MOJAVE DRIVE SELF-STORAGE PROJECT

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Prepared for:
City of Victorville Development Department
14343 Civic Drive, PO Box 5001
Victorville, CA 92393

Prepared by:
RCH Group
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RCHGROUP
planning & environmental consulting

February 2021

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ENVIRONMENTAL CHECKLIST

Initial Study/Mitigated Negative Declaration

1. Project Title: Mojave Drive Self-Storage Project

2. Lead Agency Name and Address: City of Victorville
Planning Department
14343 Civic Drive, PO Box 5001
Victorville, CA 92393

3. Contact Person and Phone Number: Alex Jauregui
City of Victorville Planning Division
Senior Planner
(760) 955-5135

4. Project Location: APN 3128-621-04-0000

5. Project Sponsor: Ohana Alliance Group, Inc.
Billy Phong
Billyphong@gmail.com
(916) 545-8888

6. General Plan Designation(s): Light Industrial

7. Zoning Designation: M-1 (Light Industrial)

8. Description of Project and Existing Setting:

Project Overview

Ohana Alliance Group, Inc. (applicant) is proposing to develop an enclosed self-storage and RV storage facility on an ±8.5-acre parcel of land (A.P.N. 3128-621-04-0000) in the City of Victorville, CA. The subject property is currently zoned M-1 (Light Industrial), however the project's proposed use is not permitted under M-1 zoning. The project requires compliance with the California Environmental Quality Act (CEQA) because the project requires discretionary approvals for the required Conditional Use Permit and Development Code Amendment. **Figure 1** shows the project site location and **Figure 2** shows the site plan.

The project would include 142,435 square-feet of enclosed self-storage units (within three storage buildings) and 158 Recreational Vehicle (RV) storage spaces (136 outdoor spaces and 22 indoor spaces). Approximately 94 outdoor spaces (69% of total outdoor spaces) would be provided with canopy cover that would shade the RVs. The project would also include an RV dump station and washing area. The project would also include a 1,400 square-foot office for approximately 2 employees and a 1,400 square-foot residential dwelling unit for employees.

The project would also include access and parking improvements, roadwork improvements on Mesa Linda, the installation of City-approved drainage features and the future installation of PV solar panels on the west canopy shade structure in the east RV parking lot.

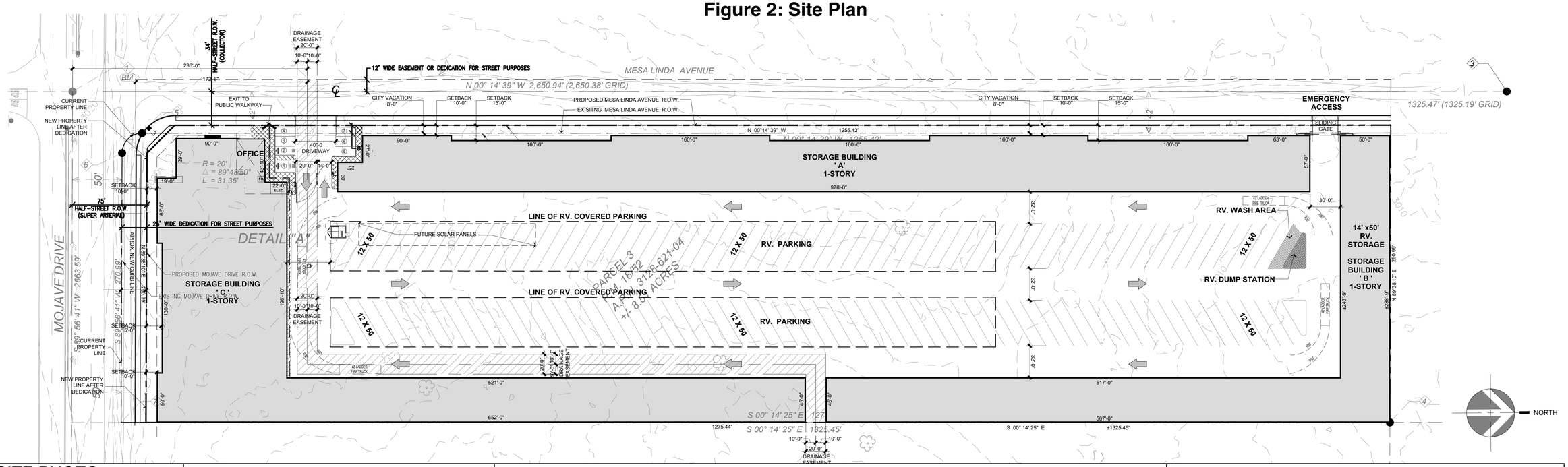
Figure 1: Project Site Location



RCH GROUP planning & environmental consulting

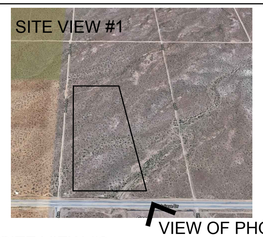
Source: Google Earth and RCH Group 2020

Figure 2: Site Plan



SITE PHOTO

SITE VIEW #1



VIEW OF PHOTO #2

SITE VIEW #2



VICINITY MAP



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A4.1 ELEVATIONS - COLOR

DIRECTORY

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E-MAIL: dmeinecke@jordanarchitects.com

PROJECT DATA

BASIS OF DESIGN

	REQUIRED	PROVIDED
ZONE	M-1T (T= SUPPLEMENTAL ZONING)	
STRUCTURE HEIGHT	50 FT. ABOVE NATURAL GRADE	
FLOOR AREA RATIO	1.0	0.39 (145,235 S.F.)
LOT COVERAGE (EXCLUDES LOADING AREAS, RECESSED ENTRANCES AND COURTYARD)	NA.	NA.
SETBACKS :		
FRONT	10 FT.	10 / 15 FT.
INTERIOR SIDE	0 FT.	0 FT.
STREET SIDE	10 FT.	10 / 15 FT.
INTERIOR REAR	0 FT.	0 FT.
INTERIOR LANDSCAPING	5 FT. AT DEDICATED ROW	12,431 SF.
OFFICE PARKING SPACES	1 SPACE PER 300 SF OF OFFICE	3 SPACES
PARKING SIZE	9' X 20'	9' X 20'

BUILDING CONSTRUCTION TYPE: IIB
OCCUPANCY CLASSIFICATION: S-1.
BUILDINGS ARE EQUIPPED WITH AUTOMATIC FIRE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13.

SITE DATA

LOT AREA	370,690	SQ. FT.
	8.51	ACRES
PARKING PROVIDED		
STANDARDS	5	
ACCESSIBLE	2	
TOTAL	7	

BUILDING AREA TABULATION (Square Feet)

BUILDING	SELF STORAGE	OFFICE & RESIDENCE	GROSS AREA
BUILDING A			51,275
STORAGE	51,275		
BUILDING B			36,565
STORAGE	36,565		
BUILDING C			54,595
STORAGE	54,595		
OFFICE		1,400	1,400
RESIDENTAL		1,400	1,400
TOTAL	142,435	2,800	145,235

NOTE

1. ALL NEW SIGNAGE AND FREESTANDING SIGNAGE SHALL COMPLY WITH TITLE 16 STANDARDS. (DEVELOPMENT CODE SECTION 16-3.22.140 - TABLE 22-4).
2. UTILITY EQUIPMENT SHALL BE SCREENED FROM PUBLIC VIEW VIA LOCATION WITHIN AN ARCHITECTURALLY INTEGRATED STRUCTURE, UTILITY ROOM, OR LANDSCAPING AND PLACEMENT SUFFICIENT TO SCREEN SUCH EQUIPMENT. (INDUSTRIAL DESIGN GUIDELINES, SECTION 16-3.10.060 (d)(1)).
3. UNDERGROUNDING OF UTILITIES AND STREET IMPROVEMENTS ARE REQUIRED IN CONJUNCTION WITH ANY NEW DEVELOPMENT. (DEVELOPMENT CODE, SECTION 16-5.12.170 & MUNICIPAL CODE, SECTION 9.32.040).

BUILDING A - FULLY SPRINKLERED
BUILDING B - FULLY SPRINKLERED
BUILDING C - FULLY SPRINKLERED

FIRE NOTES

1. AN APPROVED WATER SUPPLY SYSTEM, COMPLETE WITH STREET FIRE HYDRANTS COMPLYING WITH FIRE DEPARTMENT STANDARDS SHALL BE IN PLACE PRIOR TO CONSTRUCTION.
2. KNOX BOX / KEY BOX IS REQUIRED, AND SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE FIRE DEPARTMENT STANDARDS.
3. ACCESS GATES SHALL BE PROVIDED WITH AN "OPTICOM" RECEIVER CAPABLE OF OPENING GATES VIA DECODING OF "OPTICOM" STROBE SIGNAL TRANSMITTED BY FIRE, POLICE AND AMBULANCE UNITS. ALL ACCESS GATES SHALL REQUIRE MECHANICAL MEANS FOR OPENING IN THE EVENT OF POWER FAILURE, GATE SHALL IMPINGE ON REQUIRED CLEAR WIDTH WHEN FULLY OPEN, AND SHALL BE EQUIPPED WITH KNOX BOX LOCK ACTUATION DEVICES.

STATEMENT OF OPERATION

MANAGEMENT AND HOURS OF OPERATION

PROFESSIONAL MANAGEMENT PERSONNEL WILL BE ON SITE DURING REGULAR BUSINESS HOURS. OFFICE HOURS ARE TENTATIVELY SCHEDULED FROM 9:00 A.M. TO 6:00 P.M. MONDAY THROUGH FRIDAY AND 10:00 A.M. TO 4:00 P.M. SATURDAYS AND SUNDAYS. THE SECURITY GATE ACCESS FOR ESTABLISHED SELF STORAGE CUSTOMERS WITH CURRENT ACCOUNT STATUS WILL BE FROM 6:00 A.M. TO 9:00 P.M., 7 DAYS-A-WEEK.

SEVICES PROPOSED

TO PROVIDE SERVICES FOR SELF STORAGE INCLUDES LEASABLE STORAGE SPACE AND SALES OF ITEMS FOR STORAGE. REQUIRED EMPLOYEES TWO STAFF MEMBERS DURING DAY TIMES HOURS, SECURITY SYSTEM WILL BE IN PLACE DURING EVENING HOURS.

FIRE

MONITORED FIRE SPRINKLER SYSTEM(S) ARE REQUIRED FOR THE PROPOSED BUILDINGS. PLANS SHALL BE SUBMITTED PRIOR TO CONSTRUCTION. INTERIOR/EXTERIOR FIRE DEPARTMENT ACCESS ROADWAY/FIRE LANES SHALL BE REQUIRED PER FIRE DEPARTMENT STANDARD. FIRE DEPARTMENT ACCESS ROADWAYS PROVIDING ACCESS TO THE BUILDINGS IN THIS PROJECT SHALL BE A MINIMUM OF 26 FEET WIDE. IF GATES INSTALLED, MUST COMPLY WITH FIRE DEPARTMENT STANDARDS (SEC D103.5) 12'-0" MIN. WIDTH FOR DIVIDED ACCESS. KNOX BOX/KEY BOX IS REQUIRED, AND SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH FIRE DEPARTMENT STANDARDS. ACCESS GATES SHALL BE PROVIDED WITH AN "OPTICOM" RECEIVER CAPABLE OF OPENING GATES VIA DECODING OF THE "OPTICOM" STROBE SIGNAL TRANSMITTED BY FIRE, POLICE, AND AMBULANCE UNIT. ALL ACCESS GATES SHALE REQUIRED MECHANICAL MEANS FOR OPENING IN EVENT OF POWER FAILURE, SHALL NOT IMPINGE ON REQUIRED CLEAR WIDTH WHEN FULLY OPEN, AND SHALL BE EQUIPPED WITH KNOW BOX LOCK ACTUATION DEVICES.

BUILDING A - FULLY SPRINKLERED
BUILDING B - FULLY SPRINKLERED
BUILDING C - FULLY SPRINKLERED

OHANA ALLIANCE
MOJAVE DRIVE SELF-STORAGE
VICTORVILLE, CA

SCHEME 'E' A1.0

SITE PLAN

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JOB NUMBER: 20-113
SCALE:
DATE: 07/07/2020

JORDAN ARCHITECTS
131 CALLE IGLESIA, SUITE 100
SAN CLEMENTE, CA 92672
949.388.8090

Project History and Background

The ±8.5-acre parcel of land was purchased by the applicant with the intent to develop leasable self-storage, RV parking and sale of items needed for storage. The rapidly growing population in the City and geographical location of the project provides an ideal opportunity to provide storage services for the City's residents.

Proposed Operations

Professional management personnel would be onsite during normal operating hours. Normal operating office hours would be Monday through Friday, 9:00 a.m. to 5:00 p.m. Weekend office hours would be 10:00 a.m. to 4:00 p.m. The security gate access for established self-storage customers with current account status would be from 6:00 a.m. to 9:00 p.m., seven days a week.

Access

The project would include a primary entrance/exit and an emergency entrance/exit. The primary entrance/exit would be located in the southwest area of the project site and would be accessed from Mesa Linda Avenue. The primary entrance would include seven parking spaces (including two ADA spaces). The emergency entrance/exit would be located in the northwest area of the project site and would be accessed from Mesa Linda Avenue (**See Figure 2)**.

Construction and Schedule

Construction of the project is estimated to require approximately 14 months, with construction anticipated to begin Summer/Fall 2021 and end in Fall/Winter 2022. Construction would consist of site preparation, grading, paving, building construction and architectural coating.

9. Surrounding Land Uses and Existing Setting:

The project site is surrounded by the following land uses (**See Figure 1**):

- North Property Line – Vacant land (Zoned for Light Industrial)
- East Property Line – Vacant land (Zoned for Light Industrial) and Interstate 15 (four miles east)
- South Property Line – Mojave Drive (immediately south) and Vacant land (Zoned for General Commercial) south of Mojave Drive
- West Property Line – Mesa Linda Avenue (immediately west) and Highway 395 (½ -mile west). Vacant land immediately west (North half zoned for Heavy Industrial and south half zoned for Industrial Park)

10. Other Public Agencies

The following permits and regulations are applicable to the project and involve other public agencies whose approval may be required:

- Mojave Water Agency
- Lahontan Regional Water Quality Control Board
- California Department of Fish and Wildlife
- Mojave Desert Air Quality Management District
- SCLA Industrial Wastewater Treatment Plant
- Southern California Edison
- Southwest Gas
- Frontier Communications

11. Tribal Consultation

The City of Victorville commenced the AB 52 process by sending out consultation invitation letters to tribes previously requesting notification, pursuant to Public Resources Code section 21080.3.1. The San Manuel Band of Mission Indians (SMBMI) responded to the notification and requested the Cultural Resources Report prepared for the project and other project plans. After review of the project, the SMBMI did not have concerns with the project's implementation. The SMBMI did suggest Mitigation Measures for Cultural and Tribal Cultural Resources that have been included as Mitigation Measures in this Initial Study.

Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

Environmental Determination

On the basis of the initial evaluation:

☐ I find the proposed project COULD NOT have a significant effect on the environment and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made 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.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

ALEX JAUREGUI, SENIOR PLANNER — Name, Title

FEBRUARY 18, 2021 — Date

I. Aesthetics *Except as provided in Public Resources Code Section 21099, would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Existing Environmental Setting

The City's General Plan Resource Element recognizes the protection of local scenic resources as necessary for maintaining the overall livability and aesthetic qualities of the City. Joshua trees are a notable aesthetic feature in the City. The Joshua tree is a locally protected archetypal plant of the Mojave Desert that may live several hundred years and provides habitat for a variety of native wildlife species.

Discussion

a-b. The project site is not within a state scenic highway and there are no identifiable scenic vistas in the immediate area. There are no identifiable scenic resources within the project site, such as historic buildings or rock outcroppings.

There are four Joshua trees that have been documented onsite and two of them would be appropriately relocated with the project. In October 2020, the California Fish and Game Commission listed the western Joshua tree under the California Endangered Species Act to protect the species for at least one year. This listing supersedes the protection and preservation measures enumerated under Chapter 13.33 of the Victorville Municipal Code. Development that results in the need to remove Joshua trees is required to implement appropriate mitigation to compensate for loss of Joshua trees. The project would implement appropriate mitigation for the relocation or removal Joshua trees. (See **Mitigation Measure Bio-12)**. Therefore, the project would result in a **less-than-significant impact.**

c. The project would involve the development of a conventional self-storage facility in an area zoned for industrial uses. The City's General Plan and Development Code assumes and permits this type of development, and provides development standards such as height restrictions and other design guidelines which are intended to reduce any potential degradation to visual character and quality of public views. The project would not substantially degrade existing visual character or degrade any existing public views that are publicly accessible from a vantage point. Therefore, the project would result in a **less-than-significant impact.**

d. The project would provide new sources of light including parking lot lighting and lighting used for office, residential living space and for use in the storage facility for safety and security purposes. There could be a potential increase of light and/or glare from the proposed lighting fixtures, albeit very minor due to the location of the project and the surrounding land uses. The City's General Plan and Development Code assumes and permits this type of development, and provides development standards such as energy consumption limits, downward facing lighting fixtures, and other design features and guidelines intended to reduce any potential light and glare. Therefore, the project would result in a **less-than-significant impact.**

References

City of Victorville General Plan 2030. *Resource Element,* 2008.

City of Victorville Municipal Code of Ordinances, 2020. *Title 13 Public Peace, Safety and Morals, Chapter 13.33 Preservation and Removal of Joshua Trees.*

II. Agriculture and Forest Resources	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

a-e. The project has not been used for agriculture and is not under a Williamson Act contract. The project site is not listed as Prime Farmland, Unique Farmland or Farmland of Statewide Importance (California Department of Conservation, 2016). No forest land or farmland is located within the vicinity that may be affected by the development of the project. Therefore, there would be **no impact** on agricultural and forest resources.

References

California Department of Conservation, 2016. *California Important Farmland Finder.* Accessed September 22, 2020 at: https://maps.conservation.ca.gov/DLRP/CIFF/

III. Air Quality *Where applicable, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Existing Environmental Setting

The project site is in San Bernardino County within the Mojave Desert Air Basin (MDAB). The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevada in the north by the Tehachapi Pass (3,800 feet elevation). The Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 feet). The MDAB is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 feet). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley). The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley) whose primary channel is the San Gorgonio Pass (2,300 feet) between the San Bernardino and San Jacinto Mountains.

The U.S. Environmental Protection Agency (USEPA), under the federal Clean Air Act (CAA), establishes maximum ambient concentrations for seven criteria air pollutants (CAPs). These maximum concentrations are known as the National Ambient Air Quality Standards (NAAQSs). The seven CAPs are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (PM10), fine particulate matter (PM2.5), and lead (Pb).

The California Air Resources Board (CARB), under the California CAA, establishes maximum concentrations for the seven federal CAPs, as well as four additional air pollutants: visibility-reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride (chloroethene). These maximum concentrations are known as the California Ambient Air Quality Standards (CAAQSs). For areas within the State that have not attained air quality standards, the CARB works with local air districts to develop and implement attainment plans to obtain compliance with both federal and State air quality standards. The local air district with jurisdiction over the project site is the Mojave Desert Air Quality Management District (MDAQMD).

Discussion

a. The applicable air quality plan for the project is the *2004 Ozone Attainment Plan* (*2004 Plan*).[1] The purpose of the *2004 Plan* is to address the attainment and maintenance of State and federal ambient air quality standards for ozone in the MDAB. The portion of the MDAB that includes the project site is designated as non-attainment for ozone and PM10 CAAQS, and PM10 NAAQS. The MDAQMD has adopted the control measures recommended in the *2004 Plan* in its Rules and Regulations. The MDAQMD has also adopted fugitive dust control requirements in its Rule 403, which have been included in **Mitigation Measure AQ-1**. Because the project with mitigation would comply with the MDAQMD's Rules and Regulations, including those adopted from the *2004 Plan*, the project would not conflict with or obstruct implementation of the applicable Air Quality Plan. Therefore, the project would have a **less-than-significant impact with mitigation**.

b. Intermittent (short-term construction emissions that occur from activities, such as site-grading, paving, and building construction) and long-term air quality impacts related to the operation of the project were evaluated. The analysis focuses on daily and annual emissions from construction and operational (mobile, area, stationary, and fugitive sources) activities. The California Emissions Estimator Model (CalEEMod) Version 2016.3.2[2] was used to quantify construction-related pollutant emissions. Modeling results are included in **Appendix A, Air Quality, GHG Emissions & Energy Supporting Information**

Construction

Construction of the project would occur over approximately 14 months. Construction activities would consist of site preparation, grading, building construction, paving and architectural coating. Earthwork would be balanced onsite. **Tables AQ-1 and AQ-2** provides the estimated maximum daily and annual construction emissions, respectively, that would be associated with the project and compares those emissions to the MDAQMD's significance thresholds for construction exhaust emissions. All construction-related emissions would be below the MDAQMD significance thresholds.

[1] Mojave Desert Air Quality Management District, *2004 Ozone Attainment Plan (State and Federal)*, April 26, 2004, http://mdaqmd.ca.gov/home/showdocument?id=174

[2] California Air Pollution Control Officers Association, *CalEEMod User's Guide Version 2016.3.2*, September 2016, www.caleemod.com

Table AQ-1: Estimated Maximum Daily Construction Emissions (pounds)

Condition	ROG	NOx	SO_2	PM10	PM2.5	CO
2021 Construction	3.99	40.56	0.06	21.24	11.97	24.95
2022 Construction	71.05	21.63	0.06	3.20	1.42	24.07
Maximum Daily Emissions	**71.05**	**40.56**	**0.06**	**21.24**	**11.97**	**24.95**
Significance Threshold	137	137	137	82	65	548
Significant (Yes or No)?	No	No	No	No	No	No

SOURCE: CalEEMod Version 2016.3.2.
NOTE: Values reflect rounding.

Table AQ-2: Estimated Annual Construction Emissions (tons)

Condition	ROG	NOx	SO_2	PM10	PM2.5	CO
2021 Construction	0.13	1.14	0.01	0.28	0.15	0.97
2022 Construction	0.95	1.99	0.01	0.28	0.13	2.18
Maximum Annual Emissions	**0.95**	**1.99**	**0.01**	**0.28**	**0.15**	**2.18**
Significance Threshold	25	25	25	15	12	100
Significant (Yes or No)?	No	No	No	No	No	No

SOURCE: CalEEMod Version 2016.3.2.
NOTE: Values reflect rounding.

The project would be required to comply with MDAQMD Rule fugitive dust control requirements for construction projects in MDAQMD Rule 403.2 and **Mitigation Measure AQ-**1 would ensure fugitive dust is controlled and less than significant.

Mitigation Measure AQ-1: Unless and until the Applicant or Construction Contractor has applied for and obtained a MDAQMD-approved Alternative PM10 Control Plan, the Applicant or Construction Contractor shall comply with the following requirements in MDAQMD Rule 403.2:

a. Use periodic watering for short-term stabilization of Disturbed Surface Area to minimize visible fugitive dust emissions. For purposes of this Rule, use of a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes shall be considered sufficient to maintain compliance;
b. Take actions sufficient to prevent project-related trackout onto paved surfaces;
c. Cover loaded haul vehicles while operating on Publicly Maintained paved surfaces;
d. Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than thirty days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate Visible Fugitive Dust emissions;
e. Cleanup project-related trackout or spills on Publicly Maintained paved surfaces within twenty-four hours; and
f. Reduce non-essential Earth-Moving Activity under High Wind conditions. For purposes of this Rule, a reduction in Earth-Moving Activity when visible dusting occurs from moist and dry surfaces due to wind erosion shall be considered sufficient to maintain compliance.

Operations
CalEEMod was used to estimate emissions that would be associated with motor vehicle use, landscape maintenance, and other minor area sources (paints, solvents, etc.) expected to occur once the project is operational. Emissions estimates assume an operational year of 2023 (the first full year the project could conceivably operate) and emissions would decrease on annual basis in subsequent years of operation due to the phase-out of higher polluting vehicles and the implementation of more stringent emission standards.

Estimated daily and annual operational emissions that would be associated with the project are presented in **Tables AQ-3 and AQ-4** and are compared to MDAQMD's thresholds of significance. As indicated in **Tables AQ-3 and AQ-4**, the estimated operational emissions would be below the MDAQMD's significance thresholds and would be less than significant.

Table AQ-3: Estimated Daily Operational Emissions (pounds)

Condition	ROG	NOx	SO_2	PM10	PM2.5	CO
Summer 2023 Operations	11.3	69.2	0.5	33.3	9.1	125.3
Winter 2023 Operations	9.9	69.3	0.4	33.3	9.1	110.5
Maximum Daily Emissions	**11.3**	**69.3**	**0.5**	**33.3**	**9.1**	**125.3**
Significance Threshold	137	137	137	82	65	548
Significant Impact?	No	No	No	No	No	No

SOURCE: CalEEMod Version 2016.3.2.
NOTE: Values reflect rounding.

Table AQ-4: Estimated Annual Operational Emissions (tons)

Condition	ROG	NOx	SO_2	PM10	PM2.5	CO
2023 Operations	**0.85**	**0.58**	**0.01**	**0.40**	**0.11**	**1.16**
Significance Threshold	25	25	25	15	12	100
Significant (Yes or No)?	No	No	No	No	No	No

SOURCE: CalEEMod Version 2016.3.2.
NOTE: Values reflect rounding.

Conclusions
As indicated in **Tables AQ-1 through AQ-4,** construction and operational emissions from the project would be below the applicable significance thresholds. Implementation of **Mitigation Measure AQ-1** would ensure fugitive dust is controlled and less than significant. Because the project's emissions are less than significance thresholds, the emissions during construction and operations would not be expected to result in a cumulatively considerable impact to air quality. Therefore, the project would have a **less-than-significant impact with mitigation**.

c. The MDAQMD *CEQA and Federal Conformity Guidelines*[3] define sensitive receptor land uses as residences, schools, daycare centers, playgrounds and medical facilities. The following proposed

[3] Mojave Desert Air Quality Management District. *CEQA and Federal Conformity Guidelines*, August 2016, http://mdaqmd.ca.gov/home/showdocument?id=538

project types for sites within the specified distance of existing or planned sensitive receptor land uses must be evaluated using the MDAQMD's health risk significance thresholds:

a. Any industrial project within 1,000 feet;
b. A distribution center (40 or more trucks per day) within 1,000 feet;
c. A major transportation project (50,000 or more vehicles per day) within 1,000 feet;
d. A dry cleaner using perchloroethylene within 500 feet; and
e. A gasoline dispensing facility within 300 feet.

Project operations would not consist of industrial stationary sources or generate heavy truck trips. Operations would consist of buildings for self-storage and parking for RV storage. The nearest sensitive receptor is approximately 400 feet to the southeast opposite of Mojave Drive. Construction and operation of the would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the project would have a **less-than-significant impact.**

d. The project would consist of buildings for self-storage and parking for RV storage and would not include activities known to generate odors. The project would include an RV dump station in the northern area of the project site. However, the RV dump station would connect to the City's sewer system and would be subject to applicable City building and development code requirements. Therefore, the project would result in a **less-than-significant impact**.

References

California Air Pollution Control Officers Association, CalEEMod User's Guide Version 2016.3.2, September 2016, www.caleemod.com

Mojave Desert Air Quality Management District, 2004 Ozone Attainment Plan (State and Federal), April 26, 2004, http://mdaqmd.ca.gov/home/showdocument?id=174

Mojave Desert Air Quality Management District. *CEQA and Federal Conformity Guidelines*, August 2016, http://mdaqmd.ca.gov/home/showdocument?id=538

IV. Biological Resources *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Existing Environmental Setting

A *Biological Baseline Assessment and Protected Native Desert Tree, Plant and Cactus Report* (Biological Assessment) was performed by Altec Engineering Corporation in September 2020. The Biological Assessment identified four Joshua Trees (*Yucca brevifolia*) in the project vicinity. Two Joshua trees would require appropriate relocation. Joshua trees are a notable archetypal plant of the

Mojave Desert that may live several hundred years. As of October 2020, The California Fish and Game Commission has voted the Joshua tree species as a Candidate for Listing (Threatened) under the California Endangered Species Act. While it is a Candidate, it is fully protected and to disturb or remove it is prohibited. The Biological Assessment found no evidence of other species that qualify as candidate, sensitive, or special status species in local or regional plans, policies, or regulation, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).

Discussion

a. As discussed above, four Joshua trees were identified within the project vicinity. No other sensitive species were identified during the Biological Assessment in September 2020. However, the project site should be immediately surveyed prior to any construction or grading activities onsite to determine the presence or non-presence of any sensitive species that qualify as candidate, sensitive, or special status species. The implementation of **Mitigation Measures BIO-1 through BIO-12** would ensure impacts related to candidate, sensitive, or special status species would be **less than significant with mitigation.**

Mitigation Measure BIO-1: Pre-construction surveys for Burrowing Owls and other sensitive wildlife species (i.e. Desert Tortoise, Desert Kit Fox, American Badger, nesting birds etc.) on the project site and in the surrounding area out to 500 feet (or as otherwise in accordance with CDFW guidelines) shall be conducted no more than 30-days prior to ground disturbing activities in accordance with best practices identified by the CDFW. If ground disturbing activities are delayed for more than 30-days, additional surveys shall be required.

Mitigation Measure BIO-2: If burrowing owls are observed on the project site during future surveys the CDFW shall be immediately notified and mitigations shall be required to reduce impacts to less than significant, including the following as approved by the CDFW and in accordance with the updated CDFW Staff Report on Burrowing Owl Mitigation (2012):

a. Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by the CDFW verifies through non-invasive methods either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.
b. A burrowing owl survey shall be conducted on all portion of the site between September and January to determine the location of active (non-breeding) burrows.
c. A qualified biologist shall exclude all owls from active burrows using one-way doors. Concurrently, all inactive burrows and other sources of secondary refuge for burrowing owls shall be collapsed and removed from the site.
d. Following and 24 to 48 hour observation period all vacated burrows shall be collapsed.
e. A qualified biologist shall conduct a post-exclusion survey confirming the absence of borrowing owls on the site. Should newly occupied burrows be discovered on the site the exclusion shall be repeated.
f. A final clearance survey confirming the absence of active burrowing owl burrows shall be conducted within 30-days of proposed site disturbance.
g. Unless deemed unnecessary by the CDFW, compensatory mitigation lands for permanent impacts to nesting, occupied, and satellite burrows and burrowing owl habitat shall be provided by the applicant/developer in accordance with CDFW requirements.

Mitigation Measure BIO-3: If sensitive wildlife species such as the Desert Tortoise or the Mohave Ground Squirrel, Desert kit fox, or nesting birds are detected on the project site during future surveys or assessments or construction, all work on-site shall stop immediately and mitigation measures shall be required to reduce impact to a level of less than significant. Any proposed mitigation measures shall include avoidance, minimization, and implementation methods to be utilized, which shall be implemented prior to the start and/or restart of project activities on-site. Any proposed mitigation measures shall be determined by a qualified biologist, and be approved by the City Planner and the CDFW as applicable in accordance with typical best practices.

Mitigation Measure BIO-4: Pre-construction surveys for Mohave Ground Squirrels. Pre-construction surveys following the Mohave Ground Squirrel Survey Guidelines (CDFW, 2010) or most recent version shall be performed by a qualified biologist authorized by a Memorandum of Understanding issued by CDFW. The preconstruction surveys shall cover the project area and a 50-foot buffer zone. Should Mohave Ground Squirrels be confirmed during the survey, per **Mitigation Measure BIO-9**, the project Proponent shall obtain an Incidental Take Permit (ITP) for Mohave Ground Squirrel prior to the start of project activities.

Mitigation Measure BIO-5: Pre-construction Desert Tortoise Surveys. No more than 30 calendar days prior to the start of project activities a qualified biologist shall conduct pre-construction surveys for desert tortoise. Pre-construction surveys shall be completed using perpendicular survey routes within the project area and 50-foot buffer zone. Pre-construction surveys cannot be combined with other surveys conducted for other species while using the same personnel. Project activities cannot start until two negative test results from consecutive surveys using perpendicular survey routes for desert tortoise are documented. Should desert tortoise presence be confirmed during the survey, per **Mitigation Measure BIO-9**, the project Proponent shall obtain an ITP for desert tortoise prior to the start of Project activities.

Mitigation Measure BIO-6: Pre-construction Desert Kit Fox and American Badger Surveys. No more than 30 days prior to the beginning of ground disturbance and/or construction activities, a qualified biologist shall conduct a survey to determine if potential Desert Kit Fox or American Badger burrows are present in the project area. If potential burrows are located, they shall be monitored by the qualified biologist. If the burrow is determined to be active, the qualified biologist shall verify there are suitable burrows outside of the project area prior to undertaking passive relocation actions. If no suitable burrows are located, artificial burrows shall be created at least 14 days prior to passive relocation. The qualified biologist shall block the entrance of the active burrow with soil, sticks, and debris for 3-5 days to discourage the use of the burrow prior to project activities. The entrance shall be blocked to an incrementally greater degree over the 3-5 day period. After the qualified biologist has determined there are no active burrows, the burrows shall be hand-excavated to prevent re-use. No disturbance of active dens shall take place when juvenile Desert Kit Fox and juvenile American Badgers may be present and dependent on parental care. A qualified biologist shall determine appropriate buffers and maintain connectivity to adjacent habitat should natal burrows be present.

If avoidance of the potential dens for American Badger and Desert Kit Fox is not feasible, the following measures are recommended to avoid potential adverse effects:

- If a qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel and collapse them to prevent American badgers or Desert kit foxes from re-using them during construction.
- If a qualified biologist determines that potential dens may be active, an onsite passive relocation program shall be implemented. This program shall consist of excluding American badgers or Desert kit foxes from occupied burrows by installation of one-way doors at burrow entrances and monitoring of the burrow for seven days to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the Project Wildlife Biologist determines that American badgers and Desert kit foxes have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel and collapsed to prevent re-use during construction.
- During fencing and grading activities daily monitoring reports shall be prepared a qualified biologist for "Monitoring" purposes. The qualified biologist shall prepare a summary "Monitoring Report" for documenting the effectiveness and practicality of the protection measures that are in place and making recommendations for modifying the measures to enhance species protection, as needed. The "Monitoring Report" shall also provide information on the overall activities conducted related to biological resources, including the Environmental Awareness.

Mitigation Measure BIO-7: If project activities must occur during the avian nesting season (February to September), a survey for active nests shall be conducted by a qualified biologist, one to two weeks prior to nesting activities. If active nests are identified and present onsite, clearing and construction within 50-250 feet of the nest, depending on the species involved (50 feet for common urban-adapted native birds and up to 250 feet for raptors), shall be postponed until the nest is vacated and juveniles have fledged, and there is no evidence of a second attempt at nesting. Limits of construction shall include flagging and stakes or construction fencing. Established buffers shall remain until a qualified biologist determines the young have fledged or the nest is no longer active. Active nests shall be monitored until the qualified biologist has determined the young have fledged or the project is finished. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance.

Mitigation Measure BIO-8: A qualified biologist shall conduct an education program for all persons employed or otherwise working on the project site prior to performing any work on-site. The program shall consist of a presentation that includes a discussion of the biology of the habitats and species that may be present at the site. The qualified biologist shall also include as a part of the education program information about the distribution and habitat needs of any special status species that may be present, legal protections for those species, penalties for violations, and mitigation measures. Education should include but not be limited to Desert Tortoise, Burrowing Owl, Desert Kit Fox, American Badger, nesting birds, and special-status plants. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on-site.

Mitigation Measure BIO-9: If any construction or project related activity on-site results in the take of a California Endangered Species Act (CESA) listed species, the project proponent shall gain appropriate authorization prior to the commencement of any project related activities on-site (e.g., clearing, grading, trenching, construction, etc.). This may include an ITP or a consistency determination in certain circumstances as determined by the CDFW.

Mitigation Measure BIO-10: Unless determined to be unnecessary by the project biologist in conjunction with the required updated biological survey, the applicant/developer shall provide a qualified biologist on-site prior to and during all ground and habitat disturbing activities to move out of harm's way wildlife that would otherwise be injured or killed from related project activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should only be moved as far as necessary to ensure their safety. Measures to prevent wildlife from re-entering the site should also be taken. Only qualified biologists with authorization by CDFW may move CESA-listed species.

Additionally, in order to ensure the mitigation measures proposed are valid in accordance with current site conditions and that no additional mitigation measures are needed, the following mitigation measure has been included.

Mitigation Measure BIO-11: Should grading or construction commence after February 1st, 2021, a new biological survey shall be filed with the City of Victorville to determine the presence or absence of endangered species, threatened species, candidate species, Species of Special Concern, and fully protected species on the site and to ensure appropriate mitigation measures are maintained. Additionally, the new biological survey shall include a thorough, floristic-based assessment of special status plants and natural communities, following the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Said survey shall be filed with the City Planner or his designee prior to issuance of a grading permit and shall verify the adequacy of the adopted mitigation measures. Any measures deemed inadequate will cause the applicant to confer with the CDFW to determine appropriate mitigation measures prior to the issuance of any grading permit, including species specific avoidance, minimization, and implementation methods. The survey shall be valid for a period of one year.

Mitigation Measure BIO-12: In order to relocate Joshua trees, approval from the CDFW and City of Victorville shall be required along with coordination (and possible permit) from the County of San Bernardino. Further, since this is a newly listed c-endangered (c meaning candidate) species, coordination with CDFW would need to be conducted. Per **Mitigation Measure BIO-9,** an ITP from CDFW would be needed in order to remove or relocate the trees and would also require Section 7 consultation. Otherwise, the Joshua trees located on-site shall be protected in place during all grading, construction and operational activities. A perimeter fence shall be constructed with a 25 to 50 foot minimum buffer around the trees in order to protect the trees, branches, roots, and the existing buffer around the trees and the existing established location. Additionally, any landscaping around the trees should be drought tolerant and native. No artificial irrigation will be needed and no runoff shall impact the trees.

b. The project site is not located within riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or USFWS. Therefore, the project would have **no impact.**

c. The project site does not include any state or federally protected wetlands. Therefore, the project would have **no impact.**

d. Due to the location and nature of the project site there is no habitat for candidate, sensitive, or special status species of fish. There are no wetlands within the project site or in the immediate area. The project

would not interfere with the movement of migratory wildlife species or use of nursery sites. Therefore, the project would result in a **less-than-significant impact**.

e. Two Joshua trees would require relocation to areas that are suitable for the healthy transplanting of these trees. As discussed above in **Mitigation Measure BIO-12,** the project would require coordination with the City of Victorville, the County of San Bernardino and the CDFW to ensure all proper protocol for Joshua tree relocation is followed. The project would not conflict with any local policies or ordinances protecting biological resources. The implementation of **Mitigation Measure BIO-12** would ensure that the project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policies or ordinance. Therefore, the project would result in a **less-than-significant impact.**

f. The project would not conflict with any habitat conservation plans, natural community, conservation plan or other approved habitat conservation plans. Therefore, the project would have **no impact.**

References

Altec Land Planning, *Biological Baseline Assessment & Protected Native Desert Tree, Plant and Cactus Report, 8.52 acres, Mojave Drive, Victorville, CA*, September 30, 2020.

CDFW, 2010. *Mohave Ground Squirrel Survey Guidelines.*

V. Cultural Resources *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Environmental Setting

An archaeological investigation under the provisions of CEQA (CCR14 Section 15064.5 and PRC Section 21083.2) was conducted by ASM Affiliates (ASM) in September/October 2020. This included a records search encompassing the project property and a 1-mile radius surrounding it from the South Central Coastal Information Center (SCCIC), a request to the California Native American Heritage Commission (NAHC) for a search of their Sacred Lands File (SLF). ASM also conducted an intensive pedestrian survey of the project area.

No prehistoric or historic resources were identified from the archaeological investigation. As such, no historical resources that would require further consideration as defined under CEQA were identified within the project vicinity. Further, the results of the records search indicated a low archaeological sensitivity for the project area (ASM, 2020).

Discussion

a. There are no buildings or structures in the project area that may qualify as a historical resource as defined in Section 15064.5. Therefore, there would be **no impact.**

b-c. The probability of historical or archeological resources, including human remains is low. However, there always exists a potential to encounter previously unreported subsurface historical and archaeological resources (possibly including human remains) during future construction activities. **Mitigation Measures CUL-1 through CUL-3** would reduce potentially significant impacts on archaeological and historical resources, including human remains to **less than significant.**

Mitigation Measure CUL-1: In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered areas may continue during this assessment

period. Additionally, the SMBMI Cultural Resources Department shall be contacted, as detailed within **Mitigation Measure TCR-1**, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

Mitigation Measure CUL-2: If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within **Mitigation Measure TCR-1**. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

Mitigation Measure CUL-3: If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

References

ASM Affiliates (ASM), *Cultural Resources Assessment Findings Memo for the Victorville Cavalry Storage Development Project, City of Victorville, San Bernardino County, California*, November 23, 2020.

VI. Energy *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Environmental Setting

The project would be designed to comply with the latest energy code standards that are required by the latest adopted building code. The City of Victorville's General Plan Resource Element provides goals, policies and implementation measures for sustainable building design and development for industrial project, reducing energy use and demand and promoting energy conservation onsite to the extent feasible.

Discussion

a. There is no existing energy use on the subject property. Construction of the project would require consumption of petroleum fuels (primarily diesel) by construction workers traveling to and from the site, construction equipment onsite, and by construction equipment delivering supplies to the site. The energy required by construction would be temporary and would not be substantial. Construction would be required to comply with the latest adopted California Building Code. The computer modeling of the project's air pollutant emissions described in detail in Section III, Air Quality, utilized standard fuel consumption estimates to determine that project construction activities would require 68,383 gallons of diesel fuel.[4] For the finishing phase of construction, some electricity may be used (e.g., for power tools and work lighting). While this electricity usage cannot be quantified at this time, it is anticipated to be relatively minor compared to normal building operations. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. Natural gas would not be used during construction. Modeling results are included in **Appendix A, Air Quality, GHG Emissions & Energy Supporting Information.**

Annual operational electricity and natural gas consumption were calculated using the demand factors provided in CalEEMod. Modeling results are included in **Appendix A, Air Quality, GHG Emissions & Energy Supporting Information**. The project's building and parking electricity consumption was estimated to be approximately 434,026 kilowatt-hours (kWh) of electricity per year and natural gas consumption was estimated to be approximately 317 million British Thermal Units (BTU) per year. The

[4]Fuel usage is estimated using the CalEEMod output for CO_2, and a $kgCO_2$/gallon conversion factor, as cited in the *U.S. Energy Information Administration Voluntary Reporting of Greenhouse Gases Program*, https://www.eia.gov/environment/pdfpages/0608s(2009)index.php.

project was estimated to generate approximately 280 trips per day, requiring approximately 51,577 gallons of gasoline per year.

The project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operations. Furthermore, the project would include the future installation of PV solar panels on the west canopy shade structure in the east RV parking lot. Therefore, the project would result in a **less-than-significant impact.**

b. As noted above, the energy required for construction would be temporary and would not be substantial. Due to the project design, construction, and the nature of operational energy use, the project would not conflict or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the project would result in a **less-than-significant impact.**

References

City of Victorville General Plan 2030. *Resource Element,* 2008.

VII. Geology and Soils *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☒	☐
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Existing Environmental Setting

According to the City of Victorville General Plan, the City is located in an area of high seismic activity. The probability of a major earthquake from the San Andreas, Helendale, and San Jacinto Faults is considered to be high.

There are no faults or fault traces that are known or suspected to exist within the City of Victorville. No Alquist-Priolo Special Studies Zones are located within the City. Therefore, the project is not located within an Alquist-Priolo Earthquake Fault zone since there is no evidence of a "potentially active fault" located in the area.

The City's Housing Element requires all new development to employ design and construction techniques that will reduce the potential for loss of life, injury, and property damage in the event of a major earthquake (City of Victorville 2008a).

Discussion

a(i). There are no faults or fault traces that are known to exist in the City. The City is not subject to the provisions of the Alquist-Priolo Fault Zoning Act. Therefore, the project would have **no impact.**

a(ii). The City is located in an area with a high potential for severe ground-shaking. The project would be required to comply with the Victorville Municipal Code and the latest adopted version of the California Building Code to ensure that the project's structures would adequately resist the ground-shaking forces of an earthquake. Therefore, the project would result in a **less-than-significant impact.**

a(iii).The project is not located in an area considered a high risk for liquefaction. Areas abutting the Mojave River are typically areas where liquefaction may occur in the City. While no detailed studies have been prepared that indicate precise locations of areas prone to liquefaction in the City, geologic studies can be required by the Building official should there be concerns about liquefaction. Therefore, the project would result in a **less-than-significant impact.**

a(iv). The project is not located in an area determined to have slope hazards (City of Victorville, 2008b). Therefore, the project would result in a **less-than-significant impact.**

b-c. Due to the project location, there would be no from loss of topsoil or erosion. The project would not be located on soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. The project would be required to comply with the Victorville Municipal Code and the latest adopted version of the California Building Code to ensure potential impacts related to soil erosion, landslide, lateral spreading, subsidence, liquefaction or collapse would be less-than-significant. Therefore, the project would result in a **less-than-significant impact.**

d. Typically, soils in the City have a low or very low probability of being expansive soils as defined in Table 18-1-B of the Uniform Building Code (1994). The project would be required to submit a geotechnical investigation report and any provision outlined in that document would be required by the City's Building Official. Therefore, the project would result in a **less-than-significant impact.**

e. The project would not include the use of septic tanks or alternative waste water disposal systems. The project would be required to connect to the City's public sewer system during the construction phase of development and prior to operations. Therefore, the project would result in a **less-than-significant impact.**

f. **Mitigation Measures CUL-1 through CUL-3** would reduce potential impacts on archaeological and historical resources, including human remains to **less than significant.** The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Therefore, the project would result in a **less-than-significant impact with mitigation.**

References

City of Victorville General Plan 2030. *Housing Element,* 2008a.

City of Victorville General Plan 2030. *Safety Element, Figure S-3 Slope Hazards,* 2008b.

VIII. Greenhouse Gas Emissions *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Existing Environmental Setting

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHG) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG has been implicated as the driving force for global climate change. The primary GHG are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor.

While the presence of the primary GHG in the atmosphere are naturally occurring, CO_2, CH_4, and N_2O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHG include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

CO_2 is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2. CH_4 and N_2O are substantially more potent GHG than CO_2, with GWP of 25 and 310 times that of CO_2, respectively.

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons of CO_2 equivalents (CO_2e) per year. CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWP than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.
There is international scientific consensus that human-caused increases in GHG have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity (CalEPA, 2006).

Discussion

a-b. With the passage of California Assembly Bill (AB) 32, the Global Warming Solutions Act of 2006, jurisdictions are required to reduce their GHG emissions to 1990 levels by 2020, as well as comply with other post-2020 reduction targets. To comply with this regulation, in 2008 the City Council authorized and directed Staff to partner with San Bernardino Associated Governments (SBCOG) to conduct a Countywide GHG inventory and GHG Reduction Plan. With that process complete, the City of Victorville has adopted a Climate Action Plan (CAP) to demonstrate how the City will reduce its GHG emissions in compliance with AB32. The CAP is not additional regulation created by the City, inasmuch as the regulation to reduce GHG's already exists under CEQA, including Section 15064.4 Determining the Significance of Impacts from GHG Emissions. The CAP assists in streamlining the CEQA review by allowing developers to demonstrate that their projects are consistent with the CAP by demonstrating compliance through a screening table process that the City has developed along with SBCOG, thus not requiring the developer to conduct a complete GHG analysis on their own for CEQA processing. Absent of their own GHG analysis the applicant is subject to the screening table process which allows the applicant to choose any of a number of reduction measures and for a project to meet the reduction goal through the screening tables, 45 points must be achieved. The applicant submitted a GHG Emissions Screening Table and achieved 187 points. Furthermore, the project was estimated to generate approximately 815 metric tons of CO_2e annually, well below San Bernardino County's screening threshold of 3,000 metric tons of CO_2e per year. Modeling results and the City's GHG Emissions Screening Table for the project are included in **Appendix A, Air Quality, GHG Emissions & Energy Supporting Information**. The project would be consistent with the City's CAP and therefore, the project would result in a **less-than-significant impact.**

References

California Environmental Protection Agency (CalEPA), 2006. *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, March. https://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF

IX. Hazards and Hazardous Materials *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Existing Environmental Setting

As defined in Section 25117 of the California Health and Safety Code, a hazardous material is any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health or the environment if released into the workplace or the environment. Hazardous substances can take the form of a solid, dust, liquid, or fume and exhibit

any of the criteria set forth in 22 CCR, Chapter 30, Article 11. A list of wastes that are presumed hazardous is presented in Chapter 30, Article 9 of Title 22. Hazardous waste criteria include toxicity, ignitability, reactivity, and corrosivity.

The City of Victorville's General Plan Safety Element is intended to identify and, whenever possible, reduce the impact of natural and manmade hazards which may threaten the health, safety, and property of the residents living and working the Victorville Planning Area.

The Hazardous Waste and Substances Sites (Cortese) List website, maintained by the California State Department of Toxic Substances Control Hazardous Waste and Substances Sites List (Cortese List) indicates that there are no listed sites in the City.

Discussion

a-b. During construction of the project, the use of hazardous substances would be limited in nature and subject to standard handling and storage of equipment. Although highly unlikely, the release of hazardous materials could occur during construction on any project. Any such releases would most likely be minor spillages of motor vehicle fuels and oils. The project would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) (**See Hydrology and Water Quality Section**), which would include Best Management Practices (BMPs) to be implemented during construction to avoid spills, immediately respond to any spills, and minimize the effects of such spills. The use and handling of chemicals during construction activities would occur in accordance with applicable Federal, State, and Local laws including California Occupational Health and Safety Administration (CalOSHA) Requirements. During construction, it is highly unlikely that the release of hazardous materials at a level that would present a hazard to the environment or to human or animal life would occur. The project would not use or store hazardous materials. Therefore, the project would result in a **less-than-significant impact.**

c. There are three existing schools (Melva Davis Academy of Excellent, Gus Franklin Elementary School and West Creek Elementary School) approximately 0.66 miles northeast of the project. Project construction would comply with applicable regulations for the use and transport of hazardous materials. Furthermore, the project would not use or store hazardous materials during operations. Therefore, the project would result in a **less-than-significant impact.**

d. The DTSC and State Water Resources Control Board compile and update lists of hazardous material sites pursuant to Government Code Section 65962.5. The subject property is not included in the databases maintained by the DTSC's Envirostor (DTSC, 2020) or in the State Water Resources Control Board Geotracker (SWRCB, 2020). Therefore, the project would have **no impact.**

e. Adelanto Airport is approximately 3.5 miles west of the project. Southern California Logistics Airport is approximately 3.5 miles north of the project. The project would not result in a safety hazard for people working in the project area. Therefore, potential impacts from airport use on people working in the project area would be **less than significant.**

f. The project would not impair or interfere with any future emergency response plan or emergency evacuation plan. The project would include an emergency entrance/exit on the northwest side of the

property for use in emergency situations. The circulation of the emergency entrance/exit would not affect surrounding land uses. Therefore, the project would result in a **less-than-significant impact.**

e. The project is surrounded by vacant land to the north, east and west and low density residential to the southeast. Due to the location and nature of the project, the project would not expose people or structures to significant loss, injury or death involving wildland fires (**See Wildfire Section**). Therefore, the project would result in a **less-than-significant impact.**

References

Department of Toxic Substances Control (DTSC), *DTSC's Envirostor Database,* Accessed July 14, 2020 at: https://www.envirostor.dtsc.ca.gov/public/

State Water Resources Control Board (SWRCB), *Geotracker,* Accessed July, 14, 2020 at: https://geotracker.waterboards.ca.gov/

X. Hydrology and Water Quality *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Environmental Setting

The project is bounded on all sides by undeveloped parcels and roadways. Storm runoff from the site flows in a northeasterly direction across the undeveloped surfaces as both sheet flow and within natural swales as concentrated flow. Project area runoff and off-site run-on from the area west of the project, primarily flows across the project within one of the two natural swales, the "southerly swale" that discharges near the mid-point of the easterly project boundary and the "northerly swale" that flows

along the north project boundary. There is an earthen berm along the northerly edge of Mojave Drive that keeps street runoff within the right-of-way.

Stormwater runoff from disturbed soils associated with construction activities is a common source of pollutants (mainly sediment) to receiving waters. Earthwork activities can loosen soils and sediments making them more susceptible to erosion from stormwater runoff and increase the likelihood that these materials would migrate in stormwater runoff to storm drains and downstream water bodies. In addition, construction would likely involve the use of various materials typically associated with construction activities such as paint, solvents, oil and grease, petroleum hydrocarbons, concrete and associated concrete wash-out areas. If improperly handled, these materials could result in pollutants being mobilized and transported offsite by stormwater runoff (nonpoint source pollution) and degrade receiving water quality.

Discussion

a. Construction activities would be required to comply with National Pollutant Discharge Elimination System (NPDES) regulations and obtain coverage under the Phase II Small MS4 General Permit in the Mojave River Watershed. The Applicant or their contractor(s) would be required to implement construction Best Management Practices (BMPs) as set forth in a detailed Strom Water Pollution Prevention Plan (SWPPP). SWPPPs must be prepared by a Qualified SWPPP Developer (QSD) and implemented by a Qualified SWPPP Practitioner (QSP). SWPPPs must describe the specific erosion control and storm water quality BMPs needed to minimize pollutants in stormwater runoff and detail their placement and proper installation. The BMPs are designed to prevent pollutants from contacting stormwater and to keep all products of erosion and stormwater pollutants from moving offsite into receiving waters.

In addition to erosion control BMPs, SWPPPs also include BMPs for preventing the discharge of pollutants other than sediment (e.g. paint, solvents, concrete, petroleum products) to downstream waters. BMPs for pollutants include designated, protected storage areas, routine inspections by the QSP for equipment leaks, maintaining containers of supplies to ensure the contents are clearly labeled and the integrity of the containers is not compromised, and ensuring that construction materials are disposed of in accordance with applicable regulations.

Furthermore, the project would also comply with the mandated City-approved Water Quality Management Plan (WQMP) to minimize water pollutants of concern and document implementation of all required BMPs. Compliance with the requirements of NPDES regulations, the Phase II Small MS4 General Permit in the Mojave River Watershed, the City-approved WQMP and the implementation of all associated BMPs would prevent the discharge of pollutants to surface waters or groundwater and minimize or eliminate potential degradation of surface water or groundwater quality during construction of the project.

The type and concentration of substances in urban stormwater can vary considerably, both during the course of a storm event and from event to event at any given area (based on the intensity of rainfall), as well as from site to site within a given urban area (based on land use characteristics) (USEPA, 1993). Following construction, project operations would not result in increases of water quality constituent concentrations (such as bacteria and microorganisms, metals, and total suspended solids) transported by stormwater above baseline concentrations in a manner that would have discernible impacts on or directly degrade water quality on-site or off-site. Therefore, water quality impacts related to violation of water

quality standards or degradation of water quality from implementation of the project would be **less than significant.**

b. Pumping of groundwater can cause groundwater levels to decline in the area around the point of extraction, which could interfere with the operation of nearby wells, if present. The project would be served by the municipal water system and would not include installation of groundwater wells or long-term direct groundwater extraction. The addition of impervious surfaces, while potentially concentrating runoff would not markedly alter local groundwater recharge. As described under (c.iii), below, the project would retain stormwater onsite such that post-project stormwater runoff and drainage matches pre-project conditions. Retaining stormwater onsite may include the use of areas designed to enhance infiltration. Implementation of the project would not substantially alter local groundwater recharge; runoff would continue to infiltrate into soils. Therefore, the project would not interfere with groundwater recharge, and impacts related to groundwater depletion and interference with groundwater recharge would be **less than significant.**

c(i). Project site development would not involve the alteration of a stream or river and would not substantially alter on-site drainage patterns. There are no existing streams or rivers that traverse the project. Stormwater runoff volumes would be directed into the City stormwater drainage system that would be permitted in accordance with the City's MS4 permit. The project's hydrology study recommends the installation of a City-approved culvert and storm drain on the west side of the Mesa Linda Avenue improvements (Toal Engineering, 2020). Once conveyed off-site and into the urban stormwater drainage system, the potential for erosion is minimal. Therefore, impacts related to erosion and/or siltation due to altered drainage patterns would be **less than significant.**

c(ii). The proposed improvements onsite are not located within a flood hazard risk area associated with a 100-year flood and would not result in substantially altered on-site surface water drainage patterns. Implementing the project would result in minimal increases in stormwater runoff flowing into the onsite drainage ditch and into the City stormwater drainage system. The impervious surface area associated with the proposed storage area would not substantially increase the rate or amount of surface runoff to the extent that the project increases flood risk on-site or off-site. Further, as described under (c.iii), below, the project would require approval of a City-approved hydrology study and WQMP and implementation of a City-approved drainage plan designed with sufficient capacity to retain stormwater onsite such that post-project peak stormwater runoff matches pre-project conditions. The project would also include any required improvements in accordance with the City's Municipal Code. With implementation of an approved drainage plan, impacts related to flooding due to altered drainage patterns or the addition of impervious surfaces following completion of construction would be **less than significant.**

c(iii). The project would not result in new sources of pollutants that could be transported via storm runoff to off-site receiving waters. Impacts related to creating additional sources of polluted runoff would be **less than significant.** The Applicant would be required to prepare and implement a City-approved drainage plan for the project to ensure post-project stormwater runoff and drainage matches pre-project conditions from the recommendations of the hydrology study and the WQMP. The drainage plan would include hydrology analysis criteria to determine runoff volumes as well as design criteria for drainage systems. The drainage plan is required to quantify the amount of new impervious area and shall quantify the increase in the rate of stormwater runoff associated with the project. To the maximum extent feasible, the drainage plan would include measures such as limiting soil compaction, minimizing

impervious surfaces, dispersing runoff to landscaping or other pervious areas on-site, conserving natural areas and protecting drainage channels from erosion onsite.

The Hydrology study recommends the installation of a culvert and storm drain on the west side of the Mesa Linda Avenue improvements to collect and convey run-on in the "southerly swale" across the project. The City would review and approve the drainage plan and all recommended design features for stormwater management onsite (including drain pipe requirements and future uses of proposed storm drains) and would provide any additional recommended improvements to the storm drainage facilities and design in accordance with applicable civil engineering standards and City regulatory standards prior to accepting the drainage plan (as well as all recommendations from the hydrology study and WQMP) and issuing a building permit. Therefore, the project would have a **less-than-significant impact.**

c(iv). The project is not within a Special Flood Hazard Area and is not zoned FEMA. The subject area is listed as unshaded Zone X in the Safety Element (City of Victorville General Plan, 2008). Therefore, impacts related to impeding or redirecting flood flows would be **less than significant.**

d. The project is not located within a tsunami hazard inundation zone and is not in an area subject to current or projected future coastal flooding. A seiche is caused by oscillation of the surface of a large enclosed or semi-enclosed body of water due to an earthquake or large wind event. The project is not located near a large enclosed or semi-enclosed body of water. The subject area is listed as unshaded Zone X in the Safety Element (City of Victorville General Plan, 2008). The project would not result in an increase in flood risk at the project site. Therefore, impacts related to the release of pollutants due to inundation would be **less than significant.**

e. As discussed above, no water quality degradation or groundwater impacts would occur as a result of the project. The project would have a less than significant impact on surface water and groundwater quality on-site and off-site. The project would comply with the requirements under the NPDES Permit program, the Phase II Small MS4 General Permit in the Mojave River Watershed, the City-approved WQMP, and the implementation of associated BMPs and other requirements of SWPPP as well as a City-approved drainage plan which will ensure stormwater discharges associated with construction and use of the project comply with regulatory requirements in the City. The project would not require ongoing groundwater withdrawals or substantially reduce groundwater recharge and therefore would not conflict with or obstruct implementation of a sustainable groundwater management plan. As discussed, the drainage plan would ensure that there would be no increase in peak stormwater runoff from the project. Therefore, impacts relating to conflict or obstruction of implementing a water quality control plan or sustainable groundwater management plan would be **less than significant.**

References

City of Victorville General Plan 2030. *Safety Element, Figure S-2 Flood Hazards Map,* 2008.

USEPA, 1993. Natural wetlands and urban stormwater: Potential impacts and management. United States Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds.

Toal Engineering, Water Quality Management Plan and Hydrology Study for PSUB20-00014, 2020.

XI. Land Use and Planning *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Discussion

a. The project is currently zoned as an M-1(Light Industrial) land use. The project would require a Conditional Use Permit and Development Code Amendment to be permitted to develop the project on the subject property. The project would not physically divide an established community. Therefore, the project would have **no impact.**

b. As stated above, in order to proceed, the project would be required to be consistent with zoning policies and existing permitted land uses within each zone. The project would require a Conditional Use Permit and Development Code Amendment. Since self-storage and RV parking are not permitted uses in an M-1 zone, a Development Code Amendment is needed to allow for these uses. The proposed development and associated Development Code Amendment will conditionally allow self-storage and RV parking within the M-1 zone, which is less intense than the types of industrial development currently permitted in an M-1 zone (e.g., heavy automotive repair facilities, light industrial assembly plants and light manufacturing facilities). Furthermore, the development would not conflict with any applicable land use plan, policy, or regulation. Therefore, the project would have a **less-than-significant impact.**

XII. Mineral Resources *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

a-b. The project would be located in an area designated as MRZ-3a (City of Victorville General Plan, 2008). This designation notes that areas within its boundary may contain significant aggregate deposits. However, further exploration work would be required to explore the subject property's potential to contain mineral resources. Mining areas in the City have historically been located along the Mojave River and in the North Mojave and Northern Expansion planning areas and it is unlikely that the project would contain mineral resources that would be locally important or of value to the residents of the state, or result in the loss of availability of a locally important mineral resource recovery site. Therefore, the project have **no impact**. .

References

City of Victorville General Plan 2030. *Resource Element, Figure RE-1 Victorville Planning Area Mine Land Classification Map,* 2008.

XIII. Noise *Would the project result in:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Existing Environmental Setting

Noise Descriptors

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound pressure level has become the most common descriptor used to characterize the "loudness" of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. Decibels are measured using different scales, and it has been found that A- weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. All references to decibels (dB) in this section will be A-weighted unless noted otherwise. Several time-averaged scales represent noise environments and consequences of human level over a given time period (Leq)[5]; average day-night 24-hour average sound level (Ldn)[6] with a nighttime increase of 10 dB to account for sensitivity to noise during the nighttime; and community noise equivalent (CNEL)[7], also a 24-hour average that includes both an evening and a nighttime sensitivity weighting.

[5] The Equivalent Sound Level (Leq) is a single value of constant sound level for the same measurement period duration, which has sound energy equal to the time-varying sound energy in the measurement period.
[6] Ldn is the day-night average sound level that is equal to the 24-hour A weighted equivalent sound level with a 10-decibel penalty applied to night between 10:00 p.m. and 7:00 a.m.
[7] CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels in the evening from 7:00 p.m., and an addition of a 10-decibel penalty in the night between 10:00 p.m. and 7:00 a.m.

Noise Standards

The City of Victorville General Plan Noise Element aims to limit exposure of the community to excessive noise levels and provides a systematic approach to ensure that noise does not affect the health and serenity of Victorville residents. minimize excessive, objectionable or harmful noise impacting existing and future residents and land uses. The City has established noise sensitivity standards for new development with the goal of reducing undesirable noise impacts. The applicable type of land use category that applies to the project is the Industrial land use. Under this classification, a maximum outdoor noise level up to 70 dB Ldn is considered normally acceptable and a maximum outdoor noise level of 80+ dB Ldn is considered conditionally acceptable.

Discussion

a. Construction would be temporary and is estimated to take approximately 14 months. Construction activities would require the use noise-generating equipment. The noise levels generated by typical construction equipment would greatly vary depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment and the prevailing wind direction. Increases in noise levels from construction activities would be temporary within the project vicinity and surrounding land uses. Construction noise levels would be short term and are assumed under existing development standards. Additionally, the City of Victorville Municipal Code anticipates increases in temporary ambient noise from such occurrences from new development and regulates such activities through base ambient noise level time frames that would mitigate any potential adverse impacts. Once constructed, noise levels from operations of the project would be minimal and compatible with the surrounding land uses and would not exceed noise level standards outlined in the General Plan and Municipal Code (Title 16 Chapter 6 Article 12). The residential dwelling onsite would not be exposed to noise levels that would be incompatible with the General Plan and Municipal Code. Therefore, the project would have a **less-than-significant** impact.

b. The project would not involve the use of construction equipment that could result in potentially significant levels of ground vibration (i.e. pile drivers or blasting). Therefore, the project would have a **less-than-significant impact.**

c. Adelanto Airport is approximately 3.5 miles west of the project and Southern California Logistics Airport is approximately 3.5 miles north of the project. The project would not be located within any long range 65 dB CNEL noise contours from nearby airports. The project would not result in a noise hazard for people working in the project area or using the project for self-storage and RV parking. Therefore, the project would have **no impact.**

References

California Department of Transportation (Caltrans), *Technical Noise Supplement,* 1998.

City of Victorville General Plan 2030. *Noise Element,* 2008.

City of Victorville Municipal Code, 2020. *Title 16 Development Code, Chapter 6 Code Enforcement, Article 12 Noise Control.*

XIV. Population and Housing *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

a-b. Due to the size and development nature of the project, there would be no substantial direct or indirect population growth in the City. Therefore, the project would have **no impact.**

XV. Public Services *a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1. Fire protection?	☐	☐	☒	☐
2. Police protection?	☐	☐	☒	☐
3. Schools?	☐	☐	☐	☒
4. Parks?	☐	☐	☐	☒
5. Other public facilities?	☐	☐	☐	☒

Existing Environmental Setting

Fire Protection

Fire Protection within the City of Victorville is provided by the City of Victorville Fire Department. The City of Victorville Fire Department has 6 Fire Stations that are manned and operated. The nearest fire station is located approximately 2.3 miles east of the project.

Police Protection

Police service in the City of Victorville is provided by the San Bernardino County Sheriff's Department. The department includes 80 offices and 22 non-sworn positions. The Victorville Sheriff's Department is located approximately 3.5 miles southeast of the project.

Discussion

a(1). The project would not provide storage for flammable materials and would not be constructed of flammable materials. Construction would have a low fire hazard due to the materials that would be used for project design. The project would comply with applicable City fire prevention and protection requirements, including building/site design requirements and provisions for fire protection services. The fire station is approximately 2.3 miles east of the project and response times would be expected to be quick, when needed. The project would not affect response times or other performance objectives at the fire department. The project would provide emergency access to the fire department in the event of an emergency. Therefore, the project would have a **less-than-significant impact.**
a(2). The project would require normal police services required by the rest of the City, when necessary. The police station is approximately 3.5 miles southeast of the project and response times would be

expected to be quick, when needed. The project would not affect response times or other performance objectives at the police department. Therefore, the project would have a **less-than-significant impact.**

a(3)-(5). Due to the nature of the project, there would be no impact to schools, parks, or other public facilities in the City. Therefore, the project would have no impact.

References

City of Victorville General Plan 2030. *Safety Element,* 2008.

XVI. Recreation *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

a-b. The project would not increase the use of recreational facilities nor would it include or require the construction or expansion of recreational facilities. Therefore, the project would have **no impact** on recreation**.**

XVII. Transportation *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? *NOTE: While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for Caltrans projects is still under development. The PDT may determine the appropriate metric to use to analyze traffic impacts pursuant to section 15064.3(b). Projects for which an NOP will be issued any time after December 28th, 2018 should consider including an analysis of VMT/induced demand if the project has the potential to increase VMT (see page 20 of OPR's updated SB 743 Technical Advisory), particularly if the project will be approved after July 2020.*	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d. Result in inadequate emergency access?	☐	☐	☒	☐

Existing Environmental Setting

The City of Victorville's Resolution No. 20-031 was approved and adopted on June 23, 2020 and became effective on July 1, 2020. This resolution establishes Vehicle Miles Traveled (VMT) Analysis Guidelines. According to the City's adopted VMT Guidelines, projects that will not require a VMT analysis can be screened using either the daily vehicle trips generated by the project or the project's land use type. The Daily Vehicle Trip threshold is a net increase of 1,285 or less weekday daily trips. The Institute of Transportation Engineers (ITE) Trip Generation Manual will be used to estimate the daily trip generation.

Discussion

a. The project would result in vehicle trips during construction. Vehicles associated with construction of the project would likely use regional and local roadways to access the site, primarily Highway 395 and Mojave Drive. Vehicle trips would consist of required construction material or equipment deliveries and construction worker trips. During operations, vehicles would access the site through Mojave Drive and Mesa Linda Drive. Project construction and operation would not conflict with any program, plan, or policy addressing the circulation system in the City. Therefore, the project would have a **less-than-significant impact.**

b. Project operations would generate approximately 280 trips per day (based on the self-storage trip rate of .25 weekday daily trips per space and 1.65 trips per 1,000 square feet, as well as standard trip rates for the small residential and office components) (Institute of Transportation Engineers, 2012). Based on screening thresholds for small land use projects established in the City's Resolution No. 20-031 for VMT thresholds, project trips would be well below the threshold of 1,285 trips per day. Thus, a detailed VMT analysis using a travel demand model or tool to quantify the VMT associated with the project is not required. Therefore, the project would have a **less-than-significant impact.**

c. The project would not involve any new hazardous design or features nor introduce any new uses that would be incompatible with transportation. The project would not include sharp curves or dangerous intersections. RV's are compatible with the existing transportation system in the City. The project would not alter site access since customers would access the main entrance using existing City roads. Therefore, there the project would result in a **less-than-significant impact.**

d. The project would not affect emergency response routes. The project would include an emergency entrance/exit for on the northwestern boundary of the project. Therefore, the project would result in a **less-than-significant impact.**

References

Institute of Transportation Engineers, *Trip Generation 9th Edition, 2012.*

City of Victorville 2020, *Resolution NO. 20-031, Vehicle Miles Traveled (VMT) Thresholds of Significance for purposes of Analyzing Transportation Impacts under CEQA.*

XVIII. Tribal Cultural Resources *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the Project Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Existing Environmental Setting

Refer to the discussion for Environmental Issue **Cultural Resources** regarding historical resources. The project is not listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources.

The City of Victorville commenced the AB 52 process by sending out consultation invitation letters to tribes previously requesting notification pursuant to Public Resources Code section 21080.3.1. The San Manuel Band of Mission Indians (SMBMI) responded to the notification and requested the Cultural Resources Report prepared for the project and other project plans. After review of the project, the SMBMI did not have concerns with the project's implementation. The SMBMI did suggest Mitigation Measures for Tribal Cultural Resources that have been included as Mitigation Measures in this section.

Discussion

a(i-ii). As previously noted, no prehistoric or historic resources were identified from the archaeological investigation. As such, no historical resources that would require further consideration as defined under CEQA were identified within the project vicinity (ASM, 2020).

The project is not listed in state or local registers as a historical resource. Mitigation measures are proposed to address historical and archaeological resources (possibly human remains) potentially discovered during construction. Implementation of **Mitigation Measures CUL-1 through CUL-3** under environmental issue **Cultural Resources** and **Mitigation Measures TCR-1 and TCR-2** would reduce potentially significant impacts on Tribal Cultural Resources to **less than significant.**

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

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

XIX. Utilities and Service Systems *Would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

a-c. Project-generated wastewater would be conveyed by the municipal sewer system and would be typical for light industrial uses and would not require additional capacity beyond the wastewater treatment already provided in the City. The project would be developed and operated in compliance with the City regulations and standards of the Regional Water Quality Board (RWQCB), to ensure wastewater treatment requirements are achieved. Water demand would be minor and water supplies would be provided to the project by the City. The City of Victorville General Plan EIR concludes that City buildout pursuant to the General Plan would result in a less than significant impact to water supply and water treatment impacts. The project would also be provided natural gas (Southwest Gas Corporation), electricity (SCE) and telecommunication services (various private services available). Connection to existing services would be consistent with City and purveyor requirements. The implemented City-approved drainage plan **(See Hydrology Section)** would ensure that post-

development storm water discharge rates would not exceed pre-development conditions. The City would apply all recommendations from the hydrology study and the WQMP prior to approving a drainage plan. The project's improvements needed to connect to existing services are expected from this type of development and the project would pay all applicable impact fees, water and sewer connection fees, and service fees required by the City and purveyors. Therefore, the project would result in a **less-than-significant impact.**

d-e. Construction and operation would generate a very minimal amount of solid waste and would not be in excess of capacity of local infrastructure at the Victorville Landfill. Solid waste generation from construction and operations would comply with all federal, state and local statutes and regulations related to solid waste. Therefore, the project would result in a **less-than-significant impact.**

References

City of Victorville General Plan 2030 EIR, 2008.

XX. Wildfire *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Existing Environmental Setting

Due to the location of the project and the surrounding land uses, wildland fire hazard would be minimal. Review of the CAL FIRE *Fire Hazard Severity Zone* Viewer identifies that the City of Victorville is located in a Local Responsibility Area (LRA). The project is not located in a Very High Fire Hazard Severity Zone (CALFIRE, 2020).

Discussion

a. The project would not impair or interfere with any future emergency response or evacuation plans. The project would include a gated emergency entrance/exit on the northwest boundary of the project for use during a potential emergency. Therefore, the project would result in a **less-than-significant impact.**

b. Due to the location and topography of the project, which is relatively flat land, the project would not expose customers to pollutant concentrations from a wildfire. The project would not be composed of flammable building materials that could contribute to an uncontrolled spread of wildfire. Due to the location of the project, wind is not expected to be a factor that could exacerbate wildfire risks. Therefore, the project would result in a **less-than-significant impact.**

c. The project would not require the installation or maintenance of associated infrastructure that would exacerbate fire risk or that would result in temporary ongoing impacts to the environment. The project

would include an emergency gated entrance/exit that would be properly maintained and not cause any ongoing environmental impacts. Therefore, the project would result in a **less-than-significant impact.**

d. The project would not cause runoff, downslope or downstream flooding, or drainage changes. Due to the project location and topography, potential impacts from landslides and post-fire slope instability would not be an environmental concern. Therefore, the project would result in a **less-than-significant impact.**

References

CALFIRE, *Fire Hazard Severity Zone Viewer,* Accessed September 21 2020 at: https://egis.fire.ca.gov/FHSZ/

XXI. Mandatory Finding of Significance	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

a. **Less-than-Significant Impact with Mitigation**. The project would not decrease the quality of the environment, reduce fish or wildlife population, or eliminate important examples of major periods of California history or prehistory. With implementation of **Mitigation Measures BIO-1 through BIO-12, Mitigation Measures CUL-1 through CUL-3** and **Mitigation Measures TCR-1 and TCR-2** impacts to cultural resources would be less-than-significant. Therefore, the project would result in a less-than-significant impact with mitigation incorporated.

b. **Less-than-significant impact.** The project would not have a cumulatively considerable impact on any of the environmental factors evaluated. Therefore, the project would have a less-than-significant impacts.

c. **Less-than-significant impact.** The project would not result in impacts to human beings that would result in substantial adverse effects on human beings, directly or indirectly. Therefore, the project would result in a less-than-significant impact.

APPENDIX A

AIR QUALITY AND GREENHOUSE GAS EMISSIONS SUPPORTING INFORMATION

1.0 AIR QUALITY SETTING

Regional Meteorology and Climate

The project site is in San Bernardino County within the Mojave Desert Air Basin (MDAB). The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevada in the north by the Tehachapi Pass (3,800 feet elevation). The Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 feet). The MDAB is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 feet). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley). The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley) whose primary channel is the San Gorgonio Pass (2,300 feet) between the San Bernardino and San Jacinto Mountains.

Regional Meteorology

Air quality is affected by the rate, amount, and location of pollutant emissions and the associated meteorological conditions that influence pollutant movement and dispersal. Atmospheric conditions, including wind speed, wind direction, stability, and air temperature, in combination with local surface topography (i.e., geographic features such as mountains, valleys, and Pacific Ocean), determine the effect of air pollutant emissions on local air quality.

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time the reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The MDAB averages between 3-7 inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least three months have maximum average temperatures over 100°F. The region is characterized by extreme fluctuations of daily temperatures, strong seasonal winds, and clear skies. January is the coldest month, with a mean low temperature of 37°F. July is the hottest month, with a mean high temperature of 108°F.

During the winter (defined as December through February), the average wind speed is 6.8 miles per hour (3.1 meters per second) with winds from the north (approximately 75 percent of the period), while during the summer (defined as March through November), the average wind speed is 8.3 miles per hour (3.7 meters per second) with winds from the south (approximately 85 percent of the period). During the daytime (defined as 8 am through 8 pm), the average wind speed is 9.1 miles per hour (4.1 meters per second), while during the nighttime (defined as 8 pm through 8 am), the average wind

speed of 6.8 miles per hour (3.0 meters per second). Therefore, winds speeds tend to be higher during the summer months and during the daytime.

Criteria Air Pollutants

The United States Environmental Protection Agency (USEPA) has established the National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA) for six common air pollutants known as "criteria pollutants".[1] These air pollutants consist of CO, nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM10 and PM2.5), SO_2, and lead (Pb). An ambient air quality standard establishes the concentration above which the pollutant is known to cause adverse health effects to sensitive groups within the population such as children and the elderly. The goal is for localized project effects not to cause or contribute to an exceedance of the standards. Ambient air quality standards are classified as either "primary" or "secondary" standards. Primary standards define levels of air quality, including an adequate margin of safety, necessary to protect the public health. Secondary ambient air quality standards define levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

The California Air Resources Board (CARB) manages air quality, regulates mobile emissions sources, and oversees the activities of county and regional Air Pollution Control Districts and Air Quality Management Districts. CARB regulates local air quality indirectly by establishing State ambient air quality standards and vehicle emissions and fuel standards; and by conducting research, planning and coordinating activities. California has adopted ambient standards (known as California Ambient Air Quality Standards or CAAQS) that are more stringent than the federal standards for some criteria air pollutants. These ambient air standards are shown in **Table 1**.

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[1] U.S. Environmental Protection Agency, *Six Common Air Pollutants*, https://www.epa.gov/criteria-air-pollutants

Table 1: State and National Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 Hour 8 Hour	0.09 ppm 0.07 ppm	– 0.070 ppm	High concentrations can directly affect lungs, causing irritation. Long–term exposure may cause damage to lung tissue.	Formed when reactive organic gases and nitrogen oxides react in the presence of sunlight. Major sources include on–road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
Carbon Monoxide (CO)	1 Hour 8 Hour	20 ppm 9.0 ppm	35 ppm 9.0 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline–powered motor vehicles.
Nitrogen Dioxide (NO_2)	1 Hour Annual	0.18 ppm 0.03 ppm	0.10 ppm 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish–brown.	Motor vehicles, petroleum–refining operations, industrial sources, aircraft, ships, and railroads.
Sulfur Dioxide (SO_2)	1 Hour 3 Hour 24 Hour Annual	0.25 ppm – 0.04 ppm –	0.075 ppm 0.5 ppm 0.14 ppm 0.030 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM10)	24 Hour Annual	50 µg/m³ 20 µg/m³	150 µg/m³ –	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume–producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind–raised dust and ocean sprays).
Fine Particulate Matter (PM2.5)	24 Hour Annual	– 12 µg/m³	35.0 µg/m³ 12.0 µg/m³	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including nitrogen oxides, sulfur oxides, and organics.
Lead (Pb)	Month Rolling 3 Month	1.5 µg/m³ –	– 0.15 µg/m³	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present sources: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.

SOURCE: California Air Resource Board, *Ambient Air Quality Standards*, http://www.arb.ca.gov/research/aaqs/aaqs2.pdf, May 4, 2016.

NOTE: (ppm = parts per million; µg/m3 = micrograms per cubic meter)

Local Air Quality

The MDAB attainment status of the CAAQS and NAAQS are shown in **Table 2**. The portion of the MDAB that includes the project site is designated as non-attainment for ozone and PM10 CAAQS, and PM10 NAAQS.

Table 2: MDAQMD Attainment Status

Pollutant	Averaging Time	California Standards		Federal Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Non-attainment	-	Non-attainment*
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)	
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Non-attainment	150 µg/m^3	Non-attainment***
	Annual Arithmetic Mean	20 µg/m^3		-	
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No State Standard		35 µg/m^3	Unclassified/ Attainment
	Annual Arithmetic Mean	12 µg/m^3	Non-attainment*	12 µg/m^3	
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	Attainment	9 ppm (10 mg/m^3)	Unclassified/ Attainment
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppb (57 µg/m^3)	Attainment	0.053 ppm (100 µg/m^3)	Unclassified/ Attainment
	1 Hour	0.18 ppm (330 µg/m^3)		100 ppm (196 µg/m^3)	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	-	Attainment	0.030 ppm (80 µg/m^3)	Unclassified/ Attainment
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	
	3 Hour	-		0.5 ppm (1300 µg/m^3)	
	1 Hour	0.25 ppm (655 µg/m^3)		75 ppb (196 µg/m^3)	
Lead (Pb)	30 Day Average	1.5 µg/m^3	Attainment	-	Unclassified/ Attainment
	Calendar Quarter	-		1.5 µg/m^3	
	Rolling 3-Month Average	-		0.15 µg/m^3	
Visibility Reducing Particles	8 Hour	Extinction Coefficient of 0.24 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent	Unclassified	No Federal Standards	
Sulfates	24 Hour	25 µg/m^3	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Non-attainment**		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)	Unclassified		

*Southwest corner of desert portion of San Bernardino County only
**Searles Valley (northwest corner of San Bernardino County) only
***San Bernardino County portion only

Source: MDAQMD, http://mdaqmd.ca.gov/home/showdocument?id=1267

California Air Resources Board

The CARB has oversight over air quality in the state of California, and has established the California Clean Air Act (CCAA). The CCAA was signed into law in 1988 and, for the first time, clearly spelled out in statute California's air quality goals, planning mechanisms, regulatory strategies, and standards of progress. The CCAA provides the State with a comprehensive framework for air quality planning regulation. Prior to passage of the Act, federal law contained the only comprehensive planning framework. As part of its authority within the state of California, and as allowed under the Federal CAA,

the ARB has established the California Ambient Air Quality Standards (CAAQS). The CAAQS are at least as stringent as the NAAQS. Both the NAAQS and CAAQS are shown in **Table 1**.

The CARB is responsible for the development of the State Implementation Plan (SIP), which provides a framework for attaining and maintaining the NAAQS within the state of California. In turn, development of individual inputs to the SIP is the responsibility of local air pollution control agencies. Regulation of individual stationary sources has been delegated to local air pollution control agencies.

The CARB is responsible for developing programs designed to reduce emissions from non-stationary sources, including motor vehicles and off-road equipment. The CARB and the California Office of Environmental Health Hazard Assessment (OEHHA) are also responsible for developing regulations governing TAC. TAC include air pollutants that can cause serious illnesses or increased mortality, even in low concentrations. The CARB and OEHHA identify specific air pollutants as TAC, develop health thresholds for exposure to TAC, and develop guidelines for conducting health risk assessments for sources of TAC emissions.

Mojave Desert Air Quality Management District

The proposed project would be located in the jurisdiction of the MDAQMD. The MDAQMD is responsible for regulating stationary sources of air emissions in the project site. Stationary sources that have the potential to emit air pollutants into the ambient air are subject to the Rules and Regulations adopted by the MDAQMD.[2] The following MDAQMD rules are applicable to the project.

Rule 401 – Visible Emissions

Rule 401 states that a person shall not discharge into the atmosphere, from any single source of emissions whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:

(a) As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines, or

(b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection A [of the Rules].

Rule 402 – Nuisance

Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

[2] Mojave Desert Air Quality Management District, *Rule Book*, http://mdaqmd.ca.gov/rules/rule-book

Rule 403 – Fugitive Dust

Rule 403 requires control of fugitive dust emissions during activities such as construction that have the potential to generate dust. The provisions of Rule 403 include the following:

(a) A person shall not cause or allow the emissions of fugitive dust from any transport, handling, construction or storage activity so that the presence of such dust remains visible in the atmosphere beyond the property line of the emission source. (This does not apply to emissions emanating from unpaved roadways open to public travel or farm roads. This exclusion shall not apply to industrial or commercial facilities).

(b) A person shall take every reasonable precaution to minimize fugitive dust emissions from wrecking, excavation, grading, clearing of land and solid waste disposal operations.

(c) A person shall not cause or allow particulate matter to exceed 100 micrograms per cubic meter when determined as the difference between upwind and downwind samples collected on high volume samplers at the property line for a minimum of five hours.

(d) A person shall take every reasonable precaution to prevent visible particulate matter from being deposited upon public roadways as a direct result of their operations. Reasonable precautions shall include, but are not limited to, the removal of particulate matter from equipment prior to movement on paved streets or the prompt removal of any material from paved streets onto which such material has been deposited.

(e) Subsections (a) and (c) shall not be applicable when the wind speed instantaneously exceeds 40 kilometers (25 miles) per hour, or when the average wind speed is greater than 24 kilometers (15 miles) per hour. The average wind speed determination shall be on a 15 minute average at the nearest official air-monitoring station or by wind instrument located at the site being checked.

(f) The provisions of this rule shall not apply to agricultural operations.

Rule 404 – Particulate Matter Concentration

Rule 404 restricts emissions of particulate matter from any source based on the concentrations specified in Table 404(a).

Rule 405 – Solid Particulate Matter Weight

Rule 405 restricts emissions of particulate matter from any source based on the concentrations specified in Table 405(a).

Rule 406 – Specific Contaminants

Rule 406 restricts emissions of sulfur compounds to 500 ppm or less, and restricts emissions of halogens, which are not generally emitted from construction projects.

Rule 407 – Liquid and Gaseous Air Contaminants

Rule 407 restricts emissions of carbon monoxide to 2,000 ppm or less.

Rule 408 – Circumvention

Rule 408 restricts the building, erection, installation, or use of any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the Health and Safety Code or of the MDAQMD Rules.

Rule 409 – Combustion Contaminants

Rule 409 restricts discharge into the atmosphere from the burning of fuel, combustion contaminants exceeding 0.23 gram per cubic meter (0.1 grain per cubic foot) of gas calculated to 12 percent of CO2 at standard conditions averaged over a minimum of 25 consecutive minutes.

Rule 431 – Sulfur Content of Fuels

Rule 431 restricts the use of any gaseous fuel containing sulfur compounds in excess of 800 ppm calculated as hydrogen sulfide at standard conditions, or any liquid or solid fuel having sulfur content in excess of 0.5 percent by weight.

Rule 432 – Gasoline Specifications

Rule 432 restricts the sale or supply for use within the District of a fuel for motor vehicles as defined by the Vehicle Code of the State of California, gasoline having a degree of unsaturation greater than that indicated by a Bromine Number of 30 as determined by ASTM Method D1159-66.

Rule 442 – Usage of Solvents

Rule 442 restricts the emission of VOC from any solvent material to 1,190 pounds per month, and requires proper storage and handling of VOC-containing solvents.

Rule 461 – Gasoline Transfer and Dispensing

Rule 461 limits the emissions of VOCs and toxic compounds from the transfer and dispensing of gasoline. Rule 461 contains various requirements for Retail Gas Stations such as CARB Certified Vapor Recovery Systems and various other CARB certified equipment requirements.

MDAQMD 2004 Ozone Attainment Plan

The applicable air quality plan for the proposed project is the 2004 Ozone Attainment Plan (2004 Plan).[3] The purpose of the 2004 Plan is to address the attainment and maintenance of State and federal ambient air quality standards for ozone in the MDAB. The MDAQMD has adopted the control measures recommended in the plan in its Rules and Regulations

Significance Criteria

According to the MDAQMD, any project is significant if it triggers or exceeds the following evaluation criteria:

- Generates total emissions (direct and indirect) in excess of the thresholds in **Table 3**;

[3] Mojave Desert Air Quality Management District, *2004 Ozone Attainment Plan (State and Federal)*, April 26, 2004, http://mdaqmd.ca.gov/home/showdocument?id=174

Table 3: MDAQMD Air Quality Significance Thresholds

Pollutants	Annual (tons)	Daily (pounds)
Carbon Monoxide (CO)	100	548
Nitrogen Oxides (NOx)	25	137
Volatile Organic Compounds (VOC)	25	137
Sulfur Oxides (SOx)	25	137
Coarse Particulate Matter (PM10)	15	82
Fine Particulate Matter (PM2.5)	12	65
Hydrogen Sulfides (H_2S)	10	54
Lead (Pb)	0.6	3

SOURCE: Mojave Desert Air Quality Management District, *CEQA and Federal Conformity Guidelines*, August 2016, http://mdaqmd.ca.gov/home/showdocument?id=538

- Generates a violation of any ambient air quality standard when added to the local background;
- Does not conform to the applicable attainment or maintenance plan(s). Project is deemed to not exceed this threshold, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold.
- Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1. Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated through a health risk assessment:
    - Any industrial project within 1000 feet;
    - A distribution center (40 or more trucks per day) within 1000 feet;
    - A major transportation project (50,000 or more vehicles per day) within 1000 feet;
    - A dry cleaner using perchloroethylene within 500 feet
    - A gasoline dispensing facility within 300 feet

A significant project must incorporate mitigation sufficient to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation measures.

2.0 GREENHOUSE GAS EMISSIONS SETTING

Environmental Setting

"Global warming" and "global climate change" are the terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal, with global surface temperature increasing approximately 1.33 degrees Fahrenheit (°F) over the last 100 years. Continued warming is projected to increase global average temperature between 2 and 11°F over the next 100 years.

Natural processes and human actions have been identified as the causes of this warming. The International Panel on Climate Change concludes that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. After 1950, however, increasing GHG concentrations resulting from human activity such as fossil fuel burning and deforestation have been responsible for most of the observed temperature increase. These basic conclusions have been endorsed by more than 45 scientific societies and academies of science, including all of the national academies of science of the major industrialized countries. Since 2007, no scientific body of national or international standing has maintained a dissenting opinion.

Increases in GHG concentrations in the earth's atmosphere are thought to be the main cause of human-induced climate change. GHG naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space. Some GHG occur naturally and are necessary for keeping the earth's surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have decreased the amount of solar radiation that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

Gases that trap heat in the atmosphere are referred to as GHG because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHG has been implicated as the driving force for global climate change. The primary GHG are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), ozone, and water vapor.

While the presence of the primary GHG in the atmosphere are naturally occurring, CO_2, CH_4, and N_2O are also emitted from human activities, accelerating the rate at which these compounds occur within earth's atmosphere. Emissions of CO_2 are largely by-products of fossil fuel combustion, whereas methane results from off-gassing associated with agricultural practices and landfills. Other GHG include hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, and are generated in certain industrial processes.

CO_2 is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO_2. CH_4 and N_2O are substantially more potent GHG than CO_2, with GWP of 25 and 310 times that of CO_2, respectively.

In emissions inventories, GHG emissions are typically reported in terms of pounds or metric tons of CO_2 equivalents (CO_2e). CO_2e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH_4 and N_2O have much higher GWP than CO_2, CO_2 is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO_2e.

Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions (and thus substantial increases in atmospheric concentrations of CO_2). In pre-industrial times (c. 1860), concentrations of atmospheric CO_2 were approximately 280 parts per million (ppm). By June of 2019, atmospheric CO_2 concentrations had increased to 414 ppm, 48 percent percent above pre-industrial concentrations.[4] There is international scientific consensus that human-caused increases in GHG have contributed and will continue to contribute to global warming.

There is international scientific consensus that human-caused increases in GHG have and will continue to contribute to global warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include a global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.[5]

Regulatory Setting

California Green Building Standards Code

California Code of Regulations Title 24, Part 6 and Part 11 (California Green Building Standards Code)[6], which relate to energy and green building and commonly referred to as CALGreen, is a comprehensive and uniform regulatory code for all residential, commercial and school buildings. CALGreen contains requirements for construction site selection, storm water control during construction, construction waste reduction, indoor water use reduction, material selection, natural resource conservation, site irrigation conservation, and more. CALGreen provides for design options allowing the designer to determine how best to achieve compliance for a given site or building condition. CALGreen also requires building commissioning, which is a process for verifying that all building systems, like heating and cooling equipment and lighting systems, are functioning at their maximum efficiency. The following provides examples of CALGreen requirements:

- **Designated parking.** Provide designated parking in commercial projects for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles.
- **Recycling by Occupants.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling.
- **Construction waste.** A minimum 50-percent diversion of construction and demolition waste from landfills, increasing voluntarily to 65 and-75 percent for new homes and 80-percent for

[4] Earth System Research Laboratory, *Recent Monthly Mean CO_2 at Mauna Lora*, www.esrl.noaa.gov/gmd/ccgg/trends/
[5] California Environmental Protection Agency, *2006 Final Climate Action Team Report to the Governor and Legislature*, March 2006, http://www.climatechange.ca.gov/climate_action_team/reports/2006report/2006-04-03_FINAL_CAT_REPORT.PDF
[6] California Code of Regulations Title 24, Part 11, http://www.bsc.ca.gov/Home/CALGreen.aspx

commercial projects. All (100 percent) of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled.

- **Wastewater reduction.** Each building shall reduce the generation of wastewater by installation of water-conserving fixtures or using nonpotable water systems.
- **Water use savings.** 20-percent mandatory reduction in indoor water use with voluntary goal standards for 30, 35, and 40-percent reductions.
- **Water meters.** Separate water meters for buildings in excess of 50,000 square feet or buildings projected to consume more than 1,000 gallons per day.
- **Irrigation efficiency.** Moisture-sensing irrigation systems for larger landscaped areas.
- **Materials pollution control.** Low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard.
- **Building commissioning.** Mandatory inspections of energy systems (i.e. heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity according to their design efficiencies.

Executive Order S-3-05

Governor Schwarzenegger established Executive Order S-3-05 in 2005, in recognition of California's vulnerability to the effects of climate change. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order directed the Secretary of the CalEPA to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of CalEPA created the California Climate Action Team, made up of members from various state agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through state incentive and regulatory programs.

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

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction will be accomplished by enforcing a statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies

that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 would represent an approximate 25 to 30 percent reduction in current emissions levels. However, CARB has discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions. Under AB 32, CARB must adopt regulations to achieve reductions in GHG to meet the 1990 emissions cap by 2020.

Climate Change Scoping Plan

AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to reduce GHG to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated every five years. The initial AB 32 Scoping Plan contains the main strategies California will use to reduce the GHG that cause climate change. The initial Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation fee regulation to fund the program. In August 2011, the initial Scoping Plan was approved by CARB.

The 2013 Scoping Plan Update builds upon the initial Scoping Plan with new strategies and recommendations. The 2013 Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The 2013 Update defines CARB climate change priorities for the next five years and sets the groundwork to reach California's long-term climate goals set forth in Executive Orders S-3-05 and B-16-2012. The 2013 Update highlights California progress toward meeting the near-term 2020 GHG emission reduction goals defined in the initial Scoping Plan. In the 2013 Update, nine key focus areas were identified (energy, transportation, agriculture, water, waste management, and natural and working lands), along with short-lived climate pollutants, green buildings, and the cap-and-trade program. On May 22, 2014, the First Update to the Climate Change Scoping Plan was approved by the Board, along with the finalized environmental documents.

Executive Order No. B-30-15

On April 29, 2015, Executive Order No. B-30-15 was issued to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Executive Order No. B-30-15 sets a new, interim, 2030 reduction goal intended to provide a smooth transition to the existing ultimate 2050 reduction goal set by Executive Order No. S-3-05 (signed by Governor Schwarzenegger in June 2005). It is designed so State agencies do not fall behind the pace of reductions necessary to reach the existing 2050 reduction goal. Executive Order No. B-30-15 orders “All State agencies with jurisdiction over

sources of GHG emissions shall implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 targets." The Executive Order also states that "CARB shall update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent." The CARB is currently moving forward with a second update to the Climate Change Scoping Plan to reflect the 2030 reduction target. The updated Scoping Plan will provide a framework for achieving the 2030 target. In September of 2016, the AB 32 was extended to achieve reductions in GHG of 40 percent below 1990 levels by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

Greenhouse Gas Regional Emission Estimates

In 2016, the United States emitted about 6,511 million metric tons of CO_2. Total U.S. emissions have increased by 2.4 percent from 1990 to 2016, and emissions decreased from 2015 to 2016 by 1.9 percent (126.8 million metric tons of CO_2). The decrease in total GHG emissions between 2015 and 2016 was driven in large part by a decrease in CO_2 emissions from fossil fuel combustion. The decrease in CO_2 emissions from fossil fuel combustion was a result of multiple factors, including substitution from coal to natural gas and other non-fossil energy sources in the electric power sector; and warmer winter conditions in 2016 resulting in a decreased demand for heating fuel in the residential and commercial sectors. Of the five major sectors nationwide — residential and commercial, industrial, agriculture, transportation, and electricity— electricity accounts for the highest fraction of GHG emissions (approximately 28 percent), closely followed by transportation (approximately 28 percent) and by industry (approximately 22 percent).[7]

In 2016, California emitted approximately 429.4 million tons of CO_2e. This represents approximately 6.6 percent of total U.S. emissions. This large number is due primarily to the sheer size of California compared to other states. California's gross emissions of GHGs decreased by 9.26 percent from 466.3 million metric tons of CO_2e in 2000, with a maximum of 492.7 million metric tons in 2004.[8] In 2016, the composition of GHG emissions in California (expressed as CO_2e) were as follows:

- CO_2 accounted for 83 percent;
- CH_4 accounted for 9 percent;
- N_2O accounted for 3 percent; and
- Fluorinated gases (hydrofluorocarbons (HFCs), perfluorinated compounds (PFCs), and sulfur hexafluoride (SF_6)) accounted for 5 percent.

Of these gases, the transportation is the source of approximately 41 percent of the State's GHG emissions, followed by industrial sources at 23 percent and electricity generation (both in-State and out-of-State) at 16 percent. Agriculture is the source of approximately 8 percent, residential activity is the source of about 7 percent, and commercial activities make up 5 percent.[9]

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[7] United States Environmental Protections Agency, *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016*, April 2018, https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2016

[8] California Air Resources Board, *Emissions Trends Report 2000-2016*, July 11, 2018, https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf

[9] California Air Resources Board, *Emissions Trends Report 2000-2016*, July 11, 2018, https://www.arb.ca.gov/cc/inventory/pubs/reports/2000_2016/ghg_inventory_trends_00-16.pdf

California Emissions Estimator Model (CalEEMod) Version 2016.3.2

Output Files

Proposed Project

Annual Emissions

Summer Emissions

Winter Emissions

Mojave Drive Self Storage

San Bernardino-Mojave Desert County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1.40	1000sqft	0.03	1,400.00	0
Unrefrigerated Warehouse-No Rail	142.44	1000sqft	3.27	142,435.00	0
Parking Lot	225.46	1000sqft	5.18	225,455.00	0
Condo/Townhouse	1.00	Dwelling Unit	0.03	1,400.00	3

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	513	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Mojave Drive Self Storage - San Bernardino-Mojave Desert County, Annual

Project Characteristics - SCE 2018 Sustainability Report

Land Use - Enclosed storage buildings and parking for RVs

Construction Phase -

Grading - balanced site

Vehicle Trips - 0.25 trips per space or 1.65 trips per 1,000 SF (ITE Trip Generation Manual 9th Edition)

Woodstoves - no woodstoves or fireplaces

Energy Use -

Architectural Coating - MDAQMD Rule 1113 Architectural Coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.35	0.00
tblGrading	AcresOfGrading	10.00	8.50
tblGrading	AcresOfGrading	0.00	8.50
tblLandUse	LandUseSquareFeet	142,440.00	142,435.00
tblLandUse	LandUseSquareFeet	225,460.00	225,455.00
tblLandUse	LandUseSquareFeet	1,000.00	1,400.00
tblLandUse	LotAcreage	0.06	0.03

tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	513
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CNW_TTP	0.00	41.00
tblVehicleTrips	CW_TTP	0.00	59.00
tblVehicleTrips	DV_TP	0.00	5.00
tblVehicleTrips	PB_TP	0.00	3.00
tblVehicleTrips	PR_TP	0.00	92.00
tblVehicleTrips	ST_TR	0.00	0.10
tblVehicleTrips	ST_TR	1.68	1.65
tblVehicleTrips	SU_TR	0.00	0.10
tblVehicleTrips	SU_TR	1.68	1.65
tblVehicleTrips	WD_TR	0.00	0.10
tblVehicleTrips	WD_TR	1.68	1.65
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1264	1.1439	0.9702	2.2700e-003	0.2299	0.0503	0.2802	0.1027	0.0468	0.1495	0.0000	202.8988	202.8988	0.0344	0.0000	203.7592
2022	0.9524	1.9946	2.1753	5.4500e-003	0.2055	0.0779	0.2834	0.0553	0.0732	0.1285	0.0000	488.6694	488.6694	0.0666	0.0000	490.3338
Maximum	**0.9524**	**1.9946**	**2.1753**	**5.4500e-003**	**0.2299**	**0.0779**	**0.2834**	**0.1027**	**0.0732**	**0.1495**	**0.0000**	**488.6694**	**488.6694**	**0.0666**	**0.0000**	**490.3338**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1264	1.1439	0.9702	2.2700e-003	0.2299	0.0503	0.2802	0.1027	0.0468	0.1495	0.0000	202.8987	202.8987	0.0344	0.0000	203.7591
2022	0.9524	1.9946	2.1753	5.4500e-003	0.2055	0.0779	0.2834	0.0553	0.0732	0.1285	0.0000	488.6692	488.6692	0.0666	0.0000	490.3336
Maximum	**0.9524**	**1.9946**	**2.1753**	**5.4500e-003**	**0.2299**	**0.0779**	**0.2834**	**0.1027**	**0.0732**	**0.1495**	**0.0000**	**488.6692**	**488.6692**	**0.0666**	**0.0000**	**490.3336**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	0.9617	0.9617
2	12-1-2021	2-28-2022	0.8070	0.8070
3	3-1-2022	5-31-2022	0.7979	0.7979
4	6-1-2022	8-31-2022	0.7941	0.7941
5	9-1-2022	9-30-2022	0.2034	0.2034
		Highest	0.9617	0.9617

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	0.7590	1.2000e-004	0.0108	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0187	0.0187	3.0000e-005	0.0000	0.0195
Energy	1.7100e-003	0.0155	0.0126	9.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003	0.0000	117.8932	117.8932	3.2000e-004	3.1000e-004	117.9936
Mobile	0.0846	0.5669	1.1371	4.9500e-003	0.3992	2.9900e-003	0.4021	0.1070	2.7900e-003	0.1098	0.0000	459.0332	459.0332	0.0206	0.0000	459.5480
Waste						0.0000	0.0000		0.0000	0.0000	27.5357	0.0000	27.5357	1.6273	0.0000	68.2186
Water						0.0000	0.0000		0.0000	0.0000	10.5497	101.2542	111.8039	1.0836	0.0256	146.5172
Total	**0.8453**	**0.5825**	**1.1605**	**5.0400e-003**	**0.3992**	**4.2200e-003**	**0.4034**	**0.1070**	**4.0200e-003**	**0.1110**	**38.0854**	**678.1993**	**716.2848**	**2.7318**	**0.0259**	**792.2969**

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	0.7590	1.2000e-004	0.0108	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0187	0.0187	3.0000e-005	0.0000	0.0195
Energy	1.7100e-003	0.0155	0.0126	9.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003	0.0000	117.8932	117.8932	3.2000e-004	3.1000e-004	117.9936
Mobile	0.0846	0.5669	1.1371	4.9500e-003	0.3992	2.9900e-003	0.4021	0.1070	2.7900e-003	0.1098	0.0000	459.0332	459.0332	0.0206	0.0000	459.5480
Waste						0.0000	0.0000		0.0000	0.0000	27.5357	0.0000	27.5357	1.6273	0.0000	68.2186
Water						0.0000	0.0000		0.0000	0.0000	10.5497	101.2542	111.8039	1.0836	0.0256	146.5172
Total	**0.8453**	**0.5825**	**1.1605**	**5.0400e-003**	**0.3992**	**4.2200e-003**	**0.4034**	**0.1070**	**4.0200e-003**	**0.1110**	**38.0854**	**678.1993**	**716.2848**	**2.7318**	**0.0259**	**792.2969**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 8.5

Acres of Grading (Grading Phase): 8.5

Acres of Paving: 5.18

Residential Indoor: 2,835; Residential Outdoor: 945; Non-Residential Indoor: 215,753; Non-Residential Outdoor: 71,918; Striped Parking Area: 13,527 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	156.00	61.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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					0.0948	0.0000	0.0948	0.0501	0.0000	0.0501	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7179	16.7179	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0948**	**0.0102**	**0.1051**	**0.0501**	**9.4000e-003**	**0.0595**	**0.0000**	**16.7179**	**16.7179**	**5.4100e-003**	**0.0000**	**16.8530**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.5000e-004	3.6000e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9334	0.9334	3.0000e-005	0.0000	0.9340
Total	**4.6000e-004**	**3.5000e-004**	**3.6000e-003**	**1.0000e-005**	**1.1300e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.9334**	**0.9334**	**3.0000e-005**	**0.0000**	**0.9340**

3.2 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					0.0948	0.0000	0.0948	0.0501	0.0000	0.0501	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0194	0.2025	0.1058	1.9000e-004		0.0102	0.0102		9.4000e-003	9.4000e-003	0.0000	16.7178	16.7178	5.4100e-003	0.0000	16.8530
Total	**0.0194**	**0.2025**	**0.1058**	**1.9000e-004**	**0.0948**	**0.0102**	**0.1051**	**0.0501**	**9.4000e-003**	**0.0595**	**0.0000**	**16.7178**	**16.7178**	**5.4100e-003**	**0.0000**	**16.8530**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.5000e-004	3.6000e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9334	0.9334	3.0000e-005	0.0000	0.9340
Total	**4.6000e-004**	**3.5000e-004**	**3.6000e-003**	**1.0000e-005**	**1.1300e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.1000e-004**	**0.0000**	**0.9334**	**0.9334**	**3.0000e-005**	**0.0000**	**0.9340**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0647	0.0000	0.0647	0.0336	0.0000	0.0336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2644
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0647**	**0.0116**	**0.0763**	**0.0336**	**0.0107**	**0.0443**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2644**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.9000e-004	6.0000e-003	2.0000e-005	1.8800e-003	1.0000e-005	1.8900e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.5556	1.5556	4.0000e-005	0.0000	1.5567
Total	**7.7000e-004**	**5.9000e-004**	**6.0000e-003**	**2.0000e-005**	**1.8800e-003**	**1.0000e-005**	**1.8900e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.5556**	**1.5556**	**4.0000e-005**	**0.0000**	**1.5567**

3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0647	0.0000	0.0647	0.0336	0.0000	0.0336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0229	0.2474	0.1586	3.0000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	26.0537	26.0537	8.4300e-003	0.0000	26.2643
Total	**0.0229**	**0.2474**	**0.1586**	**3.0000e-004**	**0.0647**	**0.0116**	**0.0763**	**0.0336**	**0.0107**	**0.0443**	**0.0000**	**26.0537**	**26.0537**	**8.4300e-003**	**0.0000**	**26.2643**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	5.9000e-004	6.0000e-003	2.0000e-005	1.8800e-003	1.0000e-005	1.8900e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.5556	1.5556	4.0000e-005	0.0000	1.5567
Total	**7.7000e-004**	**5.9000e-004**	**6.0000e-003**	**2.0000e-005**	**1.8800e-003**	**1.0000e-005**	**1.8900e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.5556**	**1.5556**	**4.0000e-005**	**0.0000**	**1.5567**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6100e-003	0.1698	0.0345	4.6000e-004	0.0107	2.8000e-004	0.0110	3.0800e-003	2.7000e-004	3.3500e-003	0.0000	43.5465	43.5465	3.0100e-003	0.0000	43.6216
Worker	0.0231	0.0178	0.1811	5.2000e-004	0.0567	3.7000e-004	0.0571	0.0151	3.4000e-004	0.0154	0.0000	46.9170	46.9170	1.3000e-003	0.0000	46.9495
Total	**0.0277**	**0.1876**	**0.2156**	**9.8000e-004**	**0.0674**	**6.5000e-004**	**0.0680**	**0.0181**	**6.1000e-004**	**0.0187**	**0.0000**	**90.4635**	**90.4635**	**4.3100e-003**	**0.0000**	**90.5711**

3.4 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	0.0551	0.5055	0.4807	7.8000e-004		0.0278	0.0278		0.0261	0.0261	0.0000	67.1747	67.1747	0.0162	0.0000	67.5799
Total	**0.0551**	**0.5055**	**0.4807**	**7.8000e-004**		**0.0278**	**0.0278**		**0.0261**	**0.0261**	**0.0000**	**67.1747**	**67.1747**	**0.0162**	**0.0000**	**67.5799**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6100e-003	0.1698	0.0345	4.6000e-004	0.0107	2.8000e-004	0.0110	3.0800e-003	2.7000e-004	3.3500e-003	0.0000	43.5465	43.5465	3.0100e-003	0.0000	43.6216
Worker	0.0231	0.0178	0.1811	5.2000e-004	0.0567	3.7000e-004	0.0571	0.0151	3.4000e-004	0.0154	0.0000	46.9170	46.9170	1.3000e-003	0.0000	46.9495
Total	**0.0277**	**0.1876**	**0.2156**	**9.8000e-004**	**0.0674**	**6.5000e-004**	**0.0680**	**0.0181**	**6.1000e-004**	**0.0187**	**0.0000**	**90.4635**	**90.4635**	**4.3100e-003**	**0.0000**	**90.5711**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0127	0.4773	0.0947	1.3400e-003	0.0316	7.1000e-004	0.0324	9.1300e-003	6.8000e-004	9.8100e-003	0.0000	128.0877	128.0877	8.6100e-003	0.0000	128.3028
Worker	0.0641	0.0474	0.4925	1.4800e-003	0.1681	1.0500e-003	0.1692	0.0446	9.7000e-004	0.0456	0.0000	134.1187	134.1187	3.4600e-003	0.0000	134.2053
Total	**0.0768**	**0.5247**	**0.5872**	**2.8200e-003**	**0.1997**	**1.7600e-003**	**0.2015**	**0.0538**	**1.6500e-003**	**0.0554**	**0.0000**	**262.2063**	**262.2063**	**0.0121**	**0.0000**	**262.5081**

3.4 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	0.1467	1.3429	1.4073	2.3200e-003		0.0696	0.0696		0.0655	0.0655	0.0000	199.2835	199.2835	0.0477	0.0000	200.4770
Total	**0.1467**	**1.3429**	**1.4073**	**2.3200e-003**		**0.0696**	**0.0696**		**0.0655**	**0.0655**	**0.0000**	**199.2835**	**199.2835**	**0.0477**	**0.0000**	**200.4770**

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	0.0127	0.4773	0.0947	1.3400e-003	0.0316	7.1000e-004	0.0324	9.1300e-003	6.8000e-004	9.8100e-003	0.0000	128.0877	128.0877	8.6100e-003	0.0000	128.3028
Worker	0.0641	0.0474	0.4925	1.4800e-003	0.1681	1.0500e-003	0.1692	0.0446	9.7000e-004	0.0456	0.0000	134.1187	134.1187	3.4600e-003	0.0000	134.2053
Total	**0.0768**	**0.5247**	**0.5872**	**2.8200e-003**	**0.1997**	**1.7600e-003**	**0.2015**	**0.0538**	**1.6500e-003**	**0.0554**	**0.0000**	**262.2063**	**262.2063**	**0.0121**	**0.0000**	**262.5081**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	6.7900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0178**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	5.5100e-003	2.0000e-005	1.8800e-003	1.0000e-005	1.8900e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4995	1.4995	4.0000e-005	0.0000	1.5005
Total	**7.2000e-004**	**5.3000e-004**	**5.5100e-003**	**2.0000e-005**	**1.8800e-003**	**1.0000e-005**	**1.8900e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.4995**	**1.4995**	**4.0000e-005**	**0.0000**	**1.5005**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	6.7900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0178**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	5.5100e-003	2.0000e-005	1.8800e-003	1.0000e-005	1.8900e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.4995	1.4995	4.0000e-005	0.0000	1.5005
Total	**7.2000e-004**	**5.3000e-004**	**5.5100e-003**	**2.0000e-005**	**1.8800e-003**	**1.0000e-005**	**1.8900e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.4995**	**1.4995**	**4.0000e-005**	**0.0000**	**1.5005**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.7088**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4800e-003	1.0900e-003	0.0114	3.0000e-005	3.8800e-003	2.0000e-005	3.9100e-003	1.0300e-003	2.0000e-005	1.0500e-003	0.0000	3.0991	3.0991	8.0000e-005	0.0000	3.1011
Total	**1.4800e-003**	**1.0900e-003**	**0.0114**	**3.0000e-005**	**3.8800e-003**	**2.0000e-005**	**3.9100e-003**	**1.0300e-003**	**2.0000e-005**	**1.0500e-003**	**0.0000**	**3.0991**	**3.0991**	**8.0000e-005**	**0.0000**	**3.1011**

3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0141	0.0181	3.0000e-005		8.2000e-004	8.2000e-004		8.2000e-004	8.2000e-004	0.0000	2.5533	2.5533	1.7000e-004	0.0000	2.5574
Total	**0.7088**	**0.0141**	**0.0181**	**3.0000e-005**		**8.2000e-004**	**8.2000e-004**		**8.2000e-004**	**8.2000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.7000e-004**	**0.0000**	**2.5574**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4800e-003	1.0900e-003	0.0114	3.0000e-005	3.8800e-003	2.0000e-005	3.9100e-003	1.0300e-003	2.0000e-005	1.0500e-003	0.0000	3.0991	3.0991	8.0000e-005	0.0000	3.1011
Total	**1.4800e-003**	**1.0900e-003**	**0.0114**	**3.0000e-005**	**3.8800e-003**	**2.0000e-005**	**3.9100e-003**	**1.0300e-003**	**2.0000e-005**	**1.0500e-003**	**0.0000**	**3.0991**	**3.0991**	**8.0000e-005**	**0.0000**	**3.1011**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0846	0.5669	1.1371	4.9500e-003	0.3992	2.9900e-003	0.4021	0.1070	2.7900e-003	0.1098	0.0000	459.0332	459.0332	0.0206	0.0000	459.5480
Unmitigated	0.0846	0.5669	1.1371	4.9500e-003	0.3992	2.9900e-003	0.4021	0.1070	2.7900e-003	0.1098	0.0000	459.0332	459.0332	0.0206	0.0000	459.5480

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	5.81	5.67	4.84	20,681	20,681
General Office Building	15.44	3.44	1.47	32,390	32,390
Parking Lot	22.55	22.55	22.55	87,106	87,106
Unrefrigerated Warehouse-No Rail	235.03	235.03	235.03	908,015	908,015
Total	278.82	266.69	263.88	1,048,191	1,048,191

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	16.80	7.10	7.90	40.20	19.20	40.60	86	11	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Parking Lot	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
General Office Building	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Parking Lot	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Unrefrigerated Warehouse-No Rail	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	100.9947	100.9947	0.0000	0.0000	100.9947
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	100.9947	100.9947	0.0000	0.0000	100.9947
NaturalGas Mitigated	1.7100e-003	0.0155	0.0126	9.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003	0.0000	16.8984	16.8984	3.2000e-004	3.1000e-004	16.9989
NaturalGas Unmitigated	1.7100e-003	0.0155	0.0126	9.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003	0.0000	16.8984	16.8984	3.2000e-004	3.1000e-004	16.9989

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					
Condo/Townhouse	22663.5	1.2000e-004	1.0400e-003	4.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.2094	1.2094	2.0000e-005	2.0000e-005	1.2166
General Office Building	4858	3.0000e-005	2.4000e-004	2.0000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2592	0.2592	0.0000	0.0000	0.2608
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
Unrefrigerated Warehouse-No Rail	289143	1.5600e-003	0.0142	0.0119	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	15.4298	15.4298	3.0000e-004	2.8000e-004	15.5215
Total		**1.7100e-003**	**0.0155**	**0.0126**	**1.0000e-004**		**1.1800e-003**	**1.1800e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**16.8984**	**16.8984**	**3.2000e-004**	**3.0000e-004**	**16.9989**

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					
Condo/Townhouse	22663.5	1.2000e-004	1.0400e-003	4.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.2094	1.2094	2.0000e-005	2.0000e-005	1.2166
General Office Building	4858	3.0000e-005	2.4000e-004	2.0000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.2592	0.2592	0.0000	0.0000	0.2608
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
Unrefrigerated Warehouse-No Rail	289143	1.5600e-003	0.0142	0.0119	9.0000e-005		1.0800e-003	1.0800e-003		1.0800e-003	1.0800e-003	0.0000	15.4298	15.4298	3.0000e-004	2.8000e-004	15.5215
Total		**1.7100e-003**	**0.0155**	**0.0126**	**1.0000e-004**		**1.1800e-003**	**1.1800e-003**		**1.1800e-003**	**1.1800e-003**	**0.0000**	**16.8984**	**16.8984**	**3.2000e-004**	**3.0000e-004**	**16.9989**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	5642.06	1.3129	0.0000	0.0000	1.3129
General Office Building	13328	3.1013	0.0000	0.0000	3.1013
Parking Lot	78909.3	18.3616	0.0000	0.0000	18.3616
Unrefrigerated Warehouse-No Rail	336147	78.2189	0.0000	0.0000	78.2189
Total		**100.9947**	**0.0000**	**0.0000**	**100.9947**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	5642.06	1.3129	0.0000	0.0000	1.3129
General Office Building	13328	3.1013	0.0000	0.0000	3.1013
Parking Lot	78909.3	18.3616	0.0000	0.0000	18.3616
Unrefrigerated Warehouse-No Rail	336147	78.2189	0.0000	0.0000	78.2189
Total		**100.9947**	**0.0000**	**0.0000**	**100.9947**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7590	1.2000e-004	0.0108	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0187	0.0187	3.0000e-005	0.0000	0.0195
Unmitigated	0.7590	1.2000e-004	0.0108	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0187	0.0187	3.0000e-005	0.0000	0.0195

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	0.1767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5818					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.4000e-004	1.2000e-004	0.0108	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0187	0.0187	3.0000e-005	0.0000	0.0195
Total	**0.7590**	**1.2000e-004**	**0.0108**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0187**	**0.0187**	**3.0000e-005**	**0.0000**	**0.0195**

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	0.1767					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5818					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.4000e-004	1.2000e-004	0.0108	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0187	0.0187	3.0000e-005	0.0000	0.0195
Total	**0.7590**	**1.2000e-004**	**0.0108**	**0.0000**		**5.0000e-005**	**5.0000e-005**		**5.0000e-005**	**5.0000e-005**	**0.0000**	**0.0187**	**0.0187**	**3.0000e-005**	**0.0000**	**0.0195**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	111.8039	1.0836	0.0256	146.5172
Unmitigated	111.8039	1.0836	0.0256	146.5172

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	0.065154 / 0.0410754	0.3243	2.1200e-003	5.0000e-005	0.3923
General Office Building	0.248827 / 0.152507	1.2271	8.1100e-003	1.9000e-004	1.4869
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	32.9393 / 0	110.2525	1.0733	0.0253	144.6381
Total		**111.8039**	**1.0836**	**0.0256**	**146.5172**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	0.065154 / 0.0410754	0.3243	2.1200e-003	5.0000e-005	0.3923
General Office Building	0.248827 / 0.152507	1.2271	8.1100e-003	1.9000e-004	1.4869
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	32.9393 / 0	110.2525	1.0733	0.0253	144.6381
Total		**111.8039**	**1.0836**	**0.0256**	**146.5172**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	27.5357	1.6273	0.0000	68.2186
Unmitigated	27.5357	1.6273	0.0000	68.2186

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	0.46	0.0934	5.5200e-003	0.0000	0.2313
General Office Building	1.3	0.2639	0.0156	0.0000	0.6538
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	133.89	27.1785	1.6062	0.0000	67.3335
Total		**27.5357**	**1.6273**	**0.0000**	**68.2186**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	0.46	0.0934	5.5200e-003	0.0000	0.2313
General Office Building	1.3	0.2639	0.0156	0.0000	0.6538
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	133.89	27.1785	1.6062	0.0000	67.3335
Total		**27.5357**	**1.6273**	**0.0000**	**68.2186**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mojave Drive Self Storage

San Bernardino-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1.40	1000sqft	0.03	1,400.00	0
Unrefrigerated Warehouse-No Rail	142.44	1000sqft	3.27	142,435.00	0
Parking Lot	225.46	1000sqft	5.18	225,455.00	0
Condo/Townhouse	1.00	Dwelling Unit	0.03	1,400.00	3

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	513	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Mojave Drive Self Storage - San Bernardino-Mojave Desert County, Summer

Project Characteristics - SCE 2018 Sustainability Report

Land Use - Enclosed storage buildings and parking for RVs

Construction Phase -

Grading - balanced site

Vehicle Trips - 0.25 trips per space or 1.65 trips per 1,000 SF (ITE Trip Generation Manual 9th Edition)

Woodstoves - no woodstoves or fireplaces

Energy Use -

Architectural Coating - MDAQMD Rule 1113 Architectural Coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.35	0.00
tblGrading	AcresOfGrading	10.00	8.50
tblGrading	AcresOfGrading	0.00	8.50
tblLandUse	LandUseSquareFeet	142,440.00	142,435.00
tblLandUse	LandUseSquareFeet	225,460.00	225,455.00
tblLandUse	LandUseSquareFeet	1,000.00	1,400.00
tblLandUse	LotAcreage	0.06	0.03

tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	513
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CNW_TTP	0.00	41.00
tblVehicleTrips	CW_TTP	0.00	59.00
tblVehicleTrips	DV_TP	0.00	5.00
tblVehicleTrips	PB_TP	0.00	3.00
tblVehicleTrips	PR_TP	0.00	92.00
tblVehicleTrips	ST_TR	0.00	0.10
tblVehicleTrips	ST_TR	1.68	1.65
tblVehicleTrips	SU_TR	0.00	0.10
tblVehicleTrips	SU_TR	1.68	1.65
tblVehicleTrips	WD_TR	0.00	0.10
tblVehicleTrips	WD_TR	1.68	1.65
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9889	40.5609	24.9528	0.0624	19.1976	2.0459	21.2435	10.0890	1.8822	11.9712	0.0000	6,182.5250	6,182.5250	1.1984	0.0000	6,202.0233
2022	71.0452	21.6259	24.0671	0.0616	2.3664	0.8294	3.1957	0.6361	0.7802	1.4163	0.0000	6,099.8087	6,099.8087	0.7664	0.0000	6,118.9692
Maximum	**71.0452**	**40.5609**	**24.9528**	**0.0624**	**19.1976**	**2.0459**	**21.2435**	**10.0890**	**1.8822**	**11.9712**	**0.0000**	**6,182.5250**	**6,182.5250**	**1.1984**	**0.0000**	**6,202.0233**

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	3.9889	40.5609	24.9528	0.0624	19.1976	2.0459	21.2435	10.0890	1.8822	11.9712	0.0000	6,182.5250	6,182.5250	1.1984	0.0000	6,202.0233
2022	71.0452	21.6259	24.0671	0.0616	2.3664	0.8294	3.1957	0.6361	0.7802	1.4163	0.0000	6,099.8087	6,099.8087	0.7664	0.0000	6,118.9692
Maximum	**71.0452**	**40.5609**	**24.9528**	**0.0624**	**19.1976**	**2.0459**	**21.2435**	**10.0890**	**1.8822**	**11.9712**	**0.0000**	**6,182.5250**	**6,182.5250**	**1.1984**	**0.0000**	**6,202.0233**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1621	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	0.2294	0.2294	3.5000e-004	0.0000	0.2383
Energy	9.3600e-003	0.0847	0.0688	5.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003		102.0676	102.0676	1.9600e-003	1.8700e-003	102.6741
Mobile	0.5521	3.0752	7.0406	0.0292	2.2579	0.0166	2.2745	0.6042	0.0155	0.6196		2,982.3765	2,982.3765	0.1273		2,985.5584
Total	**4.7235**	**3.1611**	**7.2296**	**0.0297**	**2.2579**	**0.0236**	**2.2816**	**0.6042**	**0.0225**	**0.6267**	**0.0000**	**3,084.6734**	**3,084.6734**	**0.1296**	**1.8700e-003**	**3,088.4708**

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	4.1621	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	0.2294	0.2294	3.5000e-004	0.0000	0.2383
Energy	9.3600e-003	0.0847	0.0688	5.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003		102.0676	102.0676	1.9600e-003	1.8700e-003	102.6741
Mobile	0.5521	3.0752	7.0406	0.0292	2.2579	0.0166	2.2745	0.6042	0.0155	0.6196		2,982.3765	2,982.3765	0.1273		2,985.5584
Total	**4.7235**	**3.1611**	**7.2296**	**0.0297**	**2.2579**	**0.0236**	**2.2816**	**0.6042**	**0.0225**	**0.6267**	**0.0000**	**3,084.6734**	**3,084.6734**	**0.1296**	**1.8700e-003**	**3,088.4708**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 8.5

Acres of Grading (Grading Phase): 8.5

Acres of Paving: 5.18

Residential Indoor: 2,835; Residential Outdoor: 945; Non-Residential Indoor: 215,753; Non-Residential Outdoor: 71,918; Striped Parking Area: 13,527 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	156.00	61.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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					18.9677	0.0000	18.9677	10.0280	0.0000	10.0280			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.9677**	**2.0445**	**21.0121**	**10.0280**	**1.8809**	**11.9089**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1007	0.0638	0.8410	2.2500e-003	0.2299	1.4500e-003	0.2314	0.0610	1.3400e-003	0.0623		224.4932	224.4932	6.3500e-003		224.6519
Total	**0.1007**	**0.0638**	**0.8410**	**2.2500e-003**	**0.2299**	**1.4500e-003**	**0.2314**	**0.0610**	**1.3400e-003**	**0.0623**		**224.4932**	**224.4932**	**6.3500e-003**		**224.6519**

3.2 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					18.9677	0.0000	18.9677	10.0280	0.0000	10.0280			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.9677**	**2.0445**	**21.0121**	**10.0280**	**1.8809**	**11.9089**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1007	0.0638	0.8410	2.2500e-003	0.2299	1.4500e-003	0.2314	0.0610	1.3400e-003	0.0623		224.4932	224.4932	6.3500e-003		224.6519
Total	**0.1007**	**0.0638**	**0.8410**	**2.2500e-003**	**0.2299**	**1.4500e-003**	**0.2314**	**0.0610**	**1.3400e-003**	**0.0623**		**224.4932**	**224.4932**	**6.3500e-003**		**224.6519**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4728	0.0000	6.4728	3.3589	0.0000	3.3589			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.4728**	**1.1599**	**7.6327**	**3.3589**	**1.0671**	**4.4260**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0839	0.0532	0.7009	1.8800e-003	0.1916	1.2100e-003	0.1928	0.0508	1.1200e-003	0.0519		187.0776	187.0776	5.2900e-003		187.2099
Total	**0.0839**	**0.0532**	**0.7009**	**1.8800e-003**	**0.1916**	**1.2100e-003**	**0.1928**	**0.0508**	**1.1200e-003**	**0.0519**		**187.0776**	**187.0776**	**5.2900e-003**		**187.2099**

3.3 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					6.4728	0.0000	6.4728	3.3589	0.0000	3.3589			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.4728**	**1.1599**	**7.6327**	**3.3589**	**1.0671**	**4.4260**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0839	0.0532	0.7009	1.8800e-003	0.1916	1.2100e-003	0.1928	0.0508	1.1200e-003	0.0519		187.0776	187.0776	5.2900e-003		187.2099
Total	**0.0839**	**0.0532**	**0.7009**	**1.8800e-003**	**0.1916**	**1.2100e-003**	**0.1928**	**0.0508**	**1.1200e-003**	**0.0519**		**187.0776**	**187.0776**	**5.2900e-003**		**187.2099**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

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

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	0.1549	5.8078	1.0888	0.0160	0.3738	9.6900e-003	0.3835	0.1076	9.2700e-003	0.1169		1,683.5536	1,683.5536	0.1089		1,686.2759
Worker	0.8727	0.5529	7.2888	0.0195	1.9926	0.0126	2.0052	0.5284	0.0116	0.5400		1,945.6075	1,945.6075	0.0550		1,946.9832
Total	**1.0276**	**6.3607**	**8.3776**	**0.0355**	**2.3664**	**0.0223**	**2.3887**	**0.6361**	**0.0209**	**0.6569**		**3,629.1611**	**3,629.1611**	**0.1639**		**3,633.2591**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.1549	5.8078	1.0888	0.0160	0.3738	9.6900e-003	0.3835	0.1076	9.2700e-003	0.1169		1,683.5536	1,683.5536	0.1089		1,686.2759
Worker	0.8727	0.5529	7.2888	0.0195	1.9926	0.0126	2.0052	0.5284	0.0116	0.5400		1,945.6075	1,945.6075	0.0550		1,946.9832
Total	**1.0276**	**6.3607**	**8.3776**	**0.0355**	**2.3664**	**0.0223**	**2.3887**	**0.6361**	**0.0209**	**0.6569**		**3,629.1611**	**3,629.1611**	**0.1639**		**3,633.2591**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

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

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	0.1443	5.5130	1.0063	0.0158	0.3738	8.1400e-003	0.3819	0.1076	7.7800e-003	0.1154		1,670.0860	1,670.0860	0.1051		1,672.7138
Worker	0.8154	0.4972	6.6974	0.0188	1.9926	0.0122	2.0048	0.5284	0.0113	0.5397		1,875.3891	1,875.3891	0.0494		1,876.6232
Total	**0.9596**	**6.0102**	**7.7037**	**0.0347**	**2.3664**	**0.0204**	**2.3867**	**0.6361**	**0.0190**	**0.6551**		**3,545.4751**	**3,545.4751**	**0.1545**		**3,549.3370**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.1443	5.5130	1.0063	0.0158	0.3738	8.1400e-003	0.3819	0.1076	7.7800e-003	0.1154		1,670.0860	1,670.0860	0.1051		1,672.7138
Worker	0.8154	0.4972	6.6974	0.0188	1.9926	0.0122	2.0048	0.5284	0.0113	0.5397		1,875.3891	1,875.3891	0.0494		1,876.6232
Total	**0.9596**	**6.0102**	**7.7037**	**0.0347**	**2.3664**	**0.0204**	**2.3867**	**0.6361**	**0.0190**	**0.6551**		**3,545.4751**	**3,545.4751**	**0.1545**		**3,549.3370**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.6786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7814**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0784	0.0478	0.6440	1.8100e-003	0.1916	1.1800e-003	0.1928	0.0508	1.0800e-003	0.0519		180.3259	180.3259	4.7500e-003		180.4445
Total	**0.0784**	**0.0478**	**0.6440**	**1.8100e-003**	**0.1916**	**1.1800e-003**	**0.1928**	**0.0508**	**1.0800e-003**	**0.0519**		**180.3259**	**180.3259**	**4.7500e-003**		**180.4445**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.6786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7814**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0784	0.0478	0.6440	1.8100e-003	0.1916	1.1800e-003	0.1928	0.0508	1.0800e-003	0.0519		180.3259	180.3259	4.7500e-003		180.4445
Total	**0.0784**	**0.0478**	**0.6440**	**1.8100e-003**	**0.1916**	**1.1800e-003**	**0.1928**	**0.0508**	**1.0800e-003**	**0.0519**		**180.3259**	**180.3259**	**4.7500e-003**		**180.4445**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.6787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**70.8832**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1620	0.0988	1.3309	3.7400e-003	0.3960	2.4300e-003	0.3984	0.1050	2.2400e-003	0.1072		372.6735	372.6735	9.8100e-003		372.9187
Total	**0.1620**	**0.0988**	**1.3309**	**3.7400e-003**	**0.3960**	**2.4300e-003**	**0.3984**	**0.1050**	**2.2400e-003**	**0.1072**		**372.6735**	**372.6735**	**9.8100e-003**		**372.9187**

3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.6787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**70.8832**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1620	0.0988	1.3309	3.7400e-003	0.3960	2.4300e-003	0.3984	0.1050	2.2400e-003	0.1072		372.6735	372.6735	9.8100e-003		372.9187
Total	**0.1620**	**0.0988**	**1.3309**	**3.7400e-003**	**0.3960**	**2.4300e-003**	**0.3984**	**0.1050**	**2.2400e-003**	**0.1072**		**372.6735**	**372.6735**	**9.8100e-003**		**372.9187**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5521	3.0752	7.0406	0.0292	2.2579	0.0166	2.2745	0.6042	0.0155	0.6196		2,982.3765	2,982.3765	0.1273		2,985.5584
Unmitigated	0.5521	3.0752	7.0406	0.0292	2.2579	0.0166	2.2745	0.6042	0.0155	0.6196		2,982.3765	2,982.3765	0.1273		2,985.5584

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	5.81	5.67	4.84	20,681	20,681
General Office Building	15.44	3.44	1.47	32,390	32,390
Parking Lot	22.55	22.55	22.55	87,106	87,106
Unrefrigerated Warehouse-No Rail	235.03	235.03	235.03	908,015	908,015
Total	278.82	266.69	263.88	1,048,191	1,048,191

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	16.80	7.10	7.90	40.20	19.20	40.60	86	11	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Parking Lot	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
General Office Building	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Parking Lot	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Unrefrigerated Warehouse-No Rail	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.3600e-003	0.0847	0.0688	5.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003		102.0676	102.0676	1.9600e-003	1.8700e-003	102.6741
NaturalGas Unmitigated	9.3600e-003	0.0847	0.0688	5.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003		102.0676	102.0676	1.9600e-003	1.8700e-003	102.6741

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					
Condo/Townhouse	62.0919	6.7000e-004	5.7200e-003	2.4300e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		7.3049	7.3049	1.4000e-004	1.3000e-004	7.3483
General Office Building	13.3096	1.4000e-004	1.3000e-003	1.1000e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.5658	1.5658	3.0000e-005	3.0000e-005	1.5751
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
Unrefrigerated Warehouse-No Rail	792.173	8.5400e-003	0.0777	0.0652	4.7000e-004		5.9000e-003	5.9000e-003		5.9000e-003	5.9000e-003		93.1968	93.1968	1.7900e-003	1.7100e-003	93.7506
Total		**9.3500e-003**	**0.0847**	**0.0688**	**5.2000e-004**		**6.4600e-003**	**6.4600e-003**		**6.4600e-003**	**6.4600e-003**		**102.0676**	**102.0676**	**1.9600e-003**	**1.8700e-003**	**102.6741**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	0.0620919	6.7000e-004	5.7200e-003	2.4300e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		7.3049	7.3049	1.4000e-004	1.3000e-004	7.3483
General Office Building	0.0133096	1.4000e-004	1.3000e-003	1.1000e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.5658	1.5658	3.0000e-005	3.0000e-005	1.5751
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
Unrefrigerated Warehouse-No Rail	0.792173	8.5400e-003	0.0777	0.0652	4.7000e-004		5.9000e-003	5.9000e-003		5.9000e-003	5.9000e-003		93.1968	93.1968	1.7900e-003	1.7100e-003	93.7506
Total		**9.3500e-003**	**0.0847**	**0.0688**	**5.2000e-004**		**6.4600e-003**	**6.4600e-003**		**6.4600e-003**	**6.4600e-003**		**102.0676**	**102.0676**	**1.9600e-003**	**1.8700e-003**	**102.6741**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.1621	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	0.2294	0.2294	3.5000e-004	0.0000	0.2383
Unmitigated	4.1621	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	0.2294	0.2294	3.5000e-004	0.0000	0.2383

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	0.9682					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1879					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.9800e-003	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.2294	0.2294	3.5000e-004		0.2383
Total	**4.1621**	**1.2900e-003**	**0.1202**	**1.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**0.2294**	**0.2294**	**3.5000e-004**	**0.0000**	**0.2383**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9682					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1879					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.9800e-003	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.2294	0.2294	3.5000e-004		0.2383
Total	**4.1621**	**1.2900e-003**	**0.1202**	**1.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**0.2294**	**0.2294**	**3.5000e-004**	**0.0000**	**0.2383**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Mojave Drive Self Storage

San Bernardino-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	1.40	1000sqft	0.03	1,400.00	0
Unrefrigerated Warehouse-No Rail	142.44	1000sqft	3.27	142,435.00	0
Parking Lot	225.46	1000sqft	5.18	225,455.00	0
Condo/Townhouse	1.00	Dwelling Unit	0.03	1,400.00	3

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	513	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Mojave Drive Self Storage - San Bernardino-Mojave Desert County, Winter

Project Characteristics - SCE 2018 Sustainability Report

Land Use - Enclosed storage buildings and parking for RVs

Construction Phase -

Grading - balanced site

Vehicle Trips - 0.25 trips per space or 1.65 trips per 1,000 SF (ITE Trip Generation Manual 9th Edition)

Woodstoves - no woodstoves or fireplaces

Energy Use -

Architectural Coating - MDAQMD Rule 1113 Architectural Coatings

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00
tblFireplaces	NumberWood	0.35	0.00
tblGrading	AcresOfGrading	10.00	8.50
tblGrading	AcresOfGrading	0.00	8.50
tblLandUse	LandUseSquareFeet	142,440.00	142,435.00
tblLandUse	LandUseSquareFeet	225,460.00	225,455.00
tblLandUse	LandUseSquareFeet	1,000.00	1,400.00
tblLandUse	LotAcreage	0.06	0.03

tblProjectCharacteristics	CH4IntensityFactor	0.029	0
tblProjectCharacteristics	CO2IntensityFactor	702.44	513
tblProjectCharacteristics	N2OIntensityFactor	0.006	0
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	CNW_TTP	0.00	41.00
tblVehicleTrips	CW_TTP	0.00	59.00
tblVehicleTrips	DV_TP	0.00	5.00
tblVehicleTrips	PB_TP	0.00	3.00
tblVehicleTrips	PR_TP	0.00	92.00
tblVehicleTrips	ST_TR	0.00	0.10
tblVehicleTrips	ST_TR	1.68	1.65
tblVehicleTrips	SU_TR	0.00	0.10
tblVehicleTrips	SU_TR	1.68	1.65
tblVehicleTrips	WD_TR	0.00	0.10
tblVehicleTrips	WD_TR	1.68	1.65
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	3.9900	40.5642	23.7985	0.0598	19.1976	2.0459	21.2435	10.0890	1.8822	11.9712	0.0000	5,914.5449	5,914.5449	1.1976	0.0000	5,934.1684
2022	71.0475	21.5827	23.0039	0.0590	2.3664	0.8296	3.1960	0.6361	0.7804	1.4165	0.0000	5,839.1966	5,839.1966	0.7719	0.0000	5,858.4949
Maximum	**71.0475**	**40.5642**	**23.7985**	**0.0598**	**19.1976**	**2.0459**	**21.2435**	**10.0890**	**1.8822**	**11.9712**	**0.0000**	**5,914.5449**	**5,914.5449**	**1.1976**	**0.0000**	**5,934.1684**

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	3.9900	40.5642	23.7985	0.0598	19.1976	2.0459	21.2435	10.0890	1.8822	11.9712	0.0000	5,914.5449	5,914.5449	1.1976	0.0000	5,934.1684
2022	71.0475	21.5827	23.0039	0.0590	2.3664	0.8296	3.1960	0.6361	0.7804	1.4165	0.0000	5,839.1966	5,839.1966	0.7719	0.0000	5,858.4949
Maximum	**71.0475**	**40.5642**	**23.7985**	**0.0598**	**19.1976**	**2.0459**	**21.2435**	**10.0890**	**1.8822**	**11.9712**	**0.0000**	**5,914.5449**	**5,914.5449**	**1.1976**	**0.0000**	**5,934.1684**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.1621	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	0.2294	0.2294	3.5000e-004	0.0000	0.2383
Energy	9.3600e-003	0.0847	0.0688	5.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003		102.0676	102.0676	1.9600e-003	1.8700e-003	102.6741
Mobile	0.4804	3.0841	6.0996	0.0270	2.2579	0.0167	2.2746	0.6042	0.0156	0.6197		2,755.4707	2,755.4707	0.1281		2,758.6723
Total	**4.6519**	**3.1701**	**6.2886**	**0.0275**	**2.2579**	**0.0237**	**2.2817**	**0.6042**	**0.0226**	**0.6268**	**0.0000**	**2,857.7676**	**2,857.7676**	**0.1304**	**1.8700e-003**	**2,861.5847**

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	4.1621	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	0.2294	0.2294	3.5000e-004	0.0000	0.2383
Energy	9.3600e-003	0.0847	0.0688	5.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003		102.0676	102.0676	1.9600e-003	1.8700e-003	102.6741
Mobile	0.4804	3.0841	6.0996	0.0270	2.2579	0.0167	2.2746	0.6042	0.0156	0.6197		2,755.4707	2,755.4707	0.1281		2,758.6723
Total	**4.6519**	**3.1701**	**6.2886**	**0.0275**	**2.2579**	**0.0237**	**2.2817**	**0.6042**	**0.0226**	**0.6268**	**0.0000**	**2,857.7676**	**2,857.7676**	**0.1304**	**1.8700e-003**	**2,861.5847**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

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

Acres of Grading (Site Preparation Phase): 8.5

Acres of Grading (Grading Phase): 8.5

Acres of Paving: 5.18

Residential Indoor: 2,835; Residential Outdoor: 945; Non-Residential Indoor: 215,753; Non-Residential Outdoor: 71,918; Striped Parking Area: 13,527 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	156.00	61.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	31.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 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					18.9677	0.0000	18.9677	10.0280	0.0000	10.0280			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.9677**	**2.0445**	**21.0121**	**10.0280**	**1.8809**	**11.9089**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1018	0.0671	0.6861	2.0200e-003	0.2299	1.4500e-003	0.2314	0.0610	1.3400e-003	0.0623		201.3528	201.3528	5.5500e-003		201.4917
Total	**0.1018**	**0.0671**	**0.6861**	**2.0200e-003**	**0.2299**	**1.4500e-003**	**0.2314**	**0.0610**	**1.3400e-003**	**0.0623**		**201.3528**	**201.3528**	**5.5500e-003**		**201.4917**

3.2 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					18.9677	0.0000	18.9677	10.0280	0.0000	10.0280			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.9677**	**2.0445**	**21.0121**	**10.0280**	**1.8809**	**11.9089**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1018	0.0671	0.6861	2.0200e-003	0.2299	1.4500e-003	0.2314	0.0610	1.3400e-003	0.0623		201.3528	201.3528	5.5500e-003		201.4917
Total	**0.1018**	**0.0671**	**0.6861**	**2.0200e-003**	**0.2299**	**1.4500e-003**	**0.2314**	**0.0610**	**1.3400e-003**	**0.0623**		**201.3528**	**201.3528**	**5.5500e-003**		**201.4917**

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4728	0.0000	6.4728	3.3589	0.0000	3.3589			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.4728**	**1.1599**	**7.6327**	**3.3589**	**1.0671**	**4.4260**		**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0849	0.0559	0.5718	1.6800e-003	0.1916	1.2100e-003	0.1928	0.0508	1.1200e-003	0.0519		167.7940	167.7940	4.6300e-003		167.9098
Total	**0.0849**	**0.0559**	**0.5718**	**1.6800e-003**	**0.1916**	**1.2100e-003**	**0.1928**	**0.0508**	**1.1200e-003**	**0.0519**		**167.7940**	**167.7940**	**4.6300e-003**		**167.9098**

3.3 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					6.4728	0.0000	6.4728	3.3589	0.0000	3.3589			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.9285	2,871.9285	0.9288		2,895.1495
Total	**2.2903**	**24.7367**	**15.8575**	**0.0296**	**6.4728**	**1.1599**	**7.6327**	**3.3589**	**1.0671**	**4.4260**	**0.0000**	**2,871.9285**	**2,871.9285**	**0.9288**		**2,895.1495**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0849	0.0559	0.5718	1.6800e-003	0.1916	1.2100e-003	0.1928	0.0508	1.1200e-003	0.0519		167.7940	167.7940	4.6300e-003		167.9098
Total	**0.0849**	**0.0559**	**0.5718**	**1.6800e-003**	**0.1916**	**1.2100e-003**	**0.1928**	**0.0508**	**1.1200e-003**	**0.0519**		**167.7940**	**167.7940**	**4.6300e-003**		**167.9098**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

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

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	0.1645	5.7417	1.2768	0.0153	0.3738	9.9700e-003	0.3837	0.1076	9.5400e-003	0.1172		1,616.1231	1,616.1231	0.1208		1,619.1427
Worker	0.8826	0.5815	5.9465	0.0175	1.9926	0.0126	2.0052	0.5284	0.0116	0.5400		1,745.0579	1,745.0579	0.0481		1,746.2614
Total	**1.0471**	**6.3232**	**7.2233**	**0.0328**	**2.3664**	**0.0226**	**2.3889**	**0.6361**	**0.0212**	**0.6572**		**3,361.1810**	**3,361.1810**	**0.1689**		**3,365.4041**

3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.1645	5.7417	1.2768	0.0153	0.3738	9.9700e-003	0.3837	0.1076	9.5400e-003	0.1172		1,616.1231	1,616.1231	0.1208		1,619.1427
Worker	0.8826	0.5815	5.9465	0.0175	1.9926	0.0126	2.0052	0.5284	0.0116	0.5400		1,745.0579	1,745.0579	0.0481		1,746.2614
Total	**1.0471**	**6.3232**	**7.2233**	**0.0328**	**2.3664**	**0.0226**	**2.3889**	**0.6361**	**0.0212**	**0.6572**		**3,361.1810**	**3,361.1810**	**0.1689**		**3,365.4041**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

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

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	0.1534	5.4443	1.1851	0.0152	0.3738	8.3900e-003	0.3822	0.1076	8.0200e-003	0.1157		1,602.6729	1,602.6729	0.1168		1,605.5922
Worker	0.8268	0.5227	5.4554	0.0169	1.9926	0.0122	2.0048	0.5284	0.0113	0.5397		1,682.1901	1,682.1901	0.0432		1,683.2705
Total	**0.9802**	**5.9670**	**6.6405**	**0.0321**	**2.3664**	**0.0206**	**2.3870**	**0.6361**	**0.0193**	**0.6553**		**3,284.8630**	**3,284.8630**	**0.1600**		**3,288.8627**

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

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	0.1534	5.4443	1.1851	0.0152	0.3738	8.3900e-003	0.3822	0.1076	8.0200e-003	0.1157		1,602.6729	1,602.6729	0.1168		1,605.5922
Worker	0.8268	0.5227	5.4554	0.0169	1.9926	0.0122	2.0048	0.5284	0.0113	0.5397		1,682.1901	1,682.1901	0.0432		1,683.2705
Total	**0.9802**	**5.9670**	**6.6405**	**0.0321**	**2.3664**	**0.0206**	**2.3870**	**0.6361**	**0.0193**	**0.6553**		**3,284.8630**	**3,284.8630**	**0.1600**		**3,288.8627**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.6786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7814**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0795	0.0503	0.5246	1.6200e-003	0.1916	1.1800e-003	0.1928	0.0508	1.0800e-003	0.0519		161.7491	161.7491	4.1600e-003		161.8529
Total	**0.0795**	**0.0503**	**0.5246**	**1.6200e-003**	**0.1916**	**1.1800e-003**	**0.1928**	**0.0508**	**1.0800e-003**	**0.0519**		**161.7491**	**161.7491**	**4.1600e-003**		**161.8529**

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.6786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7814**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0795	0.0503	0.5246	1.6200e-003	0.1916	1.1800e-003	0.1928	0.0508	1.0800e-003	0.0519		161.7491	161.7491	4.1600e-003		161.8529
Total	**0.0795**	**0.0503**	**0.5246**	**1.6200e-003**	**0.1916**	**1.1800e-003**	**0.1928**	**0.0508**	**1.0800e-003**	**0.0519**		**161.7491**	**161.7491**	**4.1600e-003**		**161.8529**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.6787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**70.8832**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1643	0.1039	1.0841	3.3500e-003	0.3960	2.4300e-003	0.3984	0.1050	2.2400e-003	0.1072		334.2814	334.2814	8.5900e-003		334.4961
Total	**0.1643**	**0.1039**	**1.0841**	**3.3500e-003**	**0.3960**	**2.4300e-003**	**0.3984**	**0.1050**	**2.2400e-003**	**0.1072**		**334.2814**	**334.2814**	**8.5900e-003**		**334.4961**

3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.6787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**70.8832**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1643	0.1039	1.0841	3.3500e-003	0.3960	2.4300e-003	0.3984	0.1050	2.2400e-003	0.1072		334.2814	334.2814	8.5900e-003		334.4961
Total	**0.1643**	**0.1039**	**1.0841**	**3.3500e-003**	**0.3960**	**2.4300e-003**	**0.3984**	**0.1050**	**2.2400e-003**	**0.1072**		**334.2814**	**334.2814**	**8.5900e-003**		**334.4961**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.4804	3.0841	6.0996	0.0270	2.2579	0.0167	2.2746	0.6042	0.0156	0.6197		2,755.4707	2,755.4707	0.1281		2,758.6723
Unmitigated	0.4804	3.0841	6.0996	0.0270	2.2579	0.0167	2.2746	0.6042	0.0156	0.6197		2,755.4707	2,755.4707	0.1281		2,758.6723

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	5.81	5.67	4.84	20,681	20,681
General Office Building	15.44	3.44	1.47	32,390	32,390
Parking Lot	22.55	22.55	22.55	87,106	87,106
Unrefrigerated Warehouse-No Rail	235.03	235.03	235.03	908,015	908,015
Total	278.82	266.69	263.88	1,048,191	1,048,191

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	16.80	7.10	7.90	40.20	19.20	40.60	86	11	3
General Office Building	14.70	6.60	6.60	33.00	48.00	19.00	77	19	4
Parking Lot	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	14.70	6.60	6.60	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
General Office Building	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Parking Lot	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884
Unrefrigerated Warehouse-No Rail	0.555935	0.035798	0.180985	0.113549	0.015175	0.004939	0.018497	0.064736	0.001364	0.001528	0.005807	0.000803	0.000884

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	9.3600e-003	0.0847	0.0688	5.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003		102.0676	102.0676	1.9600e-003	1.8700e-003	102.6741
NaturalGas Unmitigated	9.3600e-003	0.0847	0.0688	5.1000e-004		6.4600e-003	6.4600e-003		6.4600e-003	6.4600e-003		102.0676	102.0676	1.9600e-003	1.8700e-003	102.6741

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					
Condo/Townhouse	62.0919	6.7000e-004	5.7200e-003	2.4300e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		7.3049	7.3049	1.4000e-004	1.3000e-004	7.3483
General Office Building	13.3096	1.4000e-004	1.3000e-003	1.1000e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.5658	1.5658	3.0000e-005	3.0000e-005	1.5751
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
Unrefrigerated Warehouse-No Rail	792.173	8.5400e-003	0.0777	0.0652	4.7000e-004		5.9000e-003	5.9000e-003		5.9000e-003	5.9000e-003		93.1968	93.1968	1.7900e-003	1.7100e-003	93.7506
Total		**9.3500e-003**	**0.0847**	**0.0688**	**5.2000e-004**		**6.4600e-003**	**6.4600e-003**		**6.4600e-003**	**6.4600e-003**		**102.0676**	**102.0676**	**1.9600e-003**	**1.8700e-003**	**102.6741**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	0.0620919	6.7000e-004	5.7200e-003	2.4300e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004		7.3049	7.3049	1.4000e-004	1.3000e-004	7.3483
General Office Building	0.0133096	1.4000e-004	1.3000e-003	1.1000e-003	1.0000e-005		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		1.5658	1.5658	3.0000e-005	3.0000e-005	1.5751
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
Unrefrigerated Warehouse-No Rail	0.792173	8.5400e-003	0.0777	0.0652	4.7000e-004		5.9000e-003	5.9000e-003		5.9000e-003	5.9000e-003		93.1968	93.1968	1.7900e-003	1.7100e-003	93.7506
Total		**9.3500e-003**	**0.0847**	**0.0688**	**5.2000e-004**		**6.4600e-003**	**6.4600e-003**		**6.4600e-003**	**6.4600e-003**		**102.0676**	**102.0676**	**1.9600e-003**	**1.8700e-003**	**102.6741**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.1621	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	0.2294	0.2294	3.5000e-004	0.0000	0.2383
Unmitigated	4.1621	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	0.2294	0.2294	3.5000e-004	0.0000	0.2383

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	0.9682					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1879					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.9800e-003	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.2294	0.2294	3.5000e-004		0.2383
Total	**4.1621**	**1.2900e-003**	**0.1202**	**1.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**0.2294**	**0.2294**	**3.5000e-004**	**0.0000**	**0.2383**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9682					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.1879					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.9800e-003	1.2900e-003	0.1202	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.2294	0.2294	3.5000e-004		0.2383
Total	**4.1621**	**1.2900e-003**	**0.1202**	**1.0000e-005**		**5.9000e-004**	**5.9000e-004**		**5.9000e-004**	**5.9000e-004**	**0.0000**	**0.2294**	**0.2294**	**3.5000e-004**	**0.0000**	**0.2383**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

City of Victorville

Department of Development

Planning • Building • Code Enforcement

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PO Box 5001
Victorville, CA 92393-5001
(760) 955-5135
Fax (760) 269-0070
planning@victorvilleca.gov

Greenhouse Gas Emissions Screening Table Review

Note: This form is to be used only for projects which are subject to CEQA and not exempt from CEQA (i.e. Negative Declaration, Mitigated Negative Declaration or Environmental Impact Report).

GENERAL INFORMATION

Applicant: VORAN ARCHITECTS Contact Name: ELEX LOPEZ

Address: 191 CALLE IGLESIA SUITE #100, SAN CLEMENTE, CA.

Telephone No.: 949-388-8090 Email Address: ELOPEZ@VORANARCHITECTS.COM

TYPE OF PROJECT

☐ Residential (Single-Family or Multi-Family) ☒ Commercial or Industrial

PROJECT LOCATION

General Location/Address of Project: NORTHEAST CORNER OF MOJAVE DRIVE & MEGA LINDA AVE.

Name of Business (if applicable):

Assessor's Parcel No(s): 3128-621-04

Existing Zoning: M-1 LIGHT INDUSTRIAL ZONE

PROJECT DESCRIPTION:

SELF STORAGE FACILITY, WITH 3 SEPARATE DETACHED STRUCTURES EACH OFFERING A SELECTION OF STORAGE OPTIONS, INCLUDING INDOOR R.V. STORAGE. ADDITIONLY OUTDOOR R.V. STORAGE WILL ALSO BE OFFERED. THIS FACILITY WILL HAVE A RETAIL COMPONENT WITH A MANAGER RESIDENCE ABOVE.

Instructions

1. Fill out the appropriate section below for either Residential or Commercial/Industrial.
2. Choose items which the proposed project will incorporate into the development to reach a minimum of 45 points.
3. Do not chose items which are independently required by other laws, codes or the VVMC, such as the California Building Green Code, the Civic Center Sustainability Plan or required infrastructure improvements.
4. For those items listed with a TBD point value, please provide specific information and background studies (i.e. traffic study) for Staff to determine an assigned point value.
5. Submit the Screening Table along with the Planning Commission Review Application.

Commercial/Industrial Section

Feature	Description	Assigned Point Values	Project Points
Reduction Measure PS E3: Commercial/Industrial Energy Efficiency Development			
Building Envelope			
Insulation	2008 baseline (walls R-13; roof/attic R-30)	0 points	
	Modestly Enhanced Insulation (walls R-13, roof/attic R-38))	15 points	
	Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)	18 points	18
	Greatly Enhanced Insulation (spray foam insulated walls R-15 or higher, roof/attic R-38 or higher)	20 points	
Windows	2008 Baseline Windows (0.57 U-factor, 0.4 solar heat gain coefficient [SHGC])	0 points	
	Modestly Enhanced Window Insulation (0.4 U-factor, 0.32 SHGC)	7 points	7
	Enhanced Window Insulation (0.32 U-factor, 0.25 SHGC)	8 points	
	Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less SHGC)	12 points	
Cool Roof			
	Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	12 points	
	Enhanced Cool Roof (CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)	14 points	14
	Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	16 points	
Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage.		
	Air barrier applied to exterior walls, calking, and visual inspection such as the HERS Verified Quality Insulation Installation (QII or equivalent)	12 points	12
	Blower Door HERS Verified Envelope Leakage or equivalent	10 points	
Thermal Storage of Building	Thermal storage is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls.		
	Modest Thermal Mass (10% of floor or 10% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	4 points	4
	Enhanced Thermal Mass (20% of floor or 20% of walls 12" or more thick	6 points	

Feature	Description	Assigned Point Values	Project Points
	exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials) Enhanced Thermal Mass (80% of floor or 80% of walls 12" or more thick exposed concrete or masonry with no permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	24 points	
Indoor Space Efficiencies			
Heating/ Cooling Distribution System	Minimum Duct Insulation (R-4.2 required) Modest Duct insulation (R-6) Enhanced Duct Insulation (R-8) Distribution loss reduction with inspection (HERS Verified Duct Leakage or equivalent)	0 points 8 points 10 points 14 points	8
Space Heating/ Cooling Equipment	2008 Minimum HVAC Efficiency (EER 13/75% AFUE or 7.7 HSPF) Improved Efficiency HVAC (EER 14/78% AFUE or 8 HSPF) High Efficiency HVAC (EER 15/80% AFUE or 8.5 HSPF) Very High Efficiency HVAC (EER 16/82% AFUE or 9 HSPF)	0 points 7 points 8 points 12 points	8
Commercial Heat Recovery Systems	Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting the energy savings.	TBD	
Water Heaters	2008 Minimum Efficiency (0.57 Energy Factor) Improved Efficiency Water Heater (0.675 Energy Factor) High Efficiency Water Heater (0.72 Energy Factor)	0 points 14 points 16 points	14
	Very High Efficiency Water Heater (0.92 Energy Factor) Solar Pre-heat System (0.2 Net Solar Fraction) Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)	19 points 4 points 8 points	
Daylighting	Daylighting is the ability of each room within the building to provide outside light during the day reducing the need for artificial lighting during daylight hours. All peripheral rooms within building have at least one window or skylight All rooms within building have daylight (through use of windows, solar tubes, skylights, etc.) All rooms daylighted	 1 points 5 points 7 points	1

Feature	Description	Assigned Point Values	Project Points
Artificial Lighting	2008 Minimum (required) Efficient Lights (25% of in-unit fixtures considered high efficacy. High efficacy is defined as 40 lumens/watt for 15 watt or less fixtures; 50 lumens/watt for 15-40 watt fixtures, 60 lumens/watt for fixtures >40watt) High Efficiency Lights (50% of in-unit fixtures are high efficacy) Very High Efficiency Lights (100% of in-unit fixtures are high efficacy)	0 points 9 points 12 points 14 points	14
Appliances	Star Commercial Refrigerator (new) Energy Star Commercial Dish Washer (new) Energy Star Commercial Cloths Washing	4 points 4 points 4 points	4
Miscellaneous Commercial/Industrial Building Efficiencies			
Building Placement	North/South alignment of building or other building placement such that the orientation of the buildings optimizes conditions for natural heating, cooling, and lighting.	6 point	6
Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on Jun 21st.	6 Points	6
Other	This allows innovation by the applicant to provide design features that increases the energy efficiency of the project not provided in the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	
Existing Commercial building Retrofits	The applicant may wish to provide energy efficiency retrofit projects to existing commercial buildings to further the point value of their project. Retrofitting existing commercial buildings within the City is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the City Planning Department. The decision to allow applicants to ability to participate in this program will be evaluated based upon, but not limited to the following: Will the energy efficiency retrofit project benefit low income or disadvantaged communities? Does the energy efficiency retrofit project fit within the overall assumptions in the reduction measure associated with commercial building energy efficiency retrofits?	TBD	

Feature	Description	Assigned Point Values	Project Points
	Does the energy efficiency retrofit project provide co-benefits important to the City? Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.		
Reduction Measure PS E4: Commercial/Industrial Renewable Energy			
Photovoltaic	Solar Photovoltaic panels installed on commercial buildings or in collective arrangements within a commercial development such that the total power provided augments:		
	Solar Ready Roofs (sturdy roof and electric hookups)	2 points	
	10 percent of the power needs of the project	8 points	
	20 percent of the power needs of the project	14 points	
	30 percent of the power needs of the project	20 points	20
	40 percent of the power needs of the project	26 points	
	50 percent of the power needs of the project	32 points	
	60 percent of the power needs of the project	38 points	
	70 percent of the power needs of the project	44 points	
	80 percent of the power needs of the project	50 points	
	90 percent of the power needs of the project	56 points	
	100 percent of the power needs of the project	60 points	
Wind turbines	Some areas of the City lend themselves to wind turbine applications. Analysis of the areas capability to support wind turbines should be evaluated prior to choosing this feature. Wind turbines as part of the commercial development such that the total power provided augments:		
	10 percent of the power needs of the project	8 points	
	20 percent of the power needs of the project	14 points	
	30 percent of the power needs of the project	20 points	
	40 percent of the power needs of the project	26 points	
	50 percent of the power needs of the project	32 points	
	60 percent of the power needs of the project	38 points	
	70 percent of the power needs of the project	44 points	
	80 percent of the power needs of the project	50 points	
	90 percent of the power needs of the project	56 points	
	100 percent of the power needs of the project	60 points	

Feature	Description	Assigned Point Values	Project Points
Off-site renewable energy project	The applicant may submit a proposal to supply an off-site renewable energy project such as renewable energy retrofits of existing commercial/industrial that will help implement reduction measures associated with existing buildings. These off-site renewable energy retrofit project proposals will be determined on a case by case basis accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal.	TBD	
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided in the table. The ability to supply other renewable energy and the point values allowed will be decided based upon engineering data documenting the ability to generate electricity.	TBD	
Reduction Measure PS W2: Commercial/Industrial Water Conservation			
Irrigation and Landscaping			
Water Efficient Landscaping	Eliminate conventional turf from landscaping Only moderate water using plants Only low water using plants Only California Native landscape that requires no or only supplemental irrigation	0 points 3 points 4 points 8 points	8
Trees	Increase tree planting in parking areas 50% beyond City Code requirements	TBD	
Water Efficient irrigation systems	Low precipitation spray heads< .75"/hr or drip irrigation Weather based irrigation control systems combined with drip irrigation (demonstrate 20 reduced water use)	1 point 5 points	1
Recycled Water	Recycled water connection (purple pipe)to irrigation system on site	5 points	5
Storm water Reuse Systems	Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings.	TBD	

Feature	Description	Assigned Point Values	Project Points
Potable Water			
Showers	Water Efficient Showerheads (2.0 gpm)	3 points	3
Toilets	Water Efficient Toilets/Urinals (1.5gpm) Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	3 points 4 points	3
Faucets	Water Efficient faucets (1.28gpm)	3 points	3
Commercial Dishwashers	Water Efficient dishwashers (20% water savings)	4 points	4
Commercial Laundry Washers	Water Efficient laundry (15% water savings) High Efficiency laundry Equipment that captures and reuses rinse water (30% water savings)	3 points 6 points	3
Commercial Water Operations Program	Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement of water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings.	TBD	
Reduction Measure PS T1: Land Use Based Trips and VMT Reduction			
Mixed Use	Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed use projects will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	
Local Retail Near Residential (Commercial only Projects)	Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	
Reduction Measure PS T2: Bicycle Infrastructure			
Bicycle Infrastructure	Provide bicycle paths within project boundaries. Provide bicycle path linkages between project site and other land uses. Provide bicycle path linkages between project site and transit.	TBD 2 points 5 points	5
Reduction Measure PS T3: Electric Vehicle Infrastructure			
Electric Vehicles	Provide public charging station for use by an electric vehicle (ten points for each charging station within the facility).	10 points	10

Feature	Description	Assigned Point Values	Project Points
Reduction Measure PS T4: Employee Based Trip &VMT Reduction Policy			
Compressed Work Week	Reduce the number of days per week that employees need to be on site will reduce the number of vehicle trips associated with commercial/industrial development. Compressed work week such that full time employees are on site: 5 days per week 4 days per week on site 3 days per week on site	TBD	
Car/Vanpools	Car/vanpool program Car/vanpool program with preferred parking Car/vanpool with guaranteed ride home program Subsidized employee incentive car/vanpool program Combination of all the above	TBD	
Employee Bicycle/ Pedestrian Programs	Complete sidewalk to residential within ½ mile Complete bike path to residential within 3 miles Bike lockers and secure racks Showers and changing facilities Subsidized employee walk/bike program (Note combine all applicable points for total value)	TBD	
Shuttle/Transit Programs	Local transit within ¼ mile Light rail transit within ½ mile Shuttle service to light rail transit station Guaranteed ride home program Subsidized Transit passes Note combine all applicable points for total value	TBD	
CRT	Employer based Commute Trip Reduction (CRT). CRTs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee commutes trip reduction methods. The point value will be determined based upon a TIA that demonstrates the trip/VMT reductions. Suggested point ranges: Incentive based CRT Programs (1-8 points) Mandatory CRT programs (5-20 points)	TBD	
Other Trip Reductions	Other trip or VMT reduction measures not listed above with TIA and/or other traffic data supporting the trip and/or VMT for the project.	TBD	

Feature	Description	Assigned Point Values	Project Points
Total Points from Commercial/Industrial Project:			107

-Commercial/Industrial Section Ends-