INITIAL STUDY

ELM/OLIVE STORAGE YARD

CITY OF BEAUMONT

RIVERSIDE COUNTY, CALIFORNIA

LSA

April 2019

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RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

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LSA Project No. ORZ1801

LSA

April 2019

The City of Beaumont has independently reviewed, analyzed, and exercised judgment in making the determinations contained herein, pursuant to Section 21082.1(c) of the California Public Resources Code, Division 13 (California Environmental Quality Act).

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1.0 INTRODUCTION AND PURPOSE

1.1 INTRODUCTION

Section 1.0 of this Initial Study (IS) describes the purpose, environmental authorization, the intended uses of the IS, documents incorporated by reference, and the processes and procedures governing the preparation of the environmental document. Pursuant to Section 15367 of the State of California *Guidelines for Implementation of the California Environmental Quality Act* (CEQA Guidelines), the City of Beaumont (City) is the Lead Agency under the California Environmental Quality Act (CEQA). The City has primary responsibility for compliance with CEQA and consideration of the proposed project.

The IS is organized as follows:

Section 1.0 *Introduction and Purpose* provides a discussion of the Initial Study's focus and legal requirements.

Section 2.0 *Project Description* provides a detailed description of the proposed project.

Section 3.0 *Initial Study/Environmental Checklist Form* includes a checklist and accompanying analyses of the project's effect on the environment. For each environmental issue, the analysis identifies the level of project's environmental impact.

Section 4.0 *References*

Appendices Includes the technical material prepared to support the analyses contained in the Initial Study.

1.2 PURPOSE

The CEQA requires that the proposed project be reviewed to determine the environmental effects that would result if the project is approved and implemented. The City is the Lead Agency and has the responsibility for preparing and adopting the associated environmental document prior to consideration of the approval of the proposed project. The City has the authority to make decisions regarding discretionary actions relating to implementation of the proposed project. This IS has been prepared in accordance with the relevant provisions of CEQA (California Public Resources Code Section 21000 et seq.); the *CEQA Guidelines,*[1] and the rules, regulations, and procedures for implementing CEQA as adopted by the City. The objective of the Initial Study is to inform City decision-makers, representatives of other affected/responsible agencies, the public and interested parties of the potential environmental consequences of the project.

As established in *CEQA Guidelines* Section 15063(c), the purposes of an IS are to:

- Provide the Lead Agency (i.e., the City of Beaumont) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), Negative Declaration (ND); or Mitigated Negative Declaration (MND);

[1] California Code of Regulations, Title 14, Chapter 3, Sections 15000 through 15387.

- Enable an applicant or Lead Agency to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for an ND or MND;
- Assist in the preparation of an EIR, if one is required;
- Facilitate environmental assessment early in the design of a project;
- Provide a factual basis for finding in an ND or MND that a project will not have a significant effect on the environment;
- Eliminate unnecessary EIRs; and
- Determine whether a previous prepared EIR could be used with the project.

1.3 AUTHORIZATION

According to Section 15002(b) of the *CEQA Guidelines*, the basic purposes of the CEQA are to:

- Inform government decision-makers and the public about the potential significant environmental effects of proposed activities;
- Identify ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governing agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.4 INTENDED USE OF THIS INITIAL STUDY

The City formally initiated the environmental process for the project with the preparation of this IS. The IS screens out those impacts that would be less than significant and do not warrant mitigation, while identifying those issues that require further mitigation to reduce impacts to a less than significant level. As identified in the following analyses, project impacts related to various environmental issues either do not occur, are less than significant (when measured against established significance thresholds), or have been rendered less than significant through implementation of mitigation measures. Based on these analytical conclusions, this IS supports adoption of an MND for the proposed project.

CEQA[1] permits the incorporation by reference of all or portions of other documents that are generally available to the public. The IS has been prepared utilizing information from City planning and environmental documents, technical studies specifically prepared for the project, and other publicly available data. The documents utilized in the IS are identified in Section 3.0 and are hereby incorporated by reference. These documents are available for review at the City of Beaumont, Community Development Department.

[1] *CEQA Guidelines* Section 15150.

1.5 PUBLIC REVIEW OF THE INITIAL STUDY

The IS and a Notice of Intent (NOI) to adopt an MND will be distributed to responsible and trustee agencies, other affected agencies and other parties for a 30-day public review period. Written comments regarding this IS should be addressed to:

Christina Taylor
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City of Beaumont
550 East 6th Street
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(951) 572-3212
Ctaylor@beaumontca.gov

After the public review period, consideration of comments raised during the public review period will be taken into account and addressed prior to adoption of the MND by the City.

1.6 LIST OF PREPARERS

1.6.1 City of Beaumont

Christina Taylor, Community Development Director

1.6.2 LSA Associates, Inc.

Lynn Calvert-Hayes, AICP, Principal in Charge
Carl Winter, Associate/Project Manager
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Denise Woodward, Associate/Biologist
Jason Lui, Associate/Senior Noise Specialist
Michael Slavick, Senior Air Quality Specialist
Hope Rosen, Assistant Environmental Planner
Steve Dong, Editor
Matt Phillips, GIS/Graphics Specialist
Maria Perez, Administrative Assistant/Document Production

2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The project is located at 310 Elm Avenue in the City of Beaumont, California (City). The approximately 2.8 acre property encompasses Assessor Parcel Numbers (APNs) 417-110-008, 417-110-015 and 417-130-023 south of West 4th Street. The site is located approximately 0.25 mile southwest of Interstate 10 (I-10), specifically, within Section 9, Township 3 South, Range 1 West, as shown on the U.S. Geological Survey (USGS) Beaumont, California 7.5-minute quadrangle (Figure 1).

The site is designated "Industrial" (I) in the City's General Plan and is zoned M (Manufacturing). Surrounding land uses include an industrial use (with outdoor storage) to the north, an electrical substation to the northwest, grubbed property to the west, and single-family residential uses to the south and east (Figure 2).

The project site is relatively flat and elevation ranges from approximately 2,555 to 2,561 feet above mean sea level. Soil type present within the limits of the proposed project, as mapped by the Soil Conservation Service (Knecht 1980), includes Ramona fine sandy loam, 2 to 5 percent slopes, eroded. The project site is undeveloped aside from an unoccupied single-family residence (APN 417-110-023) and four outbuildings (Figures 2 and 3). Vegetation on site consists of non-native grassland and a few ornamental trees associated with the existing residence. Specifically, the dominant vegetation on site includes mouse barley (*Hordeum murinum*), brome grass (*Bromus* sp.), and common fiddleneck (*Amsinckia* sp.) (Appendix B). Ornamental trees are located on site near the vacant residential structure.

2.2 PROJECT DESCRIPTION

The proposed project is a storage yard for freeway construction maintenance materials such as steel beams, k-rails and limited amounts of smaller construction equipment. The existing residence will be utilized for the storage of tools, signs, and other equipment. Project activities include the clearance of the site (removal of four outbuildings, removal of vegetation, and slight ground leveling)[1] and the placement of 4 to 6 inches of crushed recycled base[2] throughout the project site. The maximum depth of excavation will be approximately one foot for site level and two feet for wall footings. Block wall fences (6-foot height minimum) will be constructed along the Elm and Olive Avenue frontages, and screening fences (6-foot height minimum) will be installed along the north and south project boundaries.[3] The project includes a 5-foot wide landscaped setback along all walls/fencing around the perimeter of the site. Driveway approaches will be installed along Elm and Olive Avenues and

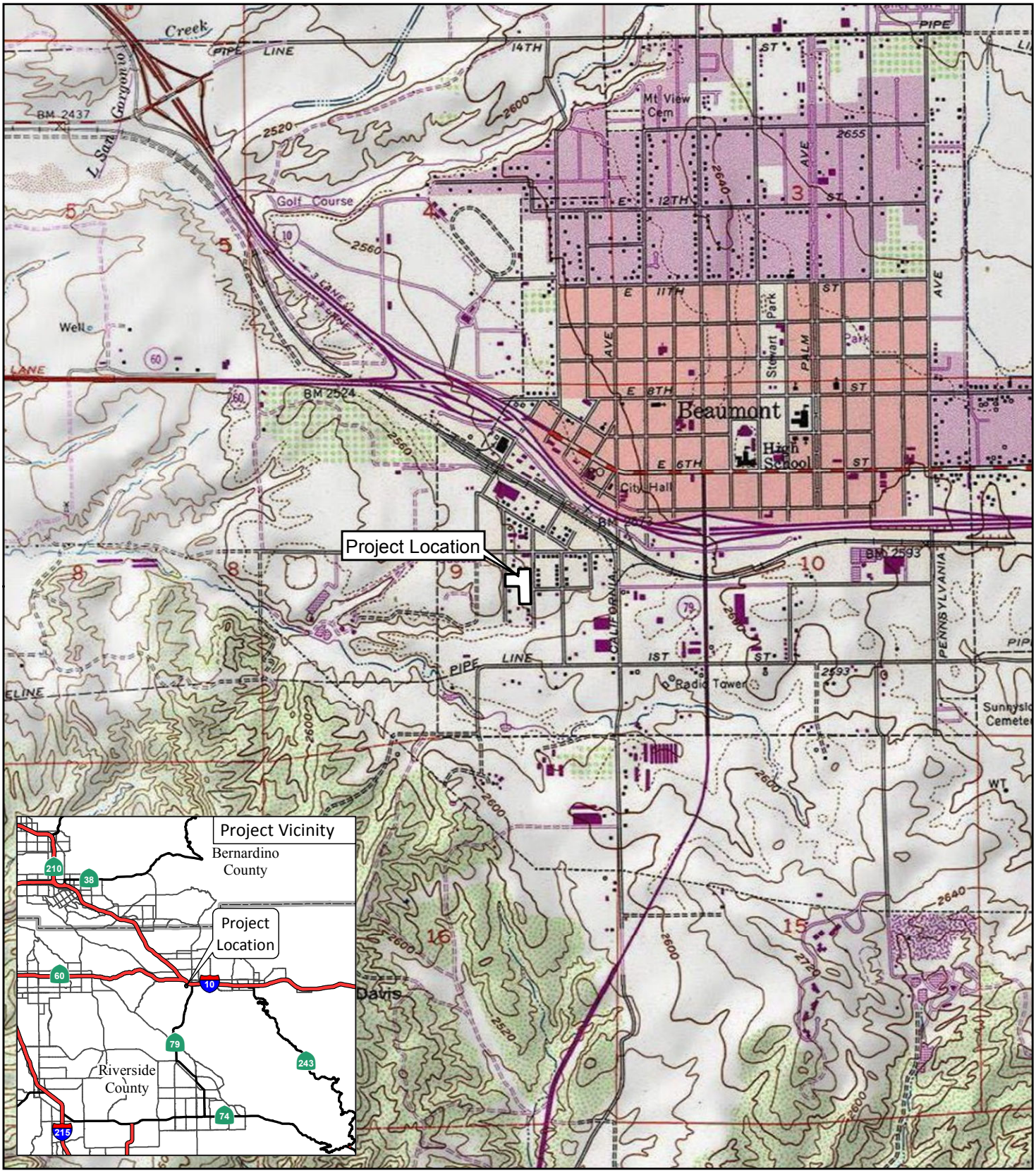
[1] Clearance of the site, including removal of the outbuildings and vegetation and slight ground leveling, involves operation of one small grader, one small skip loader, and one water truck for eight hours per day for three weeks. Two 40-cubic-yard dumpsters will be utilized for disposal of outbuilding and vegetation material. Ground disturbance will include grubbing of vegetation, minor trench excavation for erection of walls and fences, and spreading of on-site soil from high areas to low areas to create a generally level surface.

[2] Placement of 4 to 6 inches of crushed recycled base throughout the site involves three trucks delivering base material three times per day for 10 days.

[3] Erection of walls and fences and construction of approach driveways and other improvements involve operation of a forklift, small skip loader, double drum roller, and backhoe eight hours per day for three weeks. The maximum number of workers on site will be eight persons for approximately three weeks of site improvements.

connect through the site via a 40-foot-wide driveway covered with 4 to 6 inches of crushed recycled base to provide access to the proposed storage areas (Figure 3). The project does not include the development of any other habitable structures or features. Permanent perimeter lighting will be provided to facilitate site improvements, operation of the site during pickup/deliver of material, and safety on the premises. Additionally, surveillance cameras and an alarm system will be installed to maintain safety on site. The on-site residential structure is currently connected to water, power and gas service and an existing septic system. The project does not require the installation, extension, or expansion of utilities to the site.

The unattended storage yard will not require any permanent occupation or on-site employees. The existing residence will be utilized infrequently for equipment/tool storage. Materials stored outside may reach a height of up to 15 feet above ground level (similar to the adjacent use). Operation of the site includes the periodic delivery and pickup of materials used for nearby highway construction. The frequency and duration of delivery/pickup activity is dependent upon the demand of highway construction, but it is anticipated to occur between 10 and 15 times per month, with a worst-case frequency of three trips per day. Such activities would include the usage of one 18-wheel trailer per trip, as well as on-site use of one forklift, one loader, and one crane for up to eight hours per day. As a worst-case scenario, up to eight workers would be on site during delivery/pickup activities for up to eight hours per day. Trucks will access the site from Elm Avenue and will exit the site onto Olive Avenue. Delivery/pickup activity is expected between 7:00 a.m. and 7:00 p.m., and no nighttime operation of the storage yard is anticipated. No haul vehicles will be stored on site. Due to the variable need for materials stored on site, no pickups or deliveries may occur for days or weeks at a time.



LSA

LEGEND

Project Site

FIGURE 1

N

0 1000 2000

FEET

Elm/Olive Storage Yard

Regional and Project Location

SOURCE: USGS 7.5' Quad - Beaumont (1998); El Casco(1979), CA

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LSA

LEGEND

Project Site

FIGURE 2

0 75 150

FEET

SOURCE: Google (2018)

I:\ORZ1801\GIS\MXD\LandUses.mxd (12/14/2018)

Elm/Olive Storage Yard

Existing Land Uses

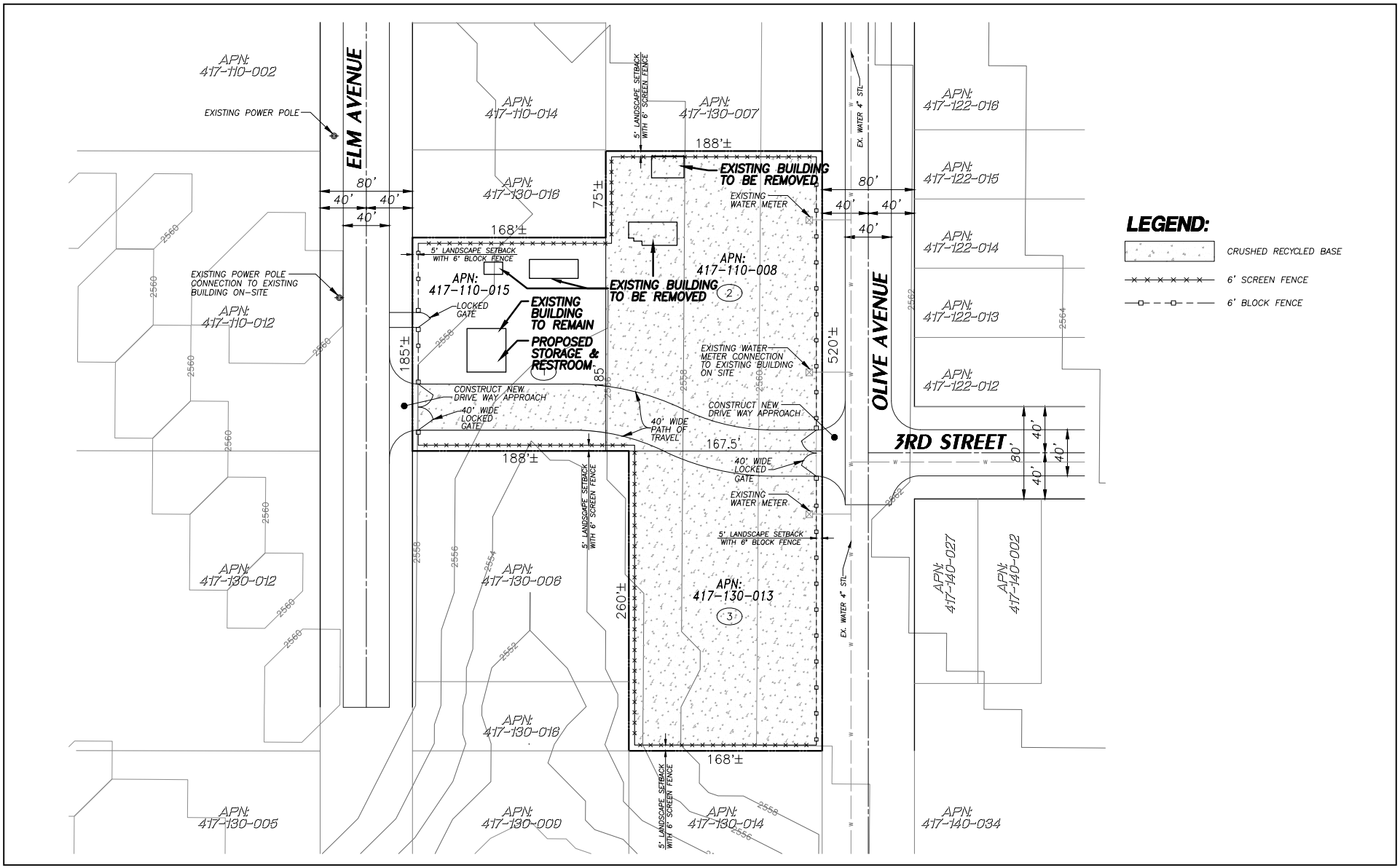

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FIGURE 3

N

0 60 120

FEET

SOURCE: Hunsacker & Associates

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Elm/Olive Storage Yard

Plot Plan

3.0 INITIAL STUDY/ENVIRONMENTAL CHECKLIST FORM

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

3.2 DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.	
I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION would 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 "potential 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 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.	

Signature

4/25/19
Date

Christina Taylor
Printed Name

Community Development Director
Title

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

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

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

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

4) "Negative Declaration: Potentially Significant Unless Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 17, "Earlier Analysis," may be cross-referenced).

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

   (a) Earlier Analysis Used: Identify and state where they are available for review.

   (b) Impacts Adequately Addressed: Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   (c) Mitigation Measures: For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

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

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

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

9) The analysis of each issue should identify (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.1 Aesthetics Would the project:				
a) Have a substantial adverse effect on a scenic vista?			■	
Less Than Significant Impact. According to the City of Beaumont (City) General Plan, there are no designated scenic views or vistas within the City.[6] The proposed project is not located on/or adjacent to a hillside area. Surrounding land uses include an industrial use (with outdoor storage) to the north, an electrical substation to the northwest, grubbed property to the west, single-family residential uses to the south and east. The project would not result in the development of any structures or facilities with the exception of fences. Block walls and screening fences will be installed along the east/west and north/south boundaries of the site, respectively. A 5-foot wide landscaped setback from the property line will be provided along each wall/fence. Materials stored on site may reach a height of up to 15 feet which is similar to that occurring on adjacent industrial properties. No new substantial obstruction of ridgelines and hillsides would occur; therefore, impacts are less than significant and no mitigation is required.				
b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				■
No Impact. The project site is located approximately 0.24 mile south of I-10; which is not designated a scenic highway within the project area.[7] There are no designated scenic highways within the City. The proposed project site consists of undeveloped land that has been plowed. Sparse ruderal[8] vegetation is growing on site, and no potentially significant scenic resources are present. Since the proposed project site is not visible from any scenic highway and does not contain scenic resources, no impact would occur and no mitigation is required.				
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			■	

[6] City of Beaumont, General Plan, March 2007.

[7] California Scenic Highway Mapping System, California Department of Transportation. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/ (accessed February 22, 2019).

[8] Ruderal vegetation is any native or non-native plant species that first colonizes disturbed lands.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Less Than Significant Impact. As of July 1, 2017, the United States Census Bureau estimated the City's population to be 46,967 persons. Therefore, the project is not located in an area that meets the definition of *Urbanized Area* under Section 15387 of the *CEQA Guidelines*. The site is designated "Industrial" (I) in the City's General Plan and is zoned M (Manufacturing), and the proposed material storage uses are generally consistent with uses permitted in the City's "M" (Manufacturing) zone (Zoning Ordinance Table 17.03-3), including 'Building Material, Outdoor Sales and Storage." Surrounding land uses include an industrial use (with outdoor storage) and residential use to the north, an electrical substation to the northwest, grubbed property to the west, and single-family residential uses directly south and east (across Olive Avenue) of the site (Figure 2). Furthermore, the project site is bounded by Elm Avenue to the west and Olive Avenue to the east. The proposed project site is developed with a single-family residence and four outbuildings. The residential structure will remain while the outbuildings will be removed. The proposed use is consistent with outdoor storage of building materials occurring on property directly north of the project site, which is bounded not only by Elm Street and Olive Street, but also by W. 4th Street. Accordingly, the majority of public views in the project vicinity consist of outdoor storage of building materials. Although the project would alter the visual character of the site, the proposed uses would be substantially similar to existing adjacent uses subject to the majority of public views in the project vicinity. Therefore, the proposed project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts are less than significant and no mitigation is required.				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			■	
Less Than Significant Impact. Current site lighting is limited to incidental lighting from the existing residence. Permanent perimeter lighting will be provided to facilitate site improvements, operation of the site during pickup/delivery of material, and safety on the premises. To reduce potential impacts from light or glare to less than significant levels, lighting will be shielded such that it will minimize light spillage to adjacent properties in accordance with City Municipal Code (Chapter 8.50: Outdoor Lighting). Additionally, the proposed project will not utilize high gloss or reflective materials that would cause glare or reflection. Through adherence to applicable City standards, the project would not generate excessive light or glare. Impacts would be less than significant and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

3.3.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, Lead Agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				■
No Impact. Farmland maps are compiled by the California Department of Conservation, Farmland Mapping and Monitoring Program (FMMP). As classified by the FMMP the project site is designated as "Urban and Built-Up Land." In Riverside County, "Urban and Built-Up land" includes land occupied by structures with a building density of at least 1 unit to 1.5 acres or approximately 6 structures to a 10-acre parcel. The FMMP does not identify any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project site;[9] therefore, no conversion of any such agricultural resources would occur. In the absence of any such agricultural conversion, no impact would occur. No mitigation is required.				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				■
No Impact. The project site is zoned "M" (Manufacturing) by the City and is not located within a Williamson Act contract area.[10] The proposed project will not conflict with existing zoning for agricultural uses or with a Williamson Act Conservation Contract; therefore, no impact would occur, and no mitigation is required.				
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))?				■
No Impact. The City does not maintain forestry-related or timberland zoning. No forest land is located within or near the project site; therefore, no conversion of forest land would occur. No mitigation is required.				

[9] *California Department of Conservation Farmland Mapping and Monitoring Program.* Riverside County Important Farmland 2016, https://maps.conservation.ca.gov/DLRP/CIFF/ Website accessed 12/11/2018.

[10] City of Beaumont, General Plan, March 2007.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?				■
No Impact. Please refer to response to Checklist Item 3.3.2c.				
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?				■
No Impact. As no agricultural uses exist on site, the proposed project would not result in the conversion of agricultural land to a non-agricultural use. Similarly, no forestry uses exist on site. In the absence of land designated for agricultural or forestry use, no impact would occur, and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.3 Air Quality Where available, 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:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			■	
Less Than Significant Impact. The project is located in the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin includes all of Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD adopted an Air Quality Management Plan (AQMP), the main purpose of which is to describe air pollution control strategies to be taken by a city, county, or region classified as a nonattainment area in order to bring the area into compliance with federal and State air quality standards. A nonattainment area is considered to have air quality worse than the National Ambient Air Quality Standards as defined in the Federal Clean Air Act. The current regional air quality plan is the Final 2016 AQMP adopted by the SCAQMD on March 10, 2017.[11] The Final 2016 AQMP proposes policies and measures currently contemplated by responsible agencies to achieve federal standards for healthful air quality in the Basin and those portions of the Salton Sea Air Basin that are under SCAQMD jurisdiction. The Basin is currently a federal and state nonattainment area for particulate matter less than 10 microns in size (PM_{10}), particulate matter less than 2.5 microns in size ($PM_{2.5}$), and ozone (O_3).				

[11] *Final 2016 Air Quality Management Plan.* South Coast Air Quality Management District. March 2016.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
The 2016 AQMP incorporates local General Plan land use assumptions and regional growth projections developed by the Southern California Association of Governments (SCAG) to estimate stationary and mobile source emissions associated with projected population and planned land uses. If a new land use is consistent with the local General Plan and the regional growth projections adopted in the 2016 AQMP, then the added emissions are considered to have been evaluated, are contained in the 2016 AQMP, and would not conflict with or obstruct implementation of the regional 2016 AQMP. The proposed project is not considered a project of statewide, regional, or area-wide significance (e.g., large-scale projects such as airports, electrical generating facilities, petroleum and gas refineries, residential development of more than 500 dwelling units, shopping center or business establishment employing more than 1,000 persons or encompassing more than 500,000 square feet of floor space, etc.) as defined in the California Code of Regulations (Title 14, Division 6, Chapter 3, Article 13, §15206(b)). The City's General Plan designates the project site land use as Industrial, and the zoning is designated as Manufacturing (M). No changes are proposed to either the General Plan land use designation or zoning, as the project will include only minor modifications to the site for the purposes of temporarily staging construction equipment and materials. Therefore, the project would not generate any increase in population that otherwise would not have been planned for in the City. Since the proposed project is consistent with the General Plan land use and zoning designation and would not generate any increase in population beyond that which has already been planned for by SCAG and the City, the proposed project is consistent with the 2016 AQMP. Impacts would be less than significant, and no mitigation is required.				
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?			■	
Less Than Significant Impact. The cumulative impacts analysis is based on projections in the regional 2016 AQMP, which incorporates local General Plan land use assumptions and regional growth projections developed by SCAG to estimate stationary and mobile source emissions associated with projected population and planned land uses. The City's General Plan designates the project site as Industrial. As detailed in response to Checklist Question 3.3.3a, no changes are proposed to either the General Plan land use designation or Zoning, as the proposed uses conform to the existing designations. Additionally, the project is not considered a project of statewide, regional, or area-wide significance. The project will include only minor modifications to the site for the purposes of temporarily staging construction equipment and material. Therefore, the project would not generate an increase in population that otherwise would not have been planned for in the City. Since the proposed project is consistent with the General Plan land use and zoning designation and would not generate an increase in population beyond that which has already been planned for by SCAG and the City, the proposed project is consistent with the 2016 AQMP.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. The SCAQMD developed the thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the Basin's existing air quality conditions. Therefore, a project that exceeds the SCAQMD project-specific thresholds would also have a cumulatively considerable contribution to a significant cumulative impact.

Short-Term Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by site leveling, paving, and other activities. Emissions from construction equipment are also anticipated and would include carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOC), directly-emitted particulate matter less than 2.5 microns ($PM_{2.5}$) or 10 microns (PM_{10}) in size, and toxic air contaminants (TACs), such as diesel exhaust particulate matter. Construction emissions were estimated for the project using the California Emission Estimator Model (CalEEMod) Version 2016.3.2, consistent with SCAQMD recommendations for the proposed project. Precise details of construction activities are unknown at this time; therefore, default assumptions (e.g., construction fleet activities) from CalEEMod were assumed. For purposes of this analysis, the construction schedule for all improvements was assumed to be approximately two months. Construction-related emissions are presented in Table 3.3.3a. CalEEMod output sheets are provided in Appendix A.

Table 3.3.3a: Estimated Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOC	NOx	CO	SOx	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Demolition	2.38	23.32	15.54	0.03	0.38	1.29	0.08	1.20
Site Preparation	1.80	21.57	12.27	0.03	0.48	0.85	0.07	0.79
Grading	2.36	34.91	12.21	0.06	3.49	1.12	1.57	1.03
Building Construction	2.91	21.36	17.95	0.04	0.70	1.11	0.19	1.06
Peak Daily	**2.91**	**34.91**	**17.95**	**0.06**	**4.61**		**2.60**	
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00		55.00	
Significant Emissions?	No	No	No	No	No		No	

Source: Table 1, Elm/Olive Storage Yard Project—Air Quality and Greenhouse Gas Emission Analysis, LSA Associates, Inc., March 2019 (Appendix A).

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

As indicated in Table 3.3.3a, construction emissions would not exceed the SCAQMD's thresholds for maximum daily construction emissions and, therefore, would not contribute to a substantial increase in regional air emissions.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Long-Term Operational Emissions. Long-term air pollutant emission impacts are those associated with the net increases in mobile-source emissions. The area source emissions would come from many sources, including consumer products, landscaping equipment, and general energy and water usage. Based on the limited project information associated with the worker crews, the proposed project is assumed to generate approximately 16 vehicle trips per day. The modeling represents a worst-case scenario of what could occur on a typical day of operation. In addition, it is assumed that up to three off-road equipment/vehicles related to materials movement would be operating on site during pick-up or delivery activity. Table 3.3.3b details the project-related long-term air pollutant emissions.

Table 3.3.3b: Regional Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Area	0.05	0	<0.01	0	0	0
Energy	0	0	0	0	0	0
Mobile	0.11	0.84	1.57	<0.01	9.15	0.99
Off-road	0.50	4.74	2.86	<0.01	0.17	0.16
Total Project Emissions	**0.66**	**5.58**	**4.43**	**0**	**9.32**	**1.15**
SCAQMD Thresholds	55.00	55.00	550.00	150.00	150.00	55.00
Significant Emissions?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Table 3, Elm/Olive Storage Yard Project—Air Quality and Greenhouse Gas Emission Analysis, LSA Associates, Inc., March 2019 (Appendix A).

CO = carbon monoxide
lbs/day = pounds per day
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SOx = sulfur oxides
VOC = volatile organic compounds

The project site is not proposed for continuous occupation. It should be noted that pick-up and delivery of construction material from/to the site is anticipated to occur infrequently, with days when no activity (and therefore no emissions) would occur. Operation activities will be limited to heavy-duty trucks picking up or delivering materials from/to the project site approximately 10 to 15 times a month, which includes transport of crew to load or unload materials. Energy use of the on-site residential building as a storage facility and occasional bathroom is expected to be nominal since the project site will not be continuously occupied. As indicated in Table 3.3.3b, none of the criteria pollutants would exceed SCAQMD emissions thresholds during operation, so the project would not contribute to a substantial increase in regional air pollutant emissions.

Compliance with SCAQMD Rules 402, 403 and 431.2; Title 13-Section 2449 of the California Code of Regulations; and CalRecycle/Green Building Program regulations, which include implementation of standard control measures for diesel equipment emissions, fugitive dust, and construction methods is a regulatory requirement for all projects in the SCAQMD. Through compliance with these regulations as part of applicable policy designed to reduce emissions, the proposed project would not exceed any SCAQMD threshold or contribute to a substantial increase in regional air pollutant

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
emissions. Therefore, the proposed project would not result in a cumulatively considerable contribution to significant air quality impacts. Cumulative air quality impacts would be less than significant and no mitigation is required.				
c) Expose sensitive receptors to substantial pollutant concentrations?			■	

Less Than Significant Impact. Localized Significance Thresholds (LSTs) represent the maximum emissions from a project that would not result in an exceedance of the national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the project source receptor area (SRA) and the distance to the nearest sensitive receptor. For this project, the appropriate SRA is the Banning Airport Area (SRA 29).

The SCAQMD recommends the evaluation of localized NOx, CO, PM_{10}, and $PM_{2.5}$ concentration-related impacts to sensitive receptors in the immediate vicinity of the project alignment. Sensitive receptors include but are not limited to residential land uses, schools, hospitals, resident care facilities, daycare facilities, or other facilities that may house individuals with health conditions that would be affected by poor air quality. The project site is adjacent to residential homes to the north, south and across Olive Avenue to the east.

Table 3.3.3c identifies the emissions thresholds for local pollutants with receptors at a distance of 82 feet (25 meters) for a 3-acre site.

Table 3.3.3c: Construction Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
Maximum On-Site Emissions	23	15	3.6	2.3
LST thresholds for a 3-acre site	178	1,966	14.0	7.7
Significant Emissions?	No	No	No	No

Source: Table 2, Elm/Olive Storage Yard Project—Air Quality and Greenhouse Gas Emission Analysis, LSA Associates, Inc., March 2019 (Appendix A).
Note: Source Receptor Area – Banning Airport, 3 acres, receptors at 25 meters.

CO = carbon monoxide
lbs/day = pounds per day
LST = local significance threshold
NOx = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

Based on the anticipated intensity of construction (e.g., number of pieces of construction equipment to be used), size of the project site, and proximity of sensitive receptors, none of the criteria pollutants would exceed SCAQMD emissions thresholds during construction.

By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod outputs do not separate on-site and off-site emissions for mobile sources. Table 3.3.3d details the calculated emissions for the proposed operational activities compared with the appropriate LSTs. For a worst-case scenario assessment, the emissions detailed in Table 3.3.3d assume all area source emissions

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

would occur on site, all of the energy source emissions would occur off site at the utility power stations, and a portion of the mobile sources would occur on site. The average trip lengths assumed by CalEEMod are 16.6 miles for home to work, 8.4 miles for home to shopping, and 6.9 miles for other types of trips. Although the average on-site distance driven is estimated to be no more than 1,000 feet, which is approximately 2 percent of the total miles traveled, a 5 percent assumption was used for this LST analysis to yield a conservative, worst-case scenario estimate of operational emissions.

Table 3.3.3d: Operational Localized Impacts Analysis

Emissions Sources	NOx (lbs/day)	CO (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Maximum On-Site Emissions	4.8	2.9	0.63	0.21
LSTs – 3-acre site	178	1,966	4.0	2.3
Significant Emissions?	No	No	No	No

Source: Table 4, Elm/Olive Storage Yard Project—Air Quality and Greenhouse Gas Emission Analysis, LSA Associates, Inc., March 2019 (Appendix A).
Note: Source Receptor Area – Banning Airport, 3 acres, receptors at 25 meters.

CO = carbon monoxide
lbs/day = pounds per day
LST = local significance threshold
NOx = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

Table 3.3.3d indicates the project's operational emission rates would not exceed the LSTs for receptors at 82 feet (25 meters). Therefore, the proposed operational activity would not result in a locally significant air quality impact. Implementation of SCAQMD Rules 402, 403 and 431.2; Title 13-Section 2449 of the California Code of Regulations; and CalRecycle/Green Building Program regulations would ensure pollutants from construction activities would disperse rapidly in the atmosphere and would not present substantial concentrations at sensitive receptors. Therefore, both short-term (i.e., construction) and long-term (i.e., operational) LST air quality impacts would be less than significant. No mitigation is required.

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

Less Than Significant Impact. Other emissions, including objectionable odors, may be emitted during the operation of diesel-fueled equipment during construction and operation of the project. However, these emissions would be short term in duration and are expected to be isolated to the immediate vicinity of the construction site or transport route. SCAQMD Rules 402, 403, and 431.2, as well as Title 13, Section 2449(d)(d) of the California Code of Regulations, require the project applicant to include implementation of standard control measures for fugitive dust and diesel equipment emissions. Additionally, operators of off-road vehicles (i.e., self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on road) are required to limit vehicle idling to five minutes or less; register and label vehicles in accordance with the CARB Diesel Off-Road Online Reporting System; restrict the inclusion of older vehicles into fleets; and retire, replace, or repower older engines or install Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). Additionally, SCAQMD Rule 402 regarding nuisances states: "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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." Adherence to these rules is standard regulatory policy for all development and would reduce impacts from other emissions such as objectionable odors to less than significant levels. No mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.4 Biological Resources Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		■		
Potentially Significant Impacts unless Mitigation Incorporated. The proposed project site is undeveloped with the exception of an unoccupied residence and four outbuildings (sheds). Land use within 100 feet of the proposed project primarily includes residential and industrial development, as well as vacant land. A General Biological Resources Assessment and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis was conducted for the project (Appendix B). This analysis included a field survey on February 13, 2019. The MSHCP identifies the project area as California annual grassland; however, vegetation observed on site during the field survey consisted of non-native grassland and a few ornamental trees associated with the existing residence. Specifically, the dominant vegetation on site included mouse barley (*Hordeum murinum*), brome grass (*Bromus* sp.), and common fiddleneck (*Amsinckia* sp.). The project is not located within a Narrow Endemic Plant Species Area (NEPSSA) survey area; therefore, a NEPSSA focused survey is not required pursuant to Section 6.1.3 of the MSHCP. Additionally, the project is not within a mapped survey area for Criteria Area Species Survey Area (CASSA) plant species, amphibian species, burrowing owl, or mammals pursuant to Section 6.3.2 of the MSHCP. The project site is not within an area of mapped Delhi soils. Soil observed throughout the site is Ramona fine sandy loam, which is inconsistent with Delhi soils; therefore, no survey or additional analysis is required for this species. No species or species with limited coverage or no take authorization as listed in Table 9-3 of the MSHCP were observed during the site visit. Given the poor habitat quality, none of these species is expected to occur on the project site.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
The project site is not adjacent to conserved lands or lands in the MSHCP Criteria Area that are described for conservation. Therefore, the Urban Wildlands Interface Guidelines do not apply to this project. Finally, the project is not within MSHCP Criteria Areas or Public/Quasi-Public Lands and therefore is not subject to best management practices (BMPs) specified in Appendix C of the MSHCP. Ornamental trees are located on site near the vacant residential structure. To prevent potential impacts to nesting birds covered by the Migratory Bird Treaty Act (MBTA), the following mitigation has been identified. **Mitigation Measure** **BIO-1:** In the event vegetation removal or site preparation activities occur during the nesting season (February 1 to August 31), a pre-construction nesting bird survey shall be conducted by a qualified biologist within three days prior to such activities. Additionally, if there is a lapse in construction activities longer than seven days, all nesting bird habitat on site must be resurveyed if construction will occur during avian nesting season. The results of the survey(s) shall be submitted to the City prior to the commencement or resumption of construction activities, as applicable. Any active nests detected in the area shall be flagged and an exclusionary buffer as determined appropriate by the project biologist shall be established. This buffer will be clearly marked in the field by construction personnel under guidance of the qualified biologist. Active nests and associated buffer zones shall be flagged and delineated on maps provided to the City Planning Department, and construction or clearing shall not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active. This measure shall be implemented to the satisfaction of the City of Beaumont Planning Department. With implementation of **Mitigation Measure BIO-1**, potential impacts on any species identified as a candidate, sensitive, or special-status species would be reduced to less than significant levels.				
b) Have a substantially 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?				■
No Impact. The project site is undeveloped aside from the single family residence and four outbuildings. Per the Biological Resources Assessment, no riparian habitat, sensitive natural communities, or wetland habitat is located on the site; therefore, no impact on such habitats would occur. No mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				■
No Impact. Per the General Biological Resources Assessment and MSHCP Consistency Analysis, no drainages, vernal pools, or other riparian or wetland areas are located on site; therefore, the project will not affect potentially jurisdictional waters. The project is not subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE) under Section 404 of the Federal Clean Water Act (CWA), the Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA, or the CDFW under Sections 1600 et seq. of the California Fish and Game Code. As no impacts to wetlands would occur, no mitigation is required.				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident migratory wildlife corridors, or impede the use of native wildlife nursery sites?		■		
Potentially Significant Impacts unless Mitigation Incorporated. The project is not subject to MSHCP Urban/Wildlands interface requirements because the site is not within or adjacent to an identified Conservation Area. Since the project is not located within a Criteria Area or Public/Quasi-Public Lands, it is not subject to BMPs specified in Appendix C of the MSHCP. No known wildlife corridors occur on or in proximity to the site, and the site does not contain nursery sites. Accordingly, the project would not substantially limit wildlife movement. A number of trees are located within the project site. To prevent potential impacts to nesting birds protected by the MBTA, **Mitigation Measure BIO-1** shall be implemented, as specified in response to Checklist Question 3.3.4a. With implementation of **Mitigation Measure BIO-1**, potential impacts to movement of any native resident or migratory fish or wildlife species, established native resident migratory wildlife corridors, or native wildlife nursery sites would be reduced to less than significant levels.				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				■
No Impact. City Municipal Code Section 12.12.130, *Tree removal* prohibits tree removal within a City controlled right-of-way (ROW) without a permit from the city engineer. The proposed project is not removing any trees within the City right-of-way; therefore, it would conflict with this City policy. As no conflict with any local policies or ordinances protecting biological resources would occur, no impact would occur and no mitigation is required.				
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?		■		

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Potentially Significant Impacts unless Mitigation Incorporated. The proposed project is located within the boundaries of the MSHCP but is not located within Criteria Cell or any species survey areas; therefore, it is not subject to possible land conservation requirements under the MSHCP. Ornamental trees located on site near the vacant residential structure have the potential to facilitate nesting bird activity. Accordingly, **Mitigation Measure BIO-1** shall be implemented to avoid potential impacts to protected raptors, special-status bird species, and other nesting birds protected by the MBTA and California Fish and Game Code, and to ensure compliance with MSHCP Incidental Take Permit Condition 5**.** Through implementation of **Mitigation Measure BIO-1,** impacts from conflict with the MSHCP or any other Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan would be reduced to less than significant levels.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.5 Cultural Resources Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?			■	
Less than Significant Impact. A "historical resource" includes, but is not limited to any object, building, site, area, place, record, or manuscript that is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.[12] In accordance with the City General Plan, the City contains the following information regarding historic structures: "Although few buildings in Beaumont pre-date 1900, there is a section of the community that exemplifies the old-town character and contains several buildings of historic interest. There are also some Victorian residences scattered throughout the City. The old-town community encompasses the segment of 6th Street between Orange Street and Viele, and 5th and 8th Streets. This area is considered by the City to be of special historic significance, and therefore it should be preserved, restored and redeveloped in relation to its historic character. The City intends to preserve old streetlights and columns that still exist in the City. Buildings of significant historical interest in the old town include the old bank building (currently Precision Stamping), the old high school (currently City Hall), Beaumont Library, the Woman's Club, the old church (currently First				

[12] California Public Resources Code §5020.1(j).

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Christian Church), Saint Stephen's Church, San Gorgonio Catholic Church, Bekins Transfer Storage and the Beaumont Hotel."

The proposed project is not within a historic district as identified by the City in its General Plan. A cultural resources records search was conducted on December 6, 2018 at the Eastern Information Center (EIC) of the California Historical Resources Information System, (CHRIS) located at University of California, Riverside (Appendix C). The records search included the project site and a one-mile radius around it. The results of the records search noted 31 previous surveys and/or excavations have been conducted within one mile of the project site, none of which encompassed the project site. The nearest resource in proximity to the project site is a vernacular wood-frame bungalow constructed prior to 1953 on Assessor's Parcel Number 417-110-016, which is the property adjacent to the northwest of the project site. Since the bungalow is an occupied historic structure on a designated property, there is little potential for a subsurface component of that resource to occur on any adjacent residential property. Per the records search, 147 cultural resources have been recorded within one mile of the project site, the vast majority of which are historic-period structures located in the vicinity of the City's downtown. The project site itself has not been previously surveyed.

A site inspection survey was conducted on February 26, 2019. The survey included surface inspection of the project site via 10-meter transect intervals. Built environment features observed include a residential structure with attached garage, four dilapidated outbuildings, a dilapidated storage shed, and chain linked fencing. A review of historic maps indicates the residential structure on site was constructed after 1953 but before 1973.[13] The date of placement of the outbuildings is unknown, but they appear in aerial photographs of the project site by 1966.[14] There is no evidence to indicate the age of the storage shed or chain linked fencing.

CEQA mandates that Lead Agencies consider a resource to be "historically significant" if it meets the criteria for listing in the California Register of Historical Resources (California Register). Such resources meet this requirement if they are (1) associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States, (2) associated with the lives of persons important to local, California, or national history, (3) embody the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values, and/or (4) have yielded, or have the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

Of the features observed on site, the residential structure will remain, while the outbuildings, shed, and chain linked fencing will be removed. There are no indications that the residential structure,

[13] Nationwide Environmental Title Research, LLC. 1970 and 1973 United States Geological Survey 7.5-minute Quadrangle Map, Beaumont, CA, T03S, R01W, San Bernardino Base Meridian. Map available at https://historicaerials.com/viewer (accessed December 7, 2018).

[14] *Ibid.* 1966 aerial photograph of T03S, R01W, San Bernardino Base Meridian. Photograph available at https://historicaerials.com/viewer (accessed December 7, 2018).

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
outbuildings, shed, or chain linked fencing are associated with important events or persons, or that they embody distinctive characteristics or have any potential to yield information important to history or prehistory. Therefore, the project site does not contain any historical resources pursuant to CEQA § 15064.5, and impacts to the on-site built environment features will be less than significant. No mitigation is required.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		■		
Potentially Significant Impact unless Mitigation Incorporated. As stated in the response to Question 3.3.5a, no historical resources have been documented or identified within the project limits. Per the records search, 147 cultural resources have been recorded within one mile of the project site, the vast majority of which are historic-period structures located in the vicinity of the City's downtown. The majority of the level areas throughout Beaumont contain very few significant archaeological or paleontological sites.[15] Owing to a lower level of agricultural development and past land disturbance, the extreme southern portions of the City that have not been previously disturbed have a greater potential to yield archaeological resources.[16] However, the project site has been utilized as a residence and been subject to routine disking for weed abatement. Site preparation activities are limited to the removal of vegetation; removal of existing outbuildings shed, and chain linked fencing; leveling of the site; placement of 4 to 6 inches of crushed recycled base; construction of new driveway approaches; and the installation of a 6-foot high walls/fence around the site. Ground disturbance will include trench excavation for wall footings and spreading of on-site soil from high areas to low areas to create a generally level surface. The maximum depth of excavation is expected to reach two feet below grade for wall footings and up to one foot below grade for leveling of the site. Due to the project site having been subject to routine disking, the anticipated depth of excavation for site preparation is not expected to penetrate beneath the plow zone of disturbed soils. No archaeological resources were observed during the archaeological pedestrian survey. Due to the lack of surface archaeological resources, substantial amount of previous disturbance of surface soils, and limited scope of proposed excavation, it is unlikely any archaeological resources occur on the project site or would be encountered if they were to occur in subsurface soils beneath the project site surface; nonetheless, while unlikely, there is a slight potential the limited disturbance of surface soils during site preparation could uncover a previously undetected on-site archaeological resource. To address this potential impact, **Mitigation Measure CUL-1** has been identified.				

[15] Section 7.0 Profile Report, City of Beaumont General Plan. Page 119. Approved March 2007.
[16] *Ibid.*

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Mitigation Measure

CUL-1: If cultural resources (archaeological) are discovered during site preparation work, all activity within 100 feet of the discovery shall be halted and the City shall be notified. Notification shall be made within 24 hours of any such discovery.

As deemed necessary by the City, a qualified archeologist shall be retained to assess the nature and significance of the discovery. As determined by the qualified archeologist should the discovery be determined to not be significant, no further recovery effort shall be required. In the event the discovery is determined to be significant pursuant to CEQA Guidelines Section 15064.5, the resource shall, as determined appropriate by the qualified archeologist, be evaluated, recorded, recovered and/or curated. Site preparation activity in the vicinity of the discovery shall not be permitted until the completion of any required assessment, recordation, reporting and/or removal of the discovery.

With implementation of **Mitigation Measure CUL-1**, potential impacts to archaeological resources would be reduced to less than significant levels.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?			■	

Less Than Significant Impact. The project site has been utilized as a residence and been subject to routine disking for weed abatement. An archaeological field survey of the site included surface inspection of the project site via 10-meter transect intervals. No evidence of past use of the project site for human burials was identified in the records search or has been documented in the City's General Plan. Additionally, no evidence of human burials or use of the site for cemetery uses was identified during the on-site inspection survey.

The California Health and Safety Code (Section 7050.5) states that if human remains are discovered on site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Because State regulations address unanticipated discoveries of human remains, mitigation measures intended to reiterate such an effort are not required. Adherence to state regulations required for all development projects will ensure potential impacts to human remains would be less than significant. No mitigation is required.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.6 Energy Would the project:				
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?			■	

Less Than Significant Impact. The majority of energy consumption of a typical development project occurs during operation of infrastructure, buildings, and other facilities that would typically be occupied and therefore consume energy. However, the project site is not proposed for continuous occupation, as activities on site are expected to occur approximately 10 to 15 times per month. Accordingly, energy consumption of the proposed project is expected primarily to be a result of site preparation during construction.

The project's consumption of energy during construction and operation was calculated with CalEEMod, as detailed in Appendix A. The CalEEMod output for energy consumption incorporates project compliance with SCAQMD Rule 431.2, Title 13-Section 2449 of the California Code of Regulations, and California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program regulations, which include implementation of standard control measures for equipment emissions. Adherence to these regulations, including the implementation of Best Available Control Measures (BACM) is a standard requirement for any construction or ground disturbance activity occurring within the SCAQMD.

BACM include, but are not limited to, requirements that the project proponent utilize only fuel having a sulfur content of 15 parts per million by weight or less; ensuring off-road vehicles (i.e., self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on road) limit vehicle idling to five minutes or less; registering and labeling vehicles in accordance with the CARB Diesel Off-Road Online Reporting System; restricting the inclusion of older vehicles into fleets; and retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). Additionally, the construction contractor will recycle/reuse at least 50 percent of the construction material (including, but not limited to, proposed aggregate base, soil, mulch, vegetation, concrete, lumber, metal, and cardboard) and use "Green Building Materials," such as those materials that are rapidly renewable or resource efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project, in accordance with CalRecycle regulations.

As indicated in the CalEEMod output (Appendix A), approximately 2,259 cubic yards of crushed recycled base material would be imported to the site, site preparation activities would not disturb more than 3 acres in a day, and up to 16 work trips would occur per day during construction. Energy

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

usage during operation would be area sources from general energy and water usage, and mobile sources from operation of vehicles during pick-up/delivery/loading of materials. Area source energy demand would be limited to use of the existing on-site residence for storage and as an occasional bathroom. The Beaumont Cherry Valley Water District (BCVWD) per capita water use per day in 2015 was 180 gallons.[17] According to SCAG, the City's average household size in 2016 was 3.2 persons per dwelling unit.[18] Therefore, occupation of the on-site structure as a residence could demand up to 576 gallons of water per day. However, the project site is not proposed for permanent occupation and the existing on-site residence will be retained for storage and occasional bathroom use. Therefore, anticipated water demand under the proposed project is expected to be substantially less than if the site remained occupied as a residence or if workers were present full-time 40 hours per week. Likewise, electricity and natural gas usage also would be correspondingly less under the proposed project land use scenario since the project site will not be continuously occupied as it otherwise would be if it were to be used as a residence or if workers were present full-time 40 hours per week. Regarding mobile sources, the average trip lengths assumed by CalEEMod are 16.6 miles for home to work, 8.4 miles for home to shopping, and 6.9 miles for other types of trips. Although the average on-site distance driven is estimated to be no more than 1,000 feet, which is approximately 2 percent of the total miles traveled, a 5 percent assumption was used to yield a conservative, worst-case scenario estimate of operational energy demand from mobile sources.

The City has developed a Climate Action Plan (CAP) to reduce energy use and greenhouse gas (GHG) emissions in the City and become a more sustainable community.[19] The CAP includes GHG reduction policies to achieve compliance with Assembly Bill (AB) 32 and reduce GHG by 15 percent from 2005 levels by 2020 and by 41.7 percent from 2012 levels by 2030.[20] Although the State has implemented various regulations statewide to ensure the 2020 emissions target would be met, the City would still need to supplement the statewide measures with the implementation of local reduction policies and monitoring of such policies in order to achieve 41.7 percent reduction in GHG from 2012 levels by 2030.[21] These local reduction policies are designed to reduce energy and water use; increase renewable energy, recycling, and diversion of solid waste; and facilitate alternative transportation.

The proposed project is required to comply with SCAQMD Rule 431.2; Title 13-Section 2449 of the California Code of Regulations; and CalRecycle/Green Building Program regulations, which include implementation of standard control measures for diesel equipment emissions. Through compliance with applicable regulatory policies designed to reduce emissions; conserve energy and water use; increase renewable energy, recycling, and diversion of solid waste; and facilitate alternative transportation, the proposed project will not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation and will support the

17 *Ibid.* Page 5-7.
18 *Profile of the City of Beaumont.* Southern California Association of Governments. Page 3. May 2017.
19 *Sustainable Beaumont: The City's Roadmap to Greenhouse Gas Reductions.* City of Beaumont. October 2015.
20 *Ibid.* Page xi.
21 *Ibid.* Page xii.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
implementation of the City's CAP to reduce energy use and become a more sustainable community in accordance with Executive Order S-3-05 and AB 32. Associated impacts will be less than significant and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.7 Geology and Soils Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)				■
ii) Strong seismic ground shaking?			■	
iii) Seismic-related ground failure, including liquefaction?			■	
iv) Landslides?				■
No Impact or Less than Significant Impact. According to the City's General Plan EIR and the most recent maps prepared by the California Geologic Survey, the project site is not located within a fault zone; therefore, no potential for on-site fault rupture would occur and no mitigation is required.[22] Like all of Southern California, the project site could be subject to strong ground shaking resulting from large earthquakes. With the exception of perimeter walls/fences and approach driveways, the project does not include the construction of any structures or features. On-site operations include the storage of construction equipment and materials. Operation of the site will be limited to periodic drop-off and pick-up of construction material. No permanent occupation of the site would occur. In the absence the construction of habitable structures or exposure of site visitors to any geologic or seismic hazard, impacts would be less than significant. As appropriate, stacked materials				

[22] Draft General Plan Update Environmental Impact Report, City of Beaumont, 2006.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
will be secured to limit movement during seismic event(s). No mitigation is required. Liquefaction occurs in areas where groundwater exists within 30 to 50 feet of the ground surface and poorly consolidated, cohesion-less soils are present. Liquefaction-related effects include loss of bearing strength, lateral spreading, and flow failures or slumping. According to the City's General Plan, groundwater is expected to be 75 to 80 feet below the ground surface at the project site. Liquefaction hazards are resultantly low to moderate. The project site is therefore not particularly susceptible to liquefaction and standard construction practices would address the stability of on-site soils. Impacts would be less than significant and no mitigation is required. The project site and surrounding area are characterized by flat to gently sloping topography. No sleep slopes are located in the project vicinity that could result in landslides. Impacts are less than significant and no mitigation is required.				
(b) Result in substantial soil erosion or the loss of topsoil?			■	
Less Than Significant Impact. The proposed project site is currently undeveloped. Aside from the unoccupied single-family residence and four outbuildings, the site consists of earthen surfaces with sparse vegetation. Surface soils are compacted and disturbed; the Natural Resource Conservation Service (NRCS) identifies the soil type as Ramona fine sandy loam (RaB2), 2 to 5 percent slopes, eroded. The proposed project would include the clearance of the site, which would require slight ground leveling to occur (spreading of on-site soil from high areas to low areas to create a generally level surface) and the placement of 4 to 6 inches of crushed recycled base throughout the project site. Covering on-site earthen surfaces with 4 to 6 inches of crushed recycled base will maintain storm water permeability on site while reducing the potential for soil erosion and siltation over the existing, baseline condition. Through the establishment of a generally flat surface area, placement of 4 to 6 inches of crushed recycled base throughout the project site, and implementation of standard erosion control measures in accordance with Municipal Code Chapter 15.24 (Floodplain Management), the proposed project is not expected to result in substantial soil erosion. Impacts would be less than significant and no mitigation is required.				
(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			■	
Less Than Significant Impact. With the exception of perimeter walls/fences, approach driveways, and perimeter lighting, the project does not include the construction of any structures or features. On-site operations include the storage of construction equipment and materials. Operation of the site will be limited to periodic drop-off and pick-up of construction material. No habitable structures are proposed and permanent occupation of the site would not occur. The project site and surrounding landscape are relatively flat. Aside from the unoccupied single-				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
family residence and four outbuildings, the site consists of earthen surfaces with sparse vegetation. Leveling the site and placement of 4 to 6 inches of crushed recycled base will maintain storm water permeability on site while reducing the potential for landslides over the existing, baseline condition. According to the City's General Plan, "the City is considered to have a limited liquefaction hazard … no unstable earth conditions or changes in geologic substructures are anticipated to occur with the excavation, grading, and paving that will be needed for any future development."[23] Where exposure to these hazards cannot be entirely avoided, California Building Code and City Building Code establish engineering and construction criteria designed to reduce the risk associated with unstable soils, landslides, lateral spreading, subsidence, liquefaction, soils collapse, and expansive soils. Compliance with existing regulations and requirements, in combination with intermittent operation of the site, would reduce the risk of unstable geologic soils or units to less than significant levels. No mitigation is required.				
(d) Be located on expansive soil, as defined in Table 18-a-B of the Uniform Building Code (1994), creating substantial risks to life or property?			■	
Less Than Significant Impact. As stated in response to Checklist Question 3.3.6a, on-site operations include the storage of construction equipment and materials. Operation of the site will be limited to periodic drop-off and pick-up of construction material. The project does not include the construction of habitable structures and permanent occupation of the site is not proposed. As stated in response to Checklist Question 3.3.6c, the City's General Plan concludes California Building Code and City Building Code establish engineering and construction criteria designed to reduce the risk associated with expansive soils, and "… no unstable earth conditions or changes in geologic substructures are anticipated to occur with the excavation, grading, and paving that will be needed for any future development."[24] Where exposure to expansive soils cannot be entirely avoided, compliance with existing regulations and requirements, in combination with intermittent operation of the site, would reduce risks to life or property to less than significant levels. No mitigation is required.				
(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?			■	
Less Than Significant Impact. The proposed project involves the storage of freeway construction maintenance materials, such as steel beams, k-rails, and limited amounts of smaller construction equipment. The existing residential building is served by an existing septic system. The project would not require the construction or expansion of septic tanks or wastewater treatment facilities. Therefore, impacts would be less than significant and no mitigation is required.				

[23] Section 7.0 Profile Report, City of Beaumont General Plan, Page 104. Approved March 2007.
[24] *Ibid*.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			■	

Less Than Significant Impact. An elevated alluvial plain, known as the Beaumont Plain, extends through the City. Natural soils in the City include older alluvium from the Pleistocene era (10,000 years to 120,000 years old) and younger alluvial deposits (less than 10,000 years old) from the Holocene era within drainage courses. The project site is located at the interface between Late to Middle Pleistocene Old Alluvial Fan Deposits (Qof) and Middle to Early Pleistocene Very Old Alluvial Fan Deposits (Qvof), both of which have the potential to yield paleontological resources.[25]

Ground disturbance will include minor trench excavation for erection of walls and fences, and spreading of on-site soil from high areas to low areas to create a generally level surface. Based on the site's natural contours, depth of excavation is expected to reach two feet below grade for trench excavation and one foot below grade for leveling of the site. Due to the project site having been subject to routine disking for weed abatement, the anticipated depth of excavation for site preparation is not expected to penetrate beneath the plow zone of disturbed soils.

As site preparation activities are minor and ground disturbance will be limited to the upper two feet within the plow zone of disturbed soils, it is unlikely any paleontological resources would be encountered if they were to occur in subsurface soils beneath the project site surface. Therefore, the project would have a less than significant impact on paleontological resources and no mitigation is required.

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

Less Than Significant Impact. State CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further states that an "ironclad definition of significant effect is not always possible because the

[25] Preliminary Geologic Map of Quaternary Surficial Deposits in Southern California, Palm Springs 30' × 60' Quadrangle. California Geological Survey Special Report 217, Plate 24. December 2012.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

significance of an activity may vary with the setting." Climate change is a global issue and is described in the context of the cumulative environment. Therefore, the project is considered in the context of multiple sectors and the combined efforts of many industries, including development.

Greenhouse gas (GHG) emissions during construction were forecast based on the proposed construction schedule and applying the mobile source derived from the SCAQMD-recommended CalEEMod. Table 3.3.8a presents the estimated annual GHG emissions for the construction phase (details are provided in the CalEEMod output in Appendix A).

Table 3.3.8a: Construction Greenhouse Gas Emissions

Construction Phase (2019)	Peak Annual Emissions (MT/yr)				Total Emissions per Calendar Year (MT/CO_2e)
	CO_2	CH_4	N_2O	CO_2e	
Demolition	3.65	<0.01	0	3.68	38.79
Site Preparation	3.42	<0.01	0	3.44	
Grading	16.17	<0.01	0	16.23	
Building Construction	15.39	<0.01	0	15.45	
Total Construction Emissions Amortized over 30 years					**1.29**

Source: Table 5, Elm/Olive Storage Yard Project–Air Quality and Greenhouse Gas Emission Analysis, LSA Associates, Inc., March 2019 (Appendix A).

CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/CO_2e = metric tons of carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources. Operational GHG emissions, as detailed in table 3.3.8b, were calculated using CalEEMod. Based on SCAQMD guidance, construction emissions were amortized over 30 years (a typical project lifetime) and added to the total project operational emissions. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with the proposed project.

As detailed in Table 3.3.8b, the proposed project would generate 186 metric tons (MT) of carbon dioxide equivalent gasses per year (CO_2e/yr). Accordingly, the project's GHG emissions are less than the SCAQMD Tier 3 threshold of 3,000 MT CO_2e/yr.

The CARB, a part of the California EPA (Cal/EPA) is responsible for the coordination and administration of both federal and State air pollution control and climate change programs within California. In this capacity, CARB conducts research, sets State ambient air quality standards (California Ambient Air Quality Standards or CAAQS), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

equipment. The City has developed a Climate Action Plan (CAP) to reduce energy use and GHG emissions in the City and become a more sustainable community.[26] The CAP includes GHG reduction policies to achieve compliance with AB 32 and reduce GHG by 15 percent from 2005 levels by 2020 and by 41.7 percent from 2012 levels by 2030.[27] Although the State has implemented various GHG reduction regulations statewide to ensure the 2020 emissions target would be met, the City would still need to supplement the statewide measures with the implementation of local reduction policies and monitoring of such policies in order to achieve 41.7 percent reduction in GHG from 2012 levels by 2030.[28] These local reduction policies are designed to reduce energy and water use; increase renewable energy, recycling, and diversion of solid waste; and facilitate alternative transportation, all of which collectively reduce GHG emissions.

Table 3.3.8b: Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT/yr)					
	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Construction Emissions Amortized over 30 Years	0	1.29	1.29	<0.01	0	1.29
Operational Emissions						
Area	0	<0.01	<0.01	0	0	<0.01
Energy	0	0	0	0	0	0
Mobile	0	70	70	<0.01	0	70
Off-road	0	113	113	0.04	0	114
Waste	0	0	0	0	0	0
Water	0	0	0	0	0	0
Total Project Emissions	**0**	**185**	**185**	**0.04**	**0**	**186**
SCAQMD Tier 3 Threshold						**3,000**
Significant?						**No**

Source: Table 6, Elm/Olive Storage Yard Project–Air Quality and Greenhouse Gas Emission Analysis, LSA Associates, Inc., March 2019 (Appendix A).

Bio-CO_2 = biologically generated CO_2
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT/yr = metric tons per year
MT CO_2e/yr/SP = metric tons of carbon dioxide equivalent per year per service population
N_2O = nitrous oxide
NBio-CO_2 = non-biologically generated CO_2
SCAQMD = South Coast Air Quality Management District

The majority of the reduction policies outlined in the City's Strategy regard operation of infrastructure, buildings, and other City facilities that would typically be occupied and therefore consume energy. The primary GHG generated by the project would be carbon dioxide (CO_2) from the limited use of site preparation equipment. The project includes placement of 4 to 6 inches of

[26] *Sustainable Beaumont: The City's Roadmap to Greenhouse Gas Reductions.* City of Beaumont. October 2015.
[27] *Ibid.* Page xi.
[28] *Ibid.* Page xii.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

recycled aggregate base throughout the project site and removal of four existing outbuildings for the purposes of temporarily staging construction equipment and materials on site. Additionally, a perimeter CMU wall and screen fence will be erected. Ground disturbance will include grubbing of vegetation, minor trench excavation for erection of walls and fences, and spreading of on-site soil from high areas to low areas to create a generally level surface. One existing permanent structure will remain on site to serve as an equipment and tool storage facility and occasional bathroom. No new habitable structures will be constructed on site.

The proposed project is required to comply with Title 13-Section 2449 of the California Code of Regulations and California Department of Resources Recycling and Recovery (CalRecycle) Sustainable (Green) Building Program regulations, which include implementation of standard control measures for equipment emissions. Adherence to these regulations, including the implementation of Best Available Control Measures (BACS) is a standard requirement for any construction or ground disturbance activity occurring within the SCAQMD.

BACM include, but are not limited to, requirements that the project proponent utilize only fuel having a sulfur content of 15 parts per million by weight or less; ensuring off-road vehicles (i.e., self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on road) limit vehicle idling to five minutes or less; registering and labeling vehicles in accordance with the CARB Diesel Off-Road Online Reporting System; restricting the inclusion of older vehicles into fleets; and retiring, replacing, or repowering older engines or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits). Additionally, the construction contractor will recycle/reuse at least 50 percent of the construction material (including, but not limited to, proposed aggregate base, soil, mulch, vegetation, concrete, lumber, metal, and cardboard) and use "Green Building Materials," such as those materials that are rapidly renewable or resource efficient, and recycled and manufactured in an environmentally friendly way, for at least 10 percent of the project, in accordance with CalRecycle regulations.

Long-term (operational) project emissions typically include emissions from use of consumer products, energy and water usage, and emissions from vehicle use and the generation/disposal of solid waste. The project site is not proposed for continuous occupation. Operation activities will be limited to heavy-duty trucks picking up or delivering materials from/to the project site approximately 10 to 15 times a month, which includes transport of crew to load or unload materials. The Beaumont Cherry Valley Water District (BCVWD) per capita water use per day in 2015 was 180 gallons.[29] According to SCAG, the City's average household size in 2016 was 3.2 persons per dwelling unit.[30] Therefore, occupation of the on-site structure as a residence could demand up to 576 gallons of water per day. However, the project site is not proposed for permanent occupation and the existing on-site residence will be retained for storage and occasional bathroom use. Therefore, anticipated water demand under the proposed project is expected to be substantially less than if the

[29] *Ibid.* Page 5-7.
[30] *Profile of the City of Beaumont.* Southern California Association of Governments. Page 3. May 2017.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
site remained occupied as a residence or if workers were present full-time 40 hours per week. Likewise, electricity and natural gas usage also would be correspondingly less under the proposed project land use scenario since the project site will not be continuously occupied as it otherwise would be if it were to be used as a residence or if workers were present full-time 40 hours per week. As stated previously, the proposed project is required to comply with SCAQMD Rule 431.2; Title 13-Section 2449 of the California Code of Regulations; and CalRecycle/Green Building Program regulations, which include implementation of standard control measures for diesel equipment emissions. Through compliance with BACM as part of applicable regulatory policies designed to reduce emissions, the proposed project's estimated GHG emissions (116 MT of CO_2e/yr would be far less than the SCAQMD Tier 3 threshold of 3,000 MT CO_2e/yr, as detailed in Table 3.3.8b, and the project would support the implementation of the City's CAP to reduce energy use and GHG emissions and become a more sustainable community in accordance with Executive Order S-3-05 and AB 32. Therefore, the proposed project will not generate greenhouse gas emissions that will have a significant impact on the environment, nor will the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Associated impacts will be less than significant and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.9 Hazards and Hazardous Materials Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			■	
Less Than Significant Impact. Potential hazardous materials such as fuel, paint products, lubricants, solvents, and cleaning products may be used and/or stored on site during site preparation. However, due to the limited quantities of these materials to be used, they are not considered hazardous to the public at large. The transport, use, and storage of hazardous materials during construction will be regulated by the Beaumont Fire Service, under contract with the Riverside County Fire Department, in accordance with the City's Hazard Mitigation Plan and California Occupational Safety and Health Administration regulations.[31] Additionally, the United States Department of Transportation Office of Hazardous Materials Safety prescribes strict regulations for the safe transportation of hazardous materials by truck and rail on State highways and rail lines, as described in Title 49 of the Code of Federal Regulations, and implemented by Title 13 of the California Code of Regulations (CCR).				

[31] *City of Beaumont Annex, Local Hazard Mitigation Plan.* City of Beaumont. June 2012.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
As detailed in the City's Hazard Mitigation Plan, the transport, use, and storage of hazardous materials during site preparation and project operation will be conducted pursuant to all applicable local, State, and federal laws, and in cooperation with the Riverside County Department of Environmental Health, Hazardous Materials Division (DEH). Project construction includes placement of 4 to 6 inches of recycled aggregate throughout the project site and removal of four existing outbuildings for the purposes of temporarily staging construction equipment and materials on site as part of operation of the project. Additionally, a perimeter CMU wall and screen fence will be erected. One existing permanent structure (the unoccupied residence) will remain on site to serve as an equipment and tool storage facility and occasional bathroom. Ground disturbance will include grubbing of vegetation, minor trench excavation for erection of walls and fences, and spreading of on-site soil from high areas to low areas to create a generally level surface. No new habitable structures will be constructed on site. Due to the relatively small size of the project site and scale of proposed construction activities, construction of the project is not expected to require hazardous materials or a mixture containing a hazardous material that has a quantity at any one time above the thresholds described in California Health and Safety Code Section 25503 and Section 25507(a) (1) through (6). The project site is not proposed for continuous occupation. Operation activities will be limited to heavy-duty trucks picking up or delivering materials from/to the project site approximately 10 to 15 times a month, which includes transport of crew to load or unload materials. Use of the on-site building as a storage facility and occasional bathroom is expected to be nominal since the project site will not be continuously occupied. Accordingly, operation of the project will occur pursuant to the City's Hazard Mitigation Plan, Title 49 of the Code of Federal Regulations, and Title 13 of the CCR. Compliance with all applicable laws and regulations during project construction and operation would ensure impacts associated with the routine transport, use, storage, or disposal of hazardous materials remain less than significant. No mitigation is required.				
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?			■	
Less Than Significant Impact. As described previously, the proposed project uses would not use or handle significant quantities of hazardous materials. The project site and a one-half-mile radius encompassing the site were evaluated via the State Water Resources Control Board GeoTracker database[32] and the Department of Toxic Substances Control's (DTSC) EnviroStor database[33] for the				

[32] *GeoTracker Database.* State Water Resources Control Board. https://geotracker.waterboards.ca.gov/map/ (accessed December 17, 2018).

[33] *EnviroStor Database.* California Department of Toxic Substances Control. https://www.envirostor.dtsc.ca.gov/public/map/ (accessed December 17, 2018).

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

purposes of identifying recognized environmental conditions or historical recognized environmental conditions.

Based on historical records, the on-site residential structure was constructed after 1953 but before 1973.[34] The date of placement of the outbuildings is unknown, but they appear in aerial photographs of the project site by 1966.[35] No information was obtained indicating evidence of improper storage, disposal, or application of hazardous materials, and a review of available aerial photographs did not show improvements such as hangers, tanks, or large barns that would indicate significant storage, formulation, and handling of these materials. Based on this information and a review of the GeoTracker and EnviroStor databases, there is no evidence of recognized environmental conditions at the project site. However, five properties with historical recognized environmental conditions were identified within one-half-mile of the project alignment, as detailed in Table 3.3.9a.

As indicated in Table 3.3.9a, no properties with recognized environmental conditions were identified within one-half-mile of the project site, and five properties with historical recognized environmental conditions were identified within one-half-mile of the project site. All historical recognized environmental conditions in proximity to the project site have been evaluated pursuant to Education Code §17213 and California Health and Safety Code §25296 and §29299, and where applicable, appropriately remediated in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the California Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the California Health and Safety Code. Based on distance relative to the project site and the issuance of a “case closed” letter or “no further action” determination by the responsible regulatory agency for each of the five properties listed in Table 3.3.9a, past operations at these properties are unlikely to have adversely affected the project site.

None of the properties identified in the GeoTracker or EnviroStor databases occurs on the project site or has any activities or materials that would represent a significant risk to public health or safety (e.g., on-site storage, leaking tanks, or approaching groundwater contamination plume) on the project site. The project would be constructed and operated in accordance with applicable local, State, and federal laws pertaining to hazardous materials. Since the proposed project uses would not include significant quantities of hazardous materials and the project site does not currently contain any recognized environmental conditions or historical recognized environmental conditions, release of hazardous materials into the environment from construction and operation of the project is not reasonably foreseeable. Therefore, impacts would be less than significant. No mitigation is required.

[34] Nationwide Environmental Title Research, LLC. 1970 and 1973 United States Geological Survey 7.5-minute Quadrangle Map, Beaumont, CA, T03S, R01W, San Bernardino Base Meridian. Map available at https://historicaerials.com/viewer (accessed December 7, 2018).

[35] *Ibid.* 1966 aerial photograph of T03S, R01W, San Bernardino Base Meridian. Photograph available at https://historicaerials.com/viewer (accessed December 7, 2018).

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 3.3.9a: Hazardous Materials Database Search

Property	Recognized Environmental Condition	Historical Recognized Environmental Condition	Location Relative to the Project Site	Status of the Property
Loma Linda University Property (Northeast corner of 3rd Street and Pennsylvania Avenue, Beaumont)	—	Property historically used for agriculture and a subsequent illegal landfill starting in the 1940s. Loma Linda University sold the property to Beaumont Unified School District in 1997. Some of the on-site waste was attributed to a drainage ditch from Yates Square D Parcel 2. The remainder of the contamination was derived from historical dumping activities.	Approximately 900 feet to the east, cross gradient of the project site.	An abbreviated Preliminary Assessment Report was prepared by an EPA-approved contractor on August 1, 2005. On November 6, 2006, The EPA determined on that no further remedial action was required under the Comprehensive, Environmental Response, Compensation, and Liability Act.
Beaumont Police Department (500 Grace Avenue, Beaumont)	—	Leaking underground storage tank for "gasoline."	Approximately 1,600 feet to the northeast, up gradient of the project site.	Completed-Case closed as of January 26, 1978. A closure letter or other formal closure decision document has been issued.
Beaumont Maintenance Yard (550 California Avenue, Beaumont)	—	Leaking underground storage tank for "gasoline."	Approximately 1,800 feet to the northeast, up gradient of the project site.	Completed-Case closed as of July 11, 1988. A closure letter or other formal closure decision document has been issued.
Southwest Motors (449 W. 6th Street, Beaumont)	—	Waste oil release of motor, hydraulic, and/or lubricating oil.	Approximately 1,800 feet to the north, up gradient of the project site.	Completed-Case closed as of November 9, 1993. A closure letter or other formal closure decision document has been issued.
Public Works Yard (711 W. 4th Street, Beaumont)	—	Leaking underground storage tank for "diesel."	Approximately 1,950 feet to the west, cross gradient of the project site.	Completed-Case closed as of July 11, 1988. A closure letter or other formal closure decision document has been issued.

Sources: *GeoTracker Database.* State Water Resources Control Board. https://geotracker.waterboards.ca.gov/map/ (accessed December 17, 2018).
EnviroStor Database. California Department of Toxic Substances Control. https://www.envirostor.dtsc.ca.gov/public/map/ (accessed December 17, 2018).

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				■
No Impact. The nearest existing school to the project site is Wellwood Elementary School, located at 7th Street and Wellwood Avenue, approximately 0.45 mile north of the project site. No existing or proposed schools are located within a quarter mile of the project site. In the absence of an existing or proposed school within a quarter mile of the project site, no impact would occur. No mitigation is required.				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				■
No Impact. A review of the Hazardous Waste and Substances Sites (Cortese) List[36] revealed the project site is not listed pursuant to Government Code Section 65962.5. The nearest property listed on the Cortese List is the Lockheed Propulsion-Beaumont No. 2 facility located at Jack Rabbit Trail, Beaumont, approximately 2.5 miles to the west and down gradient of the project site. The next nearest property is the Lockheed Propulsion-Beaumont No. 1 facility located at Highland Springs Road, Beaumont, approximately five miles to the southeast and down gradient of the project site. Based on the distance and location (down gradient) of these facilities, past operations at these properties are unlikely to have adversely affected the project site. No impact would occur and no mitigation is required.				
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?				■
No Impact. The project site is located approximately 7.25 miles west of the Banning Municipal Airport. The project is neither within an airport land use plan,[37] nor is it located within two miles of a public airport or public use airport. Therefore, the project would not result in a substantial safety hazard related to airports. No impact would occur and no mitigation is required.				

[36] *Hazardous Waste and Substances Site List (Cortese).* California Department of Toxic Substances Control. https://www.envirostor.dtsc.ca.gov/public/search?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM,COLUR&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST+(CORTESE) (accessed December 17, 2018).

[37] *Banning Municipal Airport.* Riverside County Airport Land Use Compatibility Plan, Volume 1 Policy Document. Riverside County Airport Land Use Commission. October 14, 2004.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			■	
Less Than Significant Impact. Construction activities that could temporarily restrict vehicular traffic would incorporate appropriate measures to facilitate the passage of persons and vehicles through/ around any temporary road closures in accordance with the City's Hazard Mitigation Plan adopted June 2012 for the purposes of coordinating efforts during local, State, and/or federal emergency events, including response to hazardous materials incidents. Current site access is provided only from a single driveway along the western boundary. The proposed project site layout will facilitate emergency vehicle access via two additional driveway approaches, one on the western boundary approximately 80 feet south of the existing driveway, and another along the eastern site boundary directly opposite 3rd Street. Site access points or driveway aprons into and out of the site are planned as far as possible from street intersections (minimum distance is 100 feet, or more based on safety considerations) and will be minimized to achieve efficient and productive use of paved access ways and eliminate traffic hazards. Plant material will not interfere with lighting of the premises or restrict access to emergency apparatus such as fire hydrants or fire alarm boxes. Entrances and exits to and from the site will be clearly marked with appropriate directional signage where multiple access points are provided. All site improvements would be constructed in accordance with City-adopted Fire and Building Codes, would be conditioned to pay required fire protection fees, and would be subject to review by the Riverside County Fire Department (RCFD) and/or City Fire Prevention Bureau and provide the features deemed necessary during said review to ensure adequate emergency response facilities. Adherence to the emergency access measures required by the RCFD and/or City Fire Prevention Bureau would ensure a less than significant impact related to implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan. No mitigation is required.				
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				■
No Impact. The project site is not located within or adjacent to a Very High Fire Hazard Severity Zone, as designated by the California Department of Forestry and Fire Protection (CalFire).[38] Fire protection services within the City are provided by the RCFD, and are supplemented by the CalFire station in Beaumont. The project does not include the construction or occupation of any structures or facilities within a wildland fire area. Therefore, no impact would occur and no mitigation is required.				

[38] *Very High Fire Hazard Severity Zones in LRA.* Western Riverside County. California Department of Forestry and Fire Protection. December 24, 2009.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.10 Hydrology and Water Quality Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			■	

Less Than Significant Impact. Construction of the proposed project will require ground-disturbing activities that may allow eroded soils and other pollutants to enter the storm drain system. Pollutants such as sediment, nutrients, heavy metals, toxic organics, trash and debris, and contaminants may be conveyed by storm runoff of impermeable surfaces (e.g., streets). The City implements National Pollutant Discharge Elimination System (NPDES) and Storm Water Pollution Control (SWPPP) requirements and maintenance and inspection protocols pursuant to specific criteria in order to protect the project site and downstream waters from soil erosion, construction debris and equipment fluids, and other forms of polluted storm water runoff.

The area of the project site is in excess of one acre; therefore, the project is required to obtain coverage under an NPDES permit, which includes the submittal of a Notice of Intent (NOI) application to the State Water Resources Control Board (SWRCB), the receipt of a Waste Discharge Identification Number (WDIN) from SWRCB, and the preparation of an SWPPP for construction discharges. An SWPPP is a written document that describes the construction operator's activities to comply with the requirements in the NPDES permit. The SWPPP is intended to facilitate a process whereby the operator evaluates potential pollutant sources at the site and selects and implements Best Management Practices (BMPs) designed to prevent or control the discharge of pollutants in storm water runoff. During the construction period, the project would use a series of BMPs to reduce erosion and sedimentation. These measures may include the use of gravel bags, silt fences, hay bales, check dams, hydroseed, and soil binders. The construction contractor would be required to operate and maintain these controls throughout the duration of on-site activities. In addition, the construction contractor would be required to maintain an inspection log and have the log on site to be reviewed by the City and representatives of the RWQCB.

An NPDES permit would generally specify an acceptable level of a pollutant or pollutant parameter in a discharge (for example, a certain level of bacteria). The permittee may choose which technologies to use to achieve that level. Some permits, however, do contain certain generic BMPs. Table 3.3.10a identifies common BMPs for runoff control, sediment control, erosion control, and housekeeping that may be used during the construction of the proposed project.

There are no known drainages, ponds, or other places where water collects or is conveyed on-site. The project includes placement of 4 to 6 inches of recycled base material (aggregate) throughout the project site and removal of four existing outbuildings for the purposes of temporarily staging construction equipment on-site. Operation activities will be limited to heavy-duty trucks picking up or delivering materials from/to the project site approximately 10 to 15 times a month, which includes transport of crew to load or unload materials. No reduction in existing pervious surface

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

area would occur, but the placement of aggregate stone throughout the project site would protect surface soils from exposure to wind and water and reduce the likelihood of water pollution from operation of the project. Accordingly, operation of the project is not expected to increase the volume or rate at which storm water is conveyed on or off site, and no additional flood control structures are planned or anticipated to be necessary. Additionally, the existing on-site building will be retained for storage and occasional bathroom use, and no modifications are proposed to the existing septic system, which must be maintained in accordance with RWQCB standards for septic systems and Appendix H of the California Plumbing Code.[39]

Table 3.3.10a: General Best Management Practices

Runoff Control	Sediment Control	Erosion Control	Good Housekeeping
Minimize clearing Preserve natural vegetation Stabilize drainage ways	Install perimeter controls Install sediment trapping devices Inlet protection	Stabilize exposed soils Protect steep slopes Complete construction in phases	Create waste collection area Put lids on containers Clean up spills immediately

Source: *National Menu of Stormwater Best Management Practices*. United States Environmental Protection Agency. https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#edu (accessed December 7, 2018). More detailed Best Management Practices are available at this web site.

Standard Conditions: No mitigation is required; however, compliance with the provisions of the NPDES permit and SWPPP are regulatory requirements that apply to the proposed project. These requirements are detailed below as **Standard Conditions HYD-1** and **HYD-2** to be included in the conditions of approval for this project.

Standard Condition HYD-1: Prior to construction, the project applicant shall file and obtain a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB) in order to be in compliance with the State National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit for discharge of surface runoff associated with construction activities. Evidence that this has been obtained (i.e., a copy of the Waste Discharger's Identification Number) shall be submitted to the City of Beaumont for coverage under the NPDES General Construction Permit. The NOI shall address the potential for an extended and discontinuous construction period based on funding availability. This measure shall be implemented to the satisfaction of the Director of the City Public Works Department or designee.

Standard Condition HYD-2: Prior to construction, the project applicant shall submit to and receive approval from the City of Beaumont of a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP shall include a surface water

[39] *Appendix H-Private Sewage Disposal Systems.* 2016 California Plumbing Code. https://up.codes/viewer/california/ca-plumbing-code-2016/chapter/H/private-sewage-disposal-systems#H (accessed December 14, 2018).

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
control plan and erosion control plan citing specific measures to control on-site and off-site erosion during the entire site preparation/ construction period. In addition, the SWPPP shall emphasize structural and nonstructural Best Management Practices (BMPs) to control sediment and non-visible discharges from the site. The SWPPP shall include inspection forms for routine monitoring of the site during both the demolition and construction phases to ensure National Pollutant Discharge Elimination System (NPDES) compliance and that additional BMPs and erosion control measures will be documented in the SWPPP and utilized if necessary. The SWPPP shall address the potential for an extended and discontinuous construction period based on funding availability. The SWPPP shall be kept on site for the entire duration of project construction and shall be available to the local Regional Water Quality Control Board (RWQCB) for inspection at any time. BMPs to be implemented may include the following: • Sediment discharges from the site may be controlled by the following: sandbags, silt fences, straw wattles and temporary basins (if deemed necessary), and other discharge control devices. The construction and condition of the BMPs shall be periodically inspected during construction, and repairs shall be made when necessary as required by the SWPPP. • Materials that have the potential to contribute to non-visible pollutants to storm water must not be placed in drainage ways and must be contained, elevated, and placed in temporary storage containment areas. • All loose piles of soil, silt, clay, sand, debris, and other earthen material shall be protected in a reasonable manner to eliminate any discharge from the site. Stockpiles shall be surrounded by silt fences and covered with plastic tarps. • In addition, the construction contractor shall be responsible for performing and documenting the application of BMPs identified in the SWPPP. Weekly inspections shall be performed on sandbag barriers and other sediment control measures called for in the SWPPP. Monthly reports and inspection logs shall be maintained by the contractor and reviewed by the City of Beaumont and the representatives of the State Water Resources Control Board. In the event that it is not feasible to implement specific BMPs, the City of Beaumont can make a determination that other BMPs will provide equivalent or superior treatment either on or off site.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
This measure shall be implemented to the satisfaction of the Director of the City Public Works Department or designee. The implementation of NPDES permit in accordance with **Standard Condition HYD-1** ensures that the State's mandatory standards for the maintenance of clean water and the federal minimums are met. Through implementation of the BMPs detailed in an SWPPP pursuant to **Standard Condition HYD-2**, water quality impacts would be less than significant during construction. The placement of the recycled aggregate base throughout the project site would protect surface soils from exposure to wind and water and reduce the likelihood of erosion or siltation from operation of the project. Additionally, the site will retain its permeability and therefore not preclude groundwater recharge via infiltration. No change to the amount of pervious surface area or drainage pattern is anticipated, and the existing septic system must be maintained in accordance with RWQCB standards for septic systems and Appendix H of the California Plumbing Code.[40] Therefore, the project is not expected to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality during operation. Impacts would be less than significant and no mitigation is required.				
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			■	
Less Than Significant Impact. The site contains a residential structure, which is being served by the BCVWD through existing entitlements. According to the BCVWD 2015 Urban Water Management Plan, the BCVWD relies on the substantial groundwater storage capacity of the Beaumont Basin, which the District replenishes through the State Water Project to ensure adequate water entitlements.[41] The project would not substantially contribute to groundwater depletion, nor would it interfere with groundwater recharge. The project site is not located within a designated groundwater recharge area. The project does not propose direct additions or withdrawals of groundwater. Furthermore, construction proposed by the project involves minimal excavation activity and would not involve construction at depths that would impair or alter the direction or rate of groundwater flow. Aside from the on-site residential structure and four outbuildings, the site is predominantly pervious. The project includes placement of 4 to 6 inches of recycle base material (aggregate) throughout the project site and removal of four existing outbuildings for the purposes of temporarily staging construction equipment on site. Operation activities will be limited to heavy-duty trucks picking up or delivering materials from/to the project site approximately 10 to 15 times				

[40] *Appendix H-Private Sewage Disposal Systems.* 2016 California Plumbing Code. https://up.codes/viewer/california/ca-plumbing-code-2016/chapter/H/private-sewage-disposal-systems#H (accessed December 14, 2018).

[41] *2015 Urban Water Management Plan.* Beaumont Cherry Valley Water District. Pages 7-3 and 7-4. January 2017.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a month. No reduction in existing pervious surface area would occur, so the project would not inhibit the percolation of surface water into the groundwater table. The project site is not proposed for permanent occupation, and the existing on-site residence will be retained for storage and occasional bathroom use. Therefore, anticipated water demand under the proposed project is expected to be less than if the on-site residential structure remained occupied as a residence or if workers were present full-time 40 hours per week. Since the project would not inhibit groundwater recharge potential and would not increase the demand for water, no significant impact would occur and no mitigation is required.				
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 off site?			■	
iii) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			■	
iv) Impede or redirect flood flows?			■	
Less Than Significant Impact. There are no known drainages, ponds, or other places where water collects or is conveyed on site. During rain events, storm water generally drains from east to west across the project site, which is almost entirely pervious. The project includes placement of 4 to 6 inches of recycled base material throughout the project site and removal of four existing outbuildings for the purposes of temporarily staging construction equipment on site. Additionally, a perimeter CMU wall and screen fence will be erected. One existing permanent structure will remain on site to serve as an equipment and tool storage facility and occasional bathroom. No rough grading or major excavation activities are required, and no new habitable structures will be constructed on site. The implementation of NPDES permit in accordance with **Standard Condition HYD-1** and BMPs detailed in an SWPPP pursuant to **Standard Condition HYD-2** ensure that substantial erosion, siltation, and/or flooding would not occur during construction. There are no known drainages, ponds, or other places where water collects or is conveyed on site. Implementation of the project would not result in a reduction of pervious surface area or a change in the existing drainage pattern. However, the placement of aggregate stone throughout the project site would protect surface soils from exposure to wind and water and reduce the likelihood of				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
erosion or siltation from operation of the project. Operation activities will be limited to heavy-duty trucks picking up or delivering materials from/to the project site approximately 10 to 15 times a month, which includes transport of crew to load or unload materials. Since no change to the amount of pervious surface area or drainage pattern is anticipated, operation of the project is not expected to increase the volume or rate at which storm water is conveyed on or off site, provide substantial additional sources of polluted runoff, or impede or redirect flood flows. Therefore, it is reasonable to conclude the capacity of existing or planned storm water drainage systems is capable of serving the project site as proposed. Impacts would be less than significant and no mitigation is required.				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				■
No Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 06065C0811G, the project is proposed in Zone X, which is identified to be outside the 100-year (1 percent annual chance of flood) and 500-year (0.2 percent annual chance of flood) flood hazard areas.[42] The project site is not located near a lake or ocean; therefore, there is no potential for inundation of the site by a seiche (a wave or oscillation of the surface of water in an enclosed or semi-enclosed basin) or tsunami. The project site is level and is not located near any hillsides that would be susceptible to mudflows. Furthermore, the City is not located within a dam failure inundation area according to the City's General Plan EIR. Since the project is not located in any flood hazard, tsunami, or seiche zones, no impact from release of pollutants due to project inundation within such zones would occur. No mitigation is required.				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			■	
Less Than Significant Impact. The site contains a residential structure, which is being served by the BCVWD through existing entitlements. According to the BCVWD 2015 Urban Water Management Plan, the BCVWD relies on the substantial groundwater storage capacity of the Beaumont Basin, which the District replenishes through the State Water Project to ensure adequate water entitlements.[43] The project would not substantially contribute to groundwater depletion, nor would it interfere with groundwater recharge. The project site is not located within a designated groundwater recharge area. The project does not propose direct additions or withdrawals of groundwater. Furthermore, construction proposed by the project involves minimal excavation activity and would not involve construction at depths that would impair or alter the direction or rate of groundwater flow. No reduction in existing pervious surface area would occur, so the project would not inhibit the percolation of surface water into the groundwater table. The project site is not proposed for permanent occupation and the existing on-site residence will be retained for storage and occasional bathroom use. Therefore, anticipated water demand under the proposed project is expected to be				

[42] *Flood Insurance Rate Map.* Federal Emergency Management Agency. Panel Number 06065C0811G. August 28, 2008.
[43] *2015 Urban Water Management Plan.* Beaumont Cherry Valley Water District. Pages 7-3 and 7-4. January 2017.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
less than if the on-site residential structure remained occupied as a residence or if workers were present full-time 40 hours per week. The implementation of NPDES permit in accordance with **Standard Condition HYD-1** ensures that the State's mandatory standards for the maintenance of clean water and the federal minimums are met. Through implementation of the BMPs detailed in an SWPPP pursuant to **Standard Condition HYD-2**, water quality impacts would be less than significant during construction. Since the project would not inhibit groundwater recharge potential and would not increase the demand for water during operation, it would not conflict with any applicable water quality control plan or sustainable groundwater management plan. Impacts would be less than significant and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.11 Land Use and Planning Would the project:				
a) Physically divide an established community?				■
No Impact. The project site is located in a developing area of the City. Existing adjacent uses consist of industrial uses (with outdoor storage), an electrical substation, and residential uses. The project does not include the development of a linear feature or use that would disrupt or divide existing uses. The proposed use is consistent with the current zoning and General Plan designation for the site; therefore, no impact related to this issue would occur. No mitigation is required.				
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?				■
No Impact. The project site is designated Industrial (I) in the City's General Plan and is zoned Manufacturing (M). The proposed project covers 2.8 acres and is located approximately 0.24 mile southwest of I-10. The requirements for Manufacturing zone are outlined in Chapter 17.03.100 of the Municipal Code, and permitted uses as depicted in Table 17.03-3 of the Municipal Code. The project is consistent with the City General Plan designation of Industrial and the Manufacturing zone. As indicated in responses to Checklist Questions 3.3.3a and 3.3.8a and b, the project is consistent with the SCAQMD's AQMP and the City's CAP, respectively. Furthermore, the project will be executed in accordance with the MSHCP through implementation of **Mitigation Measure Bio-1.** Therefore, no conflict with any applicable land use plan, policy, or regulation would occur. No impact would occur and no additional mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.12 Mineral Resources Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				■
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				■
No Impact. The project site is located within Mineral Resource Zone 3 (MRZ-3).[44] MRZ-3 is defined as an area containing minerals of undetermined significance.[45] However, according to the General Plan, there are no known or identified mineral resources of regional of statewide importance within the General Plan Area. No mineral resource or mineral resource extraction or processing activity occurs on or adjacent to the project site. Use of the site for the outdoor storage of construction materials would not result in the loss of City or State identified mineral resources. Therefore, no impact would occur and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.13 Noise Would the project:				
a) Result in 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?		■		
Potentially Significant Impact unless Mitigation Incorporated. **Short-Term Construction Noise** Two types of short-term noise impacts could occur during the construction of the proposed project. First, construction crew commutes and the transport of construction equipment and materials to the site for the proposed project would incrementally increase noise levels on access roads leading				

[44] Updated Mineral Land Classification Map for Portland Cement Concrete Grade Aggregate in the San Bernardino Production-Consumption (P-C) Region, California Geologic Survey, 2008.

[45] California Department of Conservation, State Mining and Geology Board, Guidelines for Classification and Designation of Mineral Lands, http://www.conservation.ca.gov/smgb/Guidelines/Documents/ClassDesig.pdf (accessed December 13, 2018).

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

to the site. Elm Avenue and Olive Avenue would be used to access the project site. Project construction trips during the grading phase are estimated to be a maximum of 292 trips per day based on CalEEMod while other construction phases are estimated to be a maximum of 71 trips per day or fewer. Traffic volumes on Elm Avenue and Olive Avenue are generally low and traffic noise generated by project construction trips may be substantial. However, because construction of the project site would be short in duration, traffic noise generated by project construction trips would be less than significant.

The second type of short-term noise impact is related to noise generated during demolition, excavation, grading, and building erection on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated on the site as well as the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.3.13a lists typical construction equipment noise levels recommended for noise impact assessments based on a distance of 50 feet between the equipment and a noise receptor taken from the FHWA Roadway Construction Noise Model (RCNM).[46]

Typical noise levels range up to 88 A-weighted decibels (dBA) maximum instantaneous noise level (L_{max}) at 50 feet during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders.

Project construction is expected to require the use of a grader, front-end loader, and water truck/ pickup truck. Noise associated with the use of construction equipment is estimated to be between 55 dBA L_{max} and 85 dBA L_{max} at a distance of 50 feet from the active construction area for the site preparation phase. As shown in Table 3.3.13a, the maximum noise level generated by a grader is assumed to be approximately 85 dBA L_{max} at 50 feet. The front-end loader would generate approximately 80 dBA L_{max} at 50 feet. The maximum noise level generated by water trucks/pickup trucks is approximately 55 dBA L_{max} at 50 feet from these vehicles. Because the size of the project site is considered small, one piece of construction equipment was assumed to operate at any one time. Based on a usage factor of 40 percent, noise levels generated by a grader, front-end loader, and pick-up truck/water truck would be 81, 76, and 51 dBA equivalent continuous sound level (L_{eq}), respectively, at a distance of 50 feet from the active construction area.

[46] *Highway Construction Noise Handbook.* Table 9.1. Federal Highway Administration. 2006.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 3.3.13a: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor[1]	Maximum Noise Level (L_{max}) at 50 Feet[2]
Backhoe	40	80
Compactor (ground)	20	80
Compressor	40	80
Crane	16	85
Dozer	40	85
Dump Truck	40	84
Excavator	40	85
Flat Bed Truck	40	84
Forklift	20	85
Front End Loader	40	80
Grader	40	85
Impact Pile Driver	20	95
Jackhammer	20	85
Pickup Truck	40	55
Pneumatic Tools	50	85
Pump	50	77
Rock Drill	20	85
Roller	20	85
Scraper	40	85
Tractor	40	84
Welder	40	73

Source: Table 9.1, *Highway Construction Noise Handbook*. Federal Highway Administration. 2006.

Note: The noise levels reported in this table are rounded to the nearest whole number.

[1] Usage factor is the percentage of time during a construction noise operation that a piece of construction equipment is operating at full power.

[2] Maximum noise levels were developed based on Spec. 721.560 from the CA/T program to be consistent with the City of Boston, Massachusetts, Noise Code for the "Big Dig" project.

CA/T = Central Artery/Tunnel FHWA = Federal Highway Administration L_{max} = maximum instantaneous noise level

Table 3.3.13b identifies the closest residences to the project construction boundary and they would be subject to interior noise levels of up to 69 dBA L_{eq} generated from project construction. As noted in Table 3.3.13b, interior noise levels were calculated based on the exterior noise level and the exterior-to-interior noise level reduction of 24 dBA. Interior noise levels generated by project construction activities would exceed the City's interior noise standard of 55 dBA for intervals of more than 15 minutes per hour at four residences.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 3.3.13b: Construction Noise Levels

Land Use	APN	Noise Level at 50 ft (dBA L_{max})	Noise Level at 50 ft (dBA L_{eq})	Distance (ft)	Exterior Noise Level (dBA)		Interior Noise Level (dBA)[1]	
					L_{max}	L_{eq}	L_{max}	L_{eq}
Residence	417-122-012 to 417-122-018	85	81	94	80	76	56	52
Residence	417-130-014	85	81	13	97	93	73	**69**[2]
Residence	417-130-006	85	81	22	92	88	68	**64**
Residence	417-130-016	85	81	26	91	87	67	**63**
Residence	417-110-014	85	81	44	86	82	62	**58**

Source: Compiled by LSA Associates, Inc. (2019).

[1] An exterior-to-interior reduction of 24 dBA was assumed based on United States Environmental Protection Agency's (EPA) *Protective Noise Levels, Condensed Version of EPA Levels Document*. EPA 550/9-79-100. November 1978.

[2] Numbers shown in bold exceed the City's interior noise standard of 55 dBA for intervals of more than 15 minutes per hour.

dBA = A-weighted decibels
ft = feet
L_{eq} = equivalent continuous sound level
L_{max} = maximum instantaneous noise level

To address potential construction noise impacts, **Mitigation Measure NOI-1** has been identified.

Mitigation Measure

NOI-1: Prior to site preparation activities, including demolition, ground leveling, placement of recycled aggregate base, or erection of perimeter walls and/or fences, the project applicant shall erect temporary noise attenuation barriers with a minimum height of 10 feet for the residential structure located at APN 417-130-014, a minimum height of 8 feet for the residential structures located at APNs 417-130-006 and 417-130-016, and a minimum height of 6 feet for the residential structure located at APN 417-110-014. Erection of temporary noise attenuation barriers shall reduce interior noise levels at the specified properties to at or below the City's interior noise standard of 55 dBA for intervals of not more than 15 minutes per hour. This measure shall be implemented to the satisfaction of the City of Beaumont Planning Department.

Additionally, the project shall comply with the construction hours specified in the City's Municipal Code Noise Ordinance Section 9.02.110(F)(1) as a matter of policy and implement standard construction practices for noise minimization, which include the use of construction equipment with noise mufflers that are properly operating and maintained, placement of construction staging areas away from off-site sensitive uses, and placement of all stationary construction equipment so that the emitted noise is directed away from sensitive receptors.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 4 details the locations of the temporary noise attenuation barriers and their respective heights. Implementation of a temporary noise attenuation barrier with a minimum height of 10 feet for the residential structure located at APN 417-130-014 would reduce noise levels by 14 dBA to a noise level of 55 dBA. A temporary noise attenuation barrier with a minimum height of 8 feet for the residential structures located at APNs 417-130-006 and 417-130-016 would reduce noise levels by 10 dBA to noise levels of 54 dBA and 53 dBA, respectively. A temporary noise attenuation barrier with a minimum height of 6 feet for the residential structure located at APN 417-110-014 would reduce noise levels by 3 dBA to noise levels of 55 dBA. Therefore, implementation of **Mitigation Measure NOI-1** would reduce potential construction noise impacts to less than significant levels.

Long-Term Traffic Noise Impacts

Elm Avenue and Olive Avenue are two streets adjacent to the proposed project. Under the worst-case scenario, the project would have up to three pick-ups or deliveries per day and not more than one project trip in each hour on approximately 10 to 15 occasions per month. Up to 16 worker trips per day would occur before and after truck delivery and pick-up. Even though the average daily traffic volumes on Elm Avenue and Olive Avenue are low, one project trip per hour or three daily project trips and worker commutes to and from the project site would not result in a perceptible increase in traffic noise levels. Therefore, traffic noise from long-term operations of the proposed project would be less than significant.

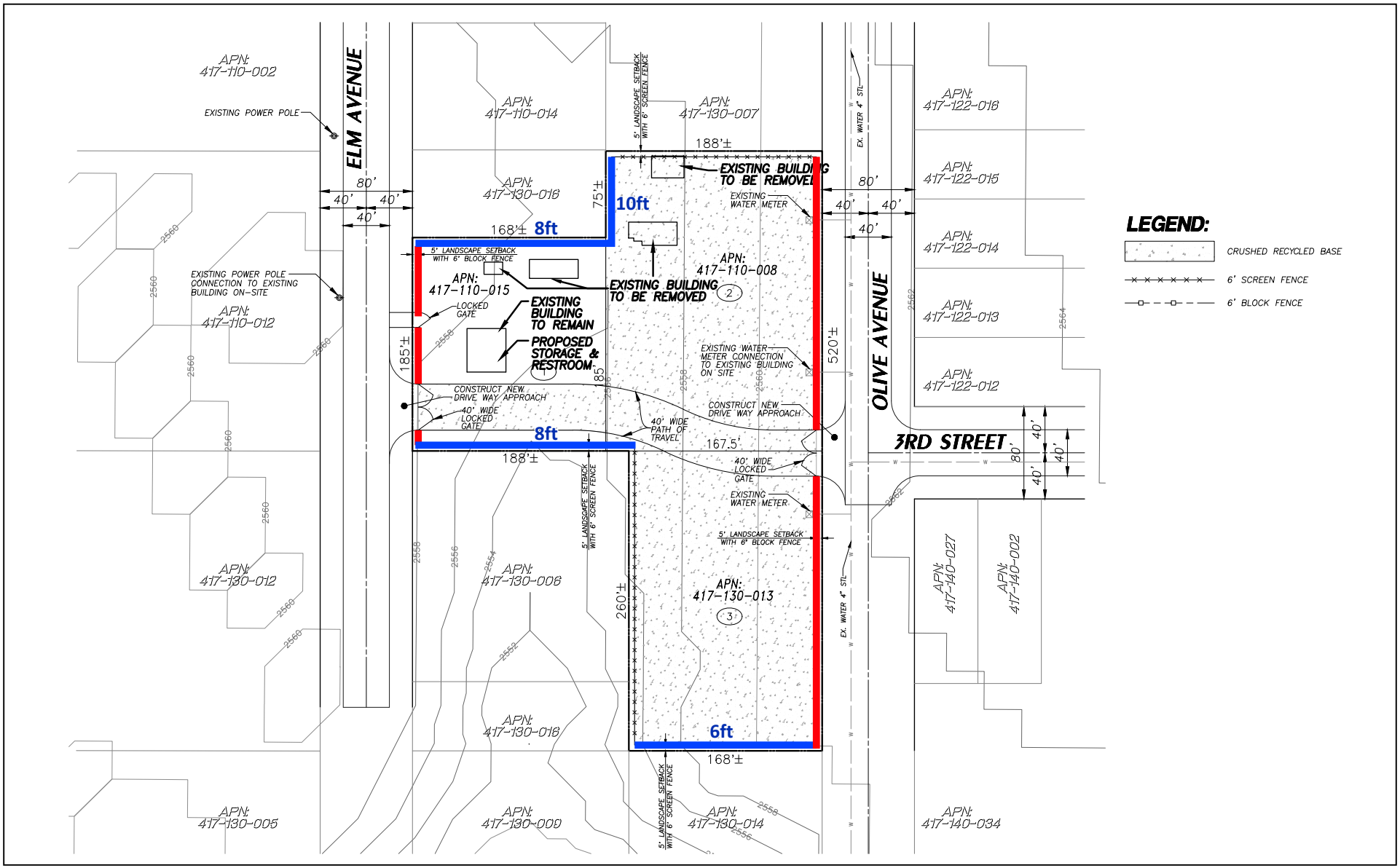
Long-Term Stationary Noise Impacts

Stationary noise sources associated with the proposed project would include only truck delivery and truck loading and unloading activities. The project would not include the construction of any on-site structure or facility. Therefore, no other stationary noise sources such as heating, ventilation, air conditioning (HVAC) equipment, industrial engines, sirens/alarms, and public address systems would operate on the project site.

Truck Delivery and Truck Loading and Unloading Activities

The proposed project would include on-site truck delivery and truck loading and unloading activities of construction materials. The frequency of truck deliveries and truck loading and unloading activities is dependent upon the demand of highway construction. Under the worst-case scenario, the project would have up to three deliveries per day and not more than one delivery in each hour approximately 10 to 15 times per month. The duration of truck delivery and truck loading and unloading is expected to be limited in nature. Equipment would include the use of 18-wheel trailer and loading equipment such as a forklifts, loaders, or cranes. No nighttime operation of the storage yard is anticipated.

Delivery trucks and truck loading and unloading activities would generate a noise level of 75 dBA L_{max} at 50 feet based on previous measurement conducted by LSA. In addition, the highest noise



LSA

LEGEND

Proposed 6ft High Block Wall

Temporary Construction Barrier

N

0 60 120

FEET

SOURCE: Hunsacker & Associates

I:\ORZ1801\G\Wall_Location.cdr (2/28/2019)

FIGURE 4

Elm/Olive Storage Yard

Wall Location

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

level generated from truck loading and unloading equipment is the forklift, which generates a noise level of 85 dBA L_{max} at 50 feet. Although a typical truck unloading process takes an average of 15–20 minutes, this maximum noise level occurs in a much shorter period of time (less than 5 minutes).

Table 3.3.13c identifies the closest residences to on-site truck delivery and truck loading and unloading activities, and they would be subject to noise levels of up to 82 dBA. Although these noise levels exceed the City's L_8 (5-minute) noise standard of 65 dBA for residential uses, the proposed project is not be required to conform to more restrictive noise requirements based on Section 9.02.130 of the Municipal Code. Therefore, noise generated from long-term operations of the proposed project would be less than significant. No mitigation is required.

Table 3.3.13c: Truck Delivery and Truck Loading and Unloading Noise Levels

Land Use	APN	Noise Level at 50 ft (dBA L_{max})	Distance (ft)	Distance Attenuation (dBA)	Shielding	Noise Level (dBA)
Residence	417-122-012 to 417-122-018	85	236	13	5	**67**[1]
Residence	417-130-014	85	254	14	0	**71**
Residence	417-130-006	85	70	3	0	**82**
Residence	417-130-016	85	167	10	0	**75**
Residence	417-110-014	85	236	13	0	**72**

Source: Compiled by LSA Associates, Inc. (2019).
[1] Numbers shown in bold exceed the City's L_8 (5-minute) noise standard 65 dBA.
dBA = A-weighted decibels
ft = feet

b) Result in generation of excessive groundborne vibration or groundborne noise levels?			■	

Less Than Significant Impact.

Temporary Impacts

Construction of the project would include the use of small bulldozers and loaded trucks that would generate vibration levels. These pieces of construction equipment would generate vibration levels of 0.003 peak particle velocity (PPV) (in/sec) (58 vibration velocity [VdB]) at and 0.076 PPV (in/sec) [86 VdB] at a distance of 25 feet, respectively based the Federal Transit Administration(FTA) *Transit Noise and Vibration Impact Assessment Manual*.[47]

Table 3.3.13d lists the projected vibration levels from various construction equipment expected to be used on the project site to the nearest residential buildings in the project vicinity. The proposed project would use a small bulldozer and loaded trucks that would generate vibration levels of 0.003 PPV (in/sec [56 VdB] and 0.076 PPV (in/sec) [86 VdB], respectively, at a distance of 25 feet during project construction.

[47] *Transit Noise and Vibration Impact Assessment Manual.* Federal Transit Administration. September 2018.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

As detailed in Table 3.3.13d, the closest residential structure would experience vibration levels of up to 0.164 PPV (in/sec) [93 VdB]. Although this vibration level has the potential to result in community annoyance because vibration levels would exceed the FTA community annoyance threshold of 78 VdB, the FTA vibration damage threshold of 0.2 PPV (in/sec) [94 VdB] would not be exceeded. Therefore, no construction vibration impacts would occur during project construction. No mitigation is required.

Table 3.3.13d: Summary of Construction Vibration Levels

Land Use	APN	Equipment/Activity	Reference Vibration Level at 25 ft		Distance (ft)	Maximum Vibration Level	
			VdB	PPV (in/sec)		VdB	PPV (in/sec)
Residential	417-122-012 to 417-122-018	Loaded Truck	86	0.076	94	69	0.010
		Small Bulldozer	56	0.003	94	39	0.000
Residential	417-130-014	Loaded Truck	86	0.076	15	93	0.164
		Small Bulldozer	56	0.003	15	63	0.006
Residential	417-130-006	Loaded Truck	86	0.076	22	88	0.092
		Small Bulldozer	56	0.003	22	58	0.004
Residential	417-130-016	Loaded Truck	86	0.076	26	85	0.072
		Small Bulldozer	56	0.003	26	55	0.003
Residential	417-110-014	Loaded Truck	86	0.076	44	79	0.033
		Small Bulldozer	56	0.003	44	49	0.001

Source: Compiled by LSA Associates, Inc. (2019).
Note: The FTA-recommended building damage threshold is 94 VdB (0.2 PPV [in/sec]) for residential structures constructed of non-engineered timber.

ft = feet
FTA = Federal Transit Administration
in/sec = inches per second
PPV = peak particle velocity
VdB = vibration velocity decibels

Permanent Impacts

During operation, the proposed project would not generate vibration other than loaded trucks entering and exiting along the 40-foot wide path on the project site, which would generate a vibration level of 0.076 PPV (in/sec) [86 VdB] at a distance of 25 feet. As provided in Table 3.3.13e, the closest residential structure would experience vibration levels of up to 0.038 PPV (in/sec) [80 VdB]. Although, this vibration level has the potential to result in community annoyance because vibration levels would exceed the FTA's community annoyance threshold of 78 VdB, the FTA vibration damage threshold of 0.2 PPV (in/sec) [94 VdB] would not be exceeded. Also, loaded trucks would not generate any significant groundborne vibration along adjacent roadways to and from the project site because they have rubber tires and the adjacent roadways to and from the project site are paved. Therefore, no operational vibration impacts would occur. No mitigation measures are required.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 3.3.13e: Summary of Construction Vibration Levels

Land Use	APN	Equipment/Activity	Reference Vibration Level at 25 ft		Distance (ft)	Maximum Vibration Level	
			VdB	PPV (in/sec)		VdB	PPV (in/sec)
Residential	417-122-012 to 417-122-018	Loaded Truck	86	0.076	191	60	0.004
Residential	417-130-014	Loaded Truck	86	0.076	252	56	0.002
Residential	417-130-006	Loaded Truck	86	0.076	40	80	0.038
Residential	417-130-016	Loaded Truck	86	0.076	154	62	0.005
Residential	417-110-014	Loaded Truck	86	0.076	236	57	0.003

Source: Compiled by LSA Associates, Inc. (2019).
Note: The FTA-recommended building damage threshold is 94 VdB (0.2 PPV [in/sec]) for residential structures constructed of non-engineered timber.

ft = feet
FTA = Federal Transit Administration
in/sec = inches per second
PPV = peak particle velocity
VdB = vibration velocity decibels

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 are to excessive noise levels?				■

No Impact. The project site is located approximately 7.25 miles west of Banning Municipal Airport. The project is not located within the 65 dBA noise contour established for this airport.[48] Additionally, the unattended storage yard will not require any permanent occupation or on-site employees. In the absence of any receptors sensitive to airport-related noise, no impact would occur. No mitigation is required.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.14 Population and Housing Would the project:				
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)?				■

[48] *Banning Municipal Airport.* Riverside County Airport Land Use Compatibility Plan, Volume 1 Policy Document. Riverside County Airport Land Use Commission. October 14, 2004.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
No Impact. The site is designated as "Industrial" (I) in the City's General Plan. No residential uses are proposed; therefore, no direct population growth would be result from the use of the site for outdoor storage. The unattended storage yard will not require any permanent occupation or on-site employees. The proposed project will not directly or indirectly cause population growth. The project also does not include any significant infrastructure improvements or the extension of roads that could indirectly induce growth in the City. Therefore, no growth-inducing impact would occur and no mitigation is required.				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				■
No Impact. The existing residence will be utilized for the storage of tools, signs, and other equipment. No impact related to the removal of housing or displacement of persons would occur and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.15 Public Services Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			■	
Less Than Significant Impact. The City of Beaumont contracts with the Riverside County Fire Department (RCFD) for fire protection, public service, and emergency medical aid response. RCFD Station No. 66 is located in the City's downtown area at 628 Maple Avenue. This station is staffed year-round by a crew of two and one full-service fire engine. An additional fire engine, as well as a breathing support unit, water tender, and a squad/utility vehicle, are housed at this station and operated by trained volunteer or reserve staff if needed. RCFD Station No 20, located near the City's eastern boundary, is also staffed year-round by the California Department of Forestry and Fire Protection (CalFire). Three other stations are located in close proximity to the City. The project includes placement of 4 to 6 inches of recycled aggregate throughout the project site and removal of four existing outbuildings for the purposes of temporarily staging construction equipment on site. One existing permanent structure will remain on site to serve as an equipment and material storage facility and occasional bathroom. No new habitable structures will be constructed on site, so the project is not expected to increase the demand for fire protection services above existing conditions.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Whereas existing site access is provided only from a single driveway along the western boundary, the proposed project site layout will facilitate emergency vehicle access via two additional driveway approaches, one on the western boundary approximately 80 feet south of the existing driveway and another along the eastern site boundary opposite 3rd Street. All site improvements would be constructed in accordance with City-adopted Fire and Building Codes, would be conditioned to pay required fire protection fees, and would be subject to review by the RCFD and/or City Fire Prevention Bureau and provide the features deemed necessary during said review. Because of the variety and proximity of existing fire protection services, no new or expanded fire stations are required to service the project site. No significant impact would occur and no mitigation is required.				
b) Police protection?			■	
Less Than Significant Impact. The Beaumont Police Department (BPD), located in the City's downtown at 660 Orange Avenue, provides comprehensive law enforcement services for the City. Although the project site contains a permanent structure to be retained and four existing outbuildings to be removed, demand for police services may increase incrementally to ensure the protection of equipment and materials to be stored on site during operation of the project. However, the project is consistent with the City's intended use of the site based on the General Plan land uses (Industrial) and zoning designation (Manufacturing). Any increase in demand for police services resulting from the proposed modification and operation of the site has been accounted for in the City's planning efforts. As required, the project will be reviewed by the BPD and be conditioned to provide the features deemed appropriate during said review. Since the project site would not generate a substantial increase in population, any incremental increase in demand for police services would not create the need for new or altered police facilities. Impacts would be less than significant and no mitigation is required.				
c) Schools?				■
No Impact. While the project site is located within the Beaumont Unified School District (BUSD), because the project does not include a residential component, no direct increase in the local student population would occur. Employment opportunities resulting from the operation of the proposed uses are likely to be filled by existing local residents; therefore, no significant indirect increase in the local student population would occur. Therefore, there would be no impact on schools and no mitigation is required.				
d) Parks?				■
No Impact. In the absence of any increase in population, no increase in demand for park facilities would occur. The project would not require provision of new or physically altered park facilities in order to maintain acceptable service ratios or other performance objectives. Therefore, no expansion of existing or development of new park facilities is required. No impact would occur and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Other public facilities?			■	
Less Than Significant Impact. The project does not include a residential component, and any employment opportunities resulting from the operation of the proposed project are likely to be filled by existing local residents; therefore, no significant direct or indirect increase in the City's population is anticipated. The payment of required fees, taxes, and other payments by the owners of the proposed development would sufficiently offset any incremental increase in demand for governmental services. In the absence of any increase in population, the construction of new or expansion of existing governmental facilities is not required. No significant impact to these facilities would occur and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.16 Recreation Would the project:				
a) 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) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				■
No Impact. In the absence of any increase in population, no increase in demand for park/recreation facilities would occur; therefore, no expansion of existing or development of new park/recreation areas would occur. No impact would occur and no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.17 Transportation Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			■	

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
Less Than Significant Impact. The City's General Plan identifies intersection thresholds of significance. These thresholds use level of service (LOS), a ratio of traffic volume to roadway capacity. Levels of service are defined using the letter grades A through F, in which LOS A represents the least amount of traffic congestion and F the most. The City has adopted LOS D as its level of service standard for intersections and requires preparation of a project-specific traffic impact analysis in cases where a project generates more than 50 peak hour trips. If required by a project, a Traffic Impact Analysis (TIA) would identify potential impacts at intersections and roadway segments affected by a project. Due to the limited number and frequency of trips generated by the proposed use, preparation of a project-specific TIA is not required. Operation of the site includes the periodic delivery and pickup of materials used for nearby highway construction. The frequency and duration of delivery/pickup activity is dependent upon the demand of highway construction, but is anticipated to occur from 10 to 15 times per month, with a worst-case frequency of three trips per day. Such activities include the usage of 18-wheel trailer and loading equipment and are expected to be of limited duration. Trucks will access the site from Elm Avenue and will exit the site onto Olive Avenue. From the site, the infrequent truck trips would utilize 4th Street, which the City has identified as a "Major Highway" and "Secondary Road" west and east of Viele Street, respectively. Even under peak hour conditions, the addition of up to three daily truck trips would not significantly affect the operation of any local intersection or roadway segment contributing to a deficient LOS condition. Additionally, no population growth would result from the use of the site for outdoor storage; therefore, no increased demand for alternative transportation would occur. The project does not include the development of any on- or off-site structure, facility, or feature that would limit or conflict with existing alternative transportation plans, policies, or facilities. In the absence of any significant project-related impact, no mitigation is required.				
b) Would the project conflict or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b)?				■
No Impact. CEQA Guidelines Section 15064.3, subdivision (b) establishes "vehicle miles traveled" criteria in lieu of LOS for analyzing transportation impacts and was signed into law as Senate Bill (SB) 743 in 2013. Regulatory changes to the *CEQA Guidelines* that implement SB 743 were approved by the Office of Planning and Research on December 28, 2018. However, lead agencies have until July 1, 2020, which is the statewide implementation date, to opt-in use of the new vehicle miles traveled (VMT) metric. In cases where lead agencies use LOS for analyzing transportation impacts, they may continue to do so until July 1, 2020. As the City's General Plan identifies intersection thresholds of significance in accordance with LOS, *CEQA Guidelines* Section 15064.3, subdivision (b) does not apply to the proposed project. Therefore, no impact would occur and no mitigation is required.				
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				■

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
No Impact. Trucks will access the site from Elm Avenue and will exit the site onto Olive Avenue. Driveway approaches will be installed per applicable City standards. The project does not include the construction of any off-site roads or additional access routes; therefore, no impact related to this issue would occur. No mitigation is required.				
d) Result in inadequate emergency access?			■	
Less Than Significant Impact. The project consists of a development of an unattended material storage yard and does not include any use that would generate or increase the demand for emergency access. The project does not include the construction of off-site roadway improvements. Trucks will access the site from Elm Avenue and will exit the site onto Olive Avenue. Driveway approaches will be installed per applicable City standards, including any requirement for emergency access. Adherence to the applicable City access requirements will ensure no significant emergency access impact would result from the proposed use. In the absence of a significant impact, no mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.18 Tribal Cultural Resources Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?		■		
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?		■		
a-b) Potentially Significant Impact unless Mitigation Incorporated. As stated in the response to Question 3.3.5a, no historical resources have been documented or identified within the project limits, nor has the City identified the site or on-site features as a historic				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

resource. Pursuant to Assembly Bill 52, the City notified 20 Native American tribal governments or designated tribal representatives. Of these, eight tribes responded. While a Sacred Lands File search (January 24, 2019) for the site conducted by the Native American Heritage Commission (NAHC) indicated "negative results," consultation with Native American tribal groups indicated the project site is located within "traditional use area" and/or may be a site of "traditional cultural value."

As the results of the AB 52 consultation process is a confidential government-to-government process, only a brief summary of the consultation is provided below:

- Agua Caliente Band of Cahuilla Indians: The tribe deferred consultation to the Morongo Band of Mission Indians.
- Augustine Band of Cahuilla Mission Indians: The tribe stated at the project is outside of its reservation and it has no information about specific cultural resources or tribal cultural resources. They suggest an archaeologist be on site during all ground-disturbing activities.
- Cabazon Band of Mission Indians: The tribe had no specific archival information on the site; however, the tribe suggested an archaeologist be on site during all ground-disturbing activities to monitor for the discovery of unknown cultural resources.
- Cahuilla Band of Indians: The tribe has no knowledge of cultural resources in the project area, but stated the project is within the Cahuilla traditional land use area and requested tribal monitors from Cahuilla be present during all ground-disturbing activities. The tribe requested further notifications of any updates and project changes. **Mitigation Measures TCR-1** through **TCR-3** have been identified to address potential impacts to Native American cultural resources.
- Morongo Band of Mission Indians: The tribe requested standard conditions to address potential impacts to tribal cultural resources. These conditions have been incorporated into **Mitigation Measures TCR-1** through **TCR-3**.
- San Manuel Band of Mission Indians: The tribe declined consultation because the project is outside of Serrano ancestral territory.
- Soboba Band of Luiseño Indians: The tribe deferred to the Morongo Band of Mission Indians.
- Twenty-Nine Palms Band of Mission Indians (February 11, 2019): The tribe is not aware of cultural or tribal cultural resources in the project area and requested a copy of any cultural resources studies for the project.

To address potential impacts to Tribal Cultural Resources in the Project Area, the following mitigation has been identified.

Mitigation Measures

TCR-1 Prior to any City approval for site preparation activities (including demolition, ground leveling, and placement of recycled material), the applicant shall provide evidence to the

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact

City that tribal monitor(s) have been retained. The tribal monitor(s) shall be present during all ground-disturbing activities, including all surveys, soil testing, grubbing, grading, and trenching activities.

TCR-2 If human remains are encountered during grading and other construction excavation, work in the immediate vicinity shall cease and the County Coroner and tribal contacts shall be contacted pursuant to State Health and Safety Code §7050.5.

TCR-3 In the event that Native American cultural resources are discovered during project activities, all work in the immediate vicinity (as defined by the tribal monitor) of the find shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be retained to assess the find. Work on the overall project may continue during this assessment period.

- If significant Native American cultural resources are discovered, the project applicant or his archaeologist shall contact the Morongo Band of Mission Indians, Cahuilla Band of Indians, and, as appropriate, other tribal governments within 24 hours of the find.
- A Treatment Plan shall be prepared by the qualified archeologist. The Treatment Plan shall be developed in coordination with the Morongo Band of Mission Indians tribes and other interested tribes.
- As established by the Treatment Plan and/or as requested by the Tribe, the developer and/or the project archaeologist shall, in good faith, consult on the discovery and its disposition (e.g., avoidance or preservation, return of artifacts to tribe).
- Prior to City approval for operation of the project, the applicant shall provide evidence that applicable provisions outlined in the Treatment Plan (as required) have been fully satisfied.

Adherence to **Mitigation Measures TCR-1** through **TCR-3** will ensure potential impacts to tribal cultural resource are reduced to a less than significant level.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.19 Utilities and Service Systems Would the project:				
a) Require or result in the relocation or construction of new or expanded water, drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects?				■
No Impact. The project does not require the installation, extension, or expansion of utilities to the site, which is already served by water, drainage, electric power, natural gas, and telecommunications facilities. The proposed project does not include any modifications to the on-site wastewater system, which consists of a septic tank serving the existing building. The project site is not proposed for permanent occupation and the existing on-site building will be retained for storage and occasional bathroom use. No modifications are proposed to the existing septic system, which must be maintained in accordance with RWQCB standards for septic systems and Appendix H of the California Plumbing Code.[49] Therefore, the proposed project would not cause significant environmental effects from relocation or construction of any utilities. No impact would occur and no mitigation is required.				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			■	
Less Than Significant Impact. The site contains a residential structure, which is being served by the BCVWD through existing entitlements. According to the BCVWD 2015 Urban Water Management Plan, the BCVWD relies on the substantial groundwater storage capacity of the Beaumont Basin, which the District replenishes through the State Water Project, to ensure adequate water entitlements.[50] The project includes placement of 4 to 6 inches of recycled aggregate throughout the project site and removal of four existing outbuildings for the purposes of temporarily staging construction equipment on site. One existing permanent structure (formerly a single-family residence) will remain on site to serve as an equipment and material storage facility and occasional bathroom. The BCVWD per capita water use per day in 2015 was 180 gallons.[51] According to SCAG, the City's average household size in 2016 was 3.2 persons per dwelling unit.[52] Therefore, occupation of the on-site structure as a residence could demand up to 576 gallons of water per day. However, the project site is not proposed for permanent occupation and the existing on-site residence will be retained for				

[49] *Appendix H-Private Sewage Disposal Systems.* 2016 California Plumbing Code. https://up.codes/viewer/california/ca-plumbing-code-2016/chapter/H/private-sewage-disposal-systems#H (accessed December 14, 2018).
[50] *2015 Urban Water Management Plan.* Beaumont Cherry Valley Water District. Pages 7-3 and 7-4. January 2017.
[51] *Ibid.* Page 5-7.
[52] *Profile of the City of Beaumont.* Southern California Association of Governments. Page 3. May 2017.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
storage and occasional bathroom use. Based on the anticipated frequency of on-site operations, use of the on-site bathroom, and corresponding water demand, is expected to be substantially less than if the site remained occupied as a residence or if workers were present full-time 40 hours per week. Additionally, no new potable water infrastructure is proposed to serve the project site. Since the BCVWD 2015 Urban Water Management Plan concluded replenishment of the Beaumont Basin via the State Water Project would meet the existing and future demand of the BCVWD during normal, dry and multiple dry years,[53] it is reasonable to conclude use of the site with a corresponding water demand expected to be substantially less than if the site remained occupied as a residence or if workers were present full-time 40 hours per week would be adequately served by the BCVWD. Therefore, sufficient water supplies are available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant and no mitigation is required.				
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?			■	
Less Than Significant Impact. As discussed in response to Checklist Question 3.3.18b, the project does not include any modifications to the on-site wastewater system, which consists of a septic tank serving the existing building. Although the project would not result in substantial increases in wastewater demand, there would be sporadic uses of the facilities on site that would result in the use of the septic tank. Based on the anticipated frequency of on-site operations, use of the on-site septic tank is expected to be substantially less frequent than if the site remained occupied as a residence or if workers were present full-time 40 hours per week. The septic tank must be maintained in accordance with RWQCB standards for septic systems and Appendix H of the California Plumbing Code.[54] Since the project does not include any land uses that would generate a substantial increase in on-site population, the project is not expected to substantially increase wastewater discharge in the City. Therefore, the proposed project would have a less than significant impact on capacity of wastewater treatment. No mitigation is required.				
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?			■	
Less Than Significant Impact. The nearest landfill to serve the proposed project would be Lambs Canyon Landfill, which underwent a permitting process in 2007 to increase capacity and extend the life of the facility. According to CalRecyle, the Lambs Canyon Landfill maintains a permitted				

[53] *2015 Urban Water Management Plan.* Beaumont Cherry Valley Water District. Page 7-11. January 2017.

[54] *Appendix H-Private Sewage Disposal Systems.* 2016 California Plumbing Code. https://up.codes/viewer/california/ca-plumbing-code-2016/chapter/H/private-sewage-disposal-systems#H (accessed December 14, 2018).

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
throughput of 5,000 tons per day, remaining capacity of over 19 million cubic yards, and estimated closure date of April 2029.[55] Disposal of solid waste to be generated by the proposed project will be the responsibility of the County of Riverside and therefore could be directed to one or several available disposal sites within the County.[56] According to CalRecycle, solid waste generation from industrial/manufacturing uses ranges from 5 pounds per 1,000 square feet per day to 62.5 pounds per 1,000 square feet per day.[57] The General Plan EIR concluded compliance with the City's adopted Source Reduction and Recycling Element (SRRE) target waste reduction and recycling goals and proper management and disposal of waste streams within the County would not result in an exceedance of permitted landfill capacities.[58] The General Plan land use and zoning designations for the project site are Industrial and Manufacturing, respectively, and the proposed project would be developed in accordance with these land use designations. However, the unattended storage yard will not require any permanent occupation or on-site employees. The existing residence will be utilized infrequently for equipment/tool storage and as a bathroom. Therefore, solid waste generation from the proposed project is anticipated to be substantially less than if the site were occupied daily by employees operating an industrial/ manufacturing facility. Since the General Plan EIR concluded use of the site under current land use and zoning designations would not result in an exceedance of permitted landfill capacities, it is reasonable to conclude use of the site under such designations but with less frequency also would not result in an exceedance of permitted landfill capacities. Impacts are less than significant and no mitigation is required.				
e) Comply with federal, State, and local management reduction statutes and regulations related to solid waste?			■	
Less Than Significant Impact. The City requires all development to adhere to all source reduction programs set forth in the SRRE for the disposal of solid waste, including yard waste and demolition materials. The project would adhere to the SRRE and, like all development, also comply with all other applicable local, State, and federal solid waste disposal standards. Impacts are considered less than significant and no mitigation is required.				

[55] CalRecycle, Solid Waste Information System, Lamb Canyon Sanitary Landfill (33-AA-0007). https://www2.calrecycle.ca.gov/SWFacilities/Directory/33-AA-0007/ (accessed February 22, 2019).
[56] Draft General Plan Update Environmental Impact Report. Pages 155 and 156. City of Beaumont, 2006.
[57] CalRecycle, Estimated Solid Waste Generation Rates. https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates#Industrial (accessed February 22, 2019).
[58] Draft General Plan Update Environmental Impact Report. Pages 155 and 156. City of Beaumont, 2006.

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.20 Wildfire If located in or near state responsibility areas or lands classified as vert high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?			■	

Less Than Significant Impact. The project site is not located within or adjacent to a Very High Fire Hazard Severity Zone (VHFHSZ), as designated by CalFire.[59] The nearest VHFHSZs are mapped 450 feet to the south and west of the project site.[60] Fire protection services within the City are provided by the RCFD and are supplemented by the CalFire station in Beaumont. The project does not include the construction or occupation of any structures or facilities within a wildland fire area.

Construction activities that could temporarily restrict vehicular traffic would incorporate appropriate measures to facilitate the passage of persons and vehicles through/around any temporary road closures in accordance with the City's Hazard Mitigation Plan adopted June 2012 for the purposes of coordinating efforts during local, State, and/or federal emergency events, including response to fire incidents.

Current site access is provided only from a single driveway along the western boundary. The proposed project site layout will facilitate emergency vehicle access via two additional driveway approaches, one on the western boundary approximately 80 feet south of the existing driveway and another along the eastern site boundary directly opposite 3rd Street. Site access points or driveway aprons into and out of the site are planned as far as possible from street intersections (minimum distance is 100 feet, or more based on safety considerations) and will be minimized to achieve efficient and productive use of paved access ways and eliminate traffic hazards. Plant material will not interfere with lighting of the premises or restrict access to emergency apparatus such as fire hydrants or fire alarm boxes. Entrances and exits to and from the site will be clearly marked with appropriate directional signage where multiple access points are provided.

All site improvements would be constructed in accordance with City-adopted Fire and Building Codes, would be conditioned to pay required fire protection fees, and would be subject to review by the Riverside County Fire Department (RCFD) and/or City Fire Prevention Bureau and provide the features deemed necessary during said review to ensure adequate emergency response facilities. Adherence to the emergency access measures required by the RCFD and/or City Fire Prevention Bureau would ensure a less than significant impact related to impairment of an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant and no mitigation is required.

[59] *Very High Fire Hazard Severity Zones in LRA.* Western Riverside County. California Department of Forestry and Fire Protection. December 24, 2009.

[60] *Ibid.*

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			■	
Less Than Significant Impact. The project site is relatively flat and currently contains vegetation that could ignite and exacerbate wildfire risks. However, the proposed project includes removal of on-site vegetation and placement of 4 to 6 inches of crushed recycled base material throughout the site. These actions would reduce the risk of wildfire compared to the existing condition by removing sources of ignition currently on site. Therefore, the project would not exacerbate wildfire risks that could otherwise expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant and no mitigation is required.				
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may result in temporary or ongoing impacts to the environment?			■	
Less Than Significant Impact. Driveway approaches will be installed along Elm and Olive Avenues and connect through the site via a 40-foot-wide path of travel that will be covered with 4 to 6 inches of crushed recycled base. The driveway approaches will facilitate additional access to the site for emergency fire apparatuses. Furthermore, the 4 to 6 inches of crushed recycled base along the 40-foot-wide path of travel between the driveways will maintain storm water permeability on site while reducing the potential for soil erosion and siltation. The on-site residential structure is currently connected to water, power, and gas service and an existing septic system. The project does not require the installation, extension, or expansion of utilities, fuel breaks, or emergency water sources to the site, and no additional buildings or habitable structures are proposed. Therefore, the project will not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may result in temporary or ongoing impacts to the environment. Impacts would be less than significant and no mitigation is required.				
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?			■	
Less Than Significant Impact. The project site is relatively flat and surrounded by generally flat land for at least 0.5 mile in every direction. A small drainage course intermittently flows in a westerly direction approximately 375 feet south and down gradient of the project site. Additionally, the nearest undeveloped slopes occur approximately 3,500 feet to the southwest and down gradient of the project site. The landscape up gradient of the project site consists of developed land. Since the project site is located up gradient (upslope) of landscape features that could be subject to post-fire				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
slope instability or drainage changes, the risk of flooding or landslides from wildfires is less than significant. No mitigation is required.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
3.3.21 Mandatory Findings of Significance				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		■		
*Potentially Significant Impact unless Mitigation Incorporated***.** As stated in Checklist Section 3.3.4 (Biological Resources), the proposed project would not cause fish or wildlife populations to drop below self-sustaining levels or restrict the movement/distribution of a rare or endangered species. The proposed project would not affect any threatened or endangered species or habitat. Potential impacts to migratory/nesting bird species would be mitigated to a less than significant level with adherence to **Mitigation Measure BIO-1**. Development of the proposed project would not result in the elimination of any identified archaeological or historic resource. There are no known unique ethnic or cultural values associated with the site, nor are known religious or sacred uses associated with the site. **Mitigation Measure CUL-1** has been identified to address potential impacts if subsurface cultural resources are encountered during construction operations. Adherence to this measure would reduce potential impacts to a less than significant level.				
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.)			■	
Less Than Significant Impact. The cumulative effects resulting from buildout of the City's General Plan, including the project area, were previously identified in the General Plan EIR. The project is				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
consistent with the existing General Plan and zoning for the site; therefore, it would not result in development that would be substantially greater in intensity than what was planned for in the General Plan. The potential cumulative environmental effects of the proposed project would fall within the impacts identified in the City's General Plan EIR. No cumulative impact greater than that identified in the General Plan EIR would result from construction of the proposed improvements. Due to the limited scope of direct physical impacts to the environment associated with the proposed project, any impacts are project-specific in nature. Consequently, the project along with other cumulative projects would result in a less than significant cumulative impact with respect to all environmental issues.				
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		■		
*Potentially Significant Impact unless Mitigation Incorporated***.** Due to the relatively small size of the project site (2.8 acres) and scale of construction and operation activities, compliance with BACM as part of SCAQMD Rules 402, 403 and 431.2; Title 13-Section 2449 of the California Code of Regulations; and CalRecycle/Green Building Program regulations designed to reduce emissions would ensure all concentrations of pollutants would be below applicable SCAQMD thresholds of significance for construction and operation of the project. None of the properties identified in the GeoTracker database, EnviroStor database, or the Cortese List occurs on the project site or has any activities or materials that would represent a significant risk to public health or safety (e.g., on-site storage, leaking tanks, approaching groundwater contamination plume) on the project site. Additionally, the project site does not currently contain any recognized environmental conditions or historical recognized environmental conditions. An adjacent industrial land use involves daily construction material delivery, loading and unloading, and prefabrication activities, which are substantially similar to activities anticipated for construction and operation of the proposed project. However, noise generated from construction could exceed the City's interior noise standard of 55 dBA for intervals of more than 15 minutes per hour at four nearby residences. Accordingly, **Mitigation Measure NOI-1** will ensure temporary noise attenuation barriers are erected to reduce construction noise levels to at or below the City's 55 dBA residential noise level threshold for intervals not more than 15 minutes per hour. Although noise levels during operation of the project may exceed the City's L_8 (5-minute) noise standard of 65 dBA for residential uses, the proposed project is not be required to conform to more restrictive noise requirements based on Section 9.02.130 of the Municipal Code. Additionally, due to the substantially similar uses adjacent to the north of the project site, noise generated from operation of the proposed project would not be acoustically discernable above ambient noise levels in the project vicinity. Therefore, noise generated from long-term operations of the proposed project would be less than significant.				

	Potentially Significant Impact	Potentially Significant Impact unless Mitigation Incorporated	Less Than Significant Impact	No Impact
The project site is not located within a fault zone or flood zone. Additionally, the project does not include development of any residential uses or any other uses that would be continuously occupied by humans; therefore, seismic impacts to humans are not expected to occur. The analysis provided in response to the Checklist Questions in this Initial Study details that, with the implementation of appropriate regulatory policies, no significant environmental impacts would result from the construction or operation of the proposed project. Therefore, development of the site as proposed would not directly or indirectly result in substantial adverse effect on any human population. Impacts would be less than significant and no mitigation is required.				

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APPENDIX A

AIR QUALITY AND GREENHOUSE GAS EMISSIONS CALEEMOD OUTPUTS

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: March 21, 2019

TO: Carl Winter, LSA Project Manager

FROM: Michael Slavick, LSA Senior Air Quality Specialist

SUBJECT: Elm/Olive Storage Yard Project - Air Quality and Greenhouse Gas Emission Analysis

An air quality and greenhouse gas emission analysis is presented below in support of the Initial Study/Mitigated Negative Declaration for the proposed Elm/Olive Storage Yard Project.

CONSTRUCTION AIR QUALITY IMPACTS

Construction and operation emissions associated with the proposed project are analyzed below. As discussed below, the proposed project would not generate operation-period emissions and would not generate construction-period emissions in excess of established standards. Therefore, the project would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

Short-Term Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, paving, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, ROG, directly-emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs such as diesel exhaust particulate matter.

Site preparation and project construction would involve clearance of the site, demolition of the sheds, slight ground leveling, placement of crushed recycled base, and construct base walls and fences along the site perimeter. Construction-related effects on air quality from the proposed project would be greatest during the site preparation and grading phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

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Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The SCAQMD has established Rule 403: Fugitive Dust, which would require the applicant to implement measures that would reduce the amount of particulate matter generated during the construction period.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_x, NO_x, ROG, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. These emissions would be temporary and limited to the immediate area surrounding the project site.

Construction emissions were estimated for the project using the California Emission Estimator Model (CalEEMod), consistent with SCAQMD recommendations for the proposed project. Precise details of construction activities are unknown at this time; therefore, default assumptions (e.g., construction fleet activities) from CalEEMod were assumed. For purposes of this analysis, the construction schedule for all improvements was assumed to be approximately 2 months. Construction-related emissions are presented in Table 1. CalEEMod output sheets are attached.

Table 1: Estimated Construction Emissions

Construction Phase	Total Regional Pollutant Emissions (lbs/day)							
	VOC	NO_X	CO	SO_X	Fugitive PM_{10}	Exhaust PM_{10}	Fugitive $PM_{2.5}$	Exhaust $PM_{2.5}$
Demolition	2.38	23.32	15.54	0.03	0.38	1.29	0.08	1.20
Site Preparation	1.80	21.57	12.27	0.03	0.48	0.85	0.07	0.79
Grading	2.36	34.91	12.21	0.06	3.49	1.12	1.57	1.03
Building Construction	2.91	21.36	17.95	0.04	0.70	1.11	0.19	1.06
Peak Daily	**2.91**	**34.91**	**17.95**	**0.06**	**4.61**		**2.60**	
SCAQMD Thresholds	75.00	100.00	550.00	150.00	150.00		55.00	
Significant Emissions?	No	No	No	No	No		No	

Source: Compiled by LSA (March 2019).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

As shown in Table 1, construction emissions would not exceed the SCAQMD's thresholds for maximum daily construction emissions, and therefore, would not result in substantial increase in regional air emissions.

Construction Source Emission Localized Significance Threshold Analysis

Local pollutant concentrations are initially addressed using the SCAQMD LST look-up table methodology. The maximum daily disturbed acreage for use in determining the applicability of the SCAQMD's LST look-up tables is up to 3 acres (SCAQMD Fact Sheet). The closest sensitive receptors to the project site are the existing residences adjacent to the western boundary of the site. Table 2 identifies the emissions thresholds for local pollutants with receptors at a distance of 82ft (25 m) for a 3-acre site. The table shows that emissions threshold increases with the size of the site. This area is consistent with the

anticipated intensity of construction and based on the number of pieces of construction equipment to be used.

Table 2: Construction Localized Impacts Analysis

Emissions Sources	Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum On-Site Emissions	23	15	3.6	2.3
LST thresholds for a 3-acre site	178	1,966	14.0	7.7
Significant Emissions?	No	No	No	No

Source: Compiled by LSA (March 2019).
Note: Source Receptor Area – Banning Airport, 3 acres, receptors at 25 meters.
CO = carbon monoxide
lbs/day = pounds per day
LST = local significance threshold
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

OPERATIONAL AIR QUALITY IMPACTS

Long-term air pollutant emission impacts are those associated with the net increases in mobile-source emissions. The area source emissions would come from many sources, including consumer products, landscaping equipment, general energy and water usage.

Based on the limited project information associated with the worker crews, the proposed project is assumed to generate approximately 16 vehicle trips per day. The project-related trip generation rate of 16 trips per weekday was entered in the CalEEMod. In addition, it is assumed that up to 3 off-road equipment/vehicles would be operating on-site.

The CalEEMod results for the project are shown in Table 3.

Table 3: Regional Operational Emissions

Source	Pollutant Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	0.05	0	<0.01	0	0	0
Energy	0	0	0	0	0	0
Mobile	0.11	0.84	1.57	<0.01	9.15	0.99
Offroad	0.50	4.74	2.86	<0.01	0.17	0.16
Total Project Emissions	**0.66**	**5.58**	**4.43**	**0**	**9.32**	**1.15**
SCAQMD Thresholds	55.00	55.00	550.00	150.00	150.00	55.00
Significant Emissions?	No	No	No	No	No	No

Source: Compiled by LSA (March 2019).
CO = carbon monoxide
lbs/day = pounds per day
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size
SCAQMD = South Coast Air Quality Management District
SO_X = sulfur oxides
VOC = volatile organic compounds

As shown in Table 3, none of the criteria pollutants would exceed SCAQMD emissions thresholds. Therefore, project-related long-term air quality impacts would be less than significant and no mitigation is required.

Operational Localized Impacts Analysis

CalEEMod was used to calculate localized NO_2, CO, PM_{10}, and $PM_{2.5}$ pollutant concentrations for operational activities. Table L shows the modeled emissions for the proposed operational activities compared with the appropriate LSTs. By design, the localized impacts analysis only includes on-site sources; however, the CalEEMod outputs do not separate on-site and off-site emissions for mobile sources. For a worst-case scenario assessment, the emissions shown in Table 4 include all on-site project-related area sources and 5 percent of the project-related new mobile sources, which is an estimate of the amount of project-related new vehicle traffic that will occur on site. A total of 5 percent is considered conservative because the average round-trip lengths assumed are 16.60 miles (mi) for home-work, 8.40 mi for home-shop, and 6.90 mi for other types of trips. It is unlikely that the average on-site distance driven will be even less than 1,000 ft, which is approximately less 2 percent of the total miles traveled. Considering the total trip length included in the CalEEMod, the 5 percent assumption is conservative.

Table 4: Operational Localized Impacts Analysis

Emissions Sources	NO_X (lbs/day)	CO (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Maximum On-Site Emissions	4.8	2.9	0.63	0.21
LSTs – 5-acre site	178	1,966	4.0	2.3
Significant Emissions?	No	No	No	No

Source: Compiled by LSA (March 2019).
Note: Source Receptor Area – Banning Airport, 3 acres, receptors at 25 meters.
CO = carbon monoxide
lbs/day = pounds per day
LST = local significance threshold
NO_X = nitrogen oxides
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
PM_{10} = particulate matter less than 10 microns in size

Table 4 shows that the operational emission rates would not exceed the LSTs for residents in the project area. Therefore, the proposed operational activity would not result in a locally significant air quality impact.

Construction Greenhouse Gas Emissions

The proposed project construction emissions were calculated using CalEEMod Version 2016.3.2. CalEEMod calculates emissions from off-road equipment usage and on-road vehicle travel associated with haul, delivery, and construction worker trips. GHG emissions during construction were forecast based on the proposed construction schedule and applying the mobile source derived from the SCAQMD-recommended CalEEMod.

Table 5 presents the estimated annual GHG emissions for the construction phase (details are provided in the CalEEMod output in the Attachment).

Table 5: Regional Construction Emissions

Construction Phase	Peak Annual Emissions (MT/yr)				Total Emissions per Calendar Year (MT/CO_2e)
	CO_2	CH_4	N_2O	CO_2e	
2019					
Demolition	3.65	<0.01	0	3.68	38.79
Site Preparation	3.42	<0.01	0	3.44	
Grading	16.17	<0.01	0	16.23	
Building Construction	15.39	<0.01	0	15.45	
Total Construction Emissions Amortized over 30 years					**1.29**

Source: Compiled by LSA (March 2019).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
MT/CO_2e = metric tons of carbon dioxide equivalent
MT/yr = metric tons per year
N_2O = nitrous oxide

Operational Greenhouse Gas Emissions

Long-term operation of the proposed project would generate GHG emissions from area and mobile sources. Operational GHG emissions, as shown in Table 6, were calculated using CalEEMod (Version 2016.3.2). Based on SCAQMD guidance, construction emissions were amortized over 30 years (a typical project lifetime) and added to the total project operational emissions. Mobile-source emissions of GHGs would include project-generated vehicle trips associated with the proposed project.

Table 6: Operational Greenhouse Gas Emissions

Source	Pollutant Emissions (MT/yr)					
	Bio-CO_2	NBio-CO_2	Total CO_2	CH_4	N_2O	CO_2e
Construction Emissions Amortized over 30 Years	0	1.29	1.29	<0.01	0	1.29
Operational Emissions						
Area	0	<0.01	<0.01	0	0	<0.01
Energy	0	0	0	0	0	0
Mobile	0	70	70	<0.01	0	70
Off-road	0	113	113	0.04	0	114
Waste	0	0	0	0	0	0
Water	0	0	0	0	0	0
Total Project Emissions	**0**	**185**	**185**	**0.04**	**0**	**186**
SCAQMD Tier 3 Threshold						**3,000**
Significant?						**No**

Source: Compiled by LSA (March 2019).
Bio-CO_2 = biologically generated CO_2
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas
MT/yr = metric tons per year
MT CO_2e/yr/SP = metric tons of carbon dioxide equivalent per year per service population
N_2O = nitrous oxide
NBio-CO_2 = non-biologically generated CO_2
SCAQMD = South Coast Air Quality Management District

As shown in Table 6, the proposed project would generate 186 MT CO_2e/yr. The project's GHG emissions are less than the SCAQMD Tier 3 threshold of 3,000 MT CO_2e/yr. Based on this GHG analysis, the proposed project impacts would be less than significant.

Attachment: CalEEMod Model Output Sheets

Elm/Olive Storage Yard

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Project include clearance of the site, removal of shed, slight ground leveling, placement of crushed recycled base, and construct block walls and fences along site perimeter.

Demolition -

Grading - Approx. 2,259 cy of crushed recycled material would be imported on-site.

Vehicle Trips - Assumed 16 work trips per weekday.

Construction Off-road Equipment Mitigation - water exposed surface three times a day.

Operational Off-Road Equipment - Assume 3 work trips per weekday

Road Dust - Assume 98 percent of vehicle trips would be on paved surface street off-site and 2 percent on unpaved surface at project site.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	10.00
tblConstructionPhase	NumDays	20.00	3.00
tblGrading	AcresOfGrading	3.00	2.80
tblGrading	AcresOfGrading	4.50	2.80
tblGrading	MaterialImported	0.00	2,259.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	3.00
tblRoadDust	RoadPercentPave	100	98
tblVehicleTrips	CC_TTP	0.00	28.00
tblVehicleTrips	CNW_TTP	0.00	13.00
tblVehicleTrips	CW_TTP	0.00	59.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	16.00

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					
2019	2.9024	34.9070	17.5868	0.0569	7.4987	1.2894	8.6165	3.6259	1.2047	4.6560	0.0000	5,883.3597	5,883.3597	0.9095	0.0000	5,906.0971
Maximum	**2.9024**	**34.9070**	**17.5868**	**0.0569**	**7.4987**	**1.2894**	**8.6165**	**3.6259**	**1.2047**	**4.6560**	**0.0000**	**5,883.3597**	**5,883.3597**	**0.9095**	**0.0000**	**5,906.0971**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.9024	34.9070	17.5868	0.0569	3.4943	1.2894	4.6121	1.5697	1.2047	2.5997	0.0000	5,883.3597	5,883.3597	0.9095	0.0000	5,906.0971
Maximum	**2.9024**	**34.9070**	**17.5868**	**0.0569**	**3.4943**	**1.2894**	**4.6121**	**1.5697**	**1.2047**	**2.5997**	**0.0000**	**5,883.3597**	**5,883.3597**	**0.9095**	**0.0000**	**5,906.0971**

	ROG	NOx	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**	**53.40**	**0.00**	**46.47**	**56.71**	**0.00**	**44.16**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0525	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0956	0.8425	1.3359	5.7300e-003	9.1438	5.6100e-003	9.1494	0.9856	5.2900e-003	0.9909		583.6831	583.6831	0.0281		584.3865
Offroad	0.4973	4.7421	2.8576	9.9000e-003		0.1728	0.1728		0.1590	0.1590		958.9665	958.9665	0.3102		966.7202
Total	**0.6454**	**5.5846**	**4.1938**	**0.0156**	**9.1438**	**0.1784**	**9.3222**	**0.9856**	**0.1642**	**1.1499**		**1,542.6502**	**1,542.6502**	**0.3383**	**0.0000**	**1,551.1074**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0525	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0956	0.8425	1.3359	5.7300e-003	9.1438	5.6100e-003	9.1494	0.9856	5.2900e-003	0.9909		583.6831	583.6831	0.0281		584.3865
Offroad	0.4973	4.7421	2.8576	9.9000e-003		0.1728	0.1728		0.1590	0.1590		958.9665	958.9665	0.3102		966.7202
Total	**0.6454**	**5.5846**	**4.1938**	**0.0156**	**9.1438**	**0.1784**	**9.3222**	**0.9856**	**0.1642**	**1.1499**		**1,542.6502**	**1,542.6502**	**0.3383**	**0.0000**	**1,551.1074**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2019	6/5/2019	5	3	
2	Site Preparation	Site Preparation	6/6/2019	6/10/2019	5	3	
3	Grading	Grading	6/11/2019	6/18/2019	5	6	
4	Building Construction	Building Construction	6/19/2019	7/2/2019	5	10	

Acres of Grading (Site Preparation Phase): 2.8

Acres of Grading (Grading Phase): 2.8

Acres of Paving: 2.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	282.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4952	0.0000	0.4952	0.0750	0.0000	0.0750			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
Total	**2.2950**	**22.6751**	**14.8943**	**0.0241**	**0.4952**	**1.2863**	**1.7815**	**0.0750**	**1.2017**	**1.2767**		**2,360.7198**	**2,360.7198**	**0.6011**		**2,375.7475**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0138	0.6021	0.0843	1.7500e-003	0.0408	2.1900e-003	0.0430	0.0112	2.1000e-003	0.0133		185.6765	185.6765	0.0130		186.0003
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	0.0699	0.0455	0.4681	1.3300e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		132.6672	132.6672	3.6000e-003		132.7572
Total	**0.0837**	**0.6476**	**0.5523**	**3.0800e-003**	**0.1861**	**3.0900e-003**	**0.1892**	**0.0497**	**2.9300e-003**	**0.0527**		**318.3437**	**318.3437**	**0.0166**		**318.7575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1931	0.0000	0.1931	0.0292	0.0000	0.0292			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
Total	**2.2950**	**22.6751**	**14.8943**	**0.0241**	**0.1931**	**1.2863**	**1.4794**	**0.0292**	**1.2017**	**1.2310**	**0.0000**	**2,360.7197**	**2,360.7197**	**0.6011**		**2,375.7475**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0138	0.6021	0.0843	1.7500e-003	0.0408	2.1900e-003	0.0430	0.0112	2.1000e-003	0.0133		185.6765	185.6765	0.0130		186.0003
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	0.0699	0.0455	0.4681	1.3300e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		132.6672	132.6672	3.6000e-003		132.7572
Total	**0.0837**	**0.6476**	**0.5523**	**3.0800e-003**	**0.1861**	**3.0900e-003**	**0.1892**	**0.0497**	**2.9300e-003**	**0.0527**		**318.3437**	**318.3437**	**0.0166**		**318.7575**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9898	0.0000	0.9898	0.1069	0.0000	0.1069			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854		2,426.5408	2,426.5408	0.7677		2,445.7341
Total	**1.7557**	**21.5386**	**11.9143**	**0.0245**	**0.9898**	**0.8537**	**1.8435**	**0.1069**	**0.7854**	**0.8923**		**2,426.5408**	**2,426.5408**	**0.7677**		**2,445.7341**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0430	0.0280	0.2880	8.2000e-004	0.0894	5.5000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.6414	81.6414	2.2200e-003		81.6968
Total	**0.0430**	**0.0280**	**0.2880**	**8.2000e-004**	**0.0894**	**5.5000e-004**	**0.0900**	**0.0237**	**5.1000e-004**	**0.0242**		**81.6414**	**81.6414**	**2.2200e-003**		**81.6968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3860	0.0000	0.3860	0.0417	0.0000	0.0417			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854	0.0000	2,426.5408	2,426.5408	0.7677		2,445.7341
Total	**1.7557**	**21.5386**	**11.9143**	**0.0245**	**0.3860**	**0.8537**	**1.2397**	**0.0417**	**0.7854**	**0.8271**	**0.0000**	**2,426.5408**	**2,426.5408**	**0.7677**		**2,445.7341**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0430	0.0280	0.2880	8.2000e-004	0.0894	5.5000e-004	0.0900	0.0237	5.1000e-004	0.0242		81.6414	81.6414	2.2200e-003		81.6968
Total	**0.0430**	**0.0280**	**0.2880**	**8.2000e-004**	**0.0894**	**5.5000e-004**	**0.0900**	**0.0237**	**5.1000e-004**	**0.0242**		**81.6414**	**81.6414**	**2.2200e-003**		**81.6968**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5647	0.0000	6.5647	3.3709	0.0000	3.3709			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871		2,041.2539	2,041.2539	0.6458		2,057.3997
Total	**2.0287**	**22.7444**	**10.1518**	**0.0206**	**6.5647**	**1.0730**	**7.6376**	**3.3709**	**0.9871**	**4.3580**		**2,041.2539**	**2,041.2539**	**0.6458**		**2,057.3997**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2776	12.1276	1.6974	0.0353	0.8223	0.0442	0.8664	0.2254	0.0423	0.2677		3,740.0541	3,740.0541	0.2609		3,746.5765
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	0.0538	0.0350	0.3601	1.0200e-003	0.1118	6.9000e-004	0.1125	0.0296	6.4000e-004	0.0303		102.0517	102.0517	2.7700e-003		102.1209
Total	**0.3314**	**12.1626**	**2.0575**	**0.0363**	**0.9341**	**0.0449**	**0.9789**	**0.2551**	**0.0429**	**0.2980**		**3,842.1059**	**3,842.1059**	**0.2637**		**3,848.6975**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5602	0.0000	2.5602	1.3147	0.0000	1.3147			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.2539	2,041.2539	0.6458		2,057.3997
Total	**2.0287**	**22.7444**	**10.1518**	**0.0206**	**2.5602**	**1.0730**	**3.6332**	**1.3147**	**0.9871**	**2.3018**	**0.0000**	**2,041.2539**	**2,041.2539**	**0.6458**		**2,057.3997**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2776	12.1276	1.6974	0.0353	0.8223	0.0442	0.8664	0.2254	0.0423	0.2677		3,740.0541	3,740.0541	0.2609		3,746.5765
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	0.0538	0.0350	0.3601	1.0200e-003	0.1118	6.9000e-004	0.1125	0.0296	6.4000e-004	0.0303		102.0517	102.0517	2.7700e-003		102.1209
Total	**0.3314**	**12.1626**	**2.0575**	**0.0363**	**0.9341**	**0.0449**	**0.9789**	**0.2551**	**0.0429**	**0.2980**		**3,842.1059**	**3,842.1059**	**0.2637**		**3,848.6975**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.1454	2,312.1454	0.4810		2,324.1705
Total	**2.5581**	**18.9103**	**15.2545**	**0.0250**		**1.0901**	**1.0901**		**1.0449**	**1.0449**		**2,312.1454**	**2,312.1454**	**0.4810**		**2,324.1705**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0699	2.2715	0.4961	5.0700e-003	0.1281	0.0175	0.1456	0.0369	0.0168	0.0536		533.8773	533.8773	0.0493		535.1097
Worker	0.2744	0.1784	1.8363	5.2200e-003	0.5701	3.5200e-003	0.5736	0.1512	3.2400e-003	0.1544		520.4638	520.4638	0.0141		520.8168
Total	**0.3443**	**2.4499**	**2.3323**	**0.0103**	**0.6981**	**0.0210**	**0.7192**	**0.1881**	**0.0200**	**0.2081**		**1,054.3410**	**1,054.3410**	**0.0634**		**1,055.9265**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.1454	2,312.1454	0.4810		2,324.1705
Total	**2.5581**	**18.9103**	**15.2545**	**0.0250**		**1.0901**	**1.0901**		**1.0449**	**1.0449**	**0.0000**	**2,312.1454**	**2,312.1454**	**0.4810**		**2,324.1705**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0699	2.2715	0.4961	5.0700e-003	0.1281	0.0175	0.1456	0.0369	0.0168	0.0536		533.8773	533.8773	0.0493		535.1097
Worker	0.2744	0.1784	1.8363	5.2200e-003	0.5701	3.5200e-003	0.5736	0.1512	3.2400e-003	0.1544		520.4638	520.4638	0.0141		520.8168
Total	**0.3443**	**2.4499**	**2.3323**	**0.0103**	**0.6981**	**0.0210**	**0.7192**	**0.1881**	**0.0200**	**0.2081**		**1,054.3410**	**1,054.3410**	**0.0634**		**1,055.9265**

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	0.0956	0.8425	1.3359	5.7300e-003	9.1438	5.6100e-003	9.1494	0.9856	5.2900e-003	0.9909		583.6831	583.6831	0.0281		584.3865
Unmitigated	0.0956	0.8425	1.3359	5.7300e-003	9.1438	5.6100e-003	9.1494	0.9856	5.2900e-003	0.9909		583.6831	583.6831	0.0281		584.3865

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	44.80	0.00	0.00	151,925	151,925
Total	44.80	0.00	0.00	151,925	151,925

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
Other Non-Asphalt Surfaces	16.60	8.40	6.90	59.00	28.00	13.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0525	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Unmitigated	0.0525	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Total	**0.0525**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.1000e-004**	**6.1000e-004**	**0.0000**		**6.5000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Total	**0.0525**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.1000e-004**	**6.1000e-004**	**0.0000**		**6.5000e-004**

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
Off-Highway Trucks	3	2.00	260	402	0.38	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Off-Highway Trucks	0.4973	4.7421	2.8576	9.9000e-003		0.1728	0.1728		0.1590	0.1590		958.9665	958.9665	0.3102		966.7202
Total	**0.4973**	**4.7421**	**2.8576**	**9.9000e-003**		**0.1728**	**0.1728**		**0.1590**	**0.1590**		**958.9665**	**958.9665**	**0.3102**		**966.7202**

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

Elm/Olive Storage Yard

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Project include clearance of the site, removal of shed, slight ground leveling, placement of crushed recycled base, and construct block walls and fences along site perimeter.

Demolition -

Grading - Approx. 2,259 cy of crushed recycled material would be imported on-site.

Vehicle Trips - Assumed 16 work trips per weekday.

Construction Off-road Equipment Mitigation - water exposed surface three times a day.

Operational Off-Road Equipment - Assume 3 work trips per weekday

Road Dust - Assume 98 percent of vehicle trips would be on paved surface street off-site and 2 percent on unpaved surface at project site.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	10.00
tblConstructionPhase	NumDays	20.00	3.00
tblGrading	AcresOfGrading	3.00	2.80
tblGrading	AcresOfGrading	4.50	2.80
tblGrading	MaterialImported	0.00	2,259.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	3.00
tblRoadDust	RoadPercentPave	100	98
tblVehicleTrips	CC_TTP	0.00	28.00
tblVehicleTrips	CNW_TTP	0.00	13.00
tblVehicleTrips	CW_TTP	0.00	59.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	16.00

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					
2019	2.9055	34.7848	17.9468	0.0579	7.4987	1.2893	8.6158	3.6259	1.2046	4.6552	0.0000	5,990.1673	5,990.1673	0.8873	0.0000	6,012.3496
Maximum	**2.9055**	**34.7848**	**17.9468**	**0.0579**	**7.4987**	**1.2893**	**8.6158**	**3.6259**	**1.2046**	**4.6552**	**0.0000**	**5,990.1673**	**5,990.1673**	**0.8873**	**0.0000**	**6,012.3496**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	2.9055	34.7848	17.9468	0.0579	3.4943	1.2893	4.6113	1.5697	1.2046	2.5990	0.0000	5,990.1673	5,990.1673	0.8873	0.0000	6,012.3496
Maximum	**2.9055**	**34.7848**	**17.9468**	**0.0579**	**3.4943**	**1.2893**	**4.6113**	**1.5697**	**1.2046**	**2.5990**	**0.0000**	**5,990.1673**	**5,990.1673**	**0.8873**	**0.0000**	**6,012.3496**

	ROG	NOx	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**	**53.40**	**0.00**	**46.48**	**56.71**	**0.00**	**44.17**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0525	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1110	0.8332	1.5734	6.2000e-003	9.1438	5.5800e-003	9.1494	0.9856	5.2600e-003	0.9909		631.4468	631.4468	0.0279		632.1436
Offroad	0.4973	4.7421	2.8576	9.9000e-003		0.1728	0.1728		0.1590	0.1590		958.9665	958.9665	0.3102		966.7202
Total	**0.6609**	**5.5752**	**4.4313**	**0.0161**	**9.1438**	**0.1784**	**9.3221**	**0.9856**	**0.1642**	**1.1498**		**1,590.4139**	**1,590.4139**	**0.3380**	**0.0000**	**1,598.8644**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0525	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1110	0.8332	1.5734	6.2000e-003	9.1438	5.5800e-003	9.1494	0.9856	5.2600e-003	0.9909		631.4468	631.4468	0.0279		632.1436
Offroad	0.4973	4.7421	2.8576	9.9000e-003		0.1728	0.1728		0.1590	0.1590		958.9665	958.9665	0.3102		966.7202
Total	**0.6609**	**5.5752**	**4.4313**	**0.0161**	**9.1438**	**0.1784**	**9.3221**	**0.9856**	**0.1642**	**1.1498**		**1,590.4139**	**1,590.4139**	**0.3380**	**0.0000**	**1,598.8644**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2019	6/5/2019	5	3	
2	Site Preparation	Site Preparation	6/6/2019	6/10/2019	5	3	
3	Grading	Grading	6/11/2019	6/18/2019	5	6	
4	Building Construction	Building Construction	6/19/2019	7/2/2019	5	10	

Acres of Grading (Site Preparation Phase): 2.8

Acres of Grading (Grading Phase): 2.8

Acres of Paving: 2.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	282.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.4952	0.0000	0.4952	0.0750	0.0000	0.0750			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017		2,360.7198	2,360.7198	0.6011		2,375.7475
Total	**2.2950**	**22.6751**	**14.8943**	**0.0241**	**0.4952**	**1.2863**	**1.7815**	**0.0750**	**1.2017**	**1.2767**		**2,360.7198**	**2,360.7198**	**0.6011**		**2,375.7475**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0131	0.5961	0.0717	1.8000e-003	0.0408	2.1500e-003	0.0430	0.0112	2.0600e-003	0.0133		190.3981	190.3981	0.0118		190.6938
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	0.0716	0.0439	0.5775	1.4900e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		147.8779	147.8779	4.1400e-003		147.9814
Total	**0.0847**	**0.6400**	**0.6492**	**3.2900e-003**	**0.1861**	**3.0500e-003**	**0.1892**	**0.0497**	**2.8900e-003**	**0.0526**		**338.2760**	**338.2760**	**0.0160**		**338.6752**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1931	0.0000	0.1931	0.0292	0.0000	0.0292			0.0000			0.0000
Off-Road	2.2950	22.6751	14.8943	0.0241		1.2863	1.2863		1.2017	1.2017	0.0000	2,360.7197	2,360.7197	0.6011		2,375.7475
Total	**2.2950**	**22.6751**	**14.8943**	**0.0241**	**0.1931**	**1.2863**	**1.4794**	**0.0292**	**1.2017**	**1.2310**	**0.0000**	**2,360.7197**	**2,360.7197**	**0.6011**		**2,375.7475**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0131	0.5961	0.0717	1.8000e-003	0.0408	2.1500e-003	0.0430	0.0112	2.0600e-003	0.0133		190.3981	190.3981	0.0118		190.6938
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	0.0716	0.0439	0.5775	1.4900e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		147.8779	147.8779	4.1400e-003		147.9814
Total	**0.0847**	**0.6400**	**0.6492**	**3.2900e-003**	**0.1861**	**3.0500e-003**	**0.1892**	**0.0497**	**2.8900e-003**	**0.0526**		**338.2760**	**338.2760**	**0.0160**		**338.6752**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.9898	0.0000	0.9898	0.1069	0.0000	0.1069			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854		2,426.5408	2,426.5408	0.7677		2,445.7341
Total	**1.7557**	**21.5386**	**11.9143**	**0.0245**	**0.9898**	**0.8537**	**1.8435**	**0.1069**	**0.7854**	**0.8923**		**2,426.5408**	**2,426.5408**	**0.7677**		**2,445.7341**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0441	0.0270	0.3554	9.1000e-004	0.0894	5.5000e-004	0.0900	0.0237	5.1000e-004	0.0242		91.0018	91.0018	2.5500e-003		91.0655
Total	**0.0441**	**0.0270**	**0.3554**	**9.1000e-004**	**0.0894**	**5.5000e-004**	**0.0900**	**0.0237**	**5.1000e-004**	**0.0242**		**91.0018**	**91.0018**	**2.5500e-003**		**91.0655**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.3860	0.0000	0.3860	0.0417	0.0000	0.0417			0.0000			0.0000
Off-Road	1.7557	21.5386	11.9143	0.0245		0.8537	0.8537		0.7854	0.7854	0.0000	2,426.5408	2,426.5408	0.7677		2,445.7341
Total	**1.7557**	**21.5386**	**11.9143**	**0.0245**	**0.3860**	**0.8537**	**1.2397**	**0.0417**	**0.7854**	**0.8271**	**0.0000**	**2,426.5408**	**2,426.5408**	**0.7677**		**2,445.7341**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0441	0.0270	0.3554	9.1000e-004	0.0894	5.5000e-004	0.0900	0.0237	5.1000e-004	0.0242		91.0018	91.0018	2.5500e-003		91.0655
Total	**0.0441**	**0.0270**	**0.3554**	**9.1000e-004**	**0.0894**	**5.5000e-004**	**0.0900**	**0.0237**	**5.1000e-004**	**0.0242**		**91.0018**	**91.0018**	**2.5500e-003**		**91.0655**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5647	0.0000	6.5647	3.3709	0.0000	3.3709			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871		2,041.2539	2,041.2539	0.6458		2,057.3997
Total	**2.0287**	**22.7444**	**10.1518**	**0.0206**	**6.5647**	**1.0730**	**7.6376**	**3.3709**	**0.9871**	**4.3580**		**2,041.2539**	**2,041.2539**	**0.6458**		**2,057.3997**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2640	12.0066	1.4438	0.0362	0.8223	0.0434	0.8657	0.2254	0.0415	0.2669		3,835.1612	3,835.1612	0.2383		3,841.1181
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	0.0551	0.0338	0.4443	1.1400e-003	0.1118	6.9000e-004	0.1125	0.0296	6.4000e-004	0.0303		113.7522	113.7522	3.1800e-003		113.8319
Total	**0.3191**	**12.0404**	**1.8881**	**0.0373**	**0.9341**	**0.0441**	**0.9781**	**0.2551**	**0.0422**	**0.2972**		**3,948.9134**	**3,948.9134**	**0.2415**		**3,954.9500**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5602	0.0000	2.5602	1.3147	0.0000	1.3147			0.0000			0.0000
Off-Road	2.0287	22.7444	10.1518	0.0206		1.0730	1.0730		0.9871	0.9871	0.0000	2,041.2539	2,041.2539	0.6458		2,057.3997
Total	**2.0287**	**22.7444**	**10.1518**	**0.0206**	**2.5602**	**1.0730**	**3.6332**	**1.3147**	**0.9871**	**2.3018**	**0.0000**	**2,041.2539**	**2,041.2539**	**0.6458**		**2,057.3997**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2640	12.0066	1.4438	0.0362	0.8223	0.0434	0.8657	0.2254	0.0415	0.2669		3,835.1612	3,835.1612	0.2383		3,841.1181
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	0.0551	0.0338	0.4443	1.1400e-003	0.1118	6.9000e-004	0.1125	0.0296	6.4000e-004	0.0303		113.7522	113.7522	3.1800e-003		113.8319
Total	**0.3191**	**12.0404**	**1.8881**	**0.0373**	**0.9341**	**0.0441**	**0.9781**	**0.2551**	**0.0422**	**0.2972**		**3,948.9134**	**3,948.9134**	**0.2415**		**3,954.9500**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449		2,312.1454	2,312.1454	0.4810		2,324.1705
Total	**2.5581**	**18.9103**	**15.2545**	**0.0250**		**1.0901**	**1.0901**		**1.0449**	**1.0449**		**2,312.1454**	**2,312.1454**	**0.4810**		**2,324.1705**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0666	2.2767	0.4266	5.2600e-003	0.1281	0.0173	0.1454	0.0369	0.0165	0.0534		554.6052	554.6052	0.0444		555.7146
Worker	0.2808	0.1723	2.2657	5.8300e-003	0.5701	3.5200e-003	0.5736	0.1512	3.2400e-003	0.1544		580.1364	580.1364	0.0162		580.5424
Total	**0.3474**	**2.4490**	**2.6923**	**0.0111**	**0.6981**	**0.0208**	**0.7190**	**0.1881**	**0.0198**	**0.2078**		**1,134.7416**	**1,134.7416**	**0.0606**		**1,136.2571**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5581	18.9103	15.2545	0.0250		1.0901	1.0901		1.0449	1.0449	0.0000	2,312.1454	2,312.1454	0.4810		2,324.1705
Total	**2.5581**	**18.9103**	**15.2545**	**0.0250**		**1.0901**	**1.0901**		**1.0449**	**1.0449**	**0.0000**	**2,312.1454**	**2,312.1454**	**0.4810**		**2,324.1705**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0666	2.2767	0.4266	5.2600e-003	0.1281	0.0173	0.1454	0.0369	0.0165	0.0534		554.6052	554.6052	0.0444		555.7146
Worker	0.2808	0.1723	2.2657	5.8300e-003	0.5701	3.5200e-003	0.5736	0.1512	3.2400e-003	0.1544		580.1364	580.1364	0.0162		580.5424
Total	**0.3474**	**2.4490**	**2.6923**	**0.0111**	**0.6981**	**0.0208**	**0.7190**	**0.1881**	**0.0198**	**0.2078**		**1,134.7416**	**1,134.7416**	**0.0606**		**1,136.2571**

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	0.1110	0.8332	1.5734	6.2000e-003	9.1438	5.5800e-003	9.1494	0.9856	5.2600e-003	0.9909		631.4468	631.4468	0.0279		632.1436
Unmitigated	0.1110	0.8332	1.5734	6.2000e-003	9.1438	5.5800e-003	9.1494	0.9856	5.2600e-003	0.9909		631.4468	631.4468	0.0279		632.1436

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	44.80	0.00	0.00	151,925	151,925
Total	44.80	0.00	0.00	151,925	151,925

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
Other Non-Asphalt Surfaces	16.60	8.40	6.90	59.00	28.00	13.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0525	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Unmitigated	0.0525	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Total	**0.0525**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.1000e-004**	**6.1000e-004**	**0.0000**		**6.5000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2900e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0432					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.0000e-005	0.0000	2.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		6.1000e-004	6.1000e-004	0.0000		6.5000e-004
Total	**0.0525**	**0.0000**	**2.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**6.1000e-004**	**6.1000e-004**	**0.0000**		**6.5000e-004**

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
Off-Highway Trucks	3	2.00	260	402	0.38	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Off-Highway Trucks	0.4973	4.7421	2.8576	9.9000e-003		0.1728	0.1728		0.1590	0.1590		958.9665	958.9665	0.3102		966.7202
Total	**0.4973**	**4.7421**	**2.8576**	**9.9000e-003**		**0.1728**	**0.1728**		**0.1590**	**0.1590**		**958.9665**	**958.9665**	**0.3102**		**966.7202**

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

Elm/Olive Storage Yard

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	2.80	Acre	2.80	121,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Project include clearance of the site, removal of shed, slight ground leveling, placement of crushed recycled base, and construct block walls and fences along site perimeter.

Demolition -

Grading - Approx. 2,259 cy of crushed recycled material would be imported on-site.

Vehicle Trips - Assumed 16 work trips per weekday.

Construction Off-road Equipment Mitigation - water exposed surface three times a day.

Operational Off-Road Equipment - Assume 3 work trips per weekday

Road Dust - Assume 98 percent of vehicle trips would be on paved surface street off-site and 2 percent on unpaved surface at project site.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	10.00
tblConstructionPhase	NumDays	20.00	3.00
tblGrading	AcresOfGrading	3.00	2.80
tblGrading	AcresOfGrading	4.50	2.80
tblGrading	MaterialImported	0.00	2,259.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	2.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	3.00
tblRoadDust	RoadPercentPave	100	98
tblVehicleTrips	CC_TTP	0.00	28.00
tblVehicleTrips	CNW_TTP	0.00	13.00
tblVehicleTrips	CW_TTP	0.00	59.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	WD_TR	0.00	16.00

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					
2019	0.0277	0.2796	0.1660	4.3000e-004	0.0285	0.0121	0.0407	0.0122	0.0114	0.0236	0.0000	38.6244	38.6244	6.7900e-003	0.0000	38.7941
Maximum	**0.0277**	**0.2796**	**0.1660**	**4.3000e-004**	**0.0285**	**0.0121**	**0.0407**	**0.0122**	**0.0114**	**0.0236**	**0.0000**	**38.6244**	**38.6244**	**6.7900e-003**	**0.0000**	**38.7941**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0277	0.2796	0.1660	4.3000e-004	0.0152	0.0121	0.0273	5.8400e-003	0.0114	0.0172	0.0000	38.6244	38.6244	6.7900e-003	0.0000	38.7941
Maximum	**0.0277**	**0.2796**	**0.1660**	**4.3000e-004**	**0.0152**	**0.0121**	**0.0273**	**5.8400e-003**	**0.0114**	**0.0172**	**0.0000**	**38.6244**	**38.6244**	**6.7900e-003**	**0.0000**	**38.7941**

	ROG	NOx	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**	**46.88**	**0.00**	**32.92**	**52.05**	**0.00**	**26.86**	**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	6-3-2019	9-2-2019	0.2967	0.2967
		Highest	0.2967	0.2967

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	9.5800e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0125	0.1113	0.1800	7.6000e-004	1.1878	7.3000e-004	1.1885	0.1279	6.8000e-004	0.1286	0.0000	70.2720	70.2720	3.2500e-003	0.0000	70.3533
Offroad	0.0647	0.6165	0.3715	1.2900e-003		0.0225	0.0225		0.0207	0.0207	0.0000	113.0948	113.0948	0.0366	0.0000	114.0092
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0867**	**0.7278**	**0.5515**	**2.0500e-003**	**1.1878**	**0.0232**	**1.2109**	**0.1279**	**0.0213**	**0.1492**	**0.0000**	**183.3668**	**183.3668**	**0.0398**	**0.0000**	**184.3625**

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	9.5800e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0125	0.1113	0.1800	7.6000e-004	1.1878	7.3000e-004	1.1885	0.1279	6.8000e-004	0.1286	0.0000	70.2720	70.2720	3.2500e-003	0.0000	70.3533
Offroad	0.0647	0.6165	0.3715	1.2900e-003		0.0225	0.0225		0.0207	0.0207	0.0000	113.0948	113.0948	0.0366	0.0000	114.0092
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0867**	**0.7278**	**0.5515**	**2.0500e-003**	**1.1878**	**0.0232**	**1.2109**	**0.1279**	**0.0213**	**0.1492**	**0.0000**	**183.3668**	**183.3668**	**0.0398**	**0.0000**	**184.3625**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/3/2019	6/5/2019	5	3	
2	Site Preparation	Site Preparation	6/6/2019	6/10/2019	5	3	
3	Grading	Grading	6/11/2019	6/18/2019	5	6	
4	Building Construction	Building Construction	6/19/2019	7/2/2019	5	10	

Acres of Grading (Site Preparation Phase): 2.8

Acres of Grading (Grading Phase): 2.8

Acres of Paving: 2.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	7.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	282.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	51.00	20.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.4000e-004	0.0000	7.4000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4400e-003	0.0340	0.0223	4.0000e-005		1.9300e-003	1.9300e-003		1.8000e-003	1.8000e-003	0.0000	3.2124	3.2124	8.2000e-004	0.0000	3.2329
Total	**3.4400e-003**	**0.0340**	**0.0223**	**4.0000e-005**	**7.4000e-004**	**1.9300e-003**	**2.6700e-003**	**1.1000e-004**	**1.8000e-003**	**1.9100e-003**	**0.0000**	**3.2124**	**3.2124**	**8.2000e-004**	**0.0000**	**3.2329**

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	2.0000e-005	9.2000e-004	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2564	0.2564	2.0000e-005	0.0000	0.2568
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	1.0000e-004	7.0000e-005	7.4000e-004	0.0000	2.1000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1852	0.1852	1.0000e-005	0.0000	0.1853
Total	**1.2000e-004**	**9.9000e-004**	**8.6000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.4416**	**0.4416**	**3.0000e-005**	**0.0000**	**0.4421**

3.2 Demolition - 2019

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					2.9000e-004	0.0000	2.9000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.4400e-003	0.0340	0.0223	4.0000e-005		1.9300e-003	1.9300e-003		1.8000e-003	1.8000e-003	0.0000	3.2124	3.2124	8.2000e-004	0.0000	3.2329
Total	**3.4400e-003**	**0.0340**	**0.0223**	**4.0000e-005**	**2.9000e-004**	**1.9300e-003**	**2.2200e-003**	**4.0000e-005**	**1.8000e-003**	**1.8400e-003**	**0.0000**	**3.2124**	**3.2124**	**8.2000e-004**	**0.0000**	**3.2329**

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	2.0000e-005	9.2000e-004	1.2000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2564	0.2564	2.0000e-005	0.0000	0.2568
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	1.0000e-004	7.0000e-005	7.4000e-004	0.0000	2.1000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1852	0.1852	1.0000e-005	0.0000	0.1853
Total	**1.2000e-004**	**9.9000e-004**	**8.6000e-004**	**0.0000**	**2.7000e-004**	**0.0000**	**2.8000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.4416**	**0.4416**	**3.0000e-005**	**0.0000**	**0.4421**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.4800e-003	0.0000	1.4800e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6300e-003	0.0323	0.0179	4.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	3.3020	3.3020	1.0400e-003	0.0000	3.3281
Total	**2.6300e-003**	**0.0323**	**0.0179**	**4.0000e-005**	**1.4800e-003**	**1.2800e-003**	**2.7600e-003**	**1.6000e-004**	**1.1800e-003**	**1.3400e-003**	**0.0000**	**3.3020**	**3.3020**	**1.0400e-003**	**0.0000**	**3.3281**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1140	0.1140	0.0000	0.0000	0.1140
Total	**6.0000e-005**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1140**	**0.1140**	**0.0000**	**0.0000**	**0.1140**

3.3 Site Preparation - 2019

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8000e-004	0.0000	5.8000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6300e-003	0.0323	0.0179	4.0000e-005		1.2800e-003	1.2800e-003		1.1800e-003	1.1800e-003	0.0000	3.3020	3.3020	1.0400e-003	0.0000	3.3281
Total	**2.6300e-003**	**0.0323**	**0.0179**	**4.0000e-005**	**5.8000e-004**	**1.2800e-003**	**1.8600e-003**	**6.0000e-005**	**1.1800e-003**	**1.2400e-003**	**0.0000**	**3.3020**	**3.3020**	**1.0400e-003**	**0.0000**	**3.3281**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	4.6000e-004	0.0000	1.3000e-004	0.0000	1.3000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1140	0.1140	0.0000	0.0000	0.1140
Total	**6.0000e-005**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**1.3000e-004**	**0.0000**	**1.3000e-004**	**4.0000e-005**	**0.0000**	**4.0000e-005**	**0.0000**	**0.1140**	**0.1140**	**0.0000**	**0.0000**	**0.1140**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e-003	0.0682	0.0305	6.0000e-005		3.2200e-003	3.2200e-003		2.9600e-003	2.9600e-003	0.0000	5.5554	5.5554	1.7600e-003	0.0000	5.5993
Total	**6.0900e-003**	**0.0682**	**0.0305**	**6.0000e-005**	**0.0197**	**3.2200e-003**	**0.0229**	**0.0101**	**2.9600e-003**	**0.0131**	**0.0000**	**5.5554**	**5.5554**	**1.7600e-003**	**0.0000**	**5.5993**

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	8.1000e-004	0.0369	4.6600e-003	1.1000e-004	2.4300e-003	1.3000e-004	2.5600e-003	6.7000e-004	1.3000e-004	7.9000e-004	0.0000	10.3289	10.3289	6.8000e-004	0.0000	10.3458
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	1.5000e-004	1.1000e-004	1.1400e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2849	0.2849	1.0000e-005	0.0000	0.2851
Total	**9.6000e-004**	**0.0370**	**5.8000e-003**	**1.1000e-004**	**2.7600e-003**	**1.3000e-004**	**2.8900e-003**	**7.6000e-004**	**1.3000e-004**	**8.8000e-004**	**0.0000**	**10.6138**	**10.6138**	**6.9000e-004**	**0.0000**	**10.6308**

3.4 Grading - 2019

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					7.6800e-003	0.0000	7.6800e-003	3.9400e-003	0.0000	3.9400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0900e-003	0.0682	0.0305	6.0000e-005		3.2200e-003	3.2200e-003		2.9600e-003	2.9600e-003	0.0000	5.5554	5.5554	1.7600e-003	0.0000	5.5993
Total	**6.0900e-003**	**0.0682**	**0.0305**	**6.0000e-005**	**7.6800e-003**	**3.2200e-003**	**0.0109**	**3.9400e-003**	**2.9600e-003**	**6.9000e-003**	**0.0000**	**5.5554**	**5.5554**	**1.7600e-003**	**0.0000**	**5.5993**

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	8.1000e-004	0.0369	4.6600e-003	1.1000e-004	2.4300e-003	1.3000e-004	2.5600e-003	6.7000e-004	1.3000e-004	7.9000e-004	0.0000	10.3289	10.3289	6.8000e-004	0.0000	10.3458
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	1.5000e-004	1.1000e-004	1.1400e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2849	0.2849	1.0000e-005	0.0000	0.2851
Total	**9.6000e-004**	**0.0370**	**5.8000e-003**	**1.1000e-004**	**2.7600e-003**	**1.3000e-004**	**2.8900e-003**	**7.6000e-004**	**1.3000e-004**	**8.8000e-004**	**0.0000**	**10.6138**	**10.6138**	**6.9000e-004**	**0.0000**	**10.6308**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0128	0.0946	0.0763	1.3000e-004		5.4500e-003	5.4500e-003		5.2200e-003	5.2200e-003	0.0000	10.4877	10.4877	2.1800e-003	0.0000	10.5423
Total	**0.0128**	**0.0946**	**0.0763**	**1.3000e-004**		**5.4500e-003**	**5.4500e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**10.4877**	**10.4877**	**2.1800e-003**	**0.0000**	**10.5423**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4000e-004	0.0115	2.3000e-003	3.0000e-005	6.3000e-004	9.0000e-005	7.2000e-004	1.8000e-004	8.0000e-005	2.7000e-004	0.0000	2.4762	2.4762	2.1000e-004	0.0000	2.4814
Worker	1.2700e-003	9.2000e-004	9.6800e-003	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4215	2.4215	7.0000e-005	0.0000	2.4232
Total	**1.6100e-003**	**0.0125**	**0.0120**	**6.0000e-005**	**3.4300e-003**	**1.1000e-004**	**3.5400e-003**	**9.2000e-004**	**1.0000e-004**	**1.0300e-003**	**0.0000**	**4.8977**	**4.8977**	**2.8000e-004**	**0.0000**	**4.9046**

3.5 Building Construction - 2019

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	0.0128	0.0946	0.0763	1.3000e-004		5.4500e-003	5.4500e-003		5.2200e-003	5.2200e-003	0.0000	10.4877	10.4877	2.1800e-003	0.0000	10.5423
Total	**0.0128**	**0.0946**	**0.0763**	**1.3000e-004**		**5.4500e-003**	**5.4500e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**10.4877**	**10.4877**	**2.1800e-003**	**0.0000**	**10.5423**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.4000e-004	0.0115	2.3000e-003	3.0000e-005	6.3000e-004	9.0000e-005	7.2000e-004	1.8000e-004	8.0000e-005	2.7000e-004	0.0000	2.4762	2.4762	2.1000e-004	0.0000	2.4814
Worker	1.2700e-003	9.2000e-004	9.6800e-003	3.0000e-005	2.8000e-003	2.0000e-005	2.8200e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.4215	2.4215	7.0000e-005	0.0000	2.4232
Total	**1.6100e-003**	**0.0125**	**0.0120**	**6.0000e-005**	**3.4300e-003**	**1.1000e-004**	**3.5400e-003**	**9.2000e-004**	**1.0000e-004**	**1.0300e-003**	**0.0000**	**4.8977**	**4.8977**	**2.8000e-004**	**0.0000**	**4.9046**

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	0.0125	0.1113	0.1800	7.6000e-004	1.1878	7.3000e-004	1.1885	0.1279	6.8000e-004	0.1286	0.0000	70.2720	70.2720	3.2500e-003	0.0000	70.3533
Unmitigated	0.0125	0.1113	0.1800	7.6000e-004	1.1878	7.3000e-004	1.1885	0.1279	6.8000e-004	0.1286	0.0000	70.2720	70.2720	3.2500e-003	0.0000	70.3533

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	44.80	0.00	0.00	151,925	151,925
Total	44.80	0.00	0.00	151,925	151,925

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
Other Non-Asphalt Surfaces	16.60	8.40	6.90	59.00	28.00	13.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	9.5800e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Unmitigated	9.5800e-003	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005

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	1.7000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Total	**9.5800e-003**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**7.0000e-005**

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	1.7000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	4.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.0000e-005	7.0000e-005	0.0000	0.0000	7.0000e-005
Total	**9.5800e-003**	**0.0000**	**4.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**7.0000e-005**	**7.0000e-005**	**0.0000**	**0.0000**	**7.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Off-Highway Trucks	3	2.00	260	402	0.38	Diesel

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Off-Highway Trucks	0.0647	0.6165	0.3715	1.2900e-003		0.0225	0.0225		0.0207	0.0207	0.0000	113.0948	113.0948	0.0366	0.0000	114.0092
Total	**0.0647**	**0.6165**	**0.3715**	**1.2900e-003**		**0.0225**	**0.0225**		**0.0207**	**0.0207**	**0.0000**	**113.0948**	**113.0948**	**0.0366**	**0.0000**	**114.0092**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT AND MSHCP CONSISTENCY ANALYSIS

WESTERN RIVERSIDE COUNTY MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS AND BIOLOGY REPORT

ELM/OLIVE AVENUE STORAGE AND MAINTENANCE YARD PROJECT

CITY OF BEAUMONT

RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

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Prepared by:

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(951) 781-9310

LSA Project No. ORZ1801

LSA

March 2019

TABLE OF CONTENTS

APPENDICES

1.0 EXECUTIVE SUMMARY

LSA Associates Inc., doing business as LSA, was retained by Ortiz Enterprises, Incorporated to conduct a Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis and general biological study of the approximately 2.8-acre Elm/Olive Avenue Storage and Maintenance Yard Project (project) area located in the City of Beaumont, Riverside County, California.

The project area is not within the MSHCP Criteria Area or Public/Quasi-Public Lands.

The project area does not contain riverine/riparian areas or vernal pools as defined in the MSHCP and does not contain any fairy shrimp habitat. Therefore, focused surveys will not be required for sensitive riparian bird or fairy shrimp species.

The project area is not within the MSHCP Narrow Endemic Plant Species Area, burrowing owl (*Athene cunicularia hypugaea*) survey area, or any other survey species areas. Therefore, no surveys for MSHCP survey species will be required. In addition, "species not adequately conserved" by the MSHCP were not found within the project area.

The project will not be subject to MSHCP Urban/Wildlands interface requirements because the project area is not within or adjacent to an identified Conservation Area. In addition, because the project is not located within a Criteria Area or Public/Quasi-Public Lands, it is not subject to best management practices (BMPs) specified in Appendix C of the MSHCP.

No drainage features, ponded areas, or riparian habitat potentially subject to jurisdiction by the California Department of Fish and Wildlife (CDFW) or U.S. Army Corps of Engineers (USACE) were found within the project area.

2.0 INTRODUCTION

LSA Associates Inc., doing business as LSA, was retained by Ortiz Enterprises, Incorporated to conduct an MSHCP consistency analysis and general biological study of the approximately 2.8-acre Elm/Olive Avenue Storage and Maintenance Yard Project area located in the City of Beaumont, Riverside County, California (Appendix A, Figure 1). The study was conducted to address compliance with the MSHCP and CEQA. The study included a site visit on February 13, 2019, by LSA biologist Denise Woodard.

2.1 PROJECT AREA

The project area consists of three parcels—Assessor's Parcel Numbers (APNs) 417-130-013, 417-110-022, 417-110-023—located generally between Elm Avenue and Olive Avenue south of West 4th Street, approximately 0.25 mile southwest of Interstate 10 (I-10). The project area is approximately 2.8 acres and the entire site will be developed.

2.2 PROJECT DESCRIPTION

The proposed project (Appendix A, Figure 2) involves the storage of freeway construction maintenance materials such as steel beams and k-rails. Project activities include the clearance of the site and the placement of crushed base throughout the project area. The existing single-family residence will be retained for storage and bathroom use. The existing outlying sheds will be removed.

2.3 GENERAL SETTING

The project area is developed on the westerly portion by a single-family residence and the easterly portion is undeveloped. The project area is bordered on the north by commercial and residential development, on the south and east by residential development, and on the west by vacant land and residential development. Topography within the project area is more or less flat and level with an approximate elevation of 2,560 feet above mean sea level. The only mapped soil on within the project area is Ramona sandy loam (California Soil Resource Lab 2019). Soil observed throughout the project area appears to be consistent with this designation.

3.0 RESERVE ASSEMBLY ANALYSIS

3.1 CELL AND CRITERIA ANALYSIS

The MSHCP provides for the assembly of a Conservation Area consisting of Core Areas and Linkages for the conservation of covered species. The Conservation Area is to be assembled from portions of the MSHCP Criteria Area, which consist of quarter-section (i.e., approximately 160-acre) Criteria Cells, each with specific criteria for the species conservation within that cell.

The project area is not within the MSHCP Criteria Area; therefore, no cell or criteria analysis is required.

3.2 PUBLIC/QUASI-PUBLIC LANDS ANALYSIS

The project area is not within or adjacent to Public/Quasi Public lands.

4.0 VEGETATION

Vegetation on within the project area consists of non-native grassland. There are a few ornamental trees associated with the existing residence (Appendix A, Figures 3 and 4). Dominant species include mouse barley (*Hordeum murinum*), brome grass (*Bromus* sp.), and common fiddleneck (*Amsinckia* sp.). There are no other plant communities within the project area. A complete list of plant species observed is included in Appendix B.

5.0 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (MSHCP SECTION 6.1.2)

Section 6.1.2 of the MSHCP requires assessment of impacts to riparian habitats, riverine areas, and vernal pools, including focused surveys for sensitive riparian bird and fairy shrimp species when suitable habitat is present. The intent of the assessment requirement is to provide for the protection of resources used by MSHCP-covered species, as well as existing and future downstream conservation areas. Riverine/riparian areas and vernal pools are defined in Section 6.1.2 of the MSHCP as follows:

> *Riparian/Riverine Areas are lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year.*
>
> *Vernal pools are seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. The determination that an area exhibits vernal pool characteristics, and the definition of the watershed supporting vernal pool hydrology, must be made on a case-by-case basis. Such determinations should consider the length of the time the area exhibits upland and wetland characteristics and the manner in which the area fits into the overall ecological system as a wetland. Evidence concerning the persistence of an area's wetness can be obtained from its history, vegetation, soils, and drainage characteristics, uses to which it has been subjected, and weather and hydrologic records.*
>
> Fairy Shrimp. *For Riverside, vernal pool and Santa Rosa fairy shrimp, mapping of stock ponds, ephemeral pools and other features shall also be undertaken as determined appropriate by a qualified biologist.*
>
> *With the exception of wetlands created for the purpose of providing wetlands Habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions.*

5.1 RIPARIAN/RIVERINE

5.1.1 Methods

The project area was assessed for riparian/riverine areas at the time of the February 13, 2019, site visit. The assessment included identification and mapping of plant communities within the project area as well as any drainage features.

5.1.2 Existing Conditions and Results

There are no drainage features within the project area. Two small stands of giant reed (*Arundo donax*) were noted immediately next to two sheds, but no evident water sources were associated with the giant reed stands; therefore, there are no areas that would meet the MSHCP definition of riparian/riverine areas.

5.2 VERNAL POOLS

5.2.1 Methods

The project area was assessed for vernal pools at the time of the February 13, 2019, site visit. The assessment included a search for depressions, indicators of wetland hydrology, suitable soils, and hydrophytic vegetation. The assessment also included a review of seasonally appropriate aerial photographs (Google Earth) from 1996 through 2018.

5.2.2 Existing Conditions and Results

No ponded areas or features resembling vernal pools were observed during the site visit, nor were any seen in aerial photographs. The soil mapped and observed within the project area is sandy loam, which is unlikely to support ponding sufficient for vernal pool formation. The only hydrophytic vegetation on the site is giant reed, which is not a species associated with vernal pools. Therefore, there are no vernal pools.

5.3 FAIRY SHRIMP

5.3.1 Methods

The project area was assessed for fairy shrimp habitat at the same time and using the same methods as the assessment for vernal pools. The MSHCP calls for habitat assessments for three sensitive species of fairy shrimp: Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*), Riverside fairy shrimp (*Streptocephalus woottoni*), and vernal pool fairy shrimp (*Branchinecta lynchi*). Santa Rosa Plateau fairy shrimp occurs only on the Santa Rosa Plateau of extreme southwest Riverside County. A fourth sensitive species of Southern California, San Diego fairy shrimp (*Branchinecta sandiegonensis*) is found primarily in coastal areas of Orange and San Diego Counties. It has been found as far inland as the Wildomar area of southwest Riverside County, but is not expected in the project area. These sensitive fairy shrimp species inhabit vernal pools as well as stock ponds, large road ruts, or other similar habitats that pond water long enough to allow growth and reproduction. To provide fairy shrimp habitat, a feature must regularly pond water for at least 18 days for vernal pool fairy shrimp (Eriksen and Belk 1999) and two months for Riverside fairy shrimp (USFWS 2012).

5.3.2 Existing Conditions and Results

As noted above, there are no vernal pools within the project area. No inundation was observed within the project area or in seasonally appropriate aerial photographs. The loamy soils are unlikely to support ponding for long enough to provide suitable habitat conditions. Given these factors, the project area does not have habitat suitable for sensitive fairy shrimp species and no surveys will be required.

5.4 RIPARIAN BIRDS

5.4.1 Methods

Habitat suitability for riparian birds, including least Bell's vireo (LBVI; *Vireo bellii pusillus*), southwestern willow flycatcher (SWFL; *Empidonax traillii extimus*), and yellow-billed cuckoo (YBCU; *Coccyzus americanus*) was assessed in conjunction with the assessment for riverine/riparian areas.

5.4.2 Existing Conditions and Results

There are no riparian/riverine areas or any habitat suitable for riparian birds within the project area. Therefore, no surveys for riparian birds will be required.

6.0 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (MSHCP SECTION 6.1.3)

Section 6.1.3 of the MSHCP requires focused surveys for specified sensitive plant species if the project is located within a Narrow Endemic Plant Species Area (NEPSSA) and suitable habitat is present. The project is not located within a NEPSSA survey area; therefore, a NEPSSA focused survey is not required.

7.0 ADDITIONAL SURVEY NEEDS AND PROCEDURES (MSHCP SECTION 6.3.2)

MSHCP Section 6.3.2 requires surveys for additional plants, amphibians, small mammals, and burrowing owl for projects located within mapped survey areas.

7.1 CRITERIA AREA PLANT SPECIES

The project is not within a mapped survey area for Criteria Area Species Survey Area (CASSA) plant species.

7.2 AMPHIBIANS

The project is not within a mapped survey area for amphibian species.

7.3 BURROWING OWL

The project is not within the MSHCP burrowing owl survey area.

7.4 MAMMALS

The project is not within a mapped survey area for mammals.

8.0 INFORMATION ON OTHER SPECIES

8.1 DELHI SANDS FLOWER-LOVING FLY

The MSHCP requires surveys for Delhi sands flower-loving fly in most areas of mapped Delhi series soils where suitable habitat exists (MSHCP Section 9).

The project area is not within an area of mapped Delhi soils and (as noted in Section 2.0, above) soil observed throughout the site is sandy loam, which is inconsistent with Delhi soils; therefore, no survey or additional analysis is required for this species.

8.2 SPECIES NOT ADEQUATELY CONSERVED

Species identified in MSHCP Table 9-3 are not considered adequately conserved under the MSHCP. Other species with limited coverage or with no take authorization under the MSHCP include Santa Rosa Plateau fairy shrimp (*Linderiella santarosae*), bald eagle (*Haliaeetus leucocephalus*), golden eagle *(Aquila chrysaetos*), peregrine falcon (*Falco peregrinus anatum*), and white-tailed kite (*Elanus leucurus*).

No Table 9-3 species or species with limited coverage or no take authorization were observed during the site visit. Given the habitat quality, none of these species is expected to occur within the project area.

9.0 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (MSHCP SECTION 6.1.4)

To preserve the integrity of areas described as existing or future MSHCP Conservation Areas, the guidelines contained in Section 6.1.4 (Urban Wildlands Interface Guidelines) are to be implemented for projects that are located adjacent to either existing conservation or land described for conservation in the MSHCP Criteria Area.

The project area is not located adjacent to conserved lands or lands in the Criteria Area that are described for conservation. Therefore, the Urban Wildlands Interface Guidelines do not apply to this project.

10.0 BEST MANAGEMENT PRACTICES (MSHCP VOLUME I, APPENDIX C)

The project is not within MSHCP Criteria Areas or Public/Quasi-Public (PQP) Lands and therefore is not subject to best management practices (BMPs) specified in Appendix C of the MSHCP.

11.0 POTENTIAL JURISDICTIONAL WATERS AND STREAMBEDS

No drainage features, ponded areas, or riparian habitat potentially subject to jurisdiction by the CDFW or USACE were found within the project area.

12.0 NESTING BIRDS

During the bird breeding season (typically February 1 through August 31), large trees on or adjacent to the project area may be used by hawks, ravens, or other large birds for nesting. Trees, shrubs, and other vegetation may provide nest sites for smaller birds, and burrowing owls may nest in ground squirrel burrows, pipes, or similar features. Nesting bird species, with potential to occur are protected by California Fish and Game Code Sections 3503, 3503.5, and 3800, and by the Migratory Bird Treaty Act (MBTA) (16 USC 703–711). These laws regulate the take, possession, or destruction of the nest or eggs of any migratory bird or bird of prey. However, the USFWS has recently determined that the MBTA should apply only to "… affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" and will not be applied to incidental take of migratory birds pursuant to otherwise lawful activities.

To avoid potential effects to fully protected raptors, special-status bird species, and other nesting birds protected by the California Fish and Game Code, and for compliance with MSHCP Incidental Take Permit Condition 5, the following measures will be implemented:

- A nesting bird pre-construction survey will be conducted by a qualified biologist three days prior to ground-disturbing activities. Should nesting birds be found, an exclusionary buffer will be established by the qualified biologist. The buffer may be up to 500 feet in diameter depending on the species of nesting bird found. This buffer will be clearly marked in the field by construction personnel under guidance of the qualified biologist and construction or clearing will not be conducted within this zone until the qualified biologist determines that the young have fledged or the nest is no longer active. Nesting bird habitat within the BSA will be resurveyed during bird breeding season if there is a lapse in construction activities longer than seven days.

13.0 REFERENCES

California, State of. 2007. California Fish and Game Code. Office of Legislative Counsel online legislation database access. http://www.leginfo.ca.gov/.

California Soil Resource Lab. 2019. *Soil Survey*. https://casoilresource.lawr.ucdavis.edu/ (accessed February 19, 2019).

Eriksen, C., and D. Belk. 1999. *Fairy Shrimps of California's Puddles, Pools, and Playas.* Mad River Press, Inc., Eureka, California.

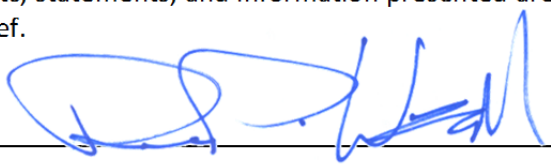
Riverside County Transportation and Land Management Agency. 2003. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Final MSHCP—Volumes 1 and 2. Approved June 17, 2003.

United States Fish and Wildlife Service. 2002. Migratory Bird Treaty Act. A Guide to the Laws and Treaties of the United States for Protecting Migratory Birds. Last Revised: 05/21/2002. http://www.fws.gov/migratorybirds/intrnltr/treatlaw.html#mbta.

United States Fish and Wildlife Service (USFWS). 2012. Endangered and Threatened Wildlife and Plants; Revised Critical Habitat for the Riverside Fairy Shrimp; Final Rule. Federal Register 77: 72070-72140 (December 4, 2012).

14.0 CERTIFICATION STATEMENT

I hereby certify that the statements furnished in this report present the data and information required for this biological evaluation and the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: March 4, 2019 Signature: 

APPENDIX A

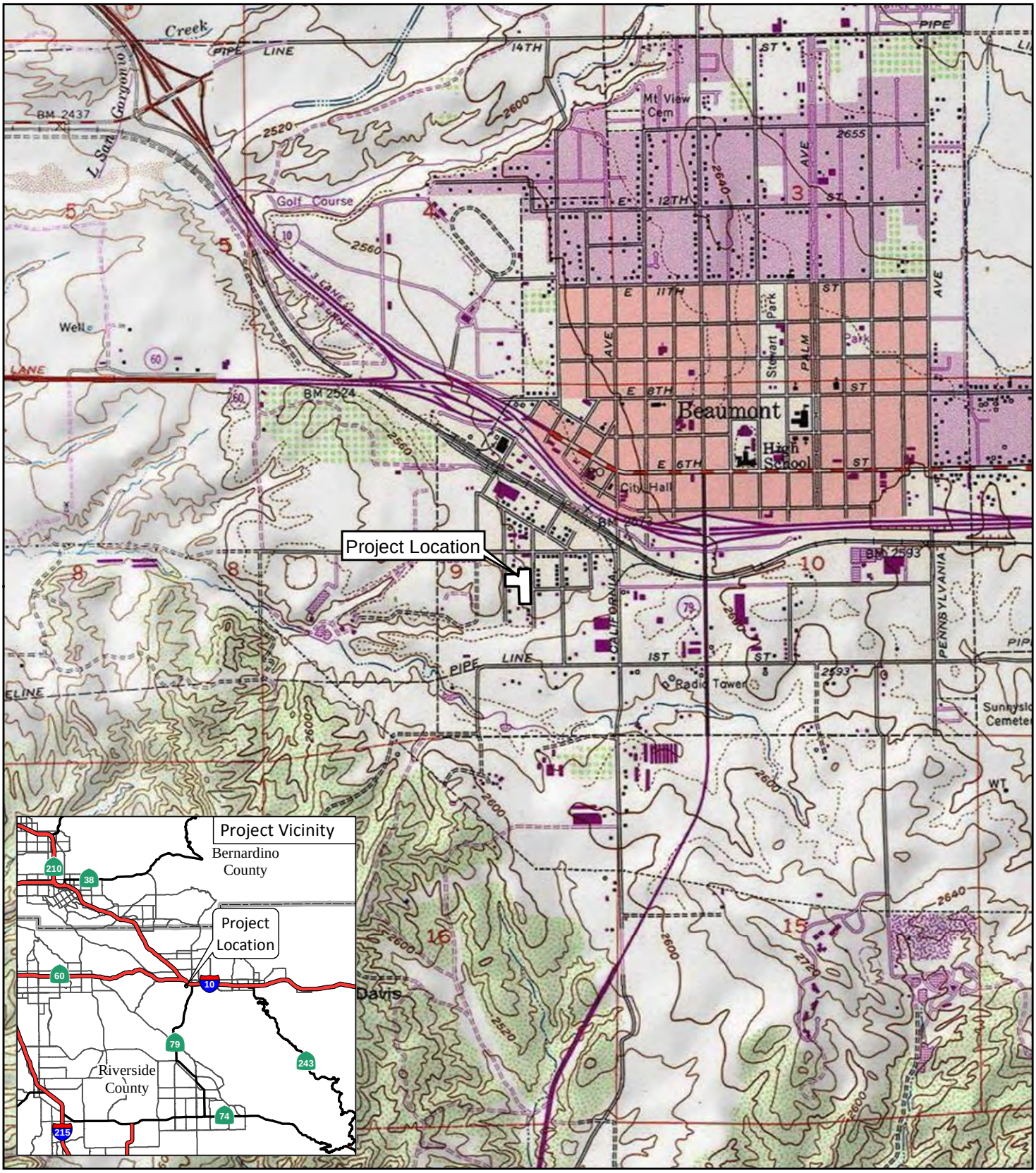
FIGURES

Figure 1: Regional and Project Location

Figures 2: Plot Plan

Figure 3: Biological Study Area and Photograph Locations

Figure 4: Site Photographs



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Project Site

FIGURE 1

N

0 1000 2000

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Elm/Olive Storage Yard

Regional and Project Location

SOURCE: USGS 7.5' Quad - Beaumont (1998); El Casco(1979), CA

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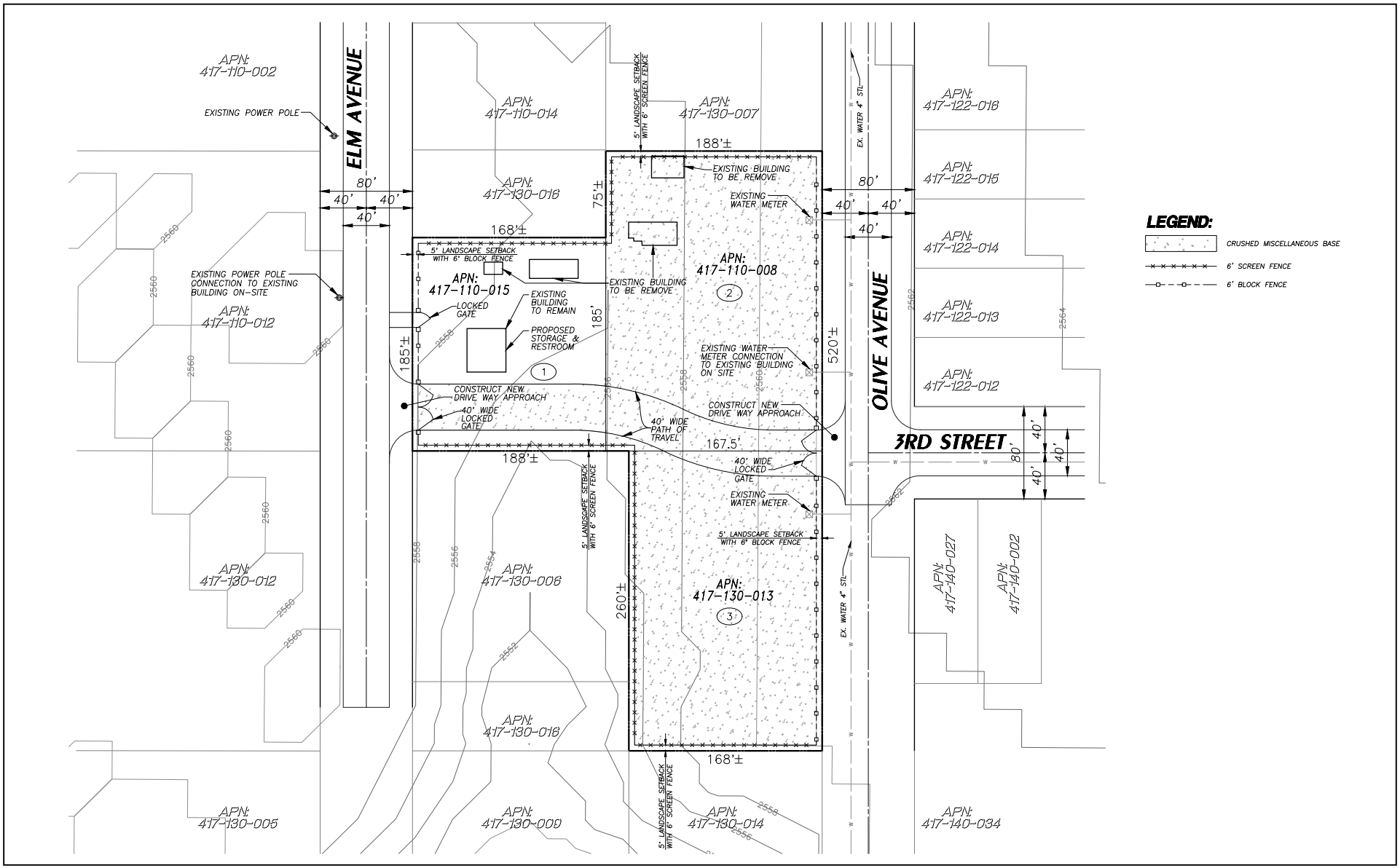

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FIGURE 2

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SOURCE: Hunsacker & Associates

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Elm/Olive Storage Yard

Plot Plan

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Biological Study Area

Photo Locations

N

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SOURCE: Google (2018)

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FIGURE 3

Elm/Olive Storage Yard

Biological Study Area and Photograph Locations

1. View of study area facing northeast.

2. View of study area facing southeast.

3. View of study area facing southwest

4. View of study area facing northwest

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FIGURE 4

Elm/Olive Storage Yard
Site Photographs

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APPENDIX B

PLANT AND ANIMAL SPECIES OBSERVED

Plant and Animal Species Observed

Scientific Name	Common Name
MAGNOLIOPHYTA: MAGNOLIOPSIDA	**DICOT FLOWERING PLANTS**
Asteraceae	**Sunflower family**
Ambrosia acanthicarpa	Annual bur-sage
Boraginaceae	**Borage family**
Amsinckia sp.	Fiddleneck
Brassicaceae	**Mustard family**
Hirschfeldia incana (non-native species)	Shortpod mustard
Chenopodiaceae	**Saltbush family**
Salsola tragus (non-native species)	Russian thistle
Cucurbitaceae	**Gourd family**
Cucurbita palmata	Coyote gourd
Fabaceae	**Pea family**
Vicia villosa (non-native species)	Winter vetch
Geraniaceae	**Geranium family**
Erodium botrys (non-native species)	Longbeak stork's bill
Erodium cicutarium (non-native species)	Redstem stork's bill
Lamiaceae	**Mint family**
Lamium amplexicaule (non-native species)	Henbit deadnettle
Malvaceae	**Mallow family**
Malva parviflora (non-native species)	Cheeseweed mallow
Montiaceae	**Miner's lettuce family**
Calandrinia menziesii	Fringed redmaids
MAGNOLIOPHYTA: LILIOPSIDA	**MONOCOT FLOWERING PLANTS**
Poaceae	**Grass family**
Arundo donax (non-native species)	Giant reed
Bromus sp.	Brome
Hordeum murinum (non-native species)	Mouse barley
AVES	**BIRDS**
Columbidae	**Pigeons and Doves**
Streptopelia decaocto (non-native species)	Eurasian collared dove
Passeridae	**Old World Sparrows**
Passer domesticus (non-native species)	House sparrow
Fringillidae	**Finches**
Haemorhous mexicanus	House finch
MAMMALIA	**MAMMALS**
Leporidae	**Rabbits and Hares**
Sylvilagus audubonii	Desert cottontail

APPENDIX C

CULTURAL RESOURCES RECORDS SEARCH RESULTS

LSA

CARLSBAD
FRESNO
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

December 7, 2018

Patrick Ortiz
Ortiz Enterprises, Inc.
6 Cushing, Suite 200
Irvine, CA 92618

Subject: Records Search Results for the Elm/Olive Avenue Storage Yard Project in the City of Beaumont, Riverside County, California (LSA Project No.ORZ1801)

Dear Mr. Ortiz:

This letter summarizes the results of a cultural resources records search for the Elm/Olive Avenue Storage Yard Project (project) in the City of Beaumont, Riverside County, California. The records search was performed on December 6, 2018, at the Eastern Information Center (EIC), located at the University of California, Riverside. The records search included a review of all recorded cultural resources (historic and prehistoric resources fifty years of age or older) and known cultural resources survey and excavation reports within one mile of the project site. In addition, the California State Historic Property Data File was reviewed, which includes a search of the National Register of Historic Places, California Register of Historical Resources, California Historical Landmarks, California Points of Historical Interest, various local historic registers, and historic maps.

Table A lists reports of all surveys and excavations conducted within a one-mile radius of the project site. Table B lists cultural resources mapped within a one-mile radius of the project site that are documented on California Department of Parks and Recreation forms on file at the EIC.

Table A: Reports of all Surveys and Excavations within One Mile of the Project Site

Report No.	Year	Author(s)	Title
RI-00161	1975	Greenwood, Roberta S.	Paleontological, Archaeological, Historical, and Cultural Resources, West Coast-Midwest Pipeline Project, Long Beach to Colorado River.
RI-00226	1977	Daly, Kenneth	Archaeological Assessment of Waste Water Treatment Facilities, Beaumont, Riverside County, California.
RI-01665	1983	Wirth Associates	Devers-Serrano-Villa Park Transmission System Supplement to the Cultural Resources Technical Report - Public Review Document and Confidential Appendices.
RI-02350	1988	Rebecca McCorkle Apple and Jan E. Wooley	MCI Rialto to El Paso Fiber Optics Project - Intensive Cultural Resource Survey - San Bernardino and Riverside Counties, California.
RI-02355	1990	Drover, C.E.	An Archaeological Assessment Of Three Rings Ranch, Riverside County, Beaumont, California.
RI-02775	1990	Lerch, Michael K.	Cultural Resources Assessment Of The Willow Springs Specific Plan Beaumont Area, Riverside County, California.

Table A: Reports of all Surveys and Excavations within One Mile of the Project Site

Report No.	Year	Author(s)	Title
RI-02836	1989	Paul Farnsworth and Deborah K.B. McLean	Cultural Resources Survey And Assessment For Rolling Hills Ranch, Beaumont, California.
RI-02917	1995	Davis, Mcmillan	Cultural Resources Survey of the Proposed Sewer System for the City of Beaumont California.
RI-02918	1992	Owen, Shelley Marie	Letter Report: Pima GRO Biosolids And Greenwaste Compost Facility Project.
RI-03101	1992	Powers, David W., James H. Cleland, and Rebecca M. Apple	Historic Study Report, State Route 79 Widening Project, Gilman Springs Road -First Street (Lamb Canyon), 08-Riv-79, Pm 33.9/40.1.
RI-03102	1992	Wahoff, Tanya	Archaeological Survey Report, State Route 79 Widening Project, Gilman Springs Road - First Street (Lamb Canyon), 08-Riv-79, Pm 33.9/40.1, 08214-465100.
RI-03606	1991	Becker, Kenneth	A Cultural Resources Reconnaissance Of The City Of Beaumont Phase I Water Facilities, Riverside County, California.
RI-03997	1996	Shepard, Richard S. And Jeanette A. McKenna	A Phase I Cultural Resources Investigation of a 3-Acre Parcel and Associated Pipeline, Beaumont, Riverside County, California.
RI-04164	1998	McKenna, Jeanette McKenna Et Al. A. And Richard Shepard	A Phase I Cultural Resources Investigation Of The Proposed Willow Springs Road Right-Of-Way, Beaumont, Riverside County, California.
RI-04165	1999	Mckenna, Jeanette A.	Letter Report: Willow Springs Road Addendum Studies (Letter Report).
RI-04421	1990	LSA Associates, Inc.	Appendix B-Cultural Resources. In: Measure A Program Project Alternatives Analysis- Environmental Component, Technical Appendix Volume I.
RI-04987	2003	McKenna et al.	A Phase I Cultural Resources Investigation For The Proposed Willow Springs Development Project Area In Beaumont, Riverside County, California.
RI-06256	2006	Ahmet Koral, and Evelyn Chandler	Cultural Resources Survey of a 29-Acre Parcel, Located West of Manzanita Road Near the City of Beaumont, Riverside County, California.
RI-07288	2007	Mariam Dahdul, Daniel Ballester, and Laura H. Shaker	Identification and Evaluation of Historic Properties Recycled Water System in and Near the Cities of Beaumont and Calimesa, Riverside County, California.
RI-07869	2008	Jordan, Stacey C. and Michael M. DeGiovine	Archaeological Survey Report for Southern California Edison Company Deteriorated Pole Replacement Project for a Total of Ten Poles on IDA 12KV (#4679978E and #4744631E), Oak Glen 12KV (#4744626E), Bryn Mawr 12KV (#4744645E), Stewart 4KV (#4760030E), Boulder 12KV (#4714250E, Lapins 12KV (4759904E), Mesa Grande 12KV (#4759915E), Conine 12KV (#4759921E) and Preston 12KV (#4759658E) Circuits and Removal of One Pole on Bench 12KV (#782504H) Circuit on Private Lands in Riverside and San Bernardino Counties, California (WO#6031-4800, AI#8-4850, AI#8-4852).
RI-07969	2009	Rioridan L. Goodwin	Historic Property Survey Report (08-RIV-60, P.M. 28.03/30.42, EA 34140).
RI-07970	2006	Roderic McLean, Shannon Carmack, Jay Michalsky, and Judith Marvin	A Study of the Past in San Timoteo Canyon and San Gorgonio Pass: Cultural Resource Assessment Oak Valley Substation Project, Riverside County.

Table A: Reports of all Surveys and Excavations within One Mile of the Project Site

Report No.	Year	Author(s)	Title
RI-08011	2008	Robert McLean, Shannon Carmack, Jay Michalsky, and Judith Marvin	Final Cultural Resources Assessment, Study Of The Past In San Timoteo Canyon and San Gorgonio Pass: Oak Valley Substation Project Riverside County.
RI-08012	2008	Roderic McLean, Shannon Carmack, Phil Fulton, Maria Aron, Jay Michalsky, Daniel Ewers, Casey Tibbet, and Brook Smith	Supplemental Cultural Resource Assessment, Oak Valley Substation Project, San Bernardino and Riverside Counties.
RI-08886	2012	Bai "Tom" Tang and Michael Hogan	Historical/ Archaeological Resources Survey Report: Beaumont Distribution Center Project, City of Beaumont, Riverside County.
RI-08977	2011	Matthew M. DeCarlo and William T. Eckhardt	Cultural Resources Inventory of Three Construction Yards and the Desert Center DC-2 Yard Distribution Alignment of the Southern California Edison (SCE) Devers-Palo Verde 2 (DPV2) Project, Riverside County, California.
RI-09006	2012	Riordan Goodwin	Supplemental Archaeological Survey Report For The Potrero Road /State Route 60 Interchange, City Of Beaumont, Riverside County, California.
*RI-09167	2013	Roderic McLean, Natalie Brodie, Jacqueline Hall, Shannon Carmack, Phil Fulton, Ingri Quon, Erin Martinelli, Richard Erickson, and Jay Michalski	Cultural Resources Assessment and Class III Inventory Volume I West of Devers Project San Bernardino and Riverside Counties, California.
RI-09183	2014	Carrie D. Wills, Sarah A. Williams, and Kathleen A. Crawford	Cultural Resources Records Search and Site Visit Results for T-Mobile West, LLC Candidate IE04451A (CM451 Beaumont Civic Center), 550 East 6th Street, Beaumont, Riverside County, California.
RI-09309	2014	David Brunzell	Cultural Resources Assessment of the Hertz Project, Beaumont, Riverside County, California (BCR Consulting Project No. TRF1401).
RI-09984	1998	Roger D. Mason and Wayne H. Bonner	Cultural Resources Records Search And Literature Review For A Pacific Bell Mobile Services Telecommunications Facility: CM 451-11 City Of Beaumont, Riverside County, California.

*Adjacent to project site

Table B: Cultural Resources within One Mile of the Project Site

Primary No.	Site Description
33-003445	Former Southern Pacific Railroad Station
33-003446	Historic debris scatter
33-003946	Historic and prehistoric debris scatter
33-004715	Historic road between Beaumont and San Jacinto Valley
33-006093 through 33-006132	Historic structures
33-006141 through 33-006161	Historic structures
33-006162	Prehistoric resource assemblage
33-006163 through 33-006166	Historic structures

Table B: Cultural Resources within One Mile of the Project Site

Primary No.	Site Description
*33-006167	Historic structure (Vernacular wood-frame bungalow)
33-006168 through 33-006228	Historic structures
33-006229	Historic Trail
33-006230 through 33-006233	Historic structures
33-007898	Isolated basin metate
33-009498	Southern Pacific Railroad
33-020559	Historic asphalt-paved road
33-020562	Electrical Subtransmission circuit
33-020721	Historic asphalt-paved road
33-020722	Historic unpaved road
33-020723	Atchison, Topeka, and Santa Fe Railroad
33-022386	Historic structure
33-023484	Electrical distribution circuit
33-026649	Foundation remains and wells

* Adjacent to project site

Data from the EIC noted 31 previous surveys and/or excavations documented within one mile of the project site (Table A), none of which encompassed the project site. The nearest study conducted in proximity to the project site is an intensive pedestrian survey along the Elm Avenue frontage adjacent to the west of the project site boundary. In addition, the EIC indicated 147 cultural resources have been recorded within one mile of the project site (Table B), none of which is located on the project site. The nearest resource in proximity to the project site is a vernacular wood-frame bungalow (P-33-006167) constructed prior to 1953 on Assessor's Parcel Number 417-110-016 approximately 26 feet north of the site.[1] A review of historic maps and orthophotography indicates the residential structure on-site was constructed after 1953 but before 1973.[2] The date of placement of the outlying sheds is unknown, but they appear on aerial photographs of the project site by 1966.[3]

Thank you for the opportunity to assist you on this project. If LSA can be of further assistance, or if you have any questions concerning this letter, please contact me at (951) 781-9310.

Sincerely,

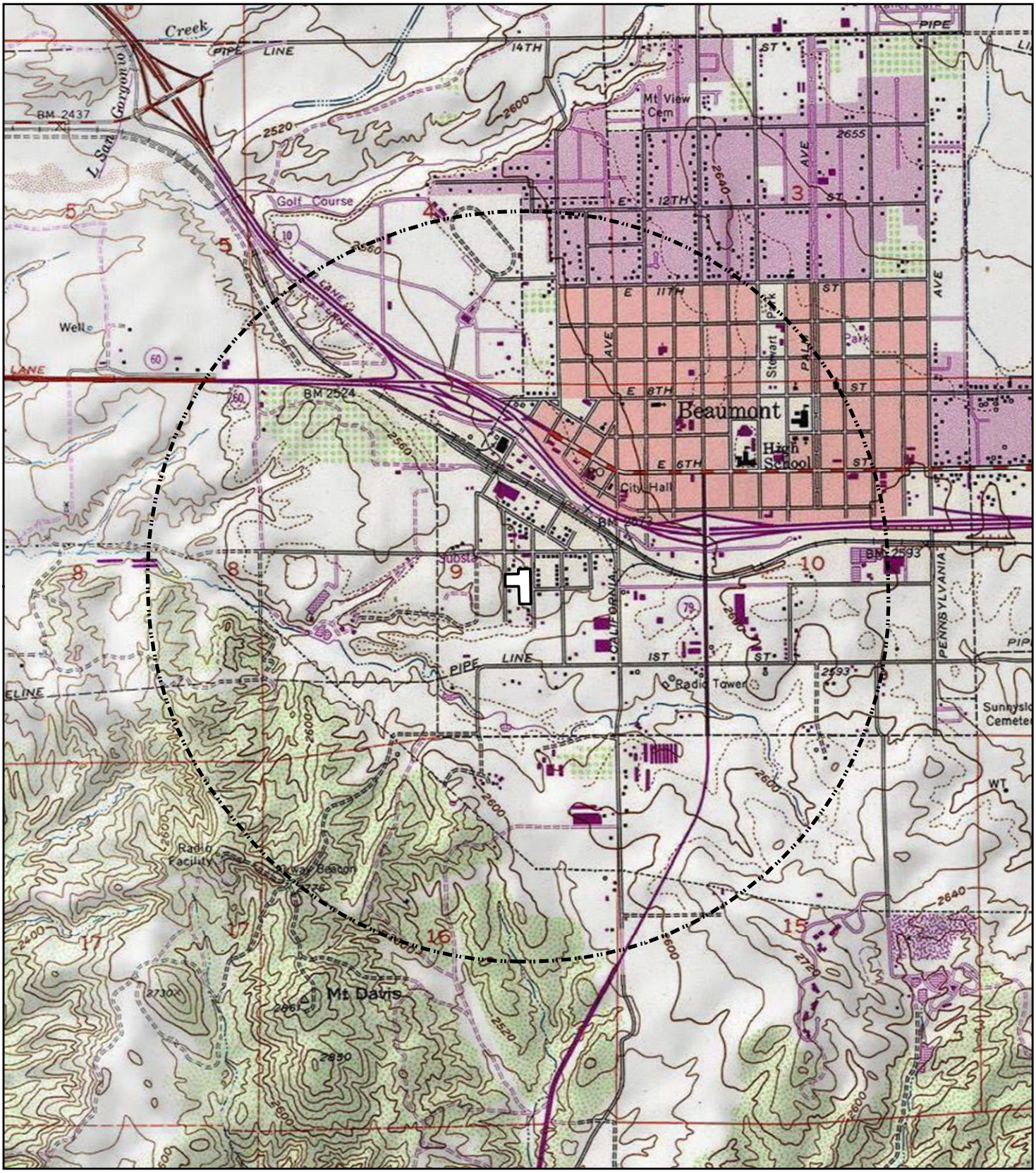
LSA

[1] United States Geological Survey 7.5-minute Quadrangle Map, Beaumont, California. T03S, R01W, San Bernardino Base Meridian. 1953, Photorevised 1988.

[2] Nationwide Environmental Title Research, LLC. 1970 and 1973 United States Geological Survey 7.5-minute Quadrangle Map, Beaumont, CA, T03S, R01W, San Bernardino Base Meridian. Map available at https://historicaerials.com/viewer. (Accessed December 7, 2018).

[3] *Ibid.* 1966 aerial photograph of T03S, R01W, San Bernardino Base Meridian. Photograph available at https://historicaerials.com/viewer. (Accessed December 7, 2018).

Dionisios Glentis
Environmental Planner/Archaeologist



LSA

LEGEND

Project Site

One Mile Buffer of Project Site

FIGURE 1

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Elm/Olive Storage Yard

Record Search

SOURCE: USGS 7.5' Quad - Beaumont (1998); El Casco(1979), CA

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