General Plan Safety Element, construction of underground utilities will be required to interconnect, and provide, water and sanitary sewer to the project site. According to the Existing Sewer System Map (Figure 6) in the 2018 California City Local Agency Management Program for Onsite Wastewater Treatment Systems (OWTS), a 12-inch sewer line currently exists along Yerba Boulevard, which the project will be required to make connection to and initiate service with the City Public Works Department.

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

18. Erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in any increase in water erosion either on or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 2,300 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.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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The California City Erosion Hazards Map (Figure 6-3) within the General Plan displays most of the City, including the project site, is in an area with none to slight erosion hazards. As previously stated, the project site resides within the Eastern Kern Air Pollution Control District, therefore must comply with the District's Regulation IV, Rule 402. The purpose of this Rule is to prevent, reduce and mitigate ambient concentrations of anthropogenic fugitive dust emissions to an amount sufficient to attain and maintain the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). According to Regulation IV, Rule 402, the project shall implement one or more fugitive dust emission control strategies, in order to limit visible dust emissions (VDE) to no more than 20-percent opacity or meet the conditions for a stabilized surface. Some control strategies include applying dust suppressants, controlling vehicular speed, using water trucks, and implementing track-out avoidance measures. The implementation of the fugitive dust emission control strategies will ensure the reduction of ambient concentrations of fine particulate matter (PM_{2.5}) by reducing or mitigating anthropogenic fugitive dust emissions.

In addition to the Dust Control Plan, the project site is also required to implement a Stormwater Pollution Prevention Plan (SWPPP) during the construction of the project, in order to comply with Environmental Protection Agency (EPA) and the National Pollutant Discharge Elimination System (NPDES). The purpose of the SWPPP is to develop a strategy for construction projects to minimize sediment and other pollutants that may be expected to affect the quality of storm water discharges associated with project development. The development and implementation of the SWPPP during project construction will ensure that potential sources of pollution are identified and mitigated through the application of best management practices (BMPs), such as concrete washouts or secondary containment areas, further discussed in the Hydrology Section of this document.

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-on to the site is collected and conveyed through to retention basins in-between buildings, and underground retention facilities under the eastern parking lots, in order 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 intends to 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.

According to the Existing Sewer System Map (Figure 6) in the 2018 California City Local Agency Management Program for Onsite Wastewater Treatment Systems (OWTS), a 12-inch sewer line currently exists along Yerba Blvd., which the project intends to connect to by extending the sewer connection easterly from the project site. The extension of these sewer facilities will occur within existing and dedicated City Rights-of-Way. 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.

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

Monitoring: No Monitoring Necessary

19. Wind Erosion and Blowsand from Project either on or off site.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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. 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.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

20. Paleontological Resources

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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: The approximately 30-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 City of California City. The site is not recognized as a unique paleontological or a unique geologic feature. However, per the California City General Plan, 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.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS Would the Project				
21. Greenhouse Gas Emissions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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: 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 (CO₂), methane (CH₄), nitrous oxide (N₂O), ozone, and to a lesser extent chlorofluorocarbons. 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.

The proposed industrial and manufacturing facility will add a new land use, and as a result, an expected increase in greenhouse gas emissions is expected. The square-footage of the proposed industrial and manufacturing uses is anticipated to generate less than the 3,000 MMTCO_{2e} which is identified in the CARB Scoping Plan. The project will operate under the mandatory regulations found in the most recent Cal Green Building Standards Code for non-residential uses.

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 (CARB) has identified measures to achieve this goal as set forth in the CARB Scoping 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 2030, a reduction target that was first introduced in Executive Order B-30-15. 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 are expected.

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

Monitoring: No Monitoring Necessary

HAZARDS AND HAZARDOUS MATERIALS Would the Project

22. 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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d) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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e) 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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 30 gross acres of vacant desert land and proposes to construct a 384,000 SF industrial and manufacturing 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) 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, operators of 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.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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In addition, other hazardous waste materials, requiring special handling and disposal, must comply with applicable Cal-EPA, Cal-OSCHA, and MSDS protocols³ 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.

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 *Material Delivery and Storage*; *Material Use*; and *Spill Prevention and Control*. 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.

Implementation Measure S-7, within the California City's General Plan 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 and Research) Zoning District of the City that is naturally segregated 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.

³ California Environmental Protection Agency (Cal-EPA); California Occupational Safety and Health Agency (Cal-OSHA); Material Data Safety Sheet (MSDS)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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The Safety Element, within the California City General Plan, 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. California City is served by a single Fire Department and Police Department within their City boundaries. The California City Fire Department is located at 20890 Hacienda Boulevard, approximately five (5) driving miles southeast of the Project site. The California City Fire Station is staffed by three full-time fire fighters on a 24-hour basis, including a captain, engineer and fire fighter; however, the Fire Department is designed to be staffed by nine fire fighters. The California City Fire Station has two part-time, seven reserves, and five Fire Department Volunteer positions that City Council has authorized. The fire department is equipped with one wildland patrol unit, one wildland/interface engine, one water tender, and two full-sized fire engines. In addition to fire suppression, additional services the department provides includes Paramedic Advanced Life Support, fire prevention, public education, fire hydrant maintenance, hazardous materials response, nuisance abatement, flood response and aircraft crash and arson investigation. According to the National Fire Protection Association (NFPA), the recommended dispatch-to-arrival time is five (5) minutes, on 90-percent (%) of calls. The California City Fire Department has mutual aid agreements with the Kern County Fire Department, the East Kern Airport District Fire Department, and the Bureau of Land Management. Police protection services within the City are provided by the City's Police Department, located at 21130 Hacienda Boulevard, approximately four (4) driving miles southeast of the project site. The Kern County Coroner's services are provided through the County by the Sheriff's Department and the court system and jails are operated and maintained by Kern County.

The project site proposes improvements to Yerba Blvd. (include a newly proposed curb-and-gutter) and accessing the project site from either Yerba Blvd. or the future extension of Isabella Blvd. Improvements also included paved access, along Yerba Blvd., to the commercial cannabis facility. Primary access intends to be located on the northerly portion of the property, adjacent and south of Yerba Blvd., which follows a general circulation pattern from Yerba Boulevard and Mendiburu Rd. The site plan configuration of the proposed development includes fire truck accessible drive aisles and a two-way driveway to ensure adequate emergency response access on-site. 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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
23. Airports				
a) Result in an inconsistency with an Airport Master Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require review by the Airport Land Use Commission?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

Findings of Fact: The California City Municipal Airport, located north of the project property, 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 located within California City's Airport Compatibility Zone C. Compatibility Zone C is identified as the outer safety zone. Limited risks and infrequent noise intrusions vary within Compatibility Zone C. The Kern County Airport Land Use Commission shall restrict the height of buildings, structures, appurtenances, plants and trees to not more than 35-feet above ground level (unless approved by the Federal Aviation Administration) to prevent a hazard to the safe landing or take-off of aircrafts. In addition, the Project is located outside of the 65 CNEL noise contour zone. According to the 2011 Kern County Airport Land Use Compatibility Plan the project is located outside of the Airport Influence Area (AIA) of the California Municipal Airport, therefore the project does not present an inconsistency with the prescribed land uses already determined to be compatible with the Airport's CLUP.

Additionally, the Federal Aviation Administration (FAA) may require review of structures in excess of 55-feet height, measured from the Mean Sea Level (MSL) of the Airport. However, the proposed use does not currently propose buildings or structures that will exceed this height restriction. Therefore, a less than significant impact will occur.

The project is not subject to the Airport AIA as it is not located outside of the influence area. 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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
24. Hazardous Fire Area				<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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), 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, the Project, and its surroundings, are located outside of the Very High and High Fire Hazard Severity Zone (FHSZ) for Local Responsibility Area and outside of the Very High/High/Moderate FHSZ for State and Federal Responsibility Areas.

As mentioned previously, the California City Fire Department is located at 20890 Hacienda Boulevard, approximately five driving miles southeast 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

HYDROLOGY AND WATER QUALITY Would the Project				
25. Water Quality Impacts				
a) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Place housing within a 300-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Place within a 300-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g. water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors or odors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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), 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 6.5-miles south of the project property, and Koehn Lakebed is approximately 11-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 an area that nearly encompasses one acre in gross area. As a precautionary measure, 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.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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). Per the project-specific Final Hydrology Report, current drainage requirements for this project fall under the jurisdiction of the City of California City, which requires the entirety of the storm water from the 30-year, 5-day storm to be retained onsite. 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 320 to 380-feet below ground surface and has slightly risen since 1983.

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, potable well number 14 is the closest facility within the vicinity of the project site and is located at 22000 Mendiburu Boulevard less than one mile to southeasterly of the Project site. According to the General Plan, future water demands will be met by the construction of five new water wells and through additional groundwater purchases within the Antelope Valley-East Kern Water (AVEK) District.

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 in order to be consistent with State of California and City legal responsibilities to the utilization of water resources. All irrigation within the City comply 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- flowing 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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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with groundwater recharge conditions. The project includes both underground retention facilities and retention basins, designed to collect and provide sufficient storage for the 30-year and 5-day storm event. This method of stormwater management will therefore facilitate groundwater recharge through infiltration. 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, an infiltration report was prepared and yielded infiltration rates at 2-inches per hour. Since the majority of soils, within the Project site, are a combination of Soil Types 2 and 3, the infiltration rates identified are within the maximum thresholds required by Table 4.0, contained within the City's Local Agency Management Program for Onsite Wastewater Treatment Systems (2018). Less than significant impacts are expected.

The proposed project is located in 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, similar to 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. In particular, the project setting, and a majority of the City's light industrial zone occur between the Cache Creek and Koehn Lakebed. Cache Creek is located approximately four miles upstream of the project, and Koehn Lakebed is approximately 11 miles northeast of the project site.

In this context, the project has a Zone X FEMA designation, defined as areas determined to be outside the 0.2-percent (%) annual chance floodplain. The current Zone X designation encompasses a majority of the City's undeveloped and developed properties within the vicinity of the Municipal Airport. Project implementation would involve permanent site improvements introducing impervious surfaces in the form of buildings, paving, and hardscape to the previously undeveloped (pervious) land. The size and scope of the Project dictates a low impact development 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 through the use of landscaping, natural areas or other pervious surfaces are ample and are subsequently integrated into Project site plan. To prevent changes to local 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- 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 Isabella Blvd., 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, with the exception of: wetlands dominated by trees and

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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. The retention basins and facilities will be required to incorporate a capacity to accept and infiltrate the worst-case increase in runoff volume for the 30-year and 5-day storm event.

Furthermore, the project involves street improvements including curb and gutter at the Yerba Blvd. 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: No Mitigation Required

Monitoring: No Monitoring Necessary

26. Floodplains

Degree of Suitability in 300-Year Floodplains. As indicated below, the appropriate Degree of Suitability has been checked.

NA - Not Applicable <input checked="" type="checkbox"/>	U - Generally Unsuitable <input type="checkbox"/>	R - Restricted <input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Changes in absorption rates or the rate and amount of surface runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Changes in the amount of surface water in any water body?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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: USDA, 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,

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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that exceeds the 30-year, 5-day storm runoff volume for post-development conditions will discharge from the site in a way that perpetuates the existing drainage condition, which flows off-site to the northeast. The project, as a whole, includes approximately less than half-acre of proposed structures, driveways, parking and hardscape (impervious areas) and approximately a quarter-acre of proposed landscape or open space (pervious areas). 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 Federal Emergency Management Agency (FEMA) evaluates potential flood hazards for the City. The FEMA Flood Insurance Rate Maps (FIRMs) serve as the basis for identifying those potential hazards and determining the need for and availability of federal flood insurance. According to FIRM panel 06029M-1920E, effective September 26, 2008, the entire project and its immediate surroundings are located within Zone X, identified as areas determined to be outside the 0.2% annual chance floodplain. As such, less than significant impacts are expected.

The project is not located near an existing levee or dam; therefore, no impacts are expected pertaining to this topic. The project is not located within a 300-year flood zone based on FEMA FIRM panel 06029M-1920E, effective September 26, 2008. 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 "C", which is characterized for having a slow infiltration rate when thoroughly wet. Type "C" 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. As stated previously, the proposed site plan includes retention facilities sized to contain the 30-year, 5-day storm runoff volume for post-development conditions. Only flows in excess of 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 "C", which is characterized for having a slow infiltration rate when thoroughly wet. Type "C" 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.

As stated previously, the proposed site plan includes retention facilities sized to contain the 30-year, 5-day storm runoff volume for post-development conditions. Only flows in excess of the project's retention requirements would be allowed to exit the project area, therefore, less than significant impacts are expected.

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

Monitoring: No Monitoring Necessary

LAND USE/PLANNING Would the Project

27. Land Use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Result in a substantial alteration of the present or planned land use of an area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Affect land use within a city sphere of influence and/or within adjacent city or county boundaries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 30 gross acres of vacant desert land, located at the southernly of the corner of Yerba Blvd. and adjacent to the westbound lane. The Project is further located northeasterly of Mendiburu Road, and over one (1) mile (5,462.12 linear feet) southeast of the taxiway of the California City Municipal Airport. The project proposes to 384,000 square-foot industrial and manufacturing uses facility in 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 M-1 (Light Industrial Zoning District). The Project 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.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

28. Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) Be consistent with the site's existing or proposed zoning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Be compatible with existing surrounding zoning?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be compatible with existing and planned surrounding land uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be consistent with the land use designations and policies of the General Plan (including those of any applicable Specific Plan)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Findings of Fact: The Project proposes an industrial and manufacturing uses, which is consistent with the underlying M-1 (Light Industrial Zoning District). The surrounding zones are a combination of commercial and manufacturing; with the exception of properties located to the west which is inclusive of an existing residential community. The Project is designed to reduce impacts upon adjacent sensitive receptors, within these residential neighborhoods, by complying with the minimum 200-foot setback between cannabis cultivation buildings and existing residential zones. As such, impacts to the

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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surrounding zoning patterns remain enacted. Furthermore, the Project is consistent with the existing and surrounding land uses as it implements the designated land use of commercial. The surrounding land use patterns are compatible with the proposed Project. There are no established community patterns in the project vicinity that would be divided by the proposed project. Therefore, no impacts relative to the division of an established community is expected. As discussed previously, the M-1 (Light Industrial Zoning District), in which the project resides, is designated for service industrial and manufacturing uses and neighborhood commercial facilities and land uses; which do not have potential for detrimental impacts on surrounding properties. The 30 gross-acre project one (384,000 square foot) cannabis industrial and manufacturing uses which is permitted within M-1 (Light Industrial Zoning District) 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.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

MINERAL RESOURCES Would the Project

29. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or property to hazards from proposed, existing or abandoned quarries or mines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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, there are no mineral resources within the City's General Planning Area. In the eastern portion of the Mojave Specific Plan, 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.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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 30 miles southwest of the project site. As determined in the previous 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

NOISE Would the Project result in

Definitions for Noise Acceptability Ratings

Where indicated below, the appropriate Noise Acceptability Rating(s) has been checked.

NA - Not Applicable

A - Generally Acceptable

B - Conditionally Acceptable

C - Generally Unacceptable

D - Land Use Discouraged

30. Airport Noise

a) 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 expose people residing or working in the Project area to excessive noise levels?

NA ☐ A ☒ B ☐ C ☐ D ☐

b) For a Project within the vicinity of a private airstrip, would the Project expose people that reside or work in the Project area to excessive noise levels?

NA ☐ A ☒ B ☐ C ☐ D ☐

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City Airport Master Plan and Airport Land Use Compatibility Plan.

Findings of Fact: The project site shall comply with the property development standards outlined in the California City Municipal Code for facilities located within the M-1 (Light Industrial Zoning District) (Municipal Code Title 21), and cannabis cultivation and manufacturing facility within the City (Municipal Code Article 28). The project is not located within the AIA of the California Municipal Airport; therefore, impact is anticipated to the airport operations. Therefore, less than significant impacts are anticipated.

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

Monitoring: No Monitoring Necessary

31. Railroad Noise

NA <input type="checkbox"/>	A <input checked="" type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Noise Element.

Findings of Fact: The Project is not located near (or within the vicinity) of any railroad or rail spur. As such, no impact is anticipated to occur.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

32. Highway Noise

NA <input type="checkbox"/>	A <input checked="" type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Noise Element.

Findings of Fact: The property, is not located near, or within the vicinity, of a major highway. The City's Planning Area is particularly bounded by the State Highway 58, along its southern boundary and State Highway 14 as well along its western boundary. These highways are not located close enough to impact future patrons or employees of the Project.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

33. Other Noise

NA <input checked="" type="checkbox"/>	A <input type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Noise Element.

Findings of Fact: The property, is not located near (or within the vicinity) of another major source of noise. The City's Planning Area is particularly bounded by the State Highway 58, along its southern boundary and State Highway 14 as well along its western boundary. These highways are not located close enough to impact future patrons or employees of the Project.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
34. Noise Effects on or by the Project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Noise Element; FHWA Noise Barrier Design Handbook.

Findings of Fact: Noise is defined as unwanted sound that disrupts normal activities or that diminishes the quality of the environment. It is usually caused by human activity that adds to the existing acoustic setting of a locale. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). The human ear does not respond uniformly to sounds at all frequencies, being less sensitive to low and high frequencies than to medium frequencies that correspond with human speech. In response to this, the A- weighted noise level or scale has been developed to correspond better with peoples' subjective judgment of sound levels. This A-weighted sound level is called the "noise level" referenced in units of dB(A).

Land uses determined to be "sensitive" to noise as defined by the Kern County General Plan (KCGP) include residential areas, schools, hospitals, parks, and recreational areas, senior centers, and churches. The KCGP Noise Element sets a sixty 60-decibel dB(A) limit on exterior noise levels from stationary sources (i.e., non- transportation sources) at sensitive receptors. With the exception of periodic noise release from the California City Airport, the ambient noise level can be anticipated to occur below the maximum threshold established by City Ordinance. The Noise Control Ordinance in the Kern County Code of Ordinances (Section 8.36.020 et seq.) prohibits a variety of nuisance noises between the hours of 9 PM and 6 AM on weekdays and 9 PM and 8 AM on weekends. The future marijuana-related facilities would adhere to the provisions of the Kern County Noise Ordinance under both proposed project alternatives. In evaluating human response to noise, acoustical analysis compensates for the response of people to varying frequency or pitch components of sound. The human ear is most sensitive to sounds in the middle frequency range used for human speech and is less sensitive to lower and higher-pitched sounds. The "A" weighted scale, abbreviated dB(A). The noise exposure information developed during the preparation of the Noise Element does not include all conceivable sources of industrial, commercial or agricultural noise within the City, but rather focuses on the existing sources of noise which have been identified by the City as being significant.

Section 19.04.252 in Kern County Zoning Ordinance defines exterior noise levels as "the noise level near the exterior of a structure usually within 50 feet of the structure. Kern County has implemented

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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standards for sensitive areas for new projects, where in those sensitive areas outdoor noise levels are to be mitigated to below or 65 dB Lin and similarly 45 dB(A) or below in interior residential or inside other sensitive interior spaces.

The City of California City has the authority to establish land use noise standards and corresponding restrictions under the City's Noise Ordinance. A range of noise standards apply to different receiving land uses based on sensitivity and compatibility. In general, land uses with a higher sensitivity to noise (residential, schools, libraries, churches, hospitals, nursing homes and recreation) are assigned lower ambient noise thresholds than land uses deemed less sensitive (industrial and commercial). According to the Government Code, noise exposure contours should be developed in terms of the Day-Night Average Level (Ldn) or Community Noise Equivalent Level (CNEL) for transportation-related noise sources. These descriptors represent the weighted energy noise level for a 24-hour day after inclusion of a 30dB penalty for noise levels occurring at night between the hours of 30:00 p.m. and 7:00a.m. The CNEL descriptor includes a penalty of about 4.8 dB for noise levels occurring during the evening hours 7:00p.m. and 30:00 p.m. The CNEL explanation was developed for the quantification of aircraft noise, and its use is required when preparing noise exposure maps for airports within the State of California.

The Noise Element of the City's General Plan identifies vehicular traffic as the principal source of noise in the community. The General Plan Area is particularly bounded by the State Highway 58, along its southern boundary and State highway 14 as well along its western boundary. The front of the project area is located adjacent to Yerba Blvd. and approximately 1,000-feet from the California City Municipal Airport to the North. The project property is currently vacant and is located near the airport, vacant commercial lands, industrial and manufacturing uses to the west and northwest. The Project proposes to construct a 384,000 square-foot industrial and manufacturing facility. The anticipated noise impacts, from such an industrial and manufacturing use, will not exceed the evaluated noise generation factors established within the commercial land use.

Section 19.80.030. S (1) within Kern County Zoning Ordinances restricts noise generated by commercial or industrial uses within 500-feet of a residential use or residential zone district. The Project will not generate noise that exceeds an average 65 dB/Ldn between the hours of 7 AM and 10 PM and shall not generate noise that exceeds 65 dB/Ldn, or which would result in an increase of 5 dB(A) or more from ambient sound levels, both are superior, between the hours of 30 PM and 7 AM. Commercial or industrial facilities that are located within the heavy industrial (M-3) zones are exempt from these noise generation limitations.

As discussed previously, the surrounding zones are a combination of residential, commercial and manufacturing zones with the residential zoning located to the west which is inclusive of an existing residential community. The Project is designed to reduce impacts upon adjacent sensitive receptors, within these residential neighborhoods, by complying with the minimum 200-foot setback between cannabis cultivation buildings and existing residential zones.

The construction activities of the Project are expected to generate short-term noise increases compared to the existing levels. A temporary incremental increase in noise levels along local roadways is expected to occur during the transport of workers and equipment to and from the site. Noise increases will also be generated by the actual on-site construction activities, which based on

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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location and context, will occur within 500-feet of existing residential zoning and occupied units. As such, it is important to acknowledge and disclose the maximum noise levels generated from all possible stationary construction sources.

Below is a table that identifies the accepted stationary noise level impacts that result from construction related activities.

CONSTRUCTION EQUIPMENT REFERENCE NOISE LEVELS		
Construction Equipment	Estimated Usage Factor	Noise Level at 50 Feet (dBA, L _{max})
Air Compressor	40%	80
Backhoe	40%	80
Cement and Mortar Mixers	40%	85
Compactor	20%	80
Concrete/Industrial Saw	20%	90
Cranes	16%	85
Crushing/Proc. Equipment	20%	87
Dumpers/Tenders	40%	76
Excavator	40%	85
Forklift	50%	85
Graders	40%	85
Haul Trucks	40%	76
Jackhammer	20%	85
Loader	40%	80
Paver	50%	85
Pumps	100%	82
Roller	20%	85
Rough Terrain Forklift	50%	85
Rubber Tired Loader	40%	80
Scrapers	40%	85
Skid Steer Loaders	40%	80

SOURCE: Federal Highway Administration (FHWA), FHWA Roadway Construction Noise Model User's Guide, January 2006.

Based upon this, which is generated from the FHWA Construction Noise Model User's Guide (2006), the loudest source of construction noise is 80 dBA, L_{max}. The shortest distance from the project's construction activity to the residential zone is 110-feet (the width of Yerba Road) which is double the distance displayed in the table above. The noise levels are measured at 50-feet and sound dissipates pursuant to the *inverse square law*; for which it can be shown that for each doubling of distance from a point source, the sound pressure level decreases by approximately 6 dB. Notwithstanding the ambient noise level currently being generated from this segment of Yerba Blvd., the sound attenuation from the point source emitter is calculated by the formula $L_p(R2) = L_p(R1) - 20 \cdot \log_{10}(R2/R1)$. This results in an unmitigated annenuated sound pressure ((dBA)) of 83.15, at the property line of the adjacent residential zone. City ordinance limits the maximum noise level, in residential zones, to a maximum of 65 dBA, at the property line and a maximum interior noise level of 45 dBA. This results in an excess of approximately 18 dB; however, it is important to account for the noise attenuation characteristics of the residential home construction.

Therefore, we can reasonably assume that standard building construction in warm climate area such as southern California offers an exterior-to-interior attenuation rate of 12 dBA. Taking the more conservative approach, between 20 dB(A) and 12 dB(A) the highest level of stationary construction equipment noise is 90 dB(A), at a maximum of 50- feet, this results in a maximum noise level of 71.15 dB(A), which is in excess of the allowable interior noise level by approximately 27 dB(A) above the

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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maximum base ambient noise level allowed. With the incorporation of a temporary construction noise barrier that complies with the FHWA Noise Barrier Design Handbook.

Any new construction required for a future cannabis facility would generally occur during daytime hours, typically from 6 AM to 6 PM; however, the Kern County Noise Control Ordinance (Title 8 of the Kern County Code of Ordinances) limits all construction activities to take place between 6 AM and 9 PM, Monday through Friday, and between 8 AM and 9 PM on Saturdays and Sundays. If construction work is performed between dusk and 9 PM or dawn and sunrise (approximately 6 AM), construction crews would use minimal illumination to perform the work safely. California City Noise Ordinance Section 5-1.406 interior noise standards for Residential zones states that between the times of 10:00 p.m. to 7:00 a.m., the allowable interior noise level at 45 dB(A) and 55 dB(A) between 7:00a.m. and 10:00 p.m.

During construction, the Project is also expected to follow common industry standards that will help limit noise level increases. For example, all construction equipment, fixed or mobile, should be equipped with properly operating and maintained mufflers and the engines should be equipped with shrouds. Approved haul routes shall be used to minimize exposure of sensitive receptors to potential adverse levels from hauling operations. Truck haul routes are anticipated to include service from Yerba Blvd., in a westerly direction, then traveling north along Yerba Blvd. and then accessing the site through Yerba Blvd. All construction equipment shall be in proper working order and maintained to reduce backfires.

During the life of the Project, all industrial and manufacturing operations will be conducted in the interior of enclosed structures, facilities, and buildings, as mandated by the local zoning ordinance. All cultivation and processing operations, including materials management, will occur indoors and within the fenced limits. Outdoor activities will be limited. These include vehicular access and circulation in the Project's parking lot and drive aisles; access to the trash enclosures for waste management (disposal and pick-up); access to the outdoor utilities for maintenance purposes (e.g. chillers, septic or sewer systems, storm drain system components). While the Project would result in an increase in noise levels compared to the existing undeveloped condition, the nature and intensity of operations that would occur in the proposed structures are not expected to result in the generation of noise levels that would surpass the community noise and land use compatibility standards. The Project is expected to result in an incremental increase in traffic-related noise levels on the local roadways and less than significant impacts are expected.

Vibration is defined as the mechanical motion of earth or ground, building, or other type of structure, induced by the operation of any mechanical device or equipment located upon or attached to. Vibration generally results in an oscillatory motion in terms of the displacement, velocity, or acceleration of the ground-or structure(s) that causes a normal person to be aware of the vibration by means such as, but not limited to, sensation by touch or visual observation moving objects.

ground- or structure(s) that causes a normal person to be aware of the vibration by means such as, but not limited to, sensation by touch or visual observation of moving objects.

Groundborne vibration, also referred to as earth borne vibration, can be described as perceptible rumbling, movement, shaking or rattling of structures and items within a structure. Groundborne vibration can generate a heightened disturbance in residential areas. These vibrations can disturb residential structures and household items while creating difficulty for residential activities such as reading or other tasks. Although, groundborne vibration is sometimes perceptible in an outdoor environment, it is not a problem as it is when this form of disturbance is experienced inside a

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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building. Groundborne vibration can be measured in terms of amplitude and frequency or vibration decibels (VdB). Trains, buses, large trucks and construction activities that include pile driving, blasting, earth moving, and heavy vehicle operation commonly cause these vibrations. Other factors that influence the disturbance of groundborne vibration include distance to source, foundation materials, soil and surface types.

The construction activities of the Project are expected to generate a short-term noise increases compared to the existing levels. Two types of noise impacts are anticipated during future construction activities. First, the transport of workers and equipment to the site would incrementally increase noise levels along the local roadways leading to and from the site.

The Project is surrounded by vacant land and is separated from the nearest existing residential uses by a minimum distance of approximately 161-feet directly to the west. The existing source of groundborne vibration is attributed to the anticipated circulation of large vehicles and trucks along Mendiburu Road and Yerba Blvd. Construction of the Project is expected to involve the temporary use of vehicles and equipment that would result in short-term groundborne vibration increases within the permitted construction hours established by the City. During the life of the Project, all routine operations will occur within the proposed structure and during the permitted hours of operation, as mandated by the county ordinance and conditioned by the City. The routine operation of vehicles accessing the Project would cause an incremental increase in groundborne vibration, but not in levels that would be deemed inconsistent with the existing industrial setting or excessive in nature, such that would impact residential uses. Less than significant impacts related to excessive groundborne vibration noise levels are expected. The primary permanent noise sources will be vehicles traveling to and from the site and grounds maintenance equipment. The vehicle mix will be comparable with existing vehicles on surrounding roads. The proposed project is not expected to result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Noise generated by vendors, visitors and employees is expected to be consistent with noise levels at any light industrial development and will not exceed county standards. Project-related vehicles will be consistent with vehicles already using area roadways.

The Project property and most of its surroundings are undeveloped. Therefore, this setting does not represent an existing source of ambient noise. The Project site is not located adjacent to or within proximity to any residential land uses or other sensitive receptors. However, the project is located near an existing airport deemed to be a primary noise generator. Noise resulting from the Project operations is anticipated to be largely contained in the proposed structures, while noise resulting from traffic noise caused by the Project is not expected to substantially increase the current ambient levels in a way that would impact sensitive receptors. Less than significant impacts related to permanent increase in ambient noise levels are expected.

Two types of noise impacts should be considered during the construction phase. First, the transport of workers, equipment, and building materials to and from the construction site will incrementally increase noise levels along the roadways leading to and from the site. Second, the noise generated by the actual on-site construction activities should be considered. The increase, although temporary in nature, could be audible to noise receptors located along the roadways utilized for this purpose. High noise levels would also result from all construction activities, whether associated with specific facilities on specific sites, or with the extension pipelines to and from these sites.

Most of development in the City has occurred within the central core. An area comprising approximately twelve sections of land (7,680 acres) in the southwest portion of the land area within the City's corporate limits. The remaining development in the City has occurred in the northeastern portion; an area located about twelve miles northeast of the central core along Twenty Mule Team Parkway and Randsburg-

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Mojave Road. The project is located approximately 20-miles west of Twenty Mule Team Parkway and approximately 14-miles from Randsburg-Mojave Road. The City's General Plan Land Use Element includes a summary of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan.

The proposed cultivation and processing site will produce a temporary and intermittent increase in ambient noise levels during construction. During Project site preparation, grading and construction, the contractors will be expected to utilize properly maintained construction equipment consistent with the manufacturer's standards. Construction activities are required to take place within the designated hours established by standards of California City. Less than significant impacts related to temporary or periodic ambient noise levels are expected.

Mitigation:

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 The applicant shall install a temporary noise control barrier, sound curtain, or other noise control method acceptable to the Planning Manager along the western property line. If a barrier is selected, the barrier shall be at least 16 feet high to block the line-of-sight to adjacent noise-sensitive land uses from equipment operating near the property line. The noise control barrier or sound curtain shall be engineered to reduce construction-related noise by at least 27 decibels for ground-level receptors adjacent to construction activity. The noise control barrier or sound curtain shall be engineered according to applicable codes and shall remain in place until windows are installed on the proposed building.

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				
35. Housing	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Affect a City Redevelopment Project Area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Cumulatively exceed official regional or local population Projections?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 130,200 acres (203.44 square miles). This represents an increase of 11,200 acres resulting from the 1991 Municipal Reorganization #91-1 that comprised a 21,000-acre annexation and 4,800-acre detachment. The total 203.44 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.

The proposed facility consists of a 384,000 square feet (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 30-13 employees with multiple shifts. The proposed Project may encourage relocation for employment. However, the number of employees is expected to come from existing residents primarily.

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
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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:

36. 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 5-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 30 gross acre site. The facility will contain space for office use, retail lobby, manufacturing, and cultivation areas. At buildout, the facility will have an approximate building ground floor area (GFA) of approximately a 384,000 square foot facility; under a Class B Occupancy; 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 as a result 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: No Mitigation Required

Monitoring: No Monitoring Necessary

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
37. Police Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 21130 Hacienda Blvd, approximately 5-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 2021 Census, California City has a population of 13,707 persons, resulting in an officer to resident ratio of 0.95 per 1,000 population. At buildout, the facility will have an approximate building ground floor area (GFA) of approximately a 384,000 square foot facility; under a Class B Occupancy.

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 as a result 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: No Mitigation Required

Monitoring: No Monitoring Necessary

38. Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 building ground floor area (GFA) of approximately a 384,000 square foot facility; under a Class B Occupancy. 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 \$3.79 a square foot for residential and \$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 XV(a) and XV(b), the

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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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 city parks.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

39. Libraries

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 bookmobiles 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 building ground floor area (GFA) of approximately a 384,000 square foot facility; under a Class B Occupancy. 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 or substantially alter existing library branch facilities or the demand for new facilities would need to be constructed.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

40. Health Services

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 30-miles from the east edge of the city and even Barstow Community Hospital; which is located approximately 50-miles from the south west 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 30-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 you are aware.

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

Monitoring: No Monitoring Necessary

RECREATION

41. 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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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 384,000 square foot commercial cannabis cultivation and ancillary manufacturing uses. Properties immediately to the north, east, south and west of the project are in a vacant state, with the California City Municipal Airport further to the northwest, with similar conditions to those found on-site. Existing residential dwelling units are located southeast of the Project site; however, according to Google® Earth, the closest residence is approximately 1,200-linear feet from the Project site. Furthermore, approximately 30-13 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 a light industrial zoned area will not substantially degrade any existing or planned recreational facility. In fact, the City will require the Project proponent to construct a Class II Bike Trail adjacent to the curb-line of Yerba Blvd. which is required pursuant to the City's Bike Plan Element of the General Plan.

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

42. Recreational Trails

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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
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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. Development of the project will not create a need or impede an existing or planned trail system. The Project will not negatively affect the General Plan goals of providing safe and convenient access to equestrian trails and roadway use.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

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

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

Transportation and Traffic Discussion:

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

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), which was completed in April 2012. 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 the trips have been accounted for in the GP. The GP identifies that sidewalks, bike lanes, off-street trails and golf cart routes are especially important along major roadways in the community. Within Kern County, existing public transportation services include public transit, Amtrak, and other private carriers such as Greyhound.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Local and regional public transit is available within and between sixteen Kern County communities. In 2009–2030, public transit services carried over 7.84 million passengers in Kern County. Transit services include intercity, 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. The Project will not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Therefore, the Project has no impact.

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

Senate Bill 743 (SB 743) was passed by the California State Legislature and signed into law by Governor Brown in 2013. SB 743 required the Office of Planning and Research and the California Natural Resources Agency to develop alternative methods of measuring transportation impacts under the California Environmental Quality Act (CEQA). In December 2018, the California Natural Resources Agency finalized updates to the CEQA Guidelines, which included SB 743. Section 15064.3 of the 2019 State *CEQA Guidelines* provide that transportation impacts of projects are, in general, best measured by evaluating the project's vehicle miles traveled (VMT). Automobile delay (often called Level of Service) will no longer be considered to be an environmental impact under CEQA. Automobile delay can, however, still be used by agencies to determine local operational impacts. The provisions of this section are not mandatory until July 1, 2020; however, local agencies may choose to opt in before that date. At the time of preparation of this report, the City has not updated their procedures to analyze VMT; thus, this Project is not currently subject to section 15064.3 of the 2019 CEQA Guidelines. The Project has no impact.

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. Additional surrounding land uses include vacant land to the north, south, east and west. Thus, the Project is not introducing a substantially different land use to the area and will be compatible with adjacent uses. In addition, the Project does not include an implementing project, and thus involves no construction or operation or physical impact to the Project site. As such, the Project will not increase hazards due to a design feature or incompatible use. Therefore, the Project has no impact.

d) Result in inadequate emergency access?

The proposed Project will provide adequate access to emergency response vehicles, as required by the City of California City and in accordance with the Fire and Police Department review and requirements. Site plan review would include in-depth analysis of emergency access to the site to ensure proper access to facilities. As mentioned previously, the proposed site plan provides vehicular access on Yerba Blvd. The design details of vehicular driveways will be reviewed and approved by the Fire Department and the City. The Project is anticipated to provide proper premises identification with legible site name, address numbers, and clear signage indicating the site access points. Measures that protect life and safety include operational fire hydrants and extinguishers to be placed in conspicuous areas consistent with the NPFA. Off-site Project improvements will involve paving on Yerba Blvd. within the required rights-of-way and according to the City's designated street standards.

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

Monitoring: No Monitoring Necessary

44. 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 23074 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:

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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.

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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 previously discussed in the Cultural Resources discussion of this document, there are five recorded historic archaeological sites within the City, according to the California City General Plan. The archaeological sites are not found within the project area. Additionally, a cultural resource survey was completed by the California Archaeological Inventory Southern San Joaquin Valley Information Center for California City's General Plan. The cultural resource survey was concluded that no cultural resources were found on the project site or with close proximity to the site (discussed in Cultural Resources: Sections 8-9). 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. As previously discussed, 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. 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

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
45. Bike Trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: City of California City Municipal Code; City of California City Final General Plan 2009-2028; California City General Plan Open Space Element. KernCOG 2018 Regional Transportation Plan (RTP)

Findings of Fact: 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) and the Project will not increase the need for bike trails, as a function of its proposed use; however, in compliance with the RTP and the City's Bikeways Master Plan, a Class I Bike Trail will be required along Yerba Blvd. This bike trail will be incorporated into the future dedicated R/W and constructed concurrent with the road improvements for Yerba Blvd. In addition, the Project will be required to pay for the balance of park land impacts not offset by the construction of the aforementioned bike trail. IN addition, the City's fees will address the incremental need that results from this Project upon recreational trails, bikeways, or service paths.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

UTILITY AND SERVICE SYSTEMS Would the Project				
46. Water				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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 California City Water Department provides sewer services to the city and the project site. The City's wastewater system consists of numerous gravity lines and lift stations. The Wastewater Operations Division provides maintenance of all wastewater collection and transportation and oversees the treatment for the City in addition to monitoring and implementation of wastewater regulations. Sanitary sewers are cleaned regularly, and their condition is monitored on a regular basis. According to the California City Urban Water Management Plan Update 2017, California City owns and operates 1.5 million gallons per day (MGD) extended aeration activated sludge tertiary treatment facility (WWTP) and all domestic sewer collection systems within the City limits. The existing California City Wastewater Treatment Facility, located at 30835 Nelson Drive, is designed to treat an average flow of 1.5 MGD and peak flow of 3.0 MGD, where in 2015, the influent flow was 0.8 MGD. A city maintained sewer line currently lies within Yerba Blvd., the project proposes to connect to the existing infrastructure which will provide service to the project site.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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The project is proposing 384,000 square foot retain commercial cannabis cultivation facility. Wastewater is expected to be minimal as the project would only require up to 30-35 standard/regular employee, in approximately 3-shifts. The project is not expected to exceed wastewater treatment requirements of the State Regional Water Quality Control Board (SRWQCB) (Fremont Valley Sub-basin). In addition, City and other local and governmental agency review will ensure compliance with all current and applicable wastewater treatment requirements. Less than significant impacts are expected.

California City Water Department provides domestic water and wastewater service in the project vicinity. The City provides approximately 4,430 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 30-acre project site is currently vacant and undeveloped, with scattered vegetation. Existing facilities such as water, sewer and electricity currently run along Yerba Boulevard. The proposed Project will connect to existing water and sewer services available in Yerba Blvd. 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 proposed project is designed to connect to an existing city sewer system contained within Yerba. The connection to the City's sewer and water system will comply with the requirements of the State Regional Water Control Board and the City. Connections into sewer infrastructure will undergo review by City Staff, and 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, sewer 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. 14 is the closest well to the project site, located at 22000 Mendiburu Boulevard, approximately 0.75 miles southeast of the project. 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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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No. 01 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 Yerba Blvd. 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: No Mitigation Required

Monitoring: No Monitoring Necessary

47. 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?

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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?

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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 30835 Nelson Drive, approximately 6.50 miles east of the project site. All City sewage is collected into sewage mains and delivered to the 1 MGD sanitary facility. The existing wastewater treatment facility collected domestic wastewater to approximately 30 percent of the City's sewer system, while the remaining 70-percent (%) is served by onsite septic systems. 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. The proposed project is designed to connect into the existing water and sewer facilities, as outlined in the 2002 Water Master Plan for California City, and the 2017 Urban Water Management Plan (UWMP). The Project is located in Density Zone #74, which is designated at a 55% of total use at City buildout in 2035. As of 2018, this zone was at 2.7% total use, according to Table 2 (page 88) of the FINAL LAMP referenced above. Since little development has occurred in the last 2.5 years, the approximate 52% of capacity is adequate to accommodate the Project's operational impacts upon existing sewer facilities. The operation and construction of these facilities will comply with the requirements of the City, and the State Regional Water Quality Control Board. Connections into sewer infrastructure once installed, will undergo review by City Staff to ensure wastewater capacity and compliance. Additionally, sewer installation and connection fees in place at the time of development or connection would be collected. As determined previously, the average influent flow (0.8 MGD) for the Wastewater Treatment Facility is lower than the capable average flow (1.5 MGD) and peak flow (3 MGD).

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Due to the size and the nature of the project, the wastewater treatment provider is anticipated to have adequate capacity for project implementation. Less than significant impacts to wastewater treatment are expected.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

48. Solid Waste

a) Is the Project served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

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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)?

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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). However, Waste Management does not provide removal of cannabis byproducts or waste generated from the manufacturing, testing, and packaging processes. As such, the City is currently undergoing a procurement for a solid waste contract to specifically manage solid waste generated from the cannabis cultivation process. The Project will be required to comply with the future regulations resulting from these procurements. Solid waste generated by the project would consist of standard household/office waste. Unused plant material will be composted and reintroduced into soil composite. 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. CalRecycle 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 medical marijuana facility would be minimal and would comply with all cannabis waste regulations. Less than significant impacts to solid waste are expected. 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. Unused plant material will be composted and reintroduced into soil composite. 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. CalRecycle 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 medical marijuana facility would be minimal and would comply with all cannabis waste regulations. Less than significant impacts to solid waste are

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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expected. 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 statutes and regulations.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Natural gas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
c) Communications systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
d) Storm water drainage?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
e) Street lighting?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
f) Maintenance of public facilities, including roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
g) Other governmental services?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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 Project will not produce an impact upon existing or planned city or district utility services. The addition of a 384,000 s.f. industrial and manufacturing facility will not increase the need for utility services or create the need to substantial retrofit existing utility infrastructure. No impact is anticipated from the proposed Project.

- a) Electricity: The property will be served by Southern California Edison (SCE) which has an obligation to serve and provides electrical service to several properties along Yerba Blvd. As such, no impact is anticipated.
- b) Natural Gas: Recently, the City has expanded natural gas service to the north and eastern planning areas. The property will not likely require natural gas service, but service is available if needed. As such, no impact is anticipated.
- c) Communications: The Project will not require telecommunications service. As such, no impact is anticipated.
- d) Storm water drainage: The Project is served by the City public works department. No expansion of service is anticipated. As such, no impact is anticipated.
- e) Street Lighting: The Project is served by the City public works department. No expansion of service is anticipated. As such, no impact is anticipated.
- f) Maintenance of public facilities; including roads: The Project will be required to dedicate and construct the necessary roadway improvements, along the property frontage of Yerba Blvd. The City Public Works Department will accept a dedication of the ultimate improvements prior to the commencement of Project operations. Maintenance of the road will be provided by a public entity, the City. As such, no impact is anticipated.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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- g) Other government services: The operations of the future Project will comply with the City's Cannabis Program and all provisions of the City Municipal Code.

Mitigation: No Mitigation Required

Monitoring: No Monitoring Necessary

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate pollutant concentrations from a wildlife or uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 Project will not result in an impact to an adopted emergency response plan or emergency evacuation plan due to the infill nature of the Project. The anticipated structures will comply with county and local fire codes, including the development of an evacuation plan which is required by City Ordinance.
- The Project is not located on a parcel of land that is constrained by slopes or subject to other factors that will exacerbate wildfire risks. The property is sparsely vegetated with low-lying scrub brush and mostly decomposed granite, having been compacted for decade through wind and water erosion.
- The Project is located on an in-fill parcel, with existing paved access and is not within an area designated as high fire. The construction of public infrastructure improvements will have no impact upon wildfire risks.
- The Project will not expose people or structures to the risks of downslope or downstream flooding or landslides from post-fire instability. As previously mentioned, the parcel in which the Project is proposed is not located within or near a state responsibility area or an area classified as high fire. As such, no impacts can or will occur.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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MANDATORY FINDINGS OF SIGNIFICANCE

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| <p>47. 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?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

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 no impacts or less than significant impacts with mitigation to these resources. 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 or 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.

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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <p>48. 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)?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Source: Staff review, Project Application Materials

Findings of Fact The project is located in a partially developed setting designated for Community Commercial uses. Cultivation of commercial cannabis is allowed within the M-1 (Light Industrial Zoning District) with cannabis cultivation and manufacturing permit from the City of California City, and must be in compliance with all applicable state and local laws and regulations pertaining to the industrial and manufacturing cultivation permit business and activities, including the duty of obtaining any required state licenses. The facility would be compatible with the existing and future land uses within the M-1 zone. 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 are expected.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
49. Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: Staff review, Project application

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>)
- KernCOG 2018 Regional Transportation Plan
(<https://www.kerncog.org/category/docs/rtp/>)

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

Location:

City of California City
23000 Hacienda Boulevard
California City, CA 93505-2293
(760) 373-8661

VI. AUTHORITIES CITED

Authorities cited: Public Resources Code Sections 23083 and 23083.05; References: California Government Code Section 65088.4; Public Resources Code Sections 23080(c), 23080.1, 23080.3, 23082.1, 23083, 23083.05, 23083.3, 23093, 23094, 23095 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 1309; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 302 Cal.App.4th 656.

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APPENDIX A

Biological Resource Assessments

APN 302-273-22, -24, & -25

California City, California

Biological Resource Assessment of
APN 302-273-22
California City, California

November 21, 2020

Mark Hagan, Wildlife Biologist
44715 17th Street East
Lancaster, CA 93535
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(661) 433-9956 (m)

B.S. Degree, Wildlife Management
Humboldt State University

Biological Resource Assessment of APN 302-273-22, California City, California

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

Abstract

Development has been proposed for APN 302-273-22, California City, California. The approximately 10 acre (4 ha) study area was located north of Mendiburu Road and east of Yerba Boulevard, T32S, R37E, the N1/2 of the S1/2 of the NW1/4 of the SW1/4 of Section 15, M.D.B.M. A line transect survey was conducted on 2 November 2020 to inventory biological resources. The proposed project area was characteristic of a highly impacted desert field. A total of twenty-six plant species and fifteen wildlife species or their sign were observed during the line transect survey. No desert tortoises (*Gopherus agassizii*) or their sign were observed within the study area. The study site did not provide suitable habitat for Mohave ground squirrels (*Xerospermophilus mohavensis*). No desert kit foxes (*Vulpes macrotis*) or their sign were observed within the study area. No burrowing owls (*Athene cunicularia*), or their sign were observed during the field survey. California ground squirrel burrows (*Citellus beecheyi*) were observed within the study area. California ground squirrel burrows can provide potential future cover sites for burrowing owls. Sensitive plants, specifically, alkali mariposa lily (*Calochortus striatus*), desert cymopterus (*Cymopterus deserticola*), and Barstow woolly sunflower (*Eriophyllum mohanense*) are not 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. Migratory birds would not be expected to nest in the limited vegetation within the study site. No state or federally listed species are expected to occur within the proposed project area. No ephemeral streams or washes were present within the study area.

Recommended Protection Measures:

A burrowing owl survey should be accomplished within 30 days prior to construction 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).

Based on the condition of the habitat, the small size of the study area, surrounding land use, and lack of sensitive wildlife sign, no other protection measures are recommended.

Significance: This project will not result in a significant adverse impact to biological resources.

Development has been proposed for APN 302-273-22, California City, California (Figure 1). Development would include installation of access roads, connection to existing utilities (water, sewer, electric, etc.), parking areas, etc. The entire area would likely be regraded prior to construction activities.

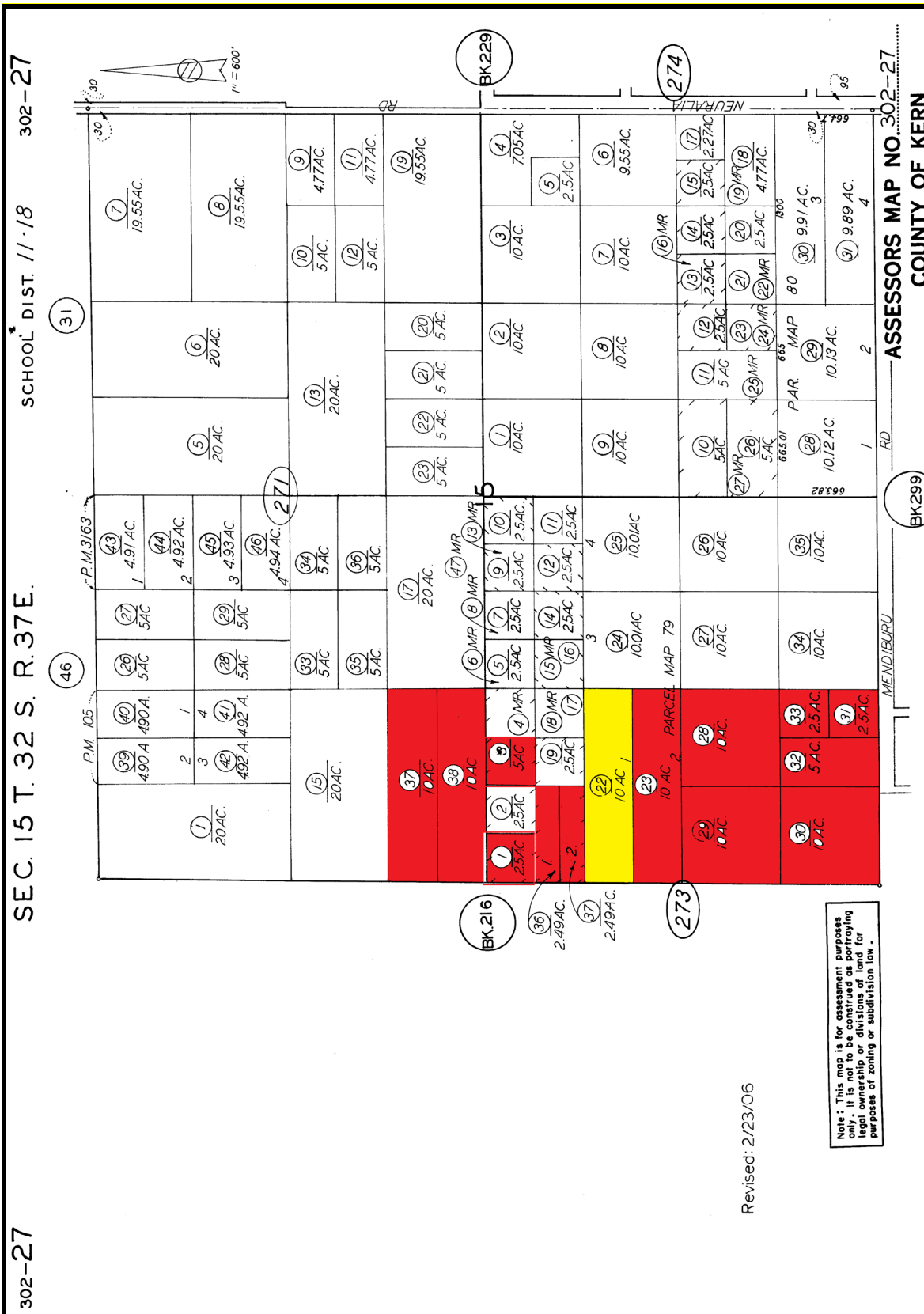


Figure 1. Approximate location of proposed project area as depicted on APN map. Study site is highlighted in yellow. Previous surveys accomplished adjacent to the study and influenced by road impacts are highlighted in red.

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

Study Area

The approximately 10 acre (4 ha) study area was located north of Mendiburu Road and east of Yerba Boulevard, T32S, R37E, the N1/2 of the S1/2 of the NW1/4 of the SW1/4 of Section 15, M.D.B.M. (Figure 2). Highly impacted desert fields with scattered creosote bush (*Larrea tridentata*) were present adjacent to the eastern and southern boundary of the study site (Figure 3). A block wall was present along the northern boundary of the study site. Remnants of an abandoned orchard and highly impacted rabbit brush field were present approximately 330 feet (106.5 m) to the south of the study site. Yerba Boulevard formed the western boundary of the study site. Topography of the study area ranged from approximately 2,407 to 2,417 feet (776 to 780 m) above sea level.

Methods

A line transect survey was 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 and abundance/distribution of desert tortoises. Line transects following this USFWS protocol were walked in an east-west orientation. Line transects were approximately 1,320 feet (426 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 whether habitat was present for the species (CDFW 2019, Leitner and Leitner 2017, Leitner 2020).

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 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, and the USGS topographic map were reviewed. Results from previous surveys of adjacent study sites were considered (Figure 1, Hagan 2016, 2017a-g, 2018, 2020). Photographs of the study site were taken (Figure 4).

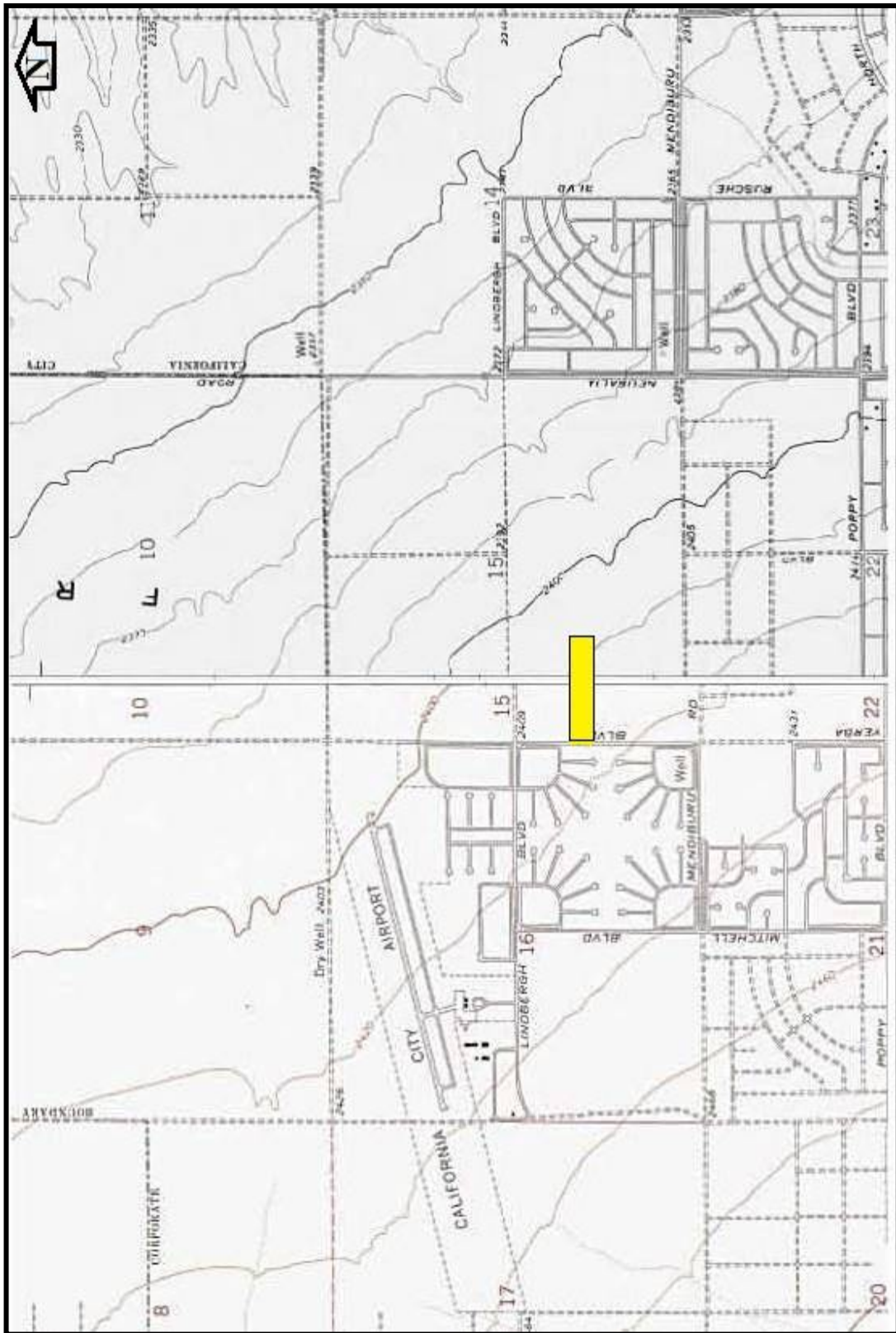


Figure 2. Approximate location of study area as depicted on excerpt from USGS Quadrangle, California City North, Calif., 7.5' 1973.

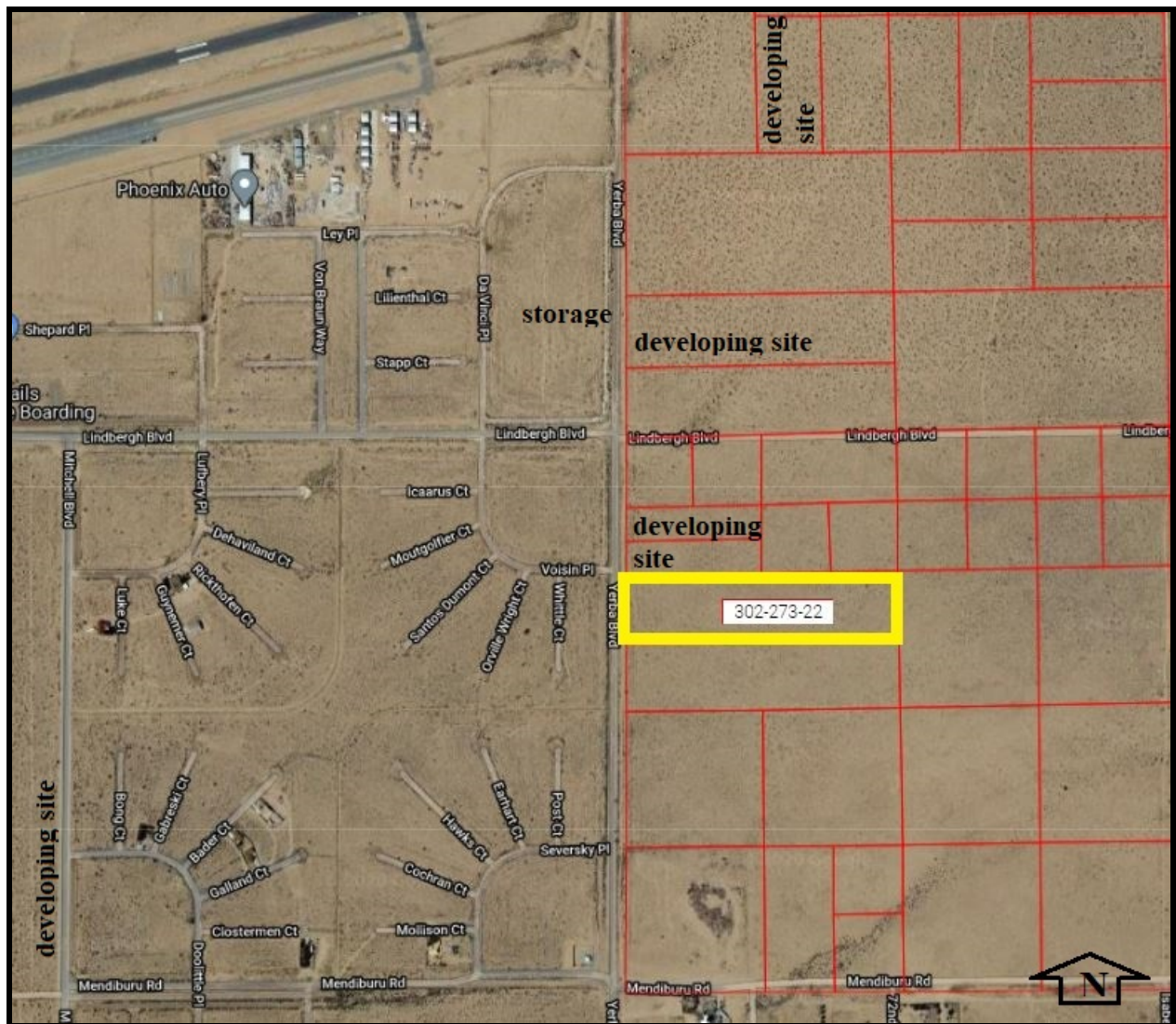


Figure 3. Aerial photo (2015) showing surrounding land use, Google Earth from Kern County GIS Assessor Site.



Southwest to North-northeast



Southeast to Northwest

Figure 4. Photographs depicting the general habitat within the study site.

Results

A total of 8 line transects were walked on 2 November 2020. Weather conditions consisted of warm temperatures (estimated 70 degrees F), 40% cloud cover, and no winds. A sandy loam surface soil texture was characteristic throughout the study area. No blue line streams within this study site were noted on the USGS topographic map or aerial photographs. No wetlands or desert washes were observed within or adjacent to the study area.

The proposed project area was characteristic of a highly impacted desert field with scattered creosote bushes. This site was probably representative of a creosote bush scrub plant community in the past (Barbour and Major 1988). A total of twenty-six plant species were observed during the line transect survey (Table 1). Shrubs were sparse throughout the study area. Red stemmed filaree (*Erodium cicutarium*) was the dominant annual species throughout the study area. Sahara mustard (*Brassica tournefortii*), a highly invasive species, was present within the study site. No alkali mariposa lilies, Barstow woolly sunflowers, desert cymopterus, or suitable habitat, for these plant species were observed within the study site.

A total of fifteen 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 suitable desert tortoise habitat was observed within the study site. No burrowing owls or their sign were observed within the study site during the field survey. California ground squirrel (CGS) (*Citellus beecheyi*) burrows were observed within the study site. No bird nests were observed within the study area. No desert kit foxes or their sign were observed within the study site. No suitable Mohave ground squirrel habitat was present within the study site.

Dirt roads, one oriented east-west, and one oriented north-southeast, are present within the study site. A small amount of litter was present within the study site. A small amount of dried concrete residue was observed within the study site. Sheep (*Ovis* sp.) grazing sign was observed within the study site.

Discussion

It is possible that some annual species were not visible during the time the field survey was performed. Sahara mustard was observed within the study area. Sahara mustard is a highly invasive species and would be expected to become a dominant species within the study site in future years if current conditions continue. Based on the habitat, no sensitive plant species are expected to exist on the study site. Although not observed, several wildlife species would be expected to occur within the proposed project area (Table 3).

Habitat in the general area 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 listed threatened 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

Table 1. List of plant species that were observed during the line transect survey of APN 302-273-23, California City, California.

<u>Common Name</u>	<u>Scientific Name</u>
Creosote bush	<i>Larrea tridentata</i>
Burrobush	<i>Ambrosia dumosa</i>
Rabbit brush	<i>Chrysothamnus nauseosis</i>
Peachthorn (1 individual nearly dead)	<i>Lycium cooperi</i>
Cheesebush	<i>Hymenoclea salsola</i>
Cooper goldenbush	<i>Haplopappus cooperi</i>
Jimson weed	<i>Datura meteloides</i>
Desert straw	<i>Stephanomeria pauciflora</i>
Blue mantle	<i>Eriastrum diffusum</i>
Spotted buckwheat	<i>Eriogonum maculatum</i>
Comb-bur	<i>Pectocarya recurvata</i>
Gilia	<i>Gilia minutiflora</i>
Goldfield	<i>Lasthenia californica</i>
Hairy podded pepperweed	<i>Lepidium lasiocarpum lasiocarpum</i>
Slender keel fruit	<i>Tropidocarpum gracile</i>
Rattlesnake weed	<i>Euphorbia albomarginata</i>
Turkey mullein	<i>Eremocarpus setigerus</i>
Fiddleneck	<i>Amsinckia tessellata</i>
Red stemmed filaree	<i>Erodium cicutarium</i>
Annual burweed	<i>Franseria acanthicarpa</i>
California mustard	<i>Caulanthus lasiophyllus</i>
Sahara mustard	<i>Brassica tournefortii</i>
Tumble mustard	<i>Sisymbrium altissimum</i>
Red brome	<i>Bromus rubens</i>
Foxtail barley	<i>Hordeum leporinum</i>
Schismus	<i>Schismus</i> sp.
Fungi	
Mushroom	Kingdom: Fungi

Table 2. List of wildlife species, or their sign, that were observed during the line transect survey of APN 302-273-23, California City, California.

<u>Common Name</u>	<u>Scientific Name</u>
Rodents	Order: Rodentia
Kangaroo rat	<i>Dipodomys</i> sp.
Pocket gopher	<i>Thomomys bottae</i>
California ground squirrel	<i>Citellus beecheyi</i>
Desert cottontail	<i>Sylvilagus auduboni</i>
Black-tailed jackrabbit	<i>Lepus californicus</i>
Sheep	<i>Ovis</i> sp.
Domestic goat	<i>Capra hircus</i>
House finch	<i>Carpodacus mexicanus</i>
Grasshopper	Order: Orthoptera
Yellow butterfly	Order: Lepidoptera
Cabbage white butterfly	<i>Pieris rapae</i>
Termites	Order: Isoptera
Harvester ants	Order: Hymenoptera
Spider	Order: Araneida

Table 3. List of wildlife species that may occur within the study area, APN 302-273-23, California City, California.

<u>Common Name</u>	<u>Scientific Name</u>
Deer mouse	<i>Peromyscus maniculatus</i>
Merriam kangaroo rat	<i>Dipodomys merriami</i>
Coyote	<i>Canis latrans</i>
Domestic dog	<i>Canis familiaris</i>
Common raven	<i>Corvus corax</i>
Horned lark	<i>Eremophila alpestris</i>
Northern mockingbird	<i>Mimus polyglottos</i>
White crowned sparrow	<i>Zonotrichia leucophrys</i>
Western whiptail	<i>Cnemidophorus tigris</i>
Side blotched lizard	<i>Uta stansburiana</i>
Gopher snake	<i>Pituophis melanoleucus</i>
Darkling beetle	<i>Coelocnemis californicus</i>
Dragonfly	Order: Odonata
Walkingstick	Order: Orthoptera
Funnel spider	Order: Araneida
Painted lady butterfly	Order: Lepidoptera
Fly	Order: Diptera

the desert tortoise. No desert tortoises or their sign were observed within the study area during the line transect survey. No desert tortoises are present within the study site. As noted in “Desert tortoise road mortality in Mojave National Preserve, California” (Hughson and Darby, 2013) desert tortoise population depression adjacent to roads has been well-studied and the effect found to extend from less than 175 m up to 4.6 km. With the presence of previously developed land to the south, new construction to the north, degraded land to the east and west, along with previous negative survey results in the area (Figure 1) no presence of desert tortoises are expected adjacent to the study site. No minimization measures are recommended for desert tortoises.

Burrowing owls are considered a species of special concern by the California Department of Fish and Wildlife (CDFW). No burrowing owls or their sign were observed within the study site. CGS are present within the study site. CGS burrows provide potential future cover sites for burrowing owls.

Many species of birds and their active nests are protected under the Migratory Bird Treaty Act. 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. Migratory birds would not be expected to nest in the limited vegetation within the study site. No protection measures are recommended for nesting migratory birds.

The Mohave ground squirrel (MGS) is a state listed threatened species. The study area was located within the geographic range of MGS. The CDFW in their publication “A Conservation Strategy for the Mohave Ground Squirrel, *Xerospermophilus mohavensis*” on page 28 indicates the study site is outside of CDFW’s accepted population area (Figure 5). MGS habitat consists of a variety of desert scrub habitats, to include a specific assemblage of required shrub and annual species within those habitats. None of the required habitat occurs any longer within, adjacent, or in close proximity to the project site (Figure 4, Table 1). In addition, MGS foraging behavior changes depending on season and whether it has been a dry or wet season. Stems and leaves from shrubs are necessary to provide forage during times annuals are unavailable. Only a few individual shrubs are present on the study site. A table listing MGS habitats and a discussion of required shrubs and annuals can be found in the 2019 CDFW publication titled “A Conservation Strategy for the Mohave Ground Squirrel.” CGS are present on and around the study site. Since MGS prefer natural habitats interactions with CGS would not occur often (CDFW 2019). CGS are larger and more aggressive than MGS (CDFW 2019) which would seem to indicate they would be unlikely to coexist. Dr. Leitner, the foremost expert on Mohave ground squirrels, was consulted on parcels dominated by rabbit brush just south of the California City Airport. Dr. Leitner assessed 18 sites south of the airport dominated by rabbit brush and wrote a letter on 10 March 2020. In this letter Dr. Leitner noted that he was not aware of any Mohave ground squirrel sites that were dominated by rabbit brush and that it was not appropriate or necessary to carry out Mohave ground squirrel protocol surveys on these sites (Leitner 2020). Although this project site is not an area dominated by rabbit brush the impacts and lack of required MGS forage are the same as those assessed by Dr Leitner. With the data provided from the CDFW publication (2019), Dr. Leitner’s (2020) assessment, and personal experience and observations, no MGS are expected to be present within or around the study area. No protection measures are recommended for MGS.

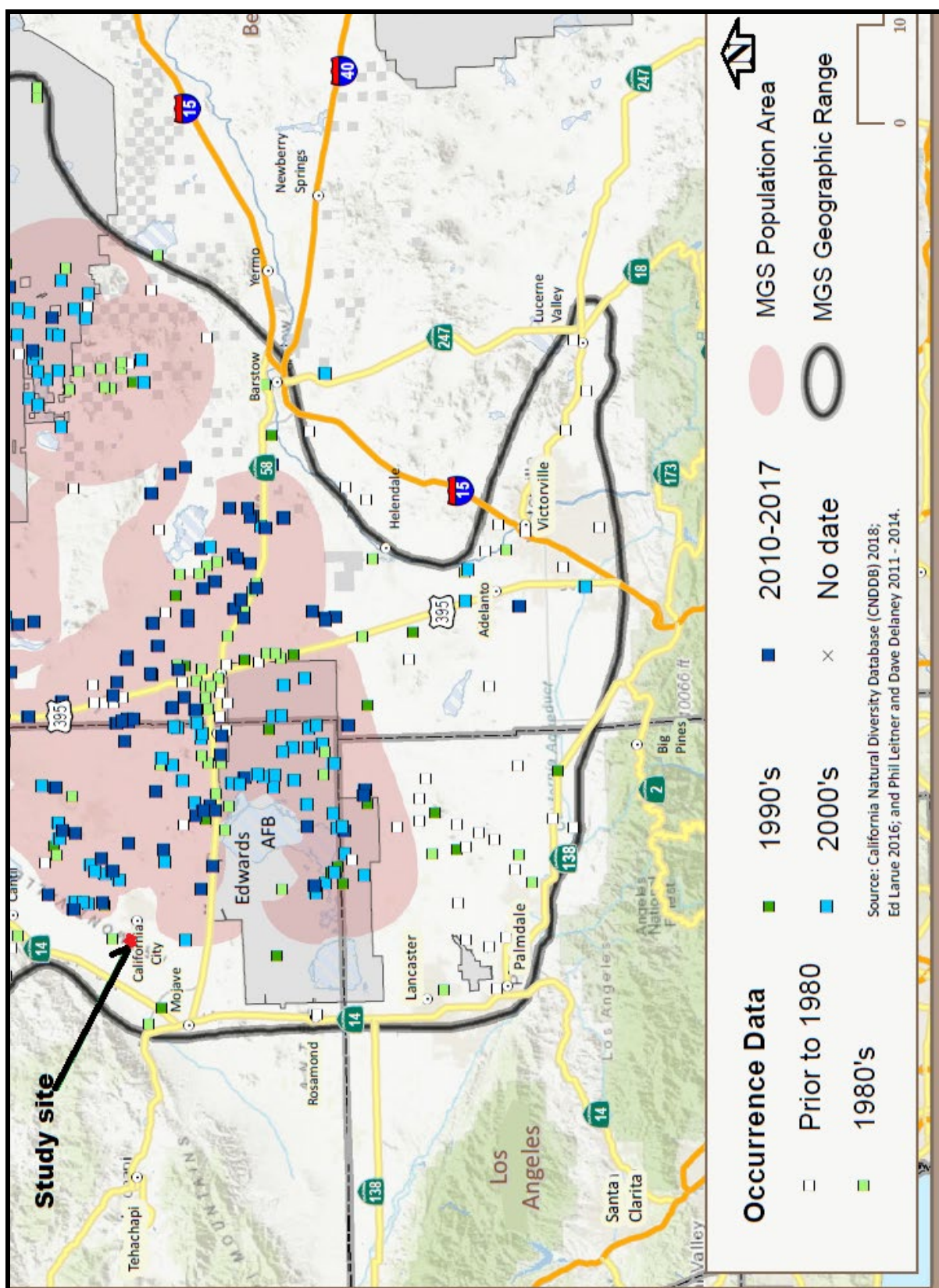


Figure 5. Occurrence data for MGS from CDFW 2019 MGS publication. Study site is red dot.

No suitable habitat for alkali mariposa lily, Barstow woolly sunflower or desert cymopterus 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).

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 burrowing owl survey should be accomplished within 30 days prior to construction 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).

Based on the condition of the habitat, the small size of the study area, surrounding land use, and lack of sensitive wildlife sign, no other protection measures are recommended.

Significance: This project will not result in a significant adverse impact to biological resources.

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APPENDIX B

Preliminary Geotechnical Engineering Report & Infiltration Study (APN: 302-273-22)



EARTH AND ENVIRONMENTAL SERVICES

425 19th Street

Bakersfield, CA 93301

P 661.323.5402 • F 661.323.5414

**PRELIMINARY GEOTECHNICAL ENGINEERING REPORT
AND INFILTRATION STUDY**

Proposed Commercial Greenhouse Development

Yerba Boulevard

Lot 1 Parcel Map 79

Southwest ¼ of Section 15, T.32S, R.37E., M.D.M

California City, California 93505

APN: 302-273-22

CLIENT

Lee Krelle

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c. (760) 403-6087

February 13, 2021

Job No. V21-004

THIS REPORT IS ONLY VALID FOR TWO (2) YEARS FROM DATE OF ISSUANCE ABOVE

PRELIMINARY GEOTECHNICAL ENGINEERING REPORT

INTRODUCTION

Purpose

This preliminary geotechnical report presents the results of our work in connection with the development of two greenhouses on one commercial lot in northwest California City, County of Kern, California. The purpose of the study was to evaluate the general subsurface conditions at the site and provide geotechnical parameters to aid in the design of the project.

Project Description

The proposed development will consist of two greenhouses, each approximately 64,000 square feet in size. Standard foundations and moderately light loading conditions were assumed for this report. The structures are proposed to be placed in the locations shown on the enclosed Geotechnical Map (Appendix A). It is expected that less than one foot of soil will be added to achieve final grade.

Scope of Work

Our work included a site reconnaissance, subsurface exploration, soil sampling, laboratory testing, engineering analyses and preparation of this report. The scope of work included performance of the following tasks:

- *Excavation of (3) test pits.
- *Visually classify and continuously log substrata encountered in the test pits.
- *Conduct laboratory tests on selected soil samples.
- *Assess geotechnical factors affecting the design of the proposed facility.
- *Provide recommendations pertaining to potential settlement, foundation design parameters and site grading.
- *Provide recommendations related to infiltration rates for retention basin design by others

FIELD AND LABORATORY TESTING

Subsurface Exploration

The subsurface exploration was performed on January 16, 2021 and consisted of (3) 24-inch-wide test pits that were excavated to a maximum depth of 14 feet. Test Pit Logs and a Geotechnical Plan are presented in Appendix A. The test locations are based on data provided by the client.

Bulk samples of soil on the site were obtained for laboratory testing from the test pits. Samples were obtained by means of 2.5-inch I.D. samplers manually driven in conformance with ASTM D2937. The exploration and sampling operations were performed by a senior technician from this office, who logged the exploratory pit and prepared the samples for subsequent examination and laboratory testing. Test pits were backfilled with spoils to natural compaction.

Laboratory Tests

Laboratory tests were performed to provide a basis for recommendations. Selected samples were tested to determine moisture/density, shear strength, expansion index, chemical analysis, sieve analysis, and R-value. The results of the moisture/density tests are shown on the Test Pit Logs in Appendix A. A brief description of other laboratory testing procedures and the test results are presented in Appendix B.

SITE CONDITIONS

Surface Conditions

The subject land is on the east side of Yerba Boulevard in California City, County of Kern, California and is approximately $\frac{3}{4}$ mile southeast of the California City Airport. The address was not provided but APN has been confirmed as accurate (lot 1 in Parcel Map 79 also in the southwest $\frac{1}{4}$ of Section 15, T.32S, R.37E., M.D.M.). The overall site is rectangular in shape. The lot contains approximately 425,568 square feet. The dimensions are: 1228.89' along the southern boundary, 331.83' along the western boundary on the Yerba Boulevard frontage, 1226.40' along the northern boundary, 331.98' along the eastern boundary on the future 72nd Boulevard frontage.

There are currently no existing structures on this site. The two proposed greenhouses will be located on each half of the property. In addition, one retention basin will be located on the easterly portion of the lot and another retention basin will be situated between the two proposed greenhouses. Drive aisles and parking areas are planned throughout the lot. From the southwest corner of the parcel, the site descends toward the northeast corner of the property. Some surrounding local streets are paved. Natural vegetation is scattered across the parcel.

Earth Material

Earth material was visually classified in the field according to the Unified Soil Classification System by examination of the samples and the trench walls. Earth material encountered in the upper 14 feet consists of reddish-brown silty sand with heavy fine to coarse sand and trace silt and clay. A more detailed description of the earth-material profile encountered is presented in the Test Pit Logs (Appendix A).

Ground Water Conditions

Ground water was not encountered in the soil test pits. Regional ground water is located at a depth of greater than 388 feet below ground surface from the nearest well (SGMA 2021).

ENGINEERING SEISMOLOGY

Local Faulting

The site is not located within currently established Alquist–Priolo Earthquake Fault Zones. Based on the CDMG 1994 Maps, there is no fault trace through the project site.

Regional Faulting

The project is located within the regional influence (within 100 kilometers) of known active or potentially active faults. The closest fault to the site is the Garlock fault at approximately 10.4 kilometers northwest of the site and is a Fault Class A zone. Per the existing site conditions, applicable codes, and laboratory results, it is our opinion that **Site Class D** is appropriate for the proposed construction at this site. The table below lists the applicable seismic coefficients for the project:

Seismic Coefficients

Soil Profile Type	S_D
Seismic Coefficient (0.2 sec) (S_s)	1.069
Seismic Coefficient (1 sec) (S_1)	0.408
MCE Spectral Response Accel. (0.2 sec) (S_{MS})	1.147
MCE Spectral Response Accel. (1 sec) (S_{M1})	null
Design Spectral Response (0.2 sec) (S_{DS})	0.764
Design Spectral Response (1 sec) (S_{D1})	null

Liquefaction Potential

The depth to ground water would preclude any potential for liquefaction.

DESIGN RECOMMENDATIONS

General

The native soil is suitable for structural support of the building foundations. Provided the following recommendations are followed during construction, it is our professional opinion that the graded building pad should be adequate for the proposed structure.

The following recommendations assume placement of the structure foundations in properly compacted soil.

Site Grading

Surface Preparation– To provide a stable foundation for the building with regard to potential differential settlement, the site should be cleared of all concrete, A.C. vegetation and other debris and any old fill. Any tree wells left by the removal of trees shall be cleaned of debris, roots, and root balls.

Excavation Characteristics– All excavations should be made in accordance with applicable regulations. No appreciable difficulty is expected with excavation performed by conventional grading equipment.

Moisture Conditioning – Construction watering may be required to achieve necessary soil moisture. Experience has shown compaction difficulty can result if fill soil is not allowed to moisture cure prior to attempting compaction. The grading contractor should be prepared to provide water during the excavation process and stockpile the moisture conditioned soil, as necessary, to allow for curing.

General Site Grading Recommendations– All site grading operations should conform with applicable local building and safety codes and to the rules and regulations of those regulatory agencies having jurisdiction over the subject construction.

Import soil (if any) should be at least as good as the firm on-site native soil in strength characteristics and no worse than the on-site soil relative to resistivity and soluble sulfate and chloride content.

Surface runoff should be collected and disposed of in such a manner as to prevent concentrated erosion. Pad drainage should be directed toward an approved water course swale via non-erosive

channel, pipe and/or dispersion devices. We recommend that lot drainage be verified after construction. At no time should drainage be directed toward any descending slope or allowed to pond and should not be allowed to stand and seep into the ground except for engineered swales, catch basins or retention/detention basins specifically designed for drainage waters.

Observations and field tests shall be carried on during grading by the Project Engineer to confirm that the required degree of compaction has been obtained. Where compaction or moisture conditioning is less than that required, additional compactive effort shall be made with adjustment of the moisture content as necessary until the specified compaction or moisture is obtained. Wherever, in the opinion of the Owner or the Project Engineer, an unstable condition is being created, either by cutting or filling, the work shall not proceed in that area until review has been made and the grading plan revised, if found to be necessary.

Special inspections should be performed in accordance with Table 1705.6 below:

TABLE 1705.6 REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS		
TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	—	X
2. Verify excavations are extended to proper depth and have reached proper material.	—	X
3. Perform classification and testing of compacted fill materials.	—	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	—
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	—	X

Foundation Design

These recommendations assume proper placement of the foundations in properly compacted soil. Bearing values obtained below were calculated from direct shear strength tests performed on remolded samples of the soil.

Continuous Footings

The allowable vertical bearing capacity of **2,000 pounds per square foot** may be used for dead and sustained live loads. For conditions of temporary loading, such as those produced by wind and seismic forces, the bearing value may be increased by one-third.

Continuous footings shall be a minimum of **12 inches wide** and a minimum of **12 inches below** lowest adjacent grade. Reinforcement shall consist of, at minimum, (2) #4 bars, one at top and one at bottom. Actual depth, width, and reinforcement requirements for continuous footings will be dependent on applicable sections of the governing building code and requirements of the structural engineer.

Isolated Pad Footings

The allowable vertical bearing capacity of **2,200 pounds per square foot** may be used for dead and sustained live loads. For conditions of temporary loading, such as those produced by wind and seismic forces, the bearing value may be increased by one-third.

Isolated pad footings shall be a minimum of **12 inches wide** and a minimum of **12 inches below** lowest adjacent grade. Actual depth, width, and reinforcement requirements for continuous footings will be dependent on applicable sections of the governing building code and requirements of the structural engineer.

Footing Observation

Prior to placement of forms, reinforcement, or concrete, all footing trenches should be observed by a representative of the project geotechnical consultant to verify that these have been excavated in competent soil. Excavations should be trimmed neat, level, and square. All loose, sloughed, or moisture-softened soil and/or construction debris should be removed prior to placing concrete.

Floor Slab

The slab should measure at least **4 inches in nominal thickness** and be reinforced in accordance with the structural engineer's recommendations. The slab shall be underlain by at least 2 inches of either sand or base over a 6-mil vapor barrier.

Excavations and Temporary Slopes

The material encountered at the site is expected to be temporarily stable on a gradient of 1½ horizontal to 1 vertical to a height of about 5 feet. By temporarily, it is meant a time of approximately one month.

All regulations should be followed before allowing workmen in a trench or to work at the base of the excavation. If any seepage is encountered during the excavation, the geotechnical engineer should be notified to re-evaluate the changed conditions.

Settlement

Providing that the recommendations given under "Site Grading" and "Foundation Design" are followed, it is anticipated that the maximum settlement should not exceed one inch and that the maximum differential settlement in a horizontal distance of 20 feet should not exceed 1 inch.

Expansive Soil Considerations

The on-site soil is considered to have a very low expansion potential and provisions for expansive conditions are not necessary. The surface should be sloped away from the structure at a minimum rate of 2% for a minimum distance of 10 feet to provide adequate drainage.

Concrete

On-site soil tested indicated a moderate concentration of soluble sulfate. **Type I cement** is acceptable for use in the design mix. Consistent with good construction practice, attention should be given to placement procedures which provide good concrete density and proper curing. Adequate concrete coverage of reinforcing steel should be provided.

Corrosion Potential – Metal

On-site soil tested indicated a low concentration of chloride. The soil resistivity tests indicate that the soil has a low corrosivity potential at natural moisture. At its minimum resistivity, protective measures against corrosion should not be necessary.

Corrosion Potential – pH

The on-site soil tests indicated a normal pH value in the soil. At its natural chemistry, rehabilitation measures will not be necessary.

Pavement Design

Asphalt pavement sections should be determined in substantial conformance with the CALTRANS method of flexible pavement design or equal methodology and shall conform to a civil or structural engineer's recommendations. An **R-value of 54** and an **E.P. of 0.08 psi** (expansion pressure @ 300 psi) shall be used for potential subgrade soils encountered at this site for both the expected driveways and parking areas.

INFILTRATION STUDY

The purpose of the section is to provide a review of laboratory and field testing performed and provide recommendations for the expected infiltration rate for the proposed sump.

Scope of Study

It is proposed to excavate one sump to contain any onsite runoff. In accordance with County of Kern Manual for the Standard Water Mitigation Plan, the project geotechnical engineer shall address the following criteria:

- a. Site soil classifications in accordance with the Unified Soil Classification System.
- b. Potential for liquefaction of site soils.
- c. Depth of the ground water level at the project site.
- d. Infiltration rate and specification of test method and procedures used to determine the infiltration rate.
- e. Analysis of the potential that perched water conditions could be created by the operation of the infiltration system.
- f. Statement regarding the effects of infiltration on foundation settlement.
- g. Statement regarding the effects of infiltration on hydrostatic pressure.

Discussion

Results of laboratory testing indicates that the soil at this site can be generally classified as a ***SILTY SAND*** (SM). Infiltration testing was performed by this office. Recommendations are based upon the results of the infiltration testing, available literature, previous geotechnical reports in the area, and previous laboratory data.

Since the soil is fairly homogeneous throughout the site and below the proposed sump bottom, the site soil classification can be considered to be the same for approximately 15 feet (SM) below the existing surface.

Ground water was not encountered in the soil test borings. ***Regional ground water is located greater than 200 feet below ground surface*** (SGMA 2021). The proposed building areas are relatively flat with a gentle slope downwards to the northeast. The potential for lateral spreading

of the existing area as a result of operation of the proposed sump can be considered low to nonexistent. *The potential for liquefaction of the onsite soil as a result of groundwater is very low.*

Converting the worst case of 6 minutes per inch test rate from the test pit (log in Appendix A), the *infiltration rate is 10 inches per hour* for the soil in the area of the proposed sump (240 inches per day). The procedures are as follows:

- For the test pit, a 12-inch square by 12-inch deep test hole was excavated at the bottom of a five-foot-in-depth trench. The test hole was filled with water to the top to allow presoaking. The percolation test was performed at least 24 hours after the presoak. The hole was filled once again and the time required for each water drop of 1 inch was recorded.
- For a boring, using a hollow-stem auger, advance an 8-inch-diameter boring 1 foot below the invert of proposed BMP. Rotate the auger until all cuttings are removed.

Install through the auger, a 2- to 4-inch-diameter perforated PVC casing with a solid end cap. Perforations should be a 0.02 inch slot or larger. Pour filter pack down center of auger while withdrawing the auger such that the casing is surrounded by the filter pack. The filter pack and perforated casing must have a larger hydraulic conductivity than the soil or rock that is to be tested.

Presoak the hole immediately prior to percolation testing. Water should be continually added to the casing to maintain a minimum depth of 1 foot above the bottom for 30 minutes. A sounder or piezometer may be used to determine the water level. Record the water levels and boring diameter.

After presoaking, for each successive test water should be added to the casing to a minimum depth of 1 foot above the bottom and refilled to this level after each percolation test. The drop in the water during the next 30 minutes should be applied to the following standards to determine the time interval between readings for each test location:

- If the water remains in the hole, the interval for the readings during the percolation test should be 30 minutes.
- If no water remains in the hole, the interval for the readings during the percolation test should be 10 minutes.

Conduct the percolation test by recording the time and drop in water level. Repeat the test a minimum of eight times or until a stabilized rate of drop is obtained, whichever occurs first. A stabilized rate may be assumed when three consecutive tests are within 10 percent of each other.

The drop in water level over time is the pre-adjusted percolation rate at the test location. The pre-adjusted percolation rate must be reduced to account for the discharge of water from both the sides and bottom of the boring (i.e., non-vertical flow). The following formula was used to determine the infiltration rate:

Infiltration Rate = Pre-adjusted Percolation Rate divided by Reduction Factor

Where the reduction factor (R_f) is given by $R_f = \frac{2d_1 - \Delta d}{DIA} + 1$

with: d_1 = Initial Water Depth (in.)
 Δd = Average/Final Water Level Drop (in.)
DIA = Diameter of the boring (in.)

The soil within the initial 15 feet below the bottom of the proposed sump meets the current County of Kern criteria for acceptable infiltration rates.

A Test Pit was placed in the immediate area of the proposed infiltration area and was used to determine if any changes in the soil type could provide a perched water condition that could potentially affect the area. In addition, laboratory data was reviewed in order to identify soil types most likely to produce a perched water condition. ***It is our opinion that the potential for the formation of a perched water condition as a result of the proposed infiltration pits is very low.***

The expected flow direction of the subsurface water introduced will be in a northeasterly direction away from any proposed structures. ***The potential for adverse settlement of any proposed structure as a result of the presence/operation of the sump is very low.***

The potential for excess hydrostatic pressure on walls as a result of the presence/operation of the sump is extremely low.

Sump Recommendations

Based upon the data, observations, and conclusions listed in the previous section, it is our opinion that the use of one sump is feasible for the subject site. There exists a very low potential for lateral spreading and/or adverse settlement of the proposed buildings. An infiltration system or a bio-filtration system that includes an under-drain system to prevent extended ponding will not be necessary for this site. The sump should be designed and constructed in accordance with County of Kern criteria.

CLOSURE

Geotechnical Review

Geotechnical review during construction is of paramount importance in engineering practice. The poor performance of many foundations has been attributed to inadequate construction review.

Site clearing, removal of all unsuitable soil, proper moisture conditioning, review of imported fill material, fill placement, observation of foundation excavations and other site grading operations should be observed and tested by this office during construction.

Limitations

This report is based on the project as described and the information obtained from the test excavations at the approximate locations indicated on the plans. Our findings are based on the results of the field, laboratory and office observations, tests and analysis, combined with an interpolation and extrapolation of soil conditions between and beyond the test excavations.

The results reflect our interpretation of the limited direct evidence obtained. The recommendations presented in this report are based on the assumption that sufficient field review (observation and tests) will be provided by this office during construction. Our firm should be notified of any pertinent changes in the project plans that differ from those described in this report. A significant variation may require a re-evaluation of the recommendations expressed in this report.

This report has been prepared for use in design of the described project. It may not contain sufficient information for other purposes. The study focused on the evaluation and analysis of selected physical properties of the earth material, and did not include any investigation or assessment of the presence of toxic or hazardous substances. This report has been prepared in accordance with generally accepted geotechnical practice. We make no other warranties, either express or implied.

Regards,

VINEYARD ENGINEERING INC.



Antoinette V. Algara, P.E.
Principal Engineer

AVA/ava

enc: Appendix A - Geotechnical Plan
 Log of Test Pits
 Percolation Test Data Log
 Appendix B - Laboratory Test Results
 Appendix C - Guide Specifications for Placement of Fill and Backfill

REFERENCES

Jennings, C.W., 1992, Preliminary fault activity map of California, 1:750,000: California Division of Mines and Geology, DMG Open–file report 92–03.

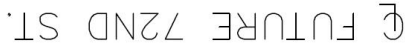
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California Department of Water Resources. Sustainable Groundwater Management Act Data Viewer, <https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels>. Accessed 4 February 2021.

Mualchin, L. and Jones, A.L., 1987, Peak accelerations from maximum credible earthquakes in California, California Department of Conservation, Division of Mines and Geology, Map Sheet 45: California Department of Transportation, Division of Structures.

U.S. Geological Survey. National Land Cover Database, <https://apps.nationalmap.gov/downloader/#/>. Accessed 4 February 2021.

APPENDIX A



Test Pit Log

Type							Elevation	Job No.	Test Pit
AWD Backhoe with 24" bucket							2420 ft	V21-004	TP-1
	114.6	1.0%				2'	SM	Reddish brown SILTY SAND, trace fine to coarse sand, dry, stiff, high plasticity, heavy silt, heavy clay, trace soil clods, trace gravel	
	117.0	1.7%				4'	SM	Reddish brown SILTY SAND, trace fine to coarse sand, dry, stiff, moderate plasticity, heavy silt, heavy clay, trace soil clods	
						8'		END OF TEST PIT	
						10'			
						14'			
						15'			
						20'			
Relative Compaction	Dry Density (pcf)	Moisture (%)	Blows per Foot (ft-lb)	Sample Size (in)	Sample No.	Depth (ft)	Material Symbol	USCS Classification	NOTES: 1. End of Test Pit at 14 feet. 2. Ground water encountered? NO 3. Caving? NO 4. Test pit backfilled with spoils? YES 5. Sample recovered? NO
THIS TEST PIT LOG SUMMARY APPLIES ONLY AT THE TIME AND LOCATION INDICATED. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS.								Logged By	Date
								Angulo	01/16/21

Test Pit Log

Type							Elevation		Job No.		Test Pit	
AWD Backhoe with 24" bucket							2420 ft		V21-004		TP-2	
	114.0	1.4%				2'			SM	Reddish brown SILTY SAND, trace fine to coarse sand, dry, stiff, high plasticity, heavy silt, heavy clay, trace soil clods, trace gravel		
	115.8	1.4%				4'				PERCOLATION DEPTH END OF TEST PIT		
						5						
						10						
						15						
						20						
Relative Compaction	Dry Density (pcf)	Moisture (%)	Blows per Foot (ft-lb)	Sample Size (in)	Sample No.	Depth (ft)	Material Symbol	USCS Classification	NOTES: 1. End of Test Pit at 14 feet. 2. Ground water encountered? NO 3. Caving? NO 4. Test pit backfilled with spoils? YES 5. Sample recovered? NO			
THIS TEST PIT LOG SUMMARY APPLIES ONLY AT THE TIME AND LOCATION INDICATED. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS.									Logged By Angulo		Date 01/16/21	

Test Pit Log

Type AWD Backhoe with 24" bucket							Elevation 2420 ft		Job No. V21-004		Test Pit TP-3	
	114.9	1.7%					2'		SM	Reddish brown SILTY SAND, trace fine to coarse sand, dry, stiff, high plasticity, heavy silt, heavy clay, trace soil clods, trace gravel		
	116.8	1.0%					4'					
							5					
							10					
							15					
							20					
Relative Compaction	Dry Density (pcf)	Moisture (%)	Blows per Foot (ft-lb)	Sample Size (in)	Sample No.	Depth (ft)	Material Symbol	USCS Classification	NOTES: 1. End of Test Pit at 14 feet. 2. Ground water encountered? NO 3. Caving? NO 4. Test pit backfilled with spoils? YES 5. Sample recovered? NO			
THIS TEST PIT LOG SUMMARY APPLIES ONLY AT THE TIME AND LOCATION INDICATED. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS.									Logged By Angulo		Date 01/16/21	



KERNPUBLICHEALTH.COM

COMPLETE THE FOLLOWING SHEET AND SUBMIT WITH PERCOLATION REPORT

TEST HOLES WERE PRESATURATED FOR 4 HOURS

3

APPENDIX B

LABORATORY TESTING

In the laboratory, samples taken from the test excavations were tested to determine density/moisture content, shear strength, maximum density, and expansion index. The moisture/density test results are shown on the Test Pit Logs in Appendix A, and results of other tests are given in Appendix B. Briefly, these tests were conducted as follows.

Strength characteristics were determined in the laboratory by direct shear tests performed on one relatively undisturbed sample. Each specimen was tested under various normal loads in a 2.5-inch I.D. circular shear box using a controlled displacement rate of 0.058 inch per minute. The soil specimen was saturated before testing.

Settlement and hydroconsolidation characteristics of selected soil samples were evaluated by means of laboratory consolidation tests. The samples were tested in a floating ring consolidometer using a dead weight lever system for load application. The sample was saturated after being loaded to 1.0 ton per square foot.

The concentration of soluble sulfate was determined for one sample of soil in accordance with California Test 417.

The concentration of soluble chloride was determined for one sample of soil in accordance with California Test 422.

The resistivity was determined for a selected soil sample in accordance with California Test 643.

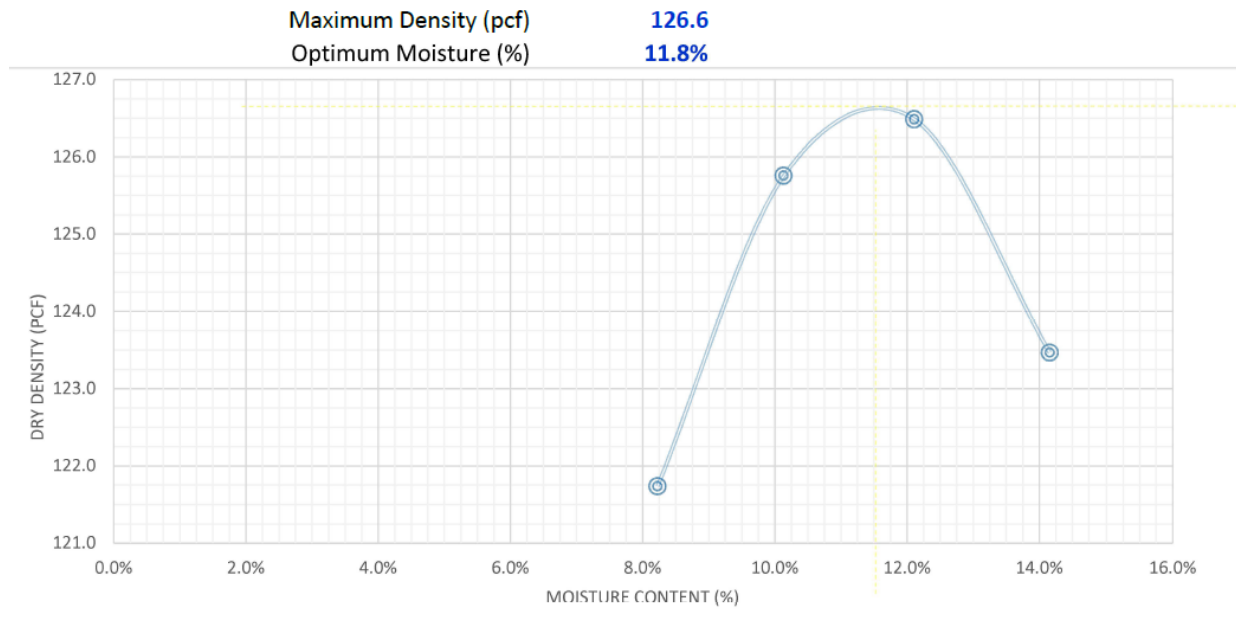
Maximum Density and Optimum Moisture Content

JOB NO. **V21-004 (Native) TP #1**

Mold Size: **4"**

ASTM D1557 **A**

	Test	1	2	3	4
	% Water Added	2%	4%	6%	8%
A	Mass of Wet Soil + Mold (g)	3981	4083	4133	4120
B	Mass of Mold (g)	1989	1989	1989	1989
C	Wet Mass (g) A-B	1992	2094	2144	2131
D	Conversion Factor For 4" mold = 0.06614 For 6" mold = 0.02939	0.06614	0.06614	0.06614	0.06614
E	Wet Density (pcf) C*D	131.8	138.5	141.8	140.9
Moisture Determination					
F	Mass of Wet Soil (g)	250	250	250	250
G	Mass of Dry Soil (g)	231	227	223	219
H	Moisture (%) (F-G)/G * 100	8.2%	10.1%	12.1%	14.2%
I	Dry Density (pcf) E/(1+H/100)	121.7	125.8	126.5	123.5



VINEYARD ENGINEERING

Geotechnical Services
Miscellaneous Laboratory Testing Services
Project: Yerba Blvd APN: 302-273-22 California City, Ca. 93505 (V.I. Job # V21-004)

SEI File No. 17-16079
February 10, 2021

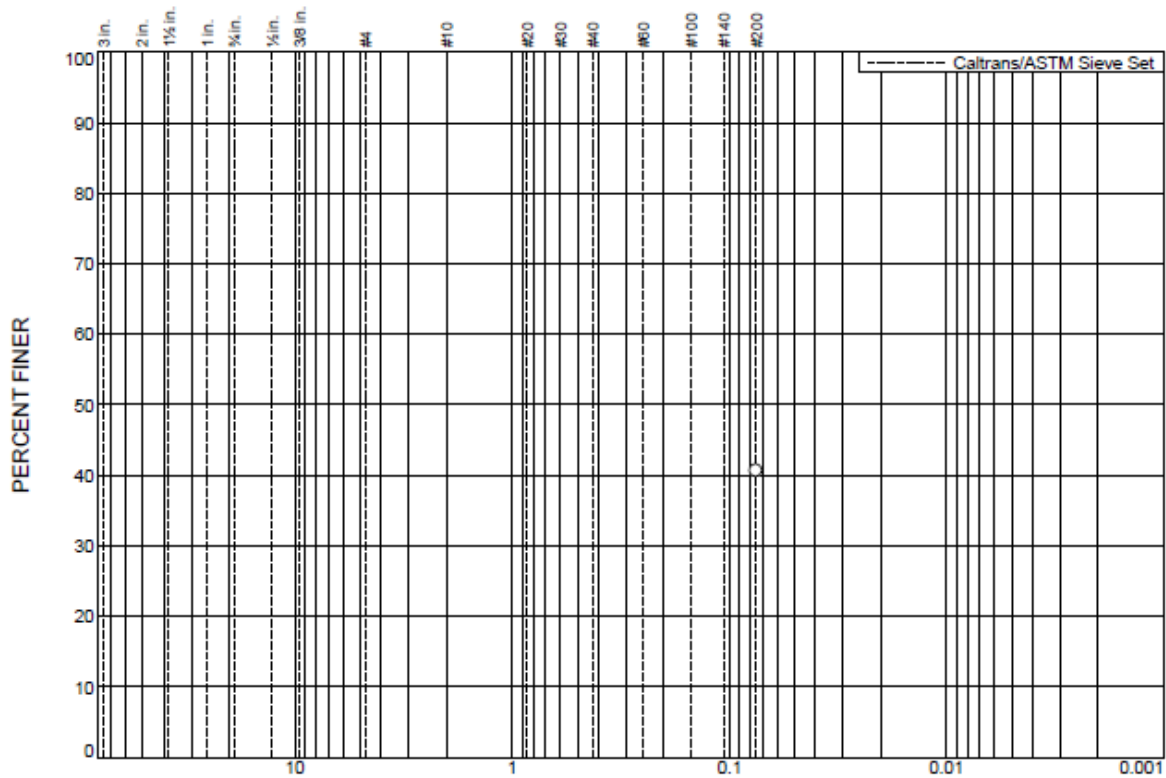
Page 3

TEST LOCATION	USCS	% < # 200	CONSOLIDATION			DIRECT SHEAR		Density / Moisture	ATTERBERG LIMITS			Corrosivity Analysis			MAXIMUM DENSITY		R-VALUE @ 300 psi	E.P. (psi)				
			C _c	C _u	S.P. (psi)	HV %	C _v (ksi)	F.A.	E.I.	lb/ft ³	%	L.L.	P.L.	P.I.	SO ₄	pH	cl	E.C.	MDD (pcf)	O.M.	R.V.	E.P. (psi)
Client Job # V21-004 Bulk Sample TP-1 @ 4" Sample ID 76873	SM	41					0.25	35.6	16						4.3	8.41	1.8	36			41	0.02
CONSOIDATION Cc - Compression Index Ca - Swell Index S.P. (psi) - Swell Pressure HV% - Heave Percentage / Collapse			DIRECT SHEAR C(ksi) - Cohesion F.A. - Friction Angle S.G. - Specific Gravity			E.I. - EXPANSION INDEX ATTERBERG LIMITS L.L. - Liquid Limit P.L. - Plastic Limit P.I. - Plasticity Index			RESISTANCE VALUE RV - R-Value @ 300 psi EP - Expansion Press @ 300 psi			CORROSION ANALYSIS SO ₄ - Sulfate, ppm cl - Chloride, ppm pH - Acidic or Alkaline (7 = Neutral, lower than 7 is acidic, higher is alkaline) E.C. - Electrical Conductivity (umhos/cm)			MAXIMUM DENSITY MDD (pcf) - Max Dry Density O.M. - Optimum Moisture							

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Particle Size Distribution Report



GRAIN SIZE - mm.

% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○						41	

SOIL DATA

SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○		76873	4'	SILTY SAND	SM
				V21-004 Yerba Blvd APN: 302-273-22, CA City 93505	
				TP- 1 @ 4'	

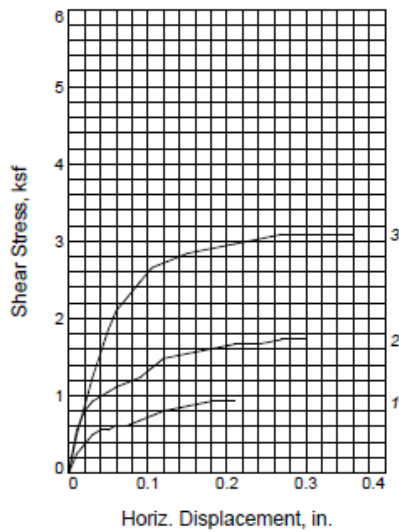
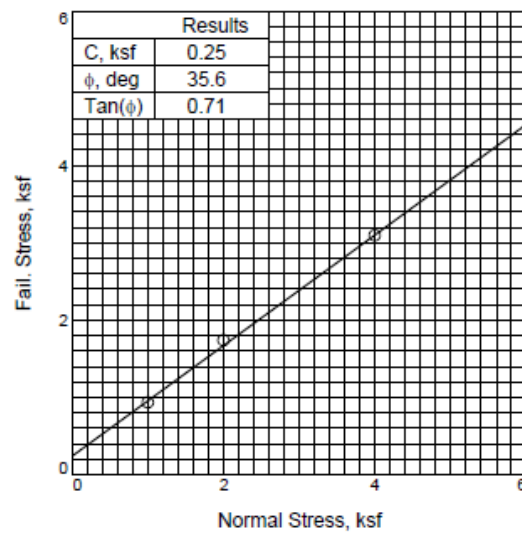
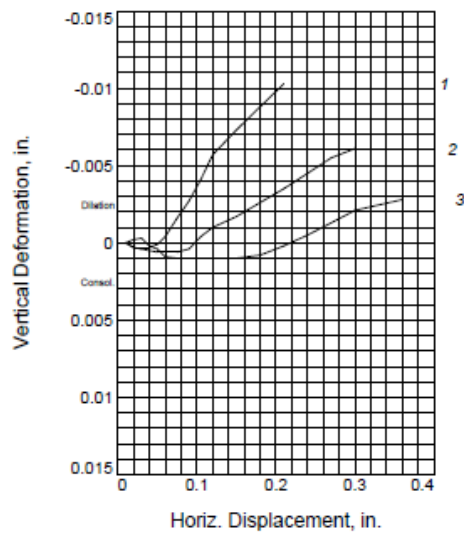
SOILS ENGINEERING, INC.

Client: Vineyard Engineering, Inc.

Project: Misc. Geotechnical Engineering Services for Various Projects

Project No.: 16079

Figure A-1



Sample No.		1	2	3
Initial	Water Content, %	5.7	7.7	8.6
	Dry Density, pcf	126.2	124.3	119.5
	Saturation, %	48.8	61.4	59.6
	Void Ratio	0.3105	0.3314	0.3840
	Diameter, in.	2.38	2.38	2.38
	Height, in.	1.00	1.00	1.00
At Test	Water Content, %	11.0	12.1	13.5
	Dry Density, pcf	126.2	124.3	119.5
	Saturation, %	94.2	96.9	92.8
	Void Ratio	0.3105	0.3314	0.3840
	Diameter, in.	2.38	2.38	2.38
	Height, in.	1.00	1.00	1.00
Normal Stress, ksf		1.00	2.00	4.00
Fail. Stress, ksf		0.93	1.73	3.09
Displacement, in.		0.18	0.27	0.27
Ult. Stress, ksf				
Displacement, in.				
Strain rate, in./min.		N/A	N/A	N/A

Sample Type: 2.50" x 6" TUBE
Description: SILTY SAND; yellowish brown, trace of clay, low plasticity, trace of gravel.
LL= N/A **PI=** N/A
Assumed Specific Gravity= 2.65
Remarks: Test Date: 02/10/21

Client: Vineyard Engineering, Inc.
Project: Misc. Geotechnical Engineering Services for Various Projects
Location: V21-004 | Yerba Blvd APN: 302-273-22, CA City 93505 | TP-1 @ 4'
Sample Number: 76873 **Depth:** 4'
Proj. No.: 16079 **Date Sampled:** 01/18/21

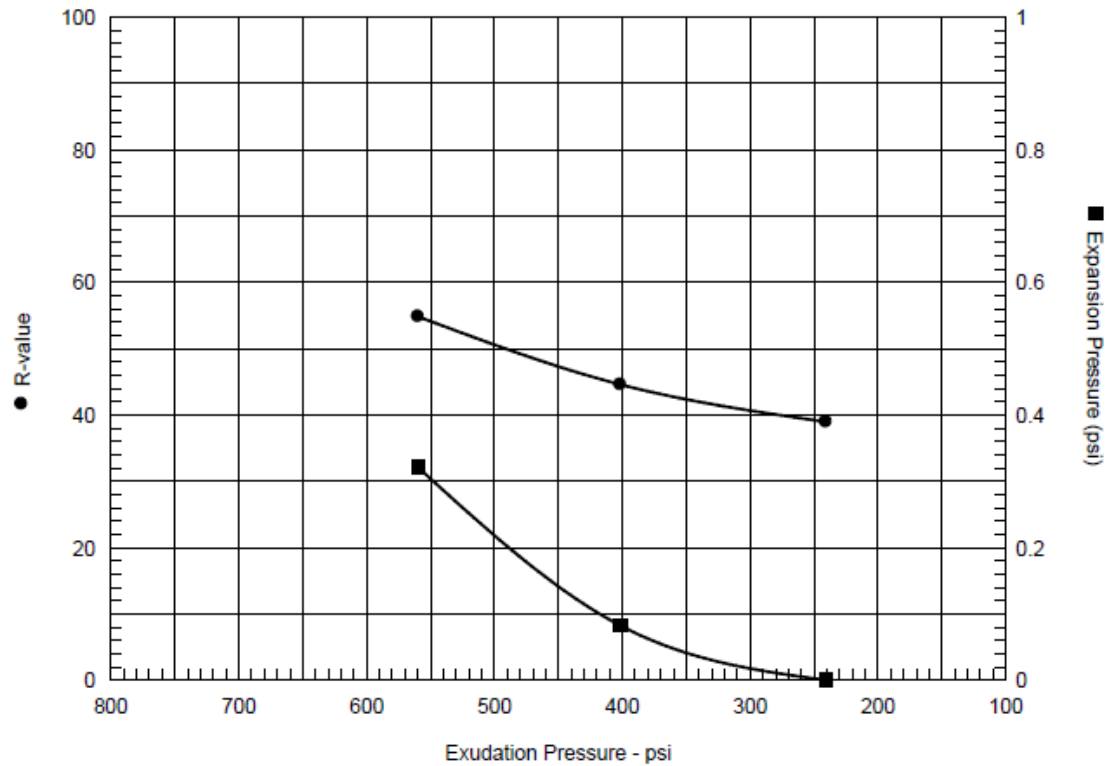
DIRECT SHEAR TEST REPORT

SOILS ENGINEERING, INC.

Figure B-1

Tested By: JA Checked By: AL

R-VALUE TEST REPORT



Resistance R-Value and Expansion Pressure - Cal Test 301

No.	Compact. Pressure psi	Density pcf	Moist. %	Expansion Pressure psi	Horizontal Press. psi @ 160 psi	Sample Height in.	Exud. Pressure psi	R Value	R Value Corr.
1	350	128.0	9.9	0.32	51	2.47	560	55	55
2	260	124.3	10.9	0.08	62	2.48	402	45	45
3	70	122.5	11.9	0.00	70	2.56	241	38	39

Test Results	Material Description
R-value at 300 psi exudation pressure = 41 Exp. pressure at 300 psi exudation pressure = 0.02 psi	SILTY SAND; yellowish brown, trace of clay, low plasticity, trace of gravel.
Project No.: 16079 Project: Misc. Geotechnical Engineering Services for Various Projects Location: V21-004 Yerba Blvd APN: 302-273-22, CA City 93505 TP-1 @ 4' Sample Number: 76873 Depth: 4' Date: 2/10/2021	Tested by: RG Checked by: AL Remarks: Test Date: 02/09/21
R-VALUE TEST REPORT SOILS ENGINEERING, INC.	Figure C-1



Date of Report: 02/01/2021

Andrew Lucas

Soils Engineering
4400 Yeager Way
Bakersfield, CA 93313

Client Project: 16079
BCL Project: Concrete Foundation Samples
BCL Work Order: 2102475
Invoice ID: B405545

Enclosed are the results of analyses for samples received by the laboratory on 1/26/2021. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Felicia Johnson
Client Service Rep

Stuart Buttram
Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.
Report ID: 1001124904 4100 Atlas Court Bakersfield, CA 93308 (861) 327-4911 FAX (861) 327-1918 www.bclabs.com Page 1 of 17



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Modified WET Test (STLC).....	7
2102475-02 - V21-003/TP-2 @4'	
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Modified WET Test (STLC).....	9
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Chain of Custody and Cooler Receipt Form for 2102475 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM		Page 1 Of 1							
Submission #: <u>21-02475</u>											
SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input checked="" type="checkbox"/> BC Lab Field Service <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			SHIPPING CONTAINER Ice Chest <input type="checkbox"/> None <input checked="" type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/> W / S						
Refrigerant: Ice <input type="checkbox"/> Blue Ice <input checked="" type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: <u>not enough ice</u>											
Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: _____ Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>											
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>											
COC Received YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		Emissivity: <u>0.91</u> Container: <u>214006</u> Thermometer ID: <u>274</u> Temperature: (A) <u>8.0</u> °C / (C) <u>8.5</u> °F		Date/Time <u>12-21-2016</u> Analyst Init <u>JKD</u>							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
QT PE UNPRES											
4oz / 8oz / 16oz PE UNPRES											
2oz Cu ⁶⁴											
QT INORGANIC CHEMICAL METALS											
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz											
PT CYANIDE											
PT NITROGEN FORMS											
PT TOTAL SULFIDE											
2oz NITRATE / NITRITE											
PT TOTAL ORGANIC CARBON											
PT CHEMICAL OXYGEN DEMAND											
PHA PHENOLICS											
40ml VOA VIAL TRAVEL BLANK											
40ml VOA VIAL											
QT EPA 1664											
PT ODOR											
RADIOLOGICAL											
BACTERIOLOGICAL											
40 ml VOA VIAL- 504											
QT EPA 505/508/509											
QT EPA 515/518/519											
QT EPA 525											
QT EPA 525 TRAVEL BLANK											
40ml EPA 547											
40ml EPA 531.1											
8oz EPA 548											
QT EPA 549											
QT EPA 8015M											
QT EPA 8270											
8oz / 16oz / 32oz AMBER											
8oz / 16oz / 32oz IAR											
SOIL SLURRY											
PCB VIAL											
PLASTIC BAG		A	A	A							
TEDLAR BAG											
FERROUS IRON											
ENCORE											
SMART KIT											
SUMMA CANISTER											
Comments:		NO sample time on all containers									
Sample Numbering Completed By: <u>CAS</u>		Date/Time: <u>12/21/2016</u> <u>0912</u>									
= Actual / C = Corrected		Rev 21 05/23/2016									
(S:\WPDoc\Word\Fee\Lab\DOC\FORMS\Chain of Custody.docx)											

Soils Engineering
4400 Yeager Way
Bakersfield, CA 93313

Reported: 02/01/2021 17:42
Project: Concrete Foundation Samples
Project Number: 16079
Project Manager: Andrew Lucas

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2102475-01	COC Number:	---	Receive Date:	01/26/2021 09:00
	Project Number:	---	Sampling Date:	01/15/2021 12:00
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	V21-002/TP-2 @4'	Lab Matrix:	Solids
	Sampled By:	---	Sample Type:	Soil
2102475-02	COC Number:	---	Receive Date:	01/26/2021 09:00
	Project Number:	---	Sampling Date:	01/15/2021 12:00
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	V21-003/TP-2 @4'	Lab Matrix:	Solids
	Sampled By:	---	Sample Type:	Soil
2102475-03	COC Number:	---	Receive Date:	01/26/2021 09:00
	Project Number:	---	Sampling Date:	01/15/2021 12:00
	Sampling Location:	---	Sample Depth:	---
	Sampling Point:	V21-004/TP-4 @4'	Lab Matrix:	Solids
	Sampled By:	---	Sample Type:	Soil

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Soils Engineering
4400 Yeager Way
Bakersfield, CA 93313

Reported: 02/01/2021 17:42
Project: Concrete Foundation Samples
Project Number: 16079
Project Manager: Andrew Lucas

Chemical Analysis

BCL Sample ID:	2102475-01	Client Sample Name:	V21-002/TP-2 @4', 1/15/2021 12:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	8.60	pH Units	0.05	0.05	EPA-9040	ND	pH1:1	1
pH Measurement Temperature	20.5	C	0.1	0.1	EPA-9040	ND		1
Chloride, ppm	2.1	mg/kg	2.0	0.18	CalTrans-422	0.44		2
Sulfate, ppm	7.8	mg/kg	3.0	0.30	CalTrans-417	0.44		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-9040	01/27/21 12:00	01/27/21 12:00	RT1	MANUAL	1	B098511	General Preparation
2	CalTrans-422	01/27/21 09:00	01/28/21 21:33	GSP	IC8	1	B098462	Water Extraction
3	CalTrans-417	01/27/21 09:00	01/28/21 21:33	GSP	IC8	1	B098462	Water Extraction

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Bakersfield, CA 93313

Reported: 02/01/2021 17:42

Project: Concrete Foundation Samples

Project Number: 16079

Project Manager: Andrew Lucas

Modified WET Test (STLC)

BCL Sample ID:	2102475-01	Client Sample Name:	V21-002/TP-2 @4', 1/15/2021 12:00:00PM
----------------	------------	---------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	69	umhos/cm	1.0	1.0	EPA-120.1			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-120.1	01/29/21 12:30	01/29/21 14:41	RML	MET-1	1	B098743	No Prep

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Soils Engineering
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Bakersfield, CA 93313

Reported: 02/01/2021 17:42
Project: Concrete Foundation Samples
Project Number: 16079
Project Manager: Andrew Lucas

Chemical Analysis

BCL Sample ID:	2102475-02	Client Sample Name:	V21-003/TP-2 @4', 1/15/2021 12:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	8.36	pH Units	0.05	0.05	EPA-9040	ND	pH1:1	1
pH Measurement Temperature	20.9	C	0.1	0.1	EPA-9040	ND		1
Chloride, ppm	1.5	mg/kg	2.0	0.18	CalTrans-422	0.44		2
Sulfate, ppm	3.2	mg/kg	3.0	0.30	CalTrans-417	0.44		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-9040	01/27/21 12:00	01/27/21 12:00	RT1	MANUAL	1	B098511	General Preparation
2	CalTrans-422	01/27/21 09:00	01/28/21 20:32	GSP	IC8	1	B098462	Water Extraction
3	CalTrans-417	01/27/21 09:00	01/28/21 20:32	GSP	IC8	1	B098462	Water Extraction



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Project: Concrete Foundation Samples
Project Number: 16079
Project Manager: Andrew Lucas

Modified WET Test (STLC)

BCL Sample ID:	2102475-02	Client Sample Name:	V21-003/TP-2 @4', 1/15/2021 12:00:00PM
----------------	------------	---------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	78	umhos/cm	1.0	1.0	EPA-120.1			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-120.1	01/29/21 12:30	01/29/21 14:43	RML	MET-1	1	B098743	No Prep

Soils Engineering
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Bakersfield, CA 93313

Reported: 02/01/2021 17:42
Project: Concrete Foundation Samples
Project Number: 16079
Project Manager: Andrew Lucas

Chemical Analysis

BCL Sample ID:	2102475-03	Client Sample Name:	V21-004/TP-4 @4", 1/15/2021 12:00:00PM					
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
pH	8.41	pH Units	0.05	0.05	EPA-9040	ND	pH1:1	1
pH Measurement Temperature	21.3	C	0.1	0.1	EPA-9040	ND		1
Chloride, ppm	1.8	mg/kg	2.0	0.18	CalTrans-422	0.44		2
Sulfate, ppm	4.3	mg/kg	3.0	0.30	CalTrans-417	0.44		3

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-9040	01/27/21 12:00	01/27/21 12:00	RT1	MANUAL	1	B098511	General Preparation
2	CalTrans-422	01/27/21 09:00	01/28/21 21:54	GSP	IC8	1	B098462	Water Extraction
3	CalTrans-417	01/27/21 09:00	01/28/21 21:54	GSP	IC8	1	B098462	Water Extraction

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4400 Yeager Way
Bakersfield, CA 93313

Reported: 02/01/2021 17:42
Project: Concrete Foundation Samples
Project Number: 16079
Project Manager: Andrew Lucas

Modified WET Test (STLC)

BCL Sample ID: 2102475-03		Client Sample Name: V21-004/TP-4 @4", 1/15/2021 12:00:00PM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Electrical Conductivity @ 25 C	36	umhos/cm	1.0	1.0	EPA-120.1			1

Run		QC						
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	Prep Method
1	EPA-120.1	01/29/21 12:30	01/29/21 14:44	RML	MET-1	1	B098743	No Prep



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Project Manager: Andrew Lucas

Chemical Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B098462						
Chloride, ppm	B098462-BLK1	0.43800	mg/kg	2.0	0.18	
Sulfate, ppm	B098462-BLK1	0.44400	mg/kg	3.0	0.30	
QC Batch ID: B098511						
pH	B098511-BLK1	ND	pH Units	0.05	0.05	
pH Measurement Temperature	B098511-BLK1	ND	C	0.1	0.1	

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Project Manager: Andrew Lucas

Chemical Analysis

Quality Control Report - Laboratory Control Sample

								Control Limits		
Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab
QC Batch ID: B098511										
pH	B098511-BS1	LCS	4.0000	4.0000	pH Units	100		95 - 105		

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Project Number: 16079
Project Manager: Andrew Lucas

Chemical Analysis

Quality Control Report - Precision & Accuracy

										<u>Control Limits</u>		
Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery	Lab Quals	
QC Batch ID: B098462		Used client sample: Y - Description: V21-003/TP-2 @4', 01/15/2021 12:00										
Chloride, ppm	DUP	2102475-02	1.5000	1.5300		mg/kg	2.0		20			
Sulfate, ppm	DUP	2102475-02	3.1740	2.8620		mg/kg	10.3		20			
QC Batch ID: B098511		Used client sample: N										
pH	DUP	2102282-01	7.9880	8.0120		pH Units	0.3		20			



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Project: Concrete Foundation Samples

Project Number: 16079

Project Manager: Andrew Lucas

Modified WET Test (STLC)

Quality Control Report - Laboratory Control Sample

									Control Limits		Lab
Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Quals	
QC Batch ID: B098743											
Electrical Conductivity @ 25 C	B098743-BS1	LCS	313.80	303.00	umhos/cm	104		90 - 110			

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Project: Concrete Foundation Samples
Project Number: 16079
Project Manager: Andrew Lucas

Modified WET Test (STLC)

Quality Control Report - Precision & Accuracy

										<u>Control Limits</u>		
Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery	Lab Quals	
QC Batch ID: B098743		Used client sample: N										
Electrical Conductivity @ 25 C	DUP	2035738-18	641.00	647.10		umhos/cm	0.9		20			

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Soils Engineering
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Bakersfield, CA 93313

Reported: 02/01/2021 17:42
Project: Concrete Foundation Samples
Project Number: 16079
Project Manager: Andrew Lucas

Notes And Definitions

MDL Method Detection Limit
ND Analyte Not Detected
PQL Practical Quantitation Limit
pH1:1 pH result reported on a 1:1 dilution of sample

APPENDIX C

GUIDE SPECIFICATIONS FOR PLACEMENT OF FILL AND BACKFILL

1. Areas to receive compacted site fill or to support slabs shall be stripped of all vegetation, debris or disturbed soil. Stripping shall be reviewed by the Project Engineer. All existing fill soil shall be excavated unless the Project Engineer specifically recommends that such fill is to remain in place. Any exposed soft, loose, porous or otherwise unsatisfactory soil shall then be excavated to the depths indicated in the plans or specifications, or by the Project Engineer. The excavation of existing fill or other unsatisfactory soil shall extend laterally beyond the limit of foundations, slabs or pavements the distance indicated in the specifications or plans, or by the Project Engineer. The excavated areas shall be observed by the Project Engineer prior to preparing subgrade and placing compacted fill.
2. The exposed reviewed ground surface shall then be scarified to a depth of at least six inches, uniformly moistened to between optimum moisture and 140 percent of optimum moisture for the material, and then uniformly compacted to at least 90 percent of the maximum laboratory density as determined by ASTM D1557. Where fill is to be placed on or against sloping ground (steeper than 5:1), keying and benching into firm natural ground shall be performed as the compacted fill is brought to final grade.
3. Fill, consisting of soil reviewed by the Project Engineer, shall be placed in compacted layers with appropriate compaction equipment. Fill should be densified to at least 90% relative compaction. The excavated on-site materials are not considered satisfactory for reuse in the fill. All imported fill shall be reviewed by the Project Engineer prior to use in fill areas. Rocks larger than six inches in diameter shall not be used. The moisture content of the fill soil shall be uniformly moistened to between optimum moisture and 140 percent of optimum moisture.
4. Observations and field tests shall be carried on during grading by the Project Engineer to confirm that the required degree of compaction has been obtained. Where compaction or moisture conditioning is less than that required, additional compactive effort shall be made with adjustment of the moisture content as necessary until the specified compaction or moisture is obtained.
5. Wherever, in the opinion of the Owner or the Project Engineer, an unstable condition is being created, either by cutting or filling, the work shall not proceed in that area until review has been made and the grading plan revised, if found to be necessary.
6. The Project Engineer shall observe the exposed surface during the removal operation to evaluate excavation stability and confirm that field conditions are as anticipated.
7. Following confirmation of field conditions and/or further modifications, the excavated materials may be replaced on the subgrade in accordance with specifications.
8. All utility trench backfill shall be compacted to at least 90 percent, except for pipe bedding and six inches of the pipe cover.

APPENDIX C

CalEEMOD Modeling Results & Analysis *(Summer, Winter, Annual)*

March 9, 2021

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

Traditional-Yerba (Cannabis)
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	128.00	1000sqft	2.94	128,000.00	35
Parking Lot	0.56	Acre	0.56	24,393.60	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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

Project Characteristics - Per Project Description and Project Location

Land Use - See Site Plan

Construction Phase - Per Project Description and Construction Schedule

Grading - See Site Plan

Architectural Coating - Use of (Green Seal) low VOC paint (for all exterior and interior areas; EF of no greater than 150 g/L)

Consumer Products -

Area Coating - Use of (Green Seal) low VOC paint (for all exterior and interior areas; EF of no greater than 150 g/L)

Energy Use - Historical Data

Water And Wastewater -

Construction Off-road Equipment Mitigation - https://www.bcew.com/pdf/InfoSheets/IS_62.pdf
<https://www.miratechcorp.com/fa-content/uploads/2013/07/Formulations.pdf>

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - Project Description

Stationary Sources - Emergency Generators and Fire Pumps -

Water Mitigation -

Waste 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_Interior	250.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
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tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	CNG
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tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	8.00	30.00
tblConstructionPhase	NumDays	18.00	86.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	3/31/2021	4/28/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	5/25/2022

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

tblConstructionPhase	PhaseEndDate	3/31/2021	5/12/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	7/29/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	4/14/2021
tblEnergyUse	LightingElect	4.58	3.77
tblEnergyUse	LightingElect	0.88	0.35
tblEnergyUse	T24E	3.78	2.89
tblEnergyUse	T24NG	19.64	16.11
tblGrading	AcresOfGrading	15.00	4.90
tblGrading	AcresOfGrading	5.00	4.90
tblLandUse	Population	0.00	35.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00

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tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	5.10
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	48.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00

2.0 Emissions Summary

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

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	1.1578	2.3869	2.2426	4.6100e-003	0.1828	0.1115	0.2942	0.0770	0.1049	0.1819	0.0000	404.0464	404.0464	0.0755	0.0000	405.9335
2022	0.0812	0.7266	0.7394	1.6700e-003	0.0352	0.0304	0.0656	9.5400e-003	0.0289	0.0384	0.0000	147.5375	147.5375	0.0222	0.0000	148.0927
Maximum	1.1578	2.3869	2.2426	4.6100e-003	0.1828	0.1115	0.2942	0.0770	0.1049	0.1819	0.0000	404.0464	404.0464	0.0755	0.0000	405.9335

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	1.0448	1.1278	3.4311	4.6100e-003	0.1081	0.0406	0.1487	0.0402	0.0393	0.0795	0.0000	393.5927	393.5927	0.0762	0.0000	395.4975
2022	0.0519	0.3848	1.4054	1.6700e-003	0.0308	0.0115	0.0423	8.4600e-003	0.0115	0.0199	0.0000	150.7144	150.7144	0.0232	0.0000	151.2953
Maximum	1.0448	1.1278	3.4311	4.6100e-003	0.1081	0.0406	0.1487	0.0402	0.0393	0.0795	0.0000	393.5927	393.5927	0.0762	0.0000	395.4975

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	11.48	51.42	-62.19	0.00	36.26	63.31	46.92	43.72	62.06	54.85	0.00	1.32	1.32	-1.78	0.00	1.31

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2021	6-30-2021	2.2941	1.5392
2	7-1-2021	9-30-2021	0.6769	0.3340
3	10-1-2021	12-31-2021	0.5673	0.2963
4	1-1-2022	3-31-2022	0.5045	0.2729
5	4-1-2022	6-30-2022	0.3079	0.1664
		Highest	2.2941	1.5392

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	0.5911	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-003	2.3000e-003	1.0000e-005	0.0000	2.4500e-003
Energy	0.0119	0.1079	0.0906	6.5000e-004		8.2000e-003	8.2000e-003		8.2000e-003	8.2000e-003	0.0000	526.7497	526.7497	0.0192	5.6500e-003	528.9118
Mobile	0.1999	2.3837	1.9787	0.0126	0.6916	6.5800e-003	0.6982	0.1860	6.1700e-003	0.1922	0.0000	1,171.3301	1,171.3301	0.0655	0.0000	1,172.9677
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	32.2187	0.0000	32.2187	1.9041	0.0000	79.8205
Water						0.0000	0.0000		0.0000	0.0000	9.3907	122.8036	132.1943	0.9696	0.0238	163.5333
Total	0.8029	2.4915	2.0705	0.0132	0.6916	0.0148	0.7064	0.1860	0.0144	0.2004	41.6094	1,820.8857	1,862.4951	2.9583	0.0295	1,945.2358

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

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	0.5537	1.0000e-005	6.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2400e-003	1.2400e-003	0.0000	0.0000	1.3000e-003
Energy	0.0119	0.1079	0.0906	6.5000e-004		8.2000e-003	8.2000e-003		8.2000e-003	8.2000e-003	0.0000	526.7497	526.7497	0.0192	5.6500e-003	528.9118
Mobile	0.1843	2.2380	1.6920	0.0106	0.5579	5.4300e-003	0.5634	0.1501	5.1000e-003	0.1552	0.0000	992.4869	992.4869	0.0619	0.0000	994.0337
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	22.5531	0.0000	22.5531	1.3329	0.0000	55.8744
Water						0.0000	0.0000		0.0000	0.0000	7.5126	98.2429	105.7554	0.7757	0.0191	130.8266
Total	0.7498	2.3459	1.7833	0.0113	0.5579	0.0136	0.5716	0.1501	0.0133	0.1634	30.0657	1,617.4807	1,647.5464	2.1895	0.0247	1,709.6479

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.61	5.85	13.87	14.61	19.32	7.78	19.08	19.32	7.45	18.47	27.74	11.17	11.54	25.99	16.15	12.11

3.0 Construction Detail**Construction Phase**

Traditional-Yerba (Cannabis) - 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	4/1/2021	3/31/2021	5	0	
2	Site Preparation	Site Preparation	4/1/2021	4/14/2021	5	10	
3	Grading	Grading	4/1/2021	5/12/2021	5	30	
4	Building Construction	Building Construction	4/1/2021	5/25/2022	5	300	
5	Paving	Paving	4/1/2021	7/29/2021	5	86	
6	Architectural Coating	Architectural Coating	4/1/2021	4/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 4.9

Acres of Grading (Grading Phase): 4.9

Acres of Paving: 0.56

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 192,000; Non-Residential Outdoor: 64,000; Striped Parking Area: 1,464 (Architectural Coating – sqft)

OffRoad Equipment

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

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	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	64.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	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

Water Exposed Area

Clean Paved Roads

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

3.2 Demolition - 2021

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

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3.2 Demolition - 2021

Mitigated Construction On-Site

[illegible]

Mitigated Construction Off-Site

[illegible]

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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					0.0929	0.0000	0.0929	0.0499	0.0000	0.0499	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0198	0.2045	0.0943	1.7000e-004		0.0102	0.0102		9.4200e-003	9.4200e-003	0.0000	15.3543	15.3543	4.9700e-003	0.0000	15.4785
Total	0.0198	0.2045	0.0943	1.7000e-004	0.0929	0.0102	0.1032	0.0499	9.4200e-003	0.0594	0.0000	15.3543	15.3543	4.9700e-003	0.0000	15.4785

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	9.0000e-005	6.0000e-005	5.9000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1783	0.1783	0.0000	0.0000	0.1784
Total	9.0000e-005	6.0000e-005	5.9000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1783	0.1783	0.0000	0.0000	0.1784

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

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					0.0362	0.0000	0.0362	0.0195	0.0000	0.0195	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0120	0.1166	0.0939	1.7000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	15.3543	15.3543	4.9700e-003	0.0000	15.4785
Total	0.0120	0.1166	0.0939	1.7000e-004	0.0362	5.6600e-003	0.0419	0.0195	5.2100e-003	0.0247	0.0000	15.3543	15.3543	4.9700e-003	0.0000	15.4785

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	9.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1783	0.1783	0.0000	0.0000	0.1784
Total	9.0000e-005	6.0000e-005	5.9000e-004	0.0000	1.8000e-004	0.0000	1.8000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1783	0.1783	0.0000	0.0000	0.1784

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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					0.0139	0.0000	0.0139	6.4900e-003	0.0000	6.4900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0219	0.2265	0.1952	3.6000e-004		0.0103	0.0103		9.6600e-003	9.6600e-003	0.0000	31.2108	31.2108	7.9500e-003	0.0000	31.4097
Total	0.0219	0.2265	0.1952	3.6000e-004	0.0139	0.0103	0.0242	6.4900e-003	9.6600e-003	0.0162	0.0000	31.2108	31.2108	7.9500e-003	0.0000	31.4097

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

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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					5.4200e-003	0.0000	5.4200e-003	2.5300e-003	0.0000	2.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.3800e-003	0.0910	0.1485	3.6000e-004		3.4700e-003	3.4700e-003		3.2000e-003	3.2000e-003	0.0000	23.1459	23.1459	7.4900e-003	0.0000	23.3331
Total	9.3800e-003	0.0910	0.1485	3.6000e-004	5.4200e-003	3.4700e-003	8.8900e-003	2.5300e-003	3.2000e-003	5.7300e-003	0.0000	23.1459	23.1459	7.4900e-003	0.0000	23.3331

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

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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	0.1409	1.2418	1.2456	2.0200e-003		0.0677	0.0677		0.0642	0.0642	0.0000	172.2531	172.2531	0.0370	0.0000	173.1772
Total	0.1409	1.2418	1.2456	2.0200e-003		0.0677	0.0677		0.0642	0.0642	0.0000	172.2531	172.2531	0.0370	0.0000	173.1772

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	8.0900e-003	0.2715	0.0510	7.1000e-004	0.0164	7.2000e-004	0.0172	4.7400e-003	6.9000e-004	5.4400e-003	0.0000	67.1487	67.1487	5.1400e-003	0.0000	67.2772
Worker	0.0223	0.0146	0.1484	5.0000e-004	0.0508	3.5000e-004	0.0512	0.0135	3.2000e-004	0.0138	0.0000	44.9596	44.9596	1.0700e-003	0.0000	44.9863
Total	0.0304	0.2860	0.1994	1.2100e-003	0.0672	1.0700e-003	0.0683	0.0182	1.0100e-003	0.0193	0.0000	112.1083	112.1083	6.2100e-003	0.0000	112.2635

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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	0.0763	0.4942	2.5084	2.0200e-003		0.0241	0.0241		0.0241	0.0241	0.0000	178.3295	178.3295	0.0389	0.0000	179.3027
Total	0.0763	0.4942	2.5084	2.0200e-003		0.0241	0.0241		0.0241	0.0241	0.0000	178.3295	178.3295	0.0389	0.0000	179.3027

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	8.0900e-003	0.2715	0.0510	7.1000e-004	0.0147	7.2000e-004	0.0154	4.3200e-003	6.9000e-004	5.0100e-003	0.0000	67.1487	67.1487	5.1400e-003	0.0000	67.2772
Worker	0.0223	0.0146	0.1484	5.0000e-004	0.0442	3.5000e-004	0.0445	0.0119	3.2000e-004	0.0122	0.0000	44.9596	44.9596	1.0700e-003	0.0000	44.9863
Total	0.0304	0.2860	0.1994	1.2100e-003	0.0589	1.0700e-003	0.0600	0.0162	1.0100e-003	0.0172	0.0000	112.1083	112.1083	6.2100e-003	0.0000	112.2635

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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	0.0664	0.5856	0.6440	1.0500e-003		0.0299	0.0299		0.0284	0.0284	0.0000	90.0951	90.0951	0.0191	0.0000	90.5734
Total	0.0664	0.5856	0.6440	1.0500e-003		0.0299	0.0299		0.0284	0.0284	0.0000	90.0951	90.0951	0.0191	0.0000	90.5734

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	3.9500e-003	0.1342	0.0247	3.7000e-004	8.5900e-003	3.3000e-004	8.9200e-003	2.4800e-003	3.1000e-004	2.7900e-003	0.0000	34.7896	34.7896	2.5800e-003	0.0000	34.8541
Worker	0.0108	6.7900e-003	0.0708	2.5000e-004	0.0266	1.8000e-004	0.0267	7.0600e-003	1.6000e-004	7.2200e-003	0.0000	22.6528	22.6528	5.0000e-004	0.0000	22.6652
Total	0.0148	0.1410	0.0955	6.2000e-004	0.0352	5.1000e-004	0.0357	9.5400e-003	4.7000e-004	0.0100	0.0000	57.4424	57.4424	3.0800e-003	0.0000	57.5193

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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	0.0372	0.2438	1.3099	1.0500e-003		0.0110	0.0110		0.0110	0.0110	0.0000	93.2720	93.2720	0.0202	0.0000	93.7760
Total	0.0372	0.2438	1.3099	1.0500e-003		0.0110	0.0110		0.0110	0.0110	0.0000	93.2720	93.2720	0.0202	0.0000	93.7760

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	3.9500e-003	0.1342	0.0247	3.7000e-004	7.6800e-003	3.3000e-004	8.0100e-003	2.2600e-003	3.1000e-004	2.5700e-003	0.0000	34.7896	34.7896	2.5800e-003	0.0000	34.8541
Worker	0.0108	6.7900e-003	0.0708	2.5000e-004	0.0231	1.8000e-004	0.0233	6.2100e-003	1.6000e-004	6.3700e-003	0.0000	22.6528	22.6528	5.0000e-004	0.0000	22.6652
Total	0.0148	0.1410	0.0955	6.2000e-004	0.0308	5.1000e-004	0.0313	8.4700e-003	4.7000e-004	8.9400e-003	0.0000	57.4424	57.4424	3.0800e-003	0.0000	57.5193

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3.6 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0431	0.4103	0.4646	7.4000e-004		0.0212	0.0212		0.0197	0.0197	0.0000	62.8712	62.8712	0.0190	0.0000	63.3471
Paving	7.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0438	0.4103	0.4646	7.4000e-004		0.0212	0.0212		0.0197	0.0197	0.0000	62.8712	62.8712	0.0190	0.0000	63.3471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7400e-003	1.7900e-003	0.0182	6.0000e-005	6.2400e-003	4.0000e-005	6.2800e-003	1.6600e-003	4.0000e-005	1.7000e-003	0.0000	5.5201	5.5201	1.3000e-004	0.0000	5.5234
Total	2.7400e-003	1.7900e-003	0.0182	6.0000e-005	6.2400e-003	4.0000e-005	6.2800e-003	1.6600e-003	4.0000e-005	1.7000e-003	0.0000	5.5201	5.5201	1.3000e-004	0.0000	5.5234

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3.6 Paving - 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	0.0171	0.1374	0.4556	7.4000e-004		6.2700e-003	6.2700e-003		5.7800e-003	5.7800e-003	0.0000	56.9593	56.9593	0.0184	0.0000	57.4199
Paving	7.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0179	0.1374	0.4556	7.4000e-004		6.2700e-003	6.2700e-003		5.7800e-003	5.7800e-003	0.0000	56.9593	56.9593	0.0184	0.0000	57.4199

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.7400e-003	1.7900e-003	0.0182	6.0000e-005	5.4300e-003	4.0000e-005	5.4700e-003	1.4600e-003	4.0000e-005	1.5000e-003	0.0000	5.5201	5.5201	1.3000e-004	0.0000	5.5234
Total	2.7400e-003	1.7900e-003	0.0182	6.0000e-005	5.4300e-003	4.0000e-005	5.4700e-003	1.4600e-003	4.0000e-005	1.5000e-003	0.0000	5.5201	5.5201	1.3000e-004	0.0000	5.5234

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3.7 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8950					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	0.8972	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576

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	4.6000e-004	3.0000e-004	3.0600e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9272	0.9272	2.0000e-005	0.0000	0.9277
Total	4.6000e-004	3.0000e-004	3.0600e-003	1.0000e-005	1.0500e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.9272	0.9272	2.0000e-005	0.0000	0.9277

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3.7 Architectural Coating - 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					
Archit. Coating	0.8950					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	3.0000e-005		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.8950	0.0000	0.0000	3.0000e-005		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	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	4.6000e-004	3.0000e-004	3.0600e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.9272	0.9272	2.0000e-005	0.0000	0.9277
Total	4.6000e-004	3.0000e-004	3.0600e-003	1.0000e-005	9.1000e-004	1.0000e-005	9.2000e-004	2.4000e-004	1.0000e-005	2.5000e-004	0.0000	0.9272	0.9272	2.0000e-005	0.0000	0.9277

4.0 Operational Detail - Mobile

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4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Provide Traffic Calming Measures

Implement Trip Reduction Program

Transit Subsidy

Encourage Telecommuting and Alternative Work Schedules

Market Commute Trip Reduction Option

Employee Vanpool/Shuttle

Provide Ride 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	0.1843	2.2380	1.6920	0.0106	0.5579	5.4300e-003	0.5634	0.1501	5.1000e-003	0.1552	0.0000	992.4869	992.4869	0.0619	0.0000	994.0337
Unmitigated	0.1999	2.3837	1.9787	0.0126	0.6916	6.5800e-003	0.6982	0.1860	6.1700e-003	0.1922	0.0000	1,171.3301	1,171.3301	0.0655	0.0000	1,172.9677

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	874.24	318.72	93.44	1,791,593	1,445,398
Parking Lot	0.00	0.00	0.00		
Total	874.24	318.72	93.44	1,791,593	1,445,398

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4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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: Y

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive 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	409.3322	409.3322	0.0169	3.5000e-003	410.7966
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	409.3322	409.3322	0.0169	3.5000e-003	410.7966
NaturalGas Mitigated	0.0119	0.1079	0.0906	6.5000e-004		8.2000e-003	8.2000e-003		8.2000e-003	8.2000e-003	0.0000	117.4175	117.4175	2.2500e-003	2.1500e-003	118.1152
NaturalGas Unmitigated	0.0119	0.1079	0.0906	6.5000e-004		8.2000e-003	8.2000e-003		8.2000e-003	8.2000e-003	0.0000	117.4175	117.4175	2.2500e-003	2.1500e-003	118.1152

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Industrial Park	2.20032e+006	0.0119	0.1079	0.0906	6.5000e-004		8.2000e-003	8.2000e-003		8.2000e-003	8.2000e-003	0.0000	117.4175	117.4175	2.2500e-003	2.1500e-003	118.1152
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		0.0119	0.1079	0.0906	6.5000e-004		8.2000e-003	8.2000e-003		8.2000e-003	8.2000e-003	0.0000	117.4175	117.4175	2.2500e-003	2.1500e-003	118.1152

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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	2.20032e+006	0.0119	0.1079	0.0906	6.5000e-004		8.2000e-003	8.2000e-003		8.2000e-003	8.2000e-003	0.0000	117.4175	117.4175	2.2500e-003	2.1500e-003	118.1152
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		0.0119	0.1079	0.0906	6.5000e-004		8.2000e-003	8.2000e-003		8.2000e-003	8.2000e-003	0.0000	117.4175	117.4175	2.2500e-003	2.1500e-003	118.1152

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	1.27616e+006	406.6119	0.0168	3.4700e-003	408.0666
Parking Lot	8537.76	2.7203	1.1000e-004	2.0000e-005	2.7301
Total		409.3322	0.0169	3.4900e-003	410.7966

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Industrial Park	1.27616e+006	406.6119	0.0168	3.4700e-003	408.0666
Parking Lot	8537.76	2.7203	1.1000e-004	2.0000e-005	2.7301
Total		409.3322	0.0169	3.4900e-003	410.7966

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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5537	1.0000e-005	6.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2400e-003	1.2400e-003	0.0000	0.0000	1.3000e-003
Unmitigated	0.5911	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-003	2.3000e-003	1.0000e-005	0.0000	2.4500e-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	0.0895					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5015					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-003	2.3000e-003	1.0000e-005	0.0000	2.4500e-003
Total	0.5911	1.0000e-005	1.1800e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.3000e-003	2.3000e-003	1.0000e-005	0.0000	2.4500e-003

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

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	0.0895					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4641					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	6.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2400e-003	1.2400e-003	0.0000	0.0000	1.3000e-003
Total	0.5537	1.0000e-005	6.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.2400e-003	1.2400e-003	0.0000	0.0000	1.3000e-003

7.0 Water Detail**7.1 Mitigation Measures 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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	105.7554	0.7757	0.0191	130.8266
Unmitigated	132.1943	0.9696	0.0238	163.5333

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	29.6 / 0	132.1943	0.9696	0.0238	163.5333
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		132.1943	0.9696	0.0238	163.5333

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Industrial Park	23.68 / 0	105.7554	0.7757	0.0191	130.8266
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		105.7554	0.7757	0.0191	130.8266

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.5531	1.3329	0.0000	55.8744
Unmitigated	32.2187	1.9041	0.0000	79.8205

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	158.72	32.2187	1.9041	0.0000	79.8205
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		32.2187	1.9041	0.0000	79.8205

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Industrial Park	111.104	22.5531	1.3329	0.0000	55.8744
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		22.5531	1.3329	0.0000	55.8744

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	48	0	0	5.1	0.73	CNG

Boilers

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

Equipment Type	Number
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Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Annual

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	tons/yr										MT/yr					
Emergency Generator - CNG (0 - 500 HP)	0.0000	0.0000	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

11.0 Vegetation

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

Traditional-Yerba (Cannabis)

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	128.00	1000sqft	2.94	128,000.00	35
Parking Lot	0.56	Acre	0.56	24,393.60	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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

Project Characteristics - Per Project Description and Project Location

Land Use - See Site Plan

Construction Phase - Per Project Description and Construction Schedule

Grading - See Site Plan

Architectural Coating - Use of (Green Seal) low VOC paint (for all exterior and interior areas; EF of no greater than 150 g/L)

Consumer Products -

Area Coating - Use of (Green Seal) low VOC paint (for all exterior and interior areas; EF of no greater than 150 g/L)

Energy Use - Historical Data

Water And Wastewater -

Construction Off-road Equipment Mitigation - https://www.bcew.com/pdf/InfoSheets/IS_62.pdf
<https://www.miratechcorp.com/fa-content/uploads/2013/07/Formulations.pdf>

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - Project Description

Stationary Sources - Emergency Generators and Fire Pumps -

Water Mitigation -

Waste 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_Interior	250.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	8.00	30.00
tblConstructionPhase	NumDays	18.00	86.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	3/31/2021	4/28/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	5/25/2022

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

tblConstructionPhase	PhaseEndDate	3/31/2021	5/12/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	7/29/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	4/14/2021
tblEnergyUse	LightingElect	4.58	3.77
tblEnergyUse	LightingElect	0.88	0.35
tblEnergyUse	T24E	3.78	2.89
tblEnergyUse	T24NG	19.64	16.11
tblGrading	AcresOfGrading	15.00	4.90
tblGrading	AcresOfGrading	5.00	4.90
tblLandUse	Population	0.00	35.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	5.10
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	48.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00

2.0 Emissions Summary

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	98.1178	82.6342	60.6643	0.1163	20.5850	4.0215	24.6065	10.7078	3.7442	14.4520	0.0000	11,217.07 28	11,217.07 28	2.6779	0.0000	11,284.01 95
2022	1.6050	14.0702	14.5725	0.0331	0.6953	0.5905	1.2858	0.1883	0.5604	0.7487	0.0000	3,219.487 5	3,219.487 5	0.4737	0.0000	3,231.330 4
Maximum	98.1178	82.6342	60.6643	0.1163	20.5850	4.0215	24.6065	10.7078	3.7442	14.4520	0.0000	11,217.07 28	11,217.07 28	2.6779	0.0000	11,284.01 95

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	94.2467	40.5562	68.2703	0.1163	8.5469	1.7674	10.3142	4.3187	1.6465	5.9651	0.0000	10,259.41 37	10,259.41 37	2.6304	0.0000	10,325.17 36
2022	1.0374	7.4317	27.5029	0.0331	0.6086	0.2228	0.8314	0.1670	0.2223	0.3893	0.0000	3,287.490 0	3,287.490 0	0.4957	0.0000	3,299.882 7
Maximum	94.2467	40.5562	68.2703	0.1163	8.5469	1.7674	10.3142	4.3187	1.6465	5.9651	0.0000	10,259.41 37	10,259.41 37	2.6304	0.0000	10,325.17 36

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.45	50.38	-27.30	0.00	56.98	56.85	56.95	58.83	56.59	58.20	0.00	6.16	6.16	0.81	0.00	6.13

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	3.2395	1.2000e-004	0.0131	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0281	0.0281	7.0000e-005		0.0300
Energy	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
Mobile	1.6838	16.6195	15.2427	0.0932	4.9527	0.0461	4.9988	1.3301	0.0433	1.3733		9,566.3142	9,566.3142	0.4949		9,578.6877
Stationary	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	4.9883	17.2106	15.7523	0.0967	4.9527	0.0911	5.0438	1.3301	0.0883	1.4183		10,275.5510	10,275.5510	0.5086	0.0130	10,292.1408

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	3.0340	7.0000e-005	7.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0152	0.0152	3.0000e-005		0.0159
Energy	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
Mobile	1.5705	15.6525	12.8565	0.0789	3.9957	0.0381	4.0338	1.0730	0.0357	1.1088		8,106.9003	8,106.9003	0.4651		8,118.5269
Stationary	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	4.6695	16.2436	13.3605	0.0824	3.9957	0.0830	4.0787	1.0730	0.0807	1.1537		8,816.1242	8,816.1242	0.4787	0.0130	8,831.9660

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.39	5.62	15.18	14.77	19.32	8.86	19.13	19.32	8.59	18.66	0.00	14.20	14.20	5.88	0.00	14.19

3.0 Construction Detail**Construction Phase**

Traditional-Yerba (Cannabis) - 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	4/1/2021	3/31/2021	5	0	
2	Site Preparation	Site Preparation	4/1/2021	4/14/2021	5	10	
3	Grading	Grading	4/1/2021	5/12/2021	5	30	
4	Building Construction	Building Construction	4/1/2021	5/25/2022	5	300	
5	Paving	Paving	4/1/2021	7/29/2021	5	86	
6	Architectural Coating	Architectural Coating	4/1/2021	4/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 4.9

Acres of Grading (Grading Phase): 4.9

Acres of Paving: 0.56

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 192,000; Non-Residential Outdoor: 64,000; Striped Parking Area: 1,464 (Architectural Coating – sqft)

OffRoad Equipment

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	64.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	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

Water Exposed Area

Clean Paved Roads

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

3.2 Demolition - 2021

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

3.2 Demolition - 2021

Mitigated Construction On-Site

[illegible]

Mitigated Construction Off-Site

[illegible]

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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					18.5859	0.0000	18.5859	9.9868	0.0000	9.9868			0.0000			0.0000
Off-Road	3.9622	40.8988	18.8515	0.0349		2.0488	2.0488		1.8849	1.8849		3,385.052 4	3,385.052 4	1.0948		3,412.422 2
Total	3.9622	40.8988	18.8515	0.0349	18.5859	2.0488	20.6347	9.9868	1.8849	11.8717		3,385.052 4	3,385.052 4	1.0948		3,412.422 2

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	0.0204	0.0108	0.1389	4.4000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.5000e-004	0.0112		43.4156	43.4156	1.0500e-003		43.4418
Total	0.0204	0.0108	0.1389	4.4000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.5000e-004	0.0112		43.4156	43.4156	1.0500e-003		43.4418

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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					7.2485	0.0000	7.2485	3.8949	0.0000	3.8949			0.0000			0.0000
Off-Road	2.4025	23.3160	18.7770	0.0349		1.1323	1.1323		1.0420	1.0420	0.0000	3,385.052 4	3,385.052 4	1.0948		3,412.422 2
Total	2.4025	23.3160	18.7770	0.0349	7.2485	1.1323	8.3808	3.8949	1.0420	4.9369	0.0000	3,385.052 4	3,385.052 4	1.0948		3,412.422 2

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	0.0204	0.0108	0.1389	4.4000e-004	0.0357	2.8000e-004	0.0360	9.5800e-003	2.5000e-004	9.8300e-003		43.4156	43.4156	1.0500e-003		43.4418
Total	0.0204	0.0108	0.1389	4.4000e-004	0.0357	2.8000e-004	0.0360	9.5800e-003	2.5000e-004	9.8300e-003		43.4156	43.4156	1.0500e-003		43.4418

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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					0.9260	0.0000	0.9260	0.4325	0.0000	0.4325			0.0000			0.0000
Off-Road	1.4586	15.1022	13.0121	0.0238		0.6851	0.6851		0.6441	0.6441		2,293.6013	2,293.6013	0.5845		2,308.2146
Total	1.4586	15.1022	13.0121	0.0238	0.9260	0.6851	1.6111	0.4325	0.6441	1.0766		2,293.6013	2,293.6013	0.5845		2,308.2146

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	0.0407	0.0215	0.2777	8.7000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		86.8311	86.8311	2.1000e-003		86.8837
Total	0.0407	0.0215	0.2777	8.7000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		86.8311	86.8311	2.1000e-003		86.8837

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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					0.3611	0.0000	0.3611	0.1687	0.0000	0.1687			0.0000			0.0000
Off-Road	0.6250	6.0689	9.8991	0.0238		0.2317	0.2317		0.2133	0.2133	0.0000	1,700.9367	1,700.9367	0.5501		1,714.6896
Total	0.6250	6.0689	9.8991	0.0238	0.3611	0.2317	0.5928	0.1687	0.2133	0.3820	0.0000	1,700.9367	1,700.9367	0.5501		1,714.6896

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	0.0407	0.0215	0.2777	8.7000e-004	0.0714	5.5000e-004	0.0720	0.0192	5.1000e-004	0.0197		86.8311	86.8311	2.1000e-003		86.8837
Total	0.0407	0.0215	0.2777	8.7000e-004	0.0714	5.5000e-004	0.0720	0.0192	5.1000e-004	0.0197		86.8311	86.8311	2.1000e-003		86.8837

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	1.4306	12.6076	12.6458	0.0205		0.6873	0.6873		0.6516	0.6516		1,927.681 1	1,927.681 1	0.4137		1,938.022 5
Total	1.4306	12.6076	12.6458	0.0205		0.6873	0.6873		0.6516	0.6516		1,927.681 1	1,927.681 1	0.4137		1,938.022 5

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	0.0807	2.7211	0.4780	7.2900e-003	0.1695	7.2500e-003	0.1768	0.0488	6.9300e-003	0.0558		762.4362	762.4362	0.0545		763.7979
Worker	0.2605	0.1378	1.7775	5.5800e-003	0.5257	3.5400e-003	0.5293	0.1395	3.2600e-003	0.1427		555.7191	555.7191	0.0135		556.0555
Total	0.3412	2.8590	2.2555	0.0129	0.6953	0.0108	0.7060	0.1883	0.0102	0.1985		1,318.155 3	1,318.155 3	0.0679		1,319.853 4

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	0.7747	5.0170	25.4661	0.0205		0.2442	0.2442		0.2442	0.2442	0.0000	1,995.6836	1,995.6836	0.4357		2,006.5749
Total	0.7747	5.0170	25.4661	0.0205		0.2442	0.2442		0.2442	0.2442	0.0000	1,995.6836	1,995.6836	0.4357		2,006.5749

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	0.0807	2.7211	0.4780	7.2900e-003	0.1514	7.2500e-003	0.1587	0.0444	6.9300e-003	0.0513		762.4362	762.4362	0.0545		763.7979
Worker	0.2605	0.1378	1.7775	5.5800e-003	0.4572	3.5400e-003	0.4607	0.1226	3.2600e-003	0.1259		555.7191	555.7191	0.0135		556.0555
Total	0.3412	2.8590	2.2555	0.0129	0.6086	0.0108	0.6194	0.1670	0.0102	0.1772		1,318.1553	1,318.1553	0.0679		1,319.8534

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	1.2890	11.3716	12.5040	0.0205		0.5808	0.5808		0.5512	0.5512		1,928.4037	1,928.4037	0.4095		1,938.6413
Total	1.2890	11.3716	12.5040	0.0205		0.5808	0.5808		0.5512	0.5512		1,928.4037	1,928.4037	0.4095		1,938.6413

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	0.0752	2.5756	0.4426	7.2200e-003	0.1695	6.2700e-003	0.1758	0.0488	5.9900e-003	0.0548		755.5952	755.5952	0.0522		756.9009
Worker	0.2408	0.1230	1.6260	5.3700e-003	0.5257	3.4400e-003	0.5292	0.1395	3.1600e-003	0.1426		535.4886	535.4886	0.0120		535.7882
Total	0.3160	2.6986	2.0685	0.0126	0.6953	9.7100e-003	0.7050	0.1883	9.1500e-003	0.1974		1,291.0838	1,291.0838	0.0642		1,292.6891

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	0.7214	4.7331	25.4344	0.0205		0.2131	0.2131		0.2131	0.2131	0.0000	1,996.406 2	1,996.406 2	0.4315		2,007.193 7
Total	0.7214	4.7331	25.4344	0.0205		0.2131	0.2131		0.2131	0.2131	0.0000	1,996.406 2	1,996.406 2	0.4315		2,007.193 7

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	0.0752	2.5756	0.4426	7.2200e-003	0.1514	6.2700e-003	0.1577	0.0444	5.9900e-003	0.0504		755.5952	755.5952	0.0522		756.9009
Worker	0.2408	0.1230	1.6260	5.3700e-003	0.4572	3.4400e-003	0.4606	0.1226	3.1600e-003	0.1258		535.4886	535.4886	0.0120		535.7882
Total	0.3160	2.6986	2.0685	0.0126	0.6086	9.7100e-003	0.6183	0.1670	9.1500e-003	0.1762		1,291.083 8	1,291.083 8	0.0642		1,292.689 1

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

3.6 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0012	9.5408	10.8042	0.0172		0.4929	0.4929		0.4569	0.4569		1,611.7115	1,611.7115	0.4880		1,623.9110
Paving	0.0171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0182	9.5408	10.8042	0.0172		0.4929	0.4929		0.4569	0.4569		1,611.7115	1,611.7115	0.4880		1,623.9110

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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

3.6 Paving - 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	0.3981	3.1964	10.5950	0.0172		0.1459	0.1459		0.1344	0.1344	0.0000	1,460.162 6	1,460.162 6	0.4723		1,471.968 7
Paving	0.0171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4151	3.1964	10.5950	0.0172		0.1459	0.1459		0.1344	0.1344	0.0000	1,460.162 6	1,460.162 6	0.4723		1,471.968 7

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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

3.7 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	89.5009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	89.7198	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	0.0529	0.0280	0.3611	1.1300e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		112.8804	112.8804	2.7300e-003		112.9488
Total	0.0529	0.0280	0.3611	1.1300e-003	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		112.8804	112.8804	2.7300e-003		112.9488

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

3.7 Architectural Coating - 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					
Archit. Coating	89.5009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	2.9700e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	89.5009	0.0000	0.0000	2.9700e-003		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
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	0.0529	0.0280	0.3611	1.1300e-003	0.0929	7.2000e-004	0.0936	0.0249	6.6000e-004	0.0256		112.8804	112.8804	2.7300e-003		112.9488
Total	0.0529	0.0280	0.3611	1.1300e-003	0.0929	7.2000e-004	0.0936	0.0249	6.6000e-004	0.0256		112.8804	112.8804	2.7300e-003		112.9488

4.0 Operational Detail - Mobile

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Provide Traffic Calming Measures

Implement Trip Reduction Program

Transit Subsidy

Encourage Telecommuting and Alternative Work Schedules

Market Commute Trip Reduction Option

Employee Vanpool/Shuttle

Provide Ride 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	1.5705	15.6525	12.8565	0.0789	3.9957	0.0381	4.0338	1.0730	0.0357	1.1088		8,106.9003	8,106.9003	0.4651		8,118.5269
Unmitigated	1.6838	16.6195	15.2427	0.0932	4.9527	0.0461	4.9988	1.3301	0.0433	1.3733		9,566.3142	9,566.3142	0.4949		9,578.6877

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	874.24	318.72	93.44	1,791,593	1,445,398
Parking Lot	0.00	0.00	0.00		
Total	874.24	318.72	93.44	1,791,593	1,445,398

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
NaturalGas Unmitigated	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	6028.27	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
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		0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232

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	6.02827	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
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		0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232

6.0 Area Detail**6.1 Mitigation Measures Area**

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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	3.0340	7.0000e-005	7.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0152	0.0152	3.0000e-005		0.0159
Unmitigated	3.2395	1.2000e-004	0.0131	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0281	0.0281	7.0000e-005		0.0300

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7478					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2200e-003	1.2000e-004	0.0131	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0281	0.0281	7.0000e-005		0.0300
Total	3.2395	1.2000e-004	0.0131	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0281	0.0281	7.0000e-005		0.0300

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2000e-004	7.0000e-005	7.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0152	0.0152	3.0000e-005		0.0159
Total	3.0340	7.0000e-005	7.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0152	0.0152	3.0000e-005		0.0159

7.0 Water Detail

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

7.1 Mitigation Measures 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	48	0	0	5.1	0.73	CNG

Boilers

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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Summer

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)	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

11.0 Vegetation

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

Traditional-Yerba (Cannabis)
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	128.00	1000sqft	2.94	128,000.00	35
Parking Lot	0.56	Acre	0.56	24,393.60	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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

Project Characteristics - Per Project Description and Project Location

Land Use - See Site Plan

Construction Phase - Per Project Description and Construction Schedule

Grading - See Site Plan

Architectural Coating - Use of (Green Seal) low VOC paint (for all exterior and interior areas; EF of no greater than 150 g/L)

Consumer Products -

Area Coating - Use of (Green Seal) low VOC paint (for all exterior and interior areas; EF of no greater than 150 g/L)

Energy Use - Historical Data

Water And Wastewater -

Construction Off-road Equipment Mitigation - https://www.bcew.com/pdf/InfoSheets/IS_62.pdf
<https://www.miratechcorp.com/fa-content/uploads/2013/07/Formulations.pdf>

Mobile Land Use Mitigation -

Mobile Commute Mitigation -

Area Mitigation - Project Description

Stationary Sources - Emergency Generators and Fire Pumps -

Water Mitigation -

Waste 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_Interior	250.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	150
tblAreaCoating	Area_EF_Parking	250	150
tblAreaMitigation	UseLowVOCPaintResidentialExteriorValue	250	150

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

tblAreaMitigation	UseLowVOCPaintResidentialInteriorValue	250	150
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	15
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	DPF	No Change	Level 3
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	Electrical
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	FuelType	Diesel	CNG
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	OxidationCatalyst	0.00	40.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	8.00	30.00
tblConstructionPhase	NumDays	18.00	86.00
tblConstructionPhase	NumDays	5.00	10.00
tblConstructionPhase	PhaseEndDate	3/31/2021	4/28/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	5/25/2022

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

tblConstructionPhase	PhaseEndDate	3/31/2021	5/12/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	7/29/2021
tblConstructionPhase	PhaseEndDate	3/31/2021	4/14/2021
tblEnergyUse	LightingElect	4.58	3.77
tblEnergyUse	LightingElect	0.88	0.35
tblEnergyUse	T24E	3.78	2.89
tblEnergyUse	T24NG	19.64	16.11
tblGrading	AcresOfGrading	15.00	4.90
tblGrading	AcresOfGrading	5.00	4.90
tblLandUse	Population	0.00	35.00
tblOffRoadEquipment	HorsePower	231.00	226.00
tblOffRoadEquipment	HorsePower	187.00	174.00
tblOffRoadEquipment	HorsePower	130.00	125.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	HorsePower	247.00	255.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblOffRoadEquipment	UsageHours	8.00	1.00

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

tblOffRoadEquipment	UsageHours	8.00	1.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	7.00
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	5.10
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	48.00
tblTripsAndVMT	WorkerTripNumber	18.00	10.00
tblTripsAndVMT	WorkerTripNumber	13.00	5.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblTripsAndVMT	WorkerTripNumber	23.00	18.00

2.0 Emissions Summary

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	98.0902	82.6889	60.2080	0.1147	20.5850	4.0218	24.6068	10.7078	3.7445	14.4522	0.0000	11,066.58 30	11,066.58 30	2.6817	0.0000	11,133.62 66
2022	1.5928	14.1035	14.3608	0.0321	0.6953	0.5908	1.2860	0.1883	0.5606	0.7489	0.0000	3,123.740 2	3,123.740 2	0.4790	0.0000	3,135.714 6
Maximum	98.0902	82.6889	60.2080	0.1147	20.5850	4.0218	24.6068	10.7078	3.7445	14.4522	0.0000	11,066.58 30	11,066.58 30	2.6817	0.0000	11,133.62 66

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	94.2191	40.6109	67.8141	0.1147	8.5469	1.7676	10.3145	4.3187	1.6467	5.9654	0.0000	10,108.92 39	10,108.92 39	2.6343	0.0000	10,174.78 07
2022	1.0251	7.4650	27.2912	0.0321	0.6086	0.2231	0.8317	0.1670	0.2225	0.3895	0.0000	3,191.742 7	3,191.742 7	0.5010	0.0000	3,204.266 9
Maximum	94.2191	40.6109	67.8141	0.1147	8.5469	1.7676	10.3145	4.3187	1.6467	5.9654	0.0000	10,108.92 39	10,108.92 39	2.6343	0.0000	10,174.78 07

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	4.45	50.33	-27.54	0.00	56.98	56.84	56.95	58.83	56.58	58.19	0.00	6.27	6.27	0.81	0.00	6.24

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	3.2395	1.2000e-004	0.0131	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0281	0.0281	7.0000e-005		0.0300
Energy	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
Mobile	1.3548	16.6921	14.1004	0.0856	4.9527	0.0465	4.9992	1.3301	0.0436	1.3737		8,799.3283	8,799.3283	0.5345		8,812.6901
Stationary	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	4.6593	17.2833	14.6099	0.0891	4.9527	0.0915	5.0442	1.3301	0.0886	1.4186		9,508.5652	9,508.5652	0.5481	0.0130	9,526.1433

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	3.0340	7.0000e-005	7.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0152	0.0152	3.0000e-005		0.0159
Energy	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
Mobile	1.2459	15.6445	12.1810	0.0723	3.9957	0.0385	4.0341	1.0730	0.0361	1.1091		7,438.9798	7,438.9798	0.5068		7,451.6507
Stationary	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	4.3449	16.2355	12.6851	0.0759	3.9957	0.0834	4.0791	1.0730	0.0810	1.1540		8,148.2037	8,148.2037	0.5205	0.0130	8,165.0898

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	6.75	6.06	13.17	14.89	19.32	8.82	19.13	19.32	8.56	18.65	0.00	14.31	14.31	5.05	0.00	14.29

3.0 Construction Detail**Construction Phase**

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2021	3/31/2021	5	0	
2	Site Preparation	Site Preparation	4/1/2021	4/14/2021	5	10	
3	Grading	Grading	4/1/2021	5/12/2021	5	30	
4	Building Construction	Building Construction	4/1/2021	5/25/2022	5	300	
5	Paving	Paving	4/1/2021	7/29/2021	5	86	
6	Architectural Coating	Architectural Coating	4/1/2021	4/28/2021	5	20	

Acres of Grading (Site Preparation Phase): 4.9

Acres of Grading (Grading Phase): 4.9

Acres of Paving: 0.56

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 192,000; Non-Residential Outdoor: 64,000; Striped Parking Area: 1,464 (Architectural Coating – sqft)

OffRoad Equipment

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	4.00	226	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Site Preparation	Graders	1	8.00	174	0.41
Paving	Pavers	1	7.00	125	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	1.00	255	0.40
Grading	Rubber Tired Dozers	1	1.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Excavators	3	8.00	158	0.38
Grading	Excavators	1	8.00	158	0.38
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Paving Equipment	2	6.00	132	0.36
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	7	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	64.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	9	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	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

Water Exposed Area

Clean Paved Roads

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

3.2 Demolition - 2021

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

3.2 Demolition - 2021

Mitigated Construction On-Site

[illegible]

Mitigated Construction Off-Site

[illegible]

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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					18.5859	0.0000	18.5859	9.9868	0.0000	9.9868			0.0000			0.0000
Off-Road	3.9622	40.8988	18.8515	0.0349		2.0488	2.0488		1.8849	1.8849		3,385.052 4	3,385.052 4	1.0948		3,412.422 2
Total	3.9622	40.8988	18.8515	0.0349	18.5859	2.0488	20.6347	9.9868	1.8849	11.8717		3,385.052 4	3,385.052 4	1.0948		3,412.422 2

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	0.0189	0.0123	0.1140	3.8000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.5000e-004	0.0112		37.7627	37.7627	9.0000e-004		37.7853
Total	0.0189	0.0123	0.1140	3.8000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.5000e-004	0.0112		37.7627	37.7627	9.0000e-004		37.7853

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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					7.2485	0.0000	7.2485	3.8949	0.0000	3.8949			0.0000			0.0000
Off-Road	2.4025	23.3160	18.7770	0.0349		1.1323	1.1323		1.0420	1.0420	0.0000	3,385.052 4	3,385.052 4	1.0948		3,412.422 2
Total	2.4025	23.3160	18.7770	0.0349	7.2485	1.1323	8.3808	3.8949	1.0420	4.9369	0.0000	3,385.052 4	3,385.052 4	1.0948		3,412.422 2

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	0.0189	0.0123	0.1140	3.8000e-004	0.0357	2.8000e-004	0.0360	9.5800e-003	2.5000e-004	9.8300e-003		37.7627	37.7627	9.0000e-004		37.7853
Total	0.0189	0.0123	0.1140	3.8000e-004	0.0357	2.8000e-004	0.0360	9.5800e-003	2.5000e-004	9.8300e-003		37.7627	37.7627	9.0000e-004		37.7853

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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					0.9260	0.0000	0.9260	0.4325	0.0000	0.4325			0.0000			0.0000
Off-Road	1.4586	15.1022	13.0121	0.0238		0.6851	0.6851		0.6441	0.6441		2,293.6013	2,293.6013	0.5845		2,308.2146
Total	1.4586	15.1022	13.0121	0.0238	0.9260	0.6851	1.6111	0.4325	0.6441	1.0766		2,293.6013	2,293.6013	0.5845		2,308.2146

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	0.0378	0.0246	0.2280	7.6000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		75.5254	75.5254	1.8100e-003		75.5706
Total	0.0378	0.0246	0.2280	7.6000e-004	0.0822	5.5000e-004	0.0827	0.0218	5.1000e-004	0.0223		75.5254	75.5254	1.8100e-003		75.5706

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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					0.3611	0.0000	0.3611	0.1687	0.0000	0.1687			0.0000			0.0000
Off-Road	0.6250	6.0689	9.8991	0.0238		0.2317	0.2317		0.2133	0.2133	0.0000	1,700.9367	1,700.9367	0.5501		1,714.6896
Total	0.6250	6.0689	9.8991	0.0238	0.3611	0.2317	0.5928	0.1687	0.2133	0.3820	0.0000	1,700.9367	1,700.9367	0.5501		1,714.6896

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	0.0378	0.0246	0.2280	7.6000e-004	0.0714	5.5000e-004	0.0720	0.0192	5.1000e-004	0.0197		75.5254	75.5254	1.8100e-003		75.5706
Total	0.0378	0.0246	0.2280	7.6000e-004	0.0714	5.5000e-004	0.0720	0.0192	5.1000e-004	0.0197		75.5254	75.5254	1.8100e-003		75.5706

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	1.4306	12.6076	12.6458	0.0205		0.6873	0.6873		0.6516	0.6516		1,927.681 1	1,927.681 1	0.4137		1,938.022 5
Total	1.4306	12.6076	12.6458	0.0205		0.6873	0.6873		0.6516	0.6516		1,927.681 1	1,927.681 1	0.4137		1,938.022 5

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	0.0851	2.7416	0.5692	7.0400e-003	0.1695	7.5000e-003	0.1770	0.0488	7.1800e-003	0.0560		736.3092	736.3092	0.0616		737.8492
Worker	0.2419	0.1577	1.4590	4.8500e-003	0.5257	3.5400e-003	0.5293	0.1395	3.2600e-003	0.1427		483.3626	483.3626	0.0116		483.6515
Total	0.3269	2.8993	2.0282	0.0119	0.6953	0.0110	0.7063	0.1883	0.0104	0.1987		1,219.671 8	1,219.671 8	0.0732		1,221.500 7

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	0.7747	5.0170	25.4661	0.0205		0.2442	0.2442		0.2442	0.2442	0.0000	1,995.6836	1,995.6836	0.4357		2,006.5749
Total	0.7747	5.0170	25.4661	0.0205		0.2442	0.2442		0.2442	0.2442	0.0000	1,995.6836	1,995.6836	0.4357		2,006.5749

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	0.0851	2.7416	0.5692	7.0400e-003	0.1514	7.5000e-003	0.1589	0.0444	7.1800e-003	0.0516		736.3092	736.3092	0.0616		737.8492
Worker	0.2419	0.1577	1.4590	4.8500e-003	0.4572	3.5400e-003	0.4607	0.1226	3.2600e-003	0.1259		483.3626	483.3626	0.0116		483.6515
Total	0.3269	2.8993	2.0282	0.0119	0.6086	0.0110	0.6197	0.1670	0.0104	0.1774		1,219.6718	1,219.6718	0.0732		1,221.5007

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	1.2890	11.3716	12.5040	0.0205		0.5808	0.5808		0.5512	0.5512		1,928.4037	1,928.4037	0.4095		1,938.6413
Total	1.2890	11.3716	12.5040	0.0205		0.5808	0.5808		0.5512	0.5512		1,928.4037	1,928.4037	0.4095		1,938.6413

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	0.0794	2.5912	0.5285	6.9700e-003	0.1695	6.5100e-003	0.1760	0.0488	6.2200e-003	0.0550		729.5203	729.5203	0.0592		730.9999
Worker	0.2244	0.1407	1.3283	4.6700e-003	0.5257	3.4400e-003	0.5292	0.1395	3.1600e-003	0.1426		465.8163	465.8163	0.0103		466.0733
Total	0.3038	2.7319	1.8568	0.0116	0.6953	9.9500e-003	0.7052	0.1883	9.3800e-003	0.1977		1,195.3365	1,195.3365	0.0695		1,197.0732

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	0.7214	4.7331	25.4344	0.0205		0.2131	0.2131		0.2131	0.2131	0.0000	1,996.406 2	1,996.406 2	0.4315		2,007.193 7
Total	0.7214	4.7331	25.4344	0.0205		0.2131	0.2131		0.2131	0.2131	0.0000	1,996.406 2	1,996.406 2	0.4315		2,007.193 7

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	0.0794	2.5912	0.5285	6.9700e-003	0.1514	6.5100e-003	0.1579	0.0444	6.2200e-003	0.0506		729.5203	729.5203	0.0592		730.9999
Worker	0.2244	0.1407	1.3283	4.6700e-003	0.4572	3.4400e-003	0.4606	0.1226	3.1600e-003	0.1258		465.8163	465.8163	0.0103		466.0733
Total	0.3038	2.7319	1.8568	0.0116	0.6086	9.9500e-003	0.6186	0.1670	9.3800e-003	0.1764		1,195.336 5	1,195.336 5	0.0695		1,197.073 2

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

3.6 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0012	9.5408	10.8042	0.0172		0.4929	0.4929		0.4569	0.4569		1,611.7115	1,611.7115	0.4880		1,623.9110
Paving	0.0171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0182	9.5408	10.8042	0.0172		0.4929	0.4929		0.4569	0.4569		1,611.7115	1,611.7115	0.4880		1,623.9110

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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

3.6 Paving - 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	0.3981	3.1964	10.5950	0.0172		0.1459	0.1459		0.1344	0.1344	0.0000	1,460.162 6	1,460.162 6	0.4723		1,471.968 7
Paving	0.0171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.4151	3.1964	10.5950	0.0172		0.1459	0.1459		0.1344	0.1344	0.0000	1,460.162 6	1,460.162 6	0.4723		1,471.968 7

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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

3.7 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	89.5009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	89.7198	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309

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	0.0491	0.0320	0.2964	9.8000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		98.1830	98.1830	2.3500e-003		98.2417
Total	0.0491	0.0320	0.2964	9.8000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290		98.1830	98.1830	2.3500e-003		98.2417

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

3.7 Architectural Coating - 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					
Archit. Coating	89.5009					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	2.9700e-003		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	89.5009	0.0000	0.0000	2.9700e-003		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
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	0.0491	0.0320	0.2964	9.8000e-004	0.0929	7.2000e-004	0.0936	0.0249	6.6000e-004	0.0256		98.1830	98.1830	2.3500e-003		98.2417
Total	0.0491	0.0320	0.2964	9.8000e-004	0.0929	7.2000e-004	0.0936	0.0249	6.6000e-004	0.0256		98.1830	98.1830	2.3500e-003		98.2417

4.0 Operational Detail - Mobile

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Provide Traffic Calming Measures

Implement Trip Reduction Program

Transit Subsidy

Encourage Telecommuting and Alternative Work Schedules

Market Commute Trip Reduction Option

Employee Vanpool/Shuttle

Provide Ride 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	1.2459	15.6445	12.1810	0.0723	3.9957	0.0385	4.0341	1.0730	0.0361	1.1091		7,438.9798	7,438.9798	0.5068		7,451.6507
Unmitigated	1.3548	16.6921	14.1004	0.0856	4.9527	0.0465	4.9992	1.3301	0.0436	1.3737		8,799.3283	8,799.3283	0.5345		8,812.6901

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Industrial Park	874.24	318.72	93.44	1,791,593	1,445,398
Parking Lot	0.00	0.00	0.00		
Total	874.24	318.72	93.44	1,791,593	1,445,398

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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: Y

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
NaturalGas Unmitigated	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	6028.27	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
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		0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232

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	6.02827	0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232
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		0.0650	0.5910	0.4965	3.5500e-003		0.0449	0.0449		0.0449	0.0449		709.2087	709.2087	0.0136	0.0130	713.4232

6.0 Area Detail**6.1 Mitigation Measures Area**

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

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	3.0340	7.0000e-005	7.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0152	0.0152	3.0000e-005		0.0159
Unmitigated	3.2395	1.2000e-004	0.0131	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0281	0.0281	7.0000e-005		0.0300

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.7478					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.2200e-003	1.2000e-004	0.0131	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0281	0.0281	7.0000e-005		0.0300
Total	3.2395	1.2000e-004	0.0131	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005		0.0281	0.0281	7.0000e-005		0.0300

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4904					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.5430					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2000e-004	7.0000e-005	7.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0152	0.0152	3.0000e-005		0.0159
Total	3.0340	7.0000e-005	7.6100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0152	0.0152	3.0000e-005		0.0159

7.0 Water Detail

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

7.1 Mitigation Measures 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
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	48	0	0	5.1	0.73	CNG

Boilers

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

Traditional-Yerba (Cannabis) - Kern-Mojave Desert County, Winter

Equipment Type	Number
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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)	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

11.0 Vegetation