

INITIAL STUDY

FOR THE

COACHELLA TRAVEL CENTRE

Prepared for:

City of Coachella
1515 Sixth Street
Coachella, California 92236

Prepared by:

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ENVIRONMENTAL CHECKLIST FORM

INTRODUCTION

1. Project Title: Coachella Travel Centre Project Initial Study
2. Lead Agency Name: City of Coachella
Address: 1515 Sixth Street, Coachella, CA 92236
3. Contact Person: Luis Lopez
Phone Number: (760) 398-3102
4. Project Location: The proposed project is located in the City of Coachella, Riverside County, at Avenue 50 and State Route 86 in Coachella, California. The project is located on the west side of State Route 86 just south of Avenue 50. The geographic coordinates of the proposed project are 33.685704, -116.163169 and the proposed project is located within Coachella, USGS 7.5-minute topographic map within Township 6 South, Range 8 East of the San Bernardino Meridian. See Figures 1 and 2 for regional and site locations.
5. Project Sponsor's Name and Address: Ed Haddad
422 Wier Road, San Bernardino, CA 92408
6. General Plan Designation: Suburban Retail District
7. Zoning: Agricultural Reserve (A-R)
8. Project Description:

Introduction

The City of Coachella is located in the middle of Riverside County north of the Salton Sea and abutting the Cities of Indio and La Quinta, near the border between Riverside and Imperial County. As part of a development application filed by AHD Limited Partnership (LP), the City of Coachella (City) will consider entitlements to develop a Travel Centre within a 14.1-acre site that includes a 5 Story Hotel, a Restaurant, a Drive-Thru Restaurant, a Convenience Store, a Gas Station, and a Truck Stop, which includes Truck Fuel Pumps, a Truck Wash Facility, and a Car Wash Facility. AHD, LP is a Real Estate Holding company whose Principal is Ed Haddad. The need for a project of this type at this location is such that this area of the City of Coachella is underserved for this type of use, particularly given that plans have been approved to extend Avenue 50 to Interstate 10, which would create a new freeway on- and off-ramp that will connect this portion of the City with interstate travelers looking to visit the Coachella Valley and beyond.

Project Description

The approximately 14.1-acre site is located in Coachella, California, which is part of the Coachella Valley within Riverside County. It is comprised of one parcel—APN 763-020-021—located generally at the southwest corner of Avenue 50 and Highway 86. The project will require a zone classification change from Agricultural Reserve (A-R) to General Commercial (C-G). The project will also require three conditional use permits for a truck wash, auto washing, and drive-

thru restaurant businesses, and site plan and architectural review by the City of Coachella. Similarly, the sale of alcohol on the premises will require a separate conditional use permit consideration. Additionally, a variance to exceed the allowable height of three stories in the C-G zone for the hotel is required.

The proposed site will be developed with 5 buildings as shown on the site plan provided as Figure 3, which will make up the Coachella Travel Centre. The site is planned to contain a convenience store and gas station at the northwestern corner of the site, at Avenue 50 and Tyler Street. The convenience store will be approximately 3,800 square feet (SF) with a gas pump canopy directly adjacent to it. The interior of convenience store will contain restrooms, a 17-doorwalk-in cooler, a utility closet, a cashier stand, an office, a soda fountain, a to-go food station, a coffee station, a sales area, a walk-in freezer, and several stands for miscellaneous convenience item sales. The entrance will be located facing east with an additional side entrance facing north. The convenience store floor plan is shown on Figure 4. The gas station will include 10 fuel pumps as well as adjacent parking. The gas station floor plan is shown on Figure 5. It is anticipated that the gas station and convenience store will employ a total of about 15 persons.

In the northern middle portion of the site there will be a drive thru restaurant that will be approximately 2,533 SF and a sit down restaurant that will be 5,555 SF. The interior of the drive thru restaurant will contain restrooms, a dining room area, a service area, and a kitchen area with three entryways restricted to employee access and two customer entrances. The drive thru wraps around the majority of the drive thru restaurant structure with parking located northeast of the structure. The drive thru restaurant floor plan is shown on Figure 6. It is anticipated that the drive-thru restaurant will employ a total of about 20 persons. The proposed sit down restaurant will have restrooms, a dining room, and a kitchen area with an entryway restricted to employee access and three customer entrances. The sit down restaurant floor plan is shown on Figure 7. Restaurant parking will surround the restaurant in each direction. It is anticipated that the sit down restaurant will employ a total of about 30 persons.

In the middle of the project site, a 4-story, 11,259 SF hotel will be developed with 116 rooms. The hotel will contain a mixture of king rooms, king suites, and double queen rooms. The lobby of the hotel will include a breakfast bar, registration, a sundry shop, a print station, a brochure station, restrooms and lobby seating. In addition to 9 guest rooms, the first floor will also include a fitness center, a pantry, a board room, and an employee area containing a work area, a linen room, a laundry room, a break room, a mechanic room, a manager's office, a security room, and employee restroom facilities. Outside on the first floor, the hotel will contain an enclosed pool for guest use. The second, third, and fourth floors are identical and each floor contains 25 rooms, elevators, storage, an electrical room, and stairways on either side of the hotel for guest access. The hotel floor plans for each floor are shown on Figures 8-11. It is anticipated that the hotel will employ a total of about 30 persons.

The southern portion of the site will consist of a 2,677 SF car wash station, 4,754 SF truck wash station, and a truck fuel pumps. The car wash will be a self-serve drive thru facility with about 13 vacuum stations adjacent to the car wash structure. The car wash floor plan is shown on Figure 12. The truck wash facility will be self-serve and will allow for three trucks to be washed at a time. The truck wash bay floor plan is shown on Figure 13. The truck fuel canopy will contain 8 canopy islands with 16 pump stations. The truck fuel canopy floor plan is shown on Figure 14. It is anticipated that the car wash and truck was stations will each employ a total of about 2 persons.

Summary of the parking for the entire site is shown in Table 1 below:

**TABLE 1
PARKING SUMMARY**

Project Component	Building SF	Ratio of Parking Required	Required by the Project	Provided
Convenience Store	3,800 SF	1 Space per 250 SF	15.2	-
Quick Serve Rest (QSR)	1,200 SF	1 Space per 200 SF of non-customer area and 1 Space per 45 SF of customer area	12.0	-
Gas Pump Canopy	-	-	-	-
Car Wash Station	2,677 SF	1 Space per 2 Employees	2.0	-
Truck Wash Station	4,754 SF	1 Space per 2 Employees	2.0	-
Drive Thru Restaurant	2,533 SF	1 Space per 100 SF	25.3	-
Restaurant	5,555 SF	1 Space per 100 SF	55.6	-
Hotel (116 Rooms)	11,259 SF	1 Space per Guest Room plus 1 space per 3 employees and 1 space per 3 person capacity of meeting rooms	116.0	-
TOTAL	77,831 SF	-	229	415

The project will provide various types of parking stalls as follows in Table 2:

**TABLE 2
PARKING STALL SUMMARY**

Stall Type	Stall Size	Stalls Provided
Regular Stall	9 x 18	405 Stalls
Accessible Stall	9 x 18	10 Stalls
Loading Stall	10 x 22	5 Stalls
Semi-Truck Stall	12 x 86	62 Stalls
Bicycle Stalls	-	12 Proposed

As demonstrated in Tables 1 and 2 above, the proposed Coachella Travel Centre will have ample parking above and beyond the amount of parking required by the City.

The Landscape plan for the proposed project is provided as Figure 15 and includes a mixture of trees, shrubs, and cactus that are drought resistant and common to the desert landscape of the Coachella Valley. The project site will have landscaping around the perimeter that will screen the site from the surrounding roadways and development. Landscaping will account for a minimum of 15% of the entire site as required by the City of Coachella.

Construction Scenario

Construction of the proposed Coachella Travel Centre is anticipated to require approximately one year, with the anticipated start date of construction in the December 2019 and the completion date by the January 2021. The Project site was agricultural land, and has been previously disturbed, which ceased approximately 30 years ago; development of the site would

require site preparation (i.e., grading and excavation), paving, and construction of buildings. There is no irrigation water infrastructure serving the site at this time. The project is anticipated to require minimal cut and fill with any cut being reused to balance of the site through grading, which will minimize import/export of material. The proposed project will develop underground storage tanks to support the fueling station, which will require some excavation, but it is anticipated that the site will balance. Development of the Coachella Travel Centre will require installation of pavement, curbing and sidewalk throughout the site as shown on the Preliminary Grading Plan (Figure 16-17). Additionally, the project will require installation of drainage inlets at several locations within the project site and installation of a stormtech subsurface stormwater management system. Delivery of construction supplies and removal of any excavated materials, if necessary, will be accomplished using trucks during normal working hours, with a maximum of 50 round trips per day. It is anticipated that a maximum number of 50 employees will be required to support the construction of the project each day. Grading will be by traditional mechanized grading and compaction equipment. Equipment utilized will be traditional site development equipment of front end graders, vibratory compactors, petroleum powered fork lifts, and various hand tools traditional to commercial construction.

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

The project site is located adjacent to State Highway 86, which generally is surrounded on either side in the project area by the Suburban Retail District land use designation.

- To the west of the site, the land use is Open Space (OS); the Whitewater River is directly adjacent to the project site, which is an important stormwater management facility within the Coachella Valley. Further to the west of the project site the land use designations are Suburban Neighborhood and Urban Employment;
 - To the north of the site, the land use is Suburban Retail District;
 - To the east of the site, the land use is Suburban Retail; and
 - To the south of the site, the land use is Open Space (OS). Further to the south of the project site the land use is Suburban Neighborhood).
10. Other agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
- Coachella Valley Water District (Flood Control)
 - California Department of Transportation (SR 86 boundaries)
 - State Water Resource Control Board
 - South Coast Air Quality Management District
 - Colorado River Basin Regional Water Quality Control Board
 - County of Riverside Fire Department
11. Have California Native American tribes traditionally and cultural affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? Yes, the City has initiated AB 52 with the following tribes: Torres Martinez Desert Cahuilla Indians, Soboba Band of Luiseño Indians, Agua Caliente Band of Cahuilla Indians, Twenty-Nine Palms Band of Mission Indians, and Cabazon Band of Mission Indians. The letters were sent out on February 7, 2019. The Agua Caliente Band

of Cahuilla Indians responded on February 26, 2019 and defers to the Cabazon Band of Mission Indians, concluding consultation efforts. The Twenty-Nine Palms Band of Mission Indians responded on February 25, 2019, requesting a copy of the cultural report, and also noting that they elect to be a consulting party under CEQA. No other Tribes responded during the 30-day consultation period.

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

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

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

DETERMINATION (To be completed by the Lead Agency)

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

<input type="checkbox"/>	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Tom Dodson & Associates
Prepared by

April 24, 2019
Date


Lead Agency (signature)

5/2/19
Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant With Mitigation Incorporated* – Adverse impacts to scenic vistas can occur in one of two ways. First, an area itself may contain existing scenic vistas that would be altered by new development. A review of the project area determined that there are no scenic vistas located internally within the area proposed for the development of the Coachella Travel Centre Project. The proposed project is located adjacent to Highway 86 and is separated from the nearest developments by the Whitewater River Channel. Therefore, given the distance of the project from any nearby residences, and also the project's location adjacent to the Highway at a Highway off-ramp, it is not anticipated that the Coachella Travel Centre Project would impact any important scenic vistas in the project area. A scenic vista impact can also occur when a scenic vista can be viewed from the project area or immediate vicinity and a proposed development may interfere with the view to a scenic vista. The Coachella Valley is located between several mountain ranges, the Little San Bernardino Mountains to the north and east, and the Santa Rosa Mountains to the south and west. The City of Coachella General Plan generally states that the City desires to preserve scenic views of the mountains. However, views around the proposed project are limited because of existing man-made features. It is assumed that nearby residences would experience a minimal change in views to the surrounding mountains as a result of the project development; however, the proposed project would develop a 4-story hotel that would obstruct some views in the vicinity of the project, generally along roadway corridors such as Avenue 50, Tyler Street, and Highway 86 in which the building's height would be most obvious. However, the City's height limit in the CG zone is 50 feet or three stories, whichever is less. Therefore, the proposed hotel will require a height variance to be pursued. As previously stated, due to the distance between the proposed project site and nearby residences, the height of the hotel will only minimally impact views to the surrounding mountains. Furthermore, the following mitigation measure shall be implemented to ensure that the structures are painted using appropriate colors to blend in with the surrounding environment:

AES-1 *The proposed structures shall be painted in colors that closely match the surrounding desert landscape, so as to create continuity in the potentially obscured views. The colors chosen shall be approved by the City of Coachella's architectural review process.*

With implementation of the above mitigation measure, development of the proposed project would have a less than significant potential to have a substantial adverse impact on a scenic vista.

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

site is vacant and has been previously disturbed as it formerly served as an active agricultural site. The site contains some loose to slightly compacted dirt and non-native vegetation that is approximately at-grade. No trees, rock outcroppings, or scenic features existing on site. According to Caltrans, the proposed project is not located adjacent to a state scenic highway, as Highway 86 is not designated as such, and the City of Coachella does not identify any locally important scenic roadways. Therefore, the proposed project cannot affect any scenic resources within a state scenic highway corridor. Based on the site condition and immediate surroundings, the project site itself does not contain any significant scenic resources. Therefore, no damage to a scenic resource will occur and any impacts under this issue are considered less than significant.

- c. *Less Than Significant With Mitigation Incorporated* – The Coachella General Plan has designated the area for Entertainment Commercial uses, and the zoning classification is Agricultural Reserve; the project will require a zone change to ensure that the zoning classification and general plan land use designations are compatible. It is anticipated that the proposed scale, architectural design and articulation of the development on the site will enhance the site and surrounding developed environment compared to the existing visual setting. Thus, even though the on-site existing visual setting will be altered in the future, the proposed change to the visual setting is not forecast to cause significant adverse degradation to the existing visual character or quality of the Project area. The project would develop Lodging, a Restaurant, a Drive Thru Restaurant, and Automotive uses. Lodging is a secondary use within the Suburban Retail District; Restaurants are a primary use within the Suburban Retail District; Drive Thru Restaurants are a primary use within the Suburban Retail District; Automotive uses are a primary use within the Suburban Retail District. Secondary uses are support uses that are allowed but shall not be the primary use. By developing this vacant/abandoned site in accordance with City design guidelines for Suburban Retail District uses and the site development plans, the visual character of this site and its surroundings will be enhanced. However, in order to ensure that the proposed structures blend in with the surrounding desert environment, mitigation measure **AES-1** shall be implemented. Thus, with implementation of mitigation measure **AES-1** above, and with the design elements incorporated in the Project, implementation of the City's design standards will mitigate the potential aesthetic impacts to a less than significant level.
- d. *Less Than Significant With Mitigation Incorporated* – The Implementation of the proposed project will create new sources of light during the operational phases of the Project. Light and glare from interior and exterior building lighting, safety and security lighting, and vehicular traffic accessing the site will occur once the site is in operation. According to the City of Coachella General Plan, the project site is located within a Suburban Retail District. The Coachella Travel Centre would be developed in accordance with City requirements for the Suburban Retail District. Adherence to the City's Zoning Code would ensure that any building or parking lighting would not significantly impact adjacent uses. The Coachella Travel Centre will require lighting, both exterior and interior; the greatest source of lighting within the project site would be the Hotel. This will introduce a new source of light and glare into the project area. To ensure that light or glare (particularly off of structures with glass exteriors) does not result in intrusive lighting or glare to existing structures or persons in the project area, the following mitigation measure will be implemented:

AES-2 *Prior to approval of the Final Design, an analysis of potential glare from sunlight or exterior lighting to impact vehicles traveling on adjacent roadways shall be submitted to the City for review and approval. This analysis shall demonstrate that due to building orientation or exterior treatment, no significant glare may be caused that could negatively impact drivers on the local roadways or impact adjacent land uses. If potential glare impacts are identified, the building orientation, use of non-glare reflective materials or other design solutions acceptable to the City of Coachella shall be implemented to eliminate glare impacts.*

With the implementation of mitigation measure **AES-2**, the proposed Coachella Travel Centre Project would have a less than significant potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – The proposed project is located within a site that is designated by the California Department of Conservation's California Important Farmland Finder as Farmland of Local Importance (Figure II-1). The City of Coachella recently updated the City's General Plan, and the project site is designated for Entertainment Commercial use; however, the zoning has not been updated to reflect this change as it is the current zoning designation is Agricultural Reserve. The City's Municipal Code defines Agricultural Reserve Zoning as follows:

17.10.010 - Intent and purpose.

This zone is intended to preserve certain designated prime agricultural lands within the city and protect those lands, which are deemed to be agricultural preserves, from the intrusion of urban development incompatible with agricultural land uses. This zone designation is reserved for only those lands which are subject to recorded Williamson Act contracts pursuant to Government Code, Section 51200 et seq.

Based on a review of the Riverside County Williamson Act FY 2015/2016 Map (Figure II-2), the project site is not designated as Williamson Act land, which would indicate that the proposed project site is not appropriately zoned at present.

The project site is located within the General Plan's Designated Subarea 9 – Central Coachella Neighborhoods. The General Plan notes the following about Subarea 9 that are applicable to the proposed project:

- 2. Require a variety of neighborhood types throughout the central Coachella Neighborhoods Subarea*
- 9. Allow higher intensity, non-residential uses in the western portion of the subarea in order to complements and support the Downtown and nearby employment centers.*
- 11. Pursue an auto mall or auto dealers adjacent to SR86S.*

The question posed as part of the CEQA process refers to the conversion of 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. While the proposed project would convert a site that is designated Farmland of Local Importance to a non-agricultural use, the site does not contain any agricultural lands designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance. Furthermore, the project site is currently vacant and does not contain any agricultural activities at present.

The City of Coachella General Plan has several policies related to the preservation of Agricultural Land. The following policies depict the importance of agricultural land to the City's character:

Preserve the natural beauty and scenic quality of the City. The City is located in an area of striking natural beauty. While the landscape will be altered with future development, the views of the mountains and the rural, agricultural character should be respected. In general, the natural topography of the hills should be maintained, some of the existing agricultural uses should be preserved or integrated into the landscape and views of the surrounding mountains should be maintained.

4.1 Agricultural land preservation. Provide for the protection and preservation of agricultural land as a major industry for Coachella and sufficient to maintain the rural character of the City. Explore and allow a variety of methods of preserving land in sizes that are viable economic units for continuing agricultural activities including:

- Density transfers to allow a greater portion of proposed development on other in order to allow productive sites to remain in agricultural production.*
- Use of the Williamson Act.*
- Implementation of a "right-to-farm" ordinance.*
- Adopting a farmland protection program.*

4.2 Agricultural land conversion. Actively discourage the urbanization of agricultural land when other land not in agricultural use within the city limits is available for development.

4.3 Agricultural elements in urban landscape. Where feasible, incorporate existing agricultural elements, such as date farms, vineyards and citrus trees into the urban landscape as part of

development projects. This preservation will enable the agricultural history of the City to remain visible and provide unique urban landscape features that can distinguish Coachella from other cities in the Coachella Valley.

Goal 5. Agricultural Preservation. Viable, productive local agricultural lands and industry.

5.1 Prime agricultural land. Prioritize the conservation of state-designated Important Farmlands and discourage the conversion of these lands to urbanized uses until such time as the land is needed for additional growth.

5.3 Agriculture preservation. Continue to work with landowners in maintaining and extending existing Williamson Act contracts.

5.12 Market transformation. If the agri-business industry declines in Coachella, support efforts that facilitate the transition of uses, businesses and employees from agriculture to other sectors of the local economy.

Most important to note is that the City of Coachella has designated the project as Entertainment Commercial, which means that the City intends for the project site to be developed for a use that would suit this land use designation. The City's Land Use Designations provide the City's desired character for a property; the City uses the General Plan Land Use Map as a basis from which to plan future development and determine the mix of uses the City intends to support in the future. The zoning code provides developers, landowners, and builders with a set of specific rules for what is and is not acceptable to be developed on a property. This is accomplished with minimum lot sizes, height requirements, light restrictions, etc. Ultimately, the City's zoning codes exist to execute the objective of the City's land use designations; as such, given that this project requires a zone change, but does not require a change in land use designation, the goal of the developer appears to align with the City's goals for land use planning at this location. Therefore, the proposed project would have a less than significant potential to convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland) to non-agricultural use.

- b. *Less Than Significant Impact* – As stated under issue II(a) above and shown on Figure II-2, the proposed project is not located within a site that is under a Williamson Act contract. There are many lands under Williamson Act contract within the City of Coachella, as is evidenced above by the extensive General Plan policies concerning the importance of agriculture to the City. As discussed under item II(a) above, the proposed project is zoned for agricultural use (Agricultural Reserve), though this zoning classification is not compatible with the underlying land use of the project site (Entertainment Commercial). Furthermore, the zoning classification of the project site conflicts with the definition of the Agricultural Reserve use, as this classification is reserved for lands that are under Williamson Act contract, and the proposed project site is not under a Williamson Act contract. Though the proposed project is zoned for agricultural use and is designated by the Department of Conservation and the City as Farmland of Local Importance, the underlying land use of the project site (Entertainment Commercial) suggests that the City does not intend for this site to be used for agricultural use. Additionally, the City supports the developer's application for the proposed zone change. Furthermore, the defining characteristics of the underlying zoning classification are not consistent with the site as it currently exists because the project site is not under a Williamson Act Contract, and therefore does not conform to the intent and purpose of the Agricultural Reserve zoning classification. Therefore, based on the data presented above, the proposed project has a less than significant potential to conflict with the existing zoning for agricultural use or a Williamson Act contract. No mitigation is required.
- c. *No Impact* – The project site is not located within forest land, timberland or timberland zoned for Timberland Production. Therefore, the proposed project will not 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 impacts are anticipated and no mitigation is required.

- d. *No Impact* – The project site is not located within forest land and has no trees on the property; therefore, the project will not result in the loss of forest land or conversion of forest land to non-forest production use. No impacts are anticipated and no mitigation is required.
- e. *Less Than Significant Impact* – Please refer to the discussions under issues II(a) and II(b) above. Though the proposed project would involve a zone change from Agricultural Reserve to Commercial Entertainment on a site with an Entertainment Commercial land use designation. According to the General Plan, the project site is located within the Subarea 9 – Central Coachella Neighborhoods, which generally states that higher intensity, non-residential uses are allowed in the western portion of this Subarea—where the proposed project is located—to support the Downtown and nearby employment centers. Additionally, the City's General Plan indicates that complimentary uses—such as automobile uses (gas stations, truck stops, etc.)—should be developed along Highway 86 to support persons travelling through the City and the proposed project intends to provide amenities that would support this goal. The uses in the immediate vicinity surrounding the proposed project do not currently support agricultural activities. Ultimately, the development of this site as the Coachella Travel Centre would not involve other changes that would result in off-site agricultural land to convert to a non-agricultural use. Furthermore, there is no forest land in the City of Coachella that would be impacted by the development of the proposed project. Therefore, the proposed project would have a less than significant potential to 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.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION:

The following information utilized in this section was obtained from the technical study "Air Quality and GHG Impact Analysis Coachella Travel Centre Project, Coachella, California" prepared by Giroux & Associates dated March 16, 2019, and provided as Appendix 1 to this document.

Background

The proposed project site is located in the Coachella Valley Planning Area (CVPA) of the Salton Sea Air Basin (SSAB). The SSAB was part of the Southeast Desert Air Basin (SEDAB) until May, 1996 when the SSAB was created. The project site is in the hottest and driest parts of California. The climate is characterized by hot, dry summers and relatively mild winters. Rainfall is scant in all seasons, so differences between the seasons are characterized principally by differences in temperature. Average annual precipitation in the air basin ranges from 2 to 6 inches per year.

Seasonal temperature differences in the basin are large, confirming the absence of marine influences due to the blocking action of the mountains to the west. Average monthly maximum temperatures in the project vicinity range from 108°F in July to 57°F in January. The average monthly minima range from about 40°F in January to about 80°F in July.

During much of the year, California is covered by a moderately intense high-pressure system. In winter, the Pacific High retreats to the south, so that frontal systems from the North Pacific can move onto the California coast. On average, 20 to 30 frontal systems pass through California each winter. The first front usually arrives around the middle of October, and the average period of frontal activity is five to six months. Most of these systems are relatively weak by the time they reach the SSAB, however, and they become more diffuse as they move southeastward.

During all seasons, the prevailing wind direction is predominantly from the west to east. Banning Pass is an area where air is squeezed through a narrow opening with accelerated airflow that supports wind farms. The strong winds also occasionally lead to blowing sand that sandblasts painted surfaces and makes driving unsafe. As the west to east winds fan out into the Coachella Valley, they slow down quickly. By the time the onshore flow reaches the project site, it has again returned to its normal speed.

Air Quality Standards

In order to gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors."

Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table III-1. Sources and health effects of various pollutants are shown in Table III-2.

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards presented in Table III-1. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O₃, CO (except 8-hour Lake Tahoe), SO₂, NO₂, PM₁₀, PM_{2.5}, and visible reducing particles are not to be exceeded at any time in any consecutive three-year period; all other values are not to be equaled or exceeded. The air quality in a region is considered to be in attainment by federal standards if the measured ambient air pollutant levels for O₃, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean are not exceeded more than once per year. The O₃ standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

Baseline Air Quality

In the CVPA portion of the SSAB, air quality planning, enforcement and monitoring responsibilities are carried out by the South Coast Air Quality Management District (SCAQMD). Existing and probable future levels of air quality around the project area can be best inferred from ambient air quality measurements conducted by the SCAQMD at the Indio and Palm Springs air quality monitoring stations. In Indio, ozone and 10 microns or less in diameter, (respirable) particulates called PM-10, are monitored. These two pollutants are the main air pollution problems in the CVPA portion of the SSAB. Vehicular pollution levels such as carbon monoxide (CO) and nitrogen dioxide (NO₂) are monitored at Palm Springs. Levels of CO and NO₂ at the project site are likely lower than those monitored in Palm Springs. However, because CO and NO₂ levels in Palm Springs are well within acceptable limits, their use to characterize the project site introduces no complications.

**Table III-1
AMBIENT AIR QUALITY STANDARDS**

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

Footnotes

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

**Table III-2
HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS**

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> • Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions. 	<ul style="list-style-type: none"> • Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> • Contaminated soil. 	<ul style="list-style-type: none"> • Impairment of blood function and nerve conduction. • Behavioral and hearing problems in children.
Respirable Particulate Matter (PM-10)	<ul style="list-style-type: none"> • Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions. 	<ul style="list-style-type: none"> • Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics. 	<ul style="list-style-type: none"> • Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes. 	<ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Baseline Air Quality (cont'd)

The last four years of published data from Indio and Palm Springs stations are summarized in Table III-3. The following conclusions can be drawn from this data:

1. Photochemical smog (ozone) levels periodically exceed standards. The 1-hour state standard was violated less than one percent of all days in the last four years near Indio. The 8-hour state ozone standard has been exceeded an average of eight percent of all days per year in the same time period. The Federal eight-hour ozone standard is violated on around four percent of all days per year. Ozone levels are much lower than 10 to 20 years ago. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade.
2. Carbon monoxide (CO) measurements near the project site have declined throughout the last decade, and 8-hour CO levels were at their lowest in 2017. Federal and state CO standards have not been exceeded in the last 10+ years. Despite continued basin-wide growth, maximum CO levels at the closest air monitoring station are less than 25 percent of their most stringent standards because of continued vehicular improvements.
3. PM-10 levels as measured at Indio, have exceeded the state 24-hour standard on 15 percent of all measurement days in the last four years, but the national 24-hour particulate standard has not been exceeded during the same period. Particulate levels have frequently exceeded the more restrictive state standard.
4. A fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). There have no violations of the 24-hour federal PM-2.5 standard in recent years. With dustier conditions along the I-10 Corridor, there may be occasional violations of PM-2.5 standards at the project site.

Table III-3
AIR QUALITY MONITORING SUMMARY
(DAYS STANDARDS WERE EXCEEDED AND MAXIMUM OBSERVED CONCENTRATIONS 2014-2017)

Pollutant/Standard	2014	2015	2016	2017
Ozone ^a				
1-Hour > 0.09 ppm (S)	2	0	2	8
8-Hour > 0.07 ppm (S)	30	12	27	44
8- Hour > 0.075 ppm (F)	10	4	12	27
Max. 1-Hour Conc. (ppm)	0.095	0.093	0.099	0.107
Max. 8-Hour Conc. (ppm)	0.091	0.085	0.089	0.093
Carbon Monoxide ^b				
1-hour > 20. ppm (S)	0	0	0	0
8- Hour > 9. ppm (S,F)	0	0	0	0
Max 8-hour Conc. (ppm)	0.9	0.7	1.5	0.5
Nitrogen Dioxide ^b				
1-Hour > 0.18 ppm (S)	0	0	0	0
Max 1-hour Conc. (ppm)	0.05	0.04	0.04	0.04
Respirable Particulates (PM-10) ^a				
24-hour > 50 µg/m ³ (S)	64/359	36/270	56/313	43/363
24-hour > 150 µg/m ³ (F)	1/359*	0/270	0/313	0/363

Pollutant/Standard	2014	2015	2016	2017
Max. 24-Hr. Conc. ($\mu\text{g}/\text{m}^3$)	152*	145.	137.	128.
Ultra-Fine Particulates (PM-2.5) ^a				
24-Hour > 35 $\mu\text{g}/\text{m}^3$ (F)	0/112	0/94	0/115	0/110
Max. 24-Hr. Conc. ($\mu\text{g}/\text{m}^3$)	26.5	24.6	25.8	18.8

*high wind event, excluded from annual statistics (S) = state standard, (F) = federal standard

^aData from Indio monitoring station.

^bData from Palm Springs air monitoring station.

Source: SCAQMD Air Monitoring Summaries.

Air Quality Planning

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The Air Quality Management District (AQMD) adopted an updated clean air “blueprint” in August 2003. The 2003 Air Quality Management Plan (AQMP) was approved by the EPA in 2004. The AQMP outlined the air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated.

With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. As previously noted, the attainment date was to “slip” from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard.

Because projected attainment by 2021 required control technologies that did not exist yet, the SCAQMD requested a voluntary “bump-up” from a “severe non-attainment” area to an “extreme non-attainment” designation for ozone. The extreme designation was to allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on “black-box” measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from “severe-17” to “extreme.” This reclassification set a later attainment deadline (2024), but also required the air basin to adopt even more stringent emissions controls.

Table III-4
SOUTH COAST AIR BASIN EMISSIONS FORECASTS (EMISSIONS IN TONS/DAY)

Pollutant	2015 ^a	2020 ^b	2025 ^b	2030 ^b
NOx	357	289	266	257
VOC	400	393	393	391
PM-10	161	165	170	172
PM-2.5	67	68	70	71

^a2015 Base Year.

^bWith current emissions reduction programs and adopted growth forecasts.

Source: California Air Resources Board, 2013 Almanac of Air Quality

In other air quality attainment plan reviews, EPA had disapproved part of the SCAB PM-2.5 attainment plan included in the AQMP. EPA stated that the current attainment plan relied on PM-2.5 control regulations that had not yet been approved or implemented. It was expected that a number of rules that were pending approval would remove the identified deficiencies. If these issues were not resolved within the next several years, federal funding sanctions for transportation projects could result. The 2012 AQMP included in the current California State Implementation Plan (SIP) was expected to remedy identified PM-2.5 planning deficiencies.

The federal Clean Air Act requires that non-attainment air basins have EPA approved attainment plans in place. This requirement includes the federal one-hour ozone standard even though that standard was revoked almost ten years ago. There was no approved attainment plan for the one-hour federal standard at the time of revocation. Through a legal quirk, the SCAQMD is now required to develop an AQMP for the long since revoked one-hour federal ozone standard. Because the current SIP for the basin contains a number of control measures for the 8-hour ozone standard that are equally effective for one-hour levels, the 2012 AQMP was believed to satisfy hourly attainment planning requirements.

AQMPs are required to be updated every three years. The 2012 AQMP was adopted in early 2013. An updated AQMP was required for completion in 2016. The 2016 AQMP was adopted by the SCAQMD Board in March, 2017, and has been submitted the California Air Resources Board for forwarding to the EPA. The 2016 AQMP acknowledges that motor vehicle emissions have been effectively controlled and that reductions in NO_x, the continuing ozone problem pollutant, may need to come from major stationary sources (power plants, refineries, landfill flares, etc.). The current attainment deadlines for all federal non-attainment pollutants are now as follows:

8-hour ozone (70 ppb)	2032
Annual PM-2.5 (12 µg/m ³)	2025
8-hour ozone (75 ppb)	2024 (old standard)
1-hour ozone (120 ppb)	2023 (rescinded standard)
24-hour PM-2.5 (35 µg/m ³)	2019

The key challenge is that NO_x emission levels, as a critical ozone precursor pollutant, are forecast to continue to exceed the levels that would allow the above deadlines to be met. Unless additional stringent NO_x control measures are adopted and implemented, ozone attainment goals may not be met.

The proposed project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

Air Quality Impact

Standards of Significance

Air quality impacts are considered “significant” if they cause clean air standards to be violated where they are currently met, or if they “substantially” contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects in the Coachella Valley portion of the SCAQMD with daily emissions that exceed any of the following emission thresholds are to be considered significant under CEQA guidelines.

**Table III-5
DAILY EMISSIONS THRESHOLDS**

Pollutant	Construction¹	Operations²
ROG	75	75
NOx	100	100
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

¹ Construction thresholds apply to both the SCAB and the Coachella Valley (Salton Sea and Mojave Desert Air Basins).

² For Coachella Valley the mass daily emissions thresholds for operation are the same as the construction daily emissions thresholds.

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation;
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year; and,
- Project could generate vehicle trips that cause a CO hot spot.

Impact Analysis

- a. *Less Than Significant Impact* – Projects such as the proposed development of a Travel Centre do not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use are the primary yardsticks by which impact significance of planned growth is determined. Based on the analysis of the City's General Plan Land Use section, the proposed project is consistent with the adopted City General Plan. Thus, the proposed project is also consistent with regional planning forecasts maintained by the Southern California Association of Governments (SCAG) regional plans. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less than significant only because of consistency with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis. As the analysis of project-related emissions provided below indicates, the proposed project will not cause or be exposed to significant air pollution, and is, therefore, consistent with the applicable air quality plan.
- b. *Less Than Significant With Mitigation Incorporated* – Air pollution emissions associated with the proposed project would occur over both a short and long-term time period. Short-term emissions include fugitive dust from construction activities (i.e., site prep, grading, and exhaust emission) at the proposed Project site. Long-term emissions generated by future operation of the proposed project primarily include energy consumption. However, there is no direct nexus between consumption and the type of power source or the air basin where the source is located. Operational air pollution emissions from electrical generation are therefore not attributable on a project-specific basis. The construction and operational emissions were estimated and compared to the SCAQMD significance thresholds using the CalEEMod model.

Construction Emissions

The proposed site will be developed with 5 buildings; a convenience store as part of a 10-pump gas station, a drive thru restaurant, a sit-down restaurant, a 116 room hotel and carwash facility. Estimated construction emissions were modeled using CalEEMod2016.3.2 to identify maximum daily emissions for each pollutant during project construction. Construction was modeled using default construction equipment and schedule for a project of this size as shown in Table III-6.

**Table III-6
CONSTRUCTION ACTIVITY EQUIPMENT FLEET**

Phase Name and Duration	Equipment
Site Prep (10)	3 Dozers
	3 Loader/Backhoes
Grading (20 days)	1 Grader
	1 Excavator
	1 Dozer
	3 Loader/Backhoes
Construction (230 days)	1 Crane
	3 Loader/Backhoes
	1 Welder
	1 Generator Set
	3 Forklifts
Paving (20 days)	2 Pavers
	2 Paving Equipment
	2 Rollers

Utilizing this indicated equipment fleet and durations shown in Table III-6 the following worst case daily construction emissions are calculated by CalEEMod and are listed in Table III-7.

Table III-7
CONSTRUCTION ACTIVITY EMISSIONS
MAXIMUM DAILY EMISSIONS (POUNDS/DAY)

Maximum Construction Emissions	ROG	NOx	CO	SO ₂	PM-10	PM-2.5
2019						
Unmitigated	4.4	45.6	22.7	0.0	20.6	12.2
Mitigated	4.4	45.6	22.7	0.0	9.6	6.1
2020						
Unmitigated	43.4	28.9	26.1	0.1	7.9	4.6
Mitigated	43.4	28.9	26.1	0.1	7.9	2.8
SCAQMD Thresholds	75	100	550	150	150	55

Peak daily construction activity emissions are estimated be below SCAQMD CEQA thresholds without the need for added mitigation. The only model-based mitigation measured applied for this project was watering exposed dirt surfaces three times per day to minimize the generation of fugitive dust generation during grading.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure

Construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds. Nevertheless, emissions minimization through enhanced dust control measures is recommended for use because of the non-attainment status of the air and proximity of residential uses. Recommended measures include:

AQ-1 Fugitive Dust Control. The following measures shall be incorporated into Project plans and specifications for implementation:

- **Apply soil stabilizers or moisten inactive areas;**
- **Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day);**
- **Cover all stock piles with tarps at the end of each day or as needed;**
- **Provide water spray during loading and unloading of earthen materials;**
- **Minimize in-out traffic from construction zone;**
- **Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard; and**
- **Sweep streets daily if visible soil material is carried out from the construction site.**

Similarly, ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD CEQA thresholds during construction. However, because of the non-attainment for photochemical smog,

the use of reasonably available control measures for diesel exhaust is recommended. The following mitigation measures shall be implemented:

AQ-2 Exhaust Emissions Control

- ***Utilize well-tuned off-road construction equipment.***
- ***Establish a preference for contractors using Tier 3-rated or better heavy equipment.***
- ***Enforce 5-minute idling limits for both on-road trucks and off-road equipment.***

Localized Significance Thresholds

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

Use of an LST analysis for a project is optional. For the proposed project, the primary source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500 meter source-receptor distances. For this project, since there is a single residential use just south of the site the most conservative 25-meter distance was modeled. However, only paving activities will be adjacent to this receptor. The closest structure is more than 400 feet from this residence. The receptors closest to the primary construction area have more than a 600-foot setback from the site.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for 1, 2 and 5 acre sites for varying distances. For this project, because of size, the screening thresholds for 5 acres were used.

The following thresholds and emissions in Table III-8 are therefore determined (pounds per day):

**Table III-8
LST AND PROJECT EMISSIONS (POUNDS/DAY)**

LST Coachella Valley	CO	NO_x	PM-10	PM-2.5
LST Threshold	2292	304	14	8
Max On-Site Emissions				
Unmitigated	27	46	21	12
Mitigated	27	46	8	5

CalEEMod Output in Appendix

LSTs were compared to the maximum daily construction activities. As seen in Table III-8, with active dust suppression, mitigated emissions meet the LST for construction thresholds. LST impacts are less-than-significant.

Therefore, the following construction mitigation measure is necessary to ensure LST thresholds are maintained below significance thresholds:

AQ-3 *Exposed surfaces shall be watered at least three times per day during grading activities.*

Operational Emissions

The project would be expected to generate approximately 1,800 daily trips using trip generation numbers provided by the applicant which includes internal trip capture. Operational emissions were calculated using CalEEMod2016.3.2 for an assumed full occupancy year of 2020. The operational impacts are shown in Table III-9. As shown, operational emissions will not exceed applicable SCAQMD operational emissions CEQA thresholds of significance.

**Table III-9
PROPOSED USES DAILY OPERATIONAL IMPACTS (2020)**

Source	ROG	NOx	CO	SO ₂	PM-10	PM-2.5
Area	0.9	0.0	0.1	0.0	0.0	0.0
Energy	0.1	0.8	0.7	0.0	0.1	0.1
Mobile	2.8	17.0	14.0	0.0	2.1	0.6
Total	3.8	17.8	14.8	0.1	2.2	0.7
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Output in Appendix

As shown in the table above, operational emissions will not exceed applicable SCAQMD operational emissions CEQA thresholds of significance. Operational impacts are considered less than significant.

- c&d. *Less Than Significant With Mitigation Incorporated* – The evaluation presented under issue III(b) above addresses cumulative impacts of project emissions and the findings remain the same as outlined in the preceding text. Additionally, as discussed above, implementation of the proposed project will not result in substantial pollutant concentrations and therefore will not expose sensitive receptors in the area to such impacts. As shown above, Localized Significance Thresholds were calculated for the proposed project and were below thresholds. Therefore, with the implementation of the above mitigation measures, impacts under these issues are considered less than significant.
- e. *Less Than Significant Impact* – Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills or various heavy industrial uses. The Project does not propose any such uses or activities that would result in potentially significant operational source odor impacts. The proposed project includes a Travel Centre with a hotel, truck stop, gas station, car wash, fast food restaurant, and sit down restaurant. For this project, since there is a single residential use just south of the site the most conservative 25-meter distance was modeled. However, only paving activities will be adjacent to this receptor. The closest structure is more than 400 feet from this residence. The receptors closest to the primary construction area have more than a 600-foot setback from the site. As such, though there are sensitive receptors located near the proposed project, the proposed project use is not of the type

that would result in odor impacts to sensitive receptors during either construction or operation. Therefore, impacts under this issue are considered less than significant. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION: The following information is provided based on a study titled "Biological Resources Assessment & Jurisdictional Delineation, Coachella Travel Centre, APN 763-020-01, Avenue 50 And Highway 86 -Coachella, CA" prepared by Jericho Systems, Inc. dated February 14, 2019 and provided as Appendix 2. The following information is abstracted from that appendix.

General Site Conditions

The subject parcel is located in an area with an average annual precipitation of 3.69 inches. Hydrologically, the Coachella Valley area is located within the Indio Hydrologic Sub-Area (HSA 719.47) which comprises a 540057-acre drainage area within the larger Whitewater River Watershed (HUC 181002010705). The Whitewater River is the major hydrogeomorphic feature within this watershed.

The general project vicinity consists primarily of undeveloped open space, existing paved and unpaved roads, and transportation corridor to the south (SR-86). Additionally, there is a private residence adjacent the southernmost boundary of the project site. Habitat on site and within the area surrounding the project

site is best described as Four-wing saltbush scrub (*Atriplex canescens*) Shrubland Alliance (Holland: Desert saltbush bush scrub).

The site is relatively flat, and the on-site soils consist of Indio, very fine sandy loam.

Habitat within the project site consists primarily of highly disturbed Four-wing saltbush scrub (*Atriplex canescens*) Shrubland Alliance (Holland: Desert saltbush bush scrub). The site has recently been bulldozed into multiple linear brush piles. Total living vegetation cover is currently approximately 15%. Native plant species identified within the project area include four wing saltbush (*Atriplex canescens*), big saltbush (*Atriplex lentiformis*), honey mesquite (*Prosopis glandulosa*), Scalebroom (*Lepidospartum squamatum*), hairy-leaved sunflower (*Helianthus annuus*), and arrow weed (*Pluchea sericea*). Non-native, invasive plant species identified within the project area include foxtail brome (*Bromus madritensis*), Russian thistle (*Salsola tragus*), London rocket (*Sisymbrium irio*), and common Mediterranean grass (*Schismus barbatus*).

No amphibian species were observed or otherwise detected within the project area and none are expected to occur. The only reptile observed within the project area was the western side-blotched lizard (*Uta stansburiana elegans*). Avian species observed in the project area include verdin (*Auriparus flaviceps*), white-crowned sparrow (*Zonotrichia leucophrys*), Gambel's quail (*Callipepla gambelii*), greater roadrunner (*Geococcyx californianus*), and Cooper's hawk (*Accipiter cooperii*). No mammal species were observed during site visit; however, common species expected to occur within the project area include coyote (*Canis latrans*), Merriams' kangaroo rat (*Dipodomys merriami*), black-tailed jackrabbit (*Lepus californicus*), and desert cottontail (*Sylvilagus audubonii*).

No State- and/or federally-listed threatened or endangered species, or other sensitive species were observed on site during the reconnaissance-level field survey. However, there is some habitat within the proposed project footprint, as well as the project vicinity, that may be suitable for several sensitive species including Coachella Valley fringe-toed lizard (CVFTL) and burrowing owl (BUOW). The findings of the Biological Resources Assessment indicate that the site is not suitable to support CVFTL and/or BUOW and no further survey is warranted or recommended. Habitat suitable for nesting birds does exist within the project site and adjacent areas, and as such mitigation is recommended to prevent impacts to nesting birds.

- a. *Less Than Significant Impact* – Implementation of the Project does not have a potential for a significant adverse effect, either directly or through habitat modifications, on 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 (CDFW) (formerly Department of Fish and Game) or U.S. Fish and Wildlife Service (USFWS). As discussed above, the proposed project does not have habitat suitable for either the CVFTL or BUOW within the project site. As such, given that no State- and/or federally-listed threatened or endangered species, or other sensitive species are anticipated to occur within the project site, the proposed project would have a less than significant potential to have a substantial adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. No mitigation is required.
- b. *Less Than Significant Impact* – Implementation of the proposed project will not have an adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. The project site itself consists of highly disturbed sandy ground, with scattered vegetation. The site has recently been bulldozed into multiple linear brush piles. Habitat on site and within the area surrounding the project site is best described as Four-wing saltbush scrub (*Atriplex canescens*) Shrubland Alliance. The general project vicinity consists primarily of undeveloped open space, existing paved and unpaved roads, and transportation corridor to the south (SR-86). Based on the field survey conducted by Jericho Systems and the information contained in Appendix 2, no significant impacts to riparian habitat or other sensitive communities are anticipated to occur as a result of implementation of the proposed project.

- c. *No Impact* – According to the data gathered by Jericho Systems in Appendix 2, no jurisdictional features subject to the CWA or FGC under the jurisdictions of the USACE, RWQCB, or CDFW exist within the project area. The project site is located entirely outside of any jurisdictional areas and no permanent or temporary impacts to jurisdictional features will result from the project. Therefore, no permits or authorizations from the USACE, RWQCB, or CDFW will be required. As such, given that no federally protected wetlands occur within the project footprint, implementation of the proposed project will have no potential to impact any federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. No mitigation is required.
- d. *Less Than Significant With Mitigation Incorporated* – Based on the field survey of the project site, the Project will not substantially interfere with the movement of any native resident or migratory species or with established native or migratory wildlife corridors, or impede the use of native nursery sites. However, the State does protect all migratory and nesting native birds. Habitat suitable for nesting birds does exist within the project site and adjacent areas. As discussed, most birds are protected by the Migratory Bird Treaty Act (MBTA). To prevent interfering with native bird nesting, the following mitigation measure shall be implemented.

BIO-1 *The State of California prohibits the “take” of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal should be conducted outside of the the State identified nesting season (Raptor nesting season is February 15 through July 31; and migratory bird nesting season is March 15 through September 1). Alternatively, the site shall be evaluated by a qualified biologist prior to the initiation of ground disturbance to determine the presence or absence of nesting birds. Active bird nests MUST be avoided during the nesting season. If an active nest is located in the project construction area it will be flagged and a 300-foot avoidance buffer placed around it. No activity shall occur within the 300-foot buffer until the young have fledged the nest.*

Thus, with implementation of the above measure, any effects on wildlife movement or the use of wildlife nursery sites can be reduced to a less than significant impact.

- e. *No Impact* – Based on the field survey, the Project footprint does not contain any biological resources, such as trees, that might be protected by local policies or ordinances. Past grading maintenance activities and human disturbance of the site have eliminated any trees or other biological resources that might be protected. With no potential for conflicts with local policies or ordinances, no mitigation is required.
- f. *No Impact* – Please refer to the discussion under response IV(a) above. The proposed project is not located within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). Therefore, the Project does not have any potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No mitigation is necessary.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: A cultural resources report has been prepared to evaluate the potential for cultural resources to occur within the project area of potential effect entitled "Historical/Archaeological Resources Survey Report: Coachella Travel Centre Project, Assessor's Parcel Number 763-020-021, City of Coachella, Riverside County, California," dated March 15, 2019, prepared by CRM TECH (Appendix 3). The following summary information has been abstracted from this report. It provides an overview and findings regarding the cultural resources found within the project area.

Background

As a part of the environmental review process for the undertaking, a Historical/Archaeological Resources Survey Report was prepared to in compliance with the California Environmental Quality Act (CEQA). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any "historical resources," as defined by CEQA, that may exist in or around the project area.

In order to identify such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, contacted Native American representatives, and carried out an intensive-level field survey of the entire project area. The results of these research procedures indicate that three historic-period sites, 33-028167 (Devers-Coachella Valley 220 kV Transmission Line), 33-028173 (Avenue 50), and 33- 028175 (domestic refuse scatter), were previously recorded as lying within or partially within the project area. The presence of these sites was confirmed during the field survey, but none of them appears to meet the definition of a "historical resource" under CEQA provisions. No other potential "historical resources" were encountered within the project area.

Based on these findings, CRM TECH recommends to the City of Coachella a conclusion of No Impact on cultural resources, pending the completion of Native American consultation process by the City of Coachella pursuant to Assembly Bill 52. No further cultural resources investigation is recommended for the proposed project unless development plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are encountered inadvertently during any earth-moving operations associated with the project, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. Human remains discovered during the project will need to be treated in accordance with the provisions of HSC §7050.5 and PRC §5097.98.

a&b. *Less Than Significant With Mitigation Incorporated* – CEQA establishes that "a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (PRC §21084.1). "Substantial adverse change,"

according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

Per the above discussion and definition, no archaeological sites or isolates were recorded within the Project boundaries; thus, none of them requires further consideration during this study. In light of this information and pursuant to PRC §21084.1, the following conclusions have been reached for the Project:

- No historical resources within or adjacent to the Project area have any potential to be disturbed as they are not within the proposed area in which the facilities will be constructed and developed, and thus, the Project as it is currently proposed will not cause a substantial adverse change to any known historical resources.
- No further cultural resources investigation is necessary for the proposed project unless construction plans undergo such changes as to include areas not covered by this study.

However, if buried cultural materials are discovered during any earth-moving operations associated with the Project, the following mitigation measure shall be implemented:

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

With the above mitigation incorporation, as well as the mitigation identified under Tribal Cultural Resources below, the potential for impacts to cultural resources will be reduced to a less than significant level. No additional mitigation is required.

- c. *Less Than Significant With Mitigation Incorporated* – The potential for discovering paleontological resources during development of the Project is considered not likely based on the data gathered within the Cultural Resources Report provided as Appendix 3. No unique geologic features are known or suspected to occur on or beneath the sites. However, because these resources are located beneath the surface and can only be discovered as a result of ground disturbance activities, the following measure shall be implemented:

CUL-2 Should any paleontological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with the City's onsite inspector. The paleontological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

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

- d. *Less Than Significant Impact* – As noted in the discussion above, no available information suggests that human remains may occur within the Area of Potential Effect (APE) and the potential for such an occurrence is considered very low. Human remains discovered during the project will need to be treated in accordance with the provisions of HSC §7050.5 and PRC §5097.98, which is mandatory. State law (Section 7050.5 of the Health and Safety Code) as well as local laws requires

that the Police Department, County Sheriff and Coroner's Office receive notification if human remains are encountered. Compliance with these laws is considered adequate mitigation for potential impacts and no further mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
<ul style="list-style-type: none"> 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. 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Strong seismic ground shaking? 	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Seismic-related ground failure, including liquefaction? 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> Landslides? 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION: The following information is provided based on a study titled "Feasibility Study Preliminary Report of Soils and Foundation Evaluations, Proposed Commercial Development Planned Gas Station/Retail, Restaurant, Car Wash, and Hotel, SWC Avenue 50 & State Route 86, APN 763-0020-021-7" prepared by Soils Southwest, Inc. dated February 28, 2019 and provided as Appendix 4. The following information is abstracted that appendix.

a. i. Ground Rupture

Less Than Significant Impact – The Project site is located in the City of Coachella, which is located in an area with several active faults, including the San Andreas fault zone to the north and east, the Mecca Hills fault zone to the southeast, and the Indio Hills fault zone to the north as shown on the City of Coachella General Plan Faults and Historical (1800-2011) Seismicity Map (Figure VI-1). The

California Geologic Survey Earthquake Zones of Required Investigation Indio Quadrangle map depicts the Alquist-Priolo fault zones in the City of Coachella area (Figure VI-2). According to Figure VI-2, the site is not located within an Alquist-Priolo fault zone, but is located approximately 2 miles southwest from the nearest Alquist-Priolo fault zone. Based on the project site's distance from the nearest fault zone, the risk for ground rupture at the site location is low; therefore, it is not likely that future employees or visitors of the Coachella Travel Centre will be subject to seismic hazards from rupture of a known earthquake fault. Therefore, any impacts under this issue are considered less than significant; no mitigation is required.

ii. Strong Seismic Ground Shaking

Less Than Significant Impact – As stated in the discussion above, several faults run through the City, and as with much of southern California, the proposed structures will be subject to strong seismic ground shaking impacts should any major earthquakes occur in the future, particularly due to the site's proximity to the San Andreas Fault Zone, which is classified as an Alquist-Priolo fault zone. Additionally, several active Fault Zones as defined by the City of Coachella, shown in Figure VI-1, travel through the City and surrounding area. As a result, and like all other development projects in the City and throughout the Southern California Region, the proposed project will be required to comply with all applicable seismic design standards contained in the 2016 California Building Code (CBC), including Section 1613 Earthquake Loads. Compliance with the CBC will ensure that structural integrity will be maintained in the event of an earthquake. Therefore, impacts associated with strong ground shaking will be less than significant without mitigation.

iii. Seismic-Related Ground Failure Including Liquefaction

Less Than Significant With Mitigation Incorporated – According to the City of Coachella General Plan Update 2035 EIR Liquefaction Risk map (Figure VI-3), the project is located within an area of high liquefaction susceptibility. According to Appendix 4, the Geotechnical Study, the proposed project has a moderate susceptibility for liquefaction. The following mitigation measure shall be implemented to ensure that the structures are designed to minimize impacts from occurring as a result of seismic related ground failure, including liquefaction:

GEO-1 Based upon the geotechnical investigation (Appendix 4), all of the recommended design and construction measures identified in Appendix 4 (listed on Pages 12-25) as well as the Seismic Design Parameters (Pages 10-11) shall be implemented by the Applicant into the project design. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site.

Thus, with the above mitigation measure, the Project will not have a significant potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving liquefaction. No further mitigation is required.

iv. Landslides

No Impact – According to the City of Coachella General Plan Update 2035 EIR Landslide Risk map (Figure VI-4), the proposed project site is not located in an area with any known earthquake induced landslide hazards. Based on a site reconnaissance the project site is essentially flat. Therefore, the Project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. No impacts under this issue are anticipated and no mitigation is required.

- b. *Less Than Significant With Mitigation Incorporated* – Due to the existing graded/bladed and disturbed nature of the project site, and the type of project being proposed, a potential for soil erosion, loss of topsoil, and/or placing structures on unstable soils is generally considered less than

significant. The project site is vacant with minimal non-native vegetation coverage. City grading standards, best management practices and the Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) are required to control the potential significant erosion hazards. The topography is generally flat with less than a 5-foot elevation change from the highest point (to the south) and the lowest point (to the north) on the site. The project is anticipated to require minimal cut and fill with any cut being reused to balance of the site through grading. During project construction when soils are exposed, temporary soil erosion could occur, which could be exacerbated by rainfall. Project grading would be managed through the preparation and implementation of a SWPPP, and will be required to implement best management practices to achieve concurrent water quality controls after construction is completed and the Coachella Travel Centre is in operation. The following mitigation measures or equivalent BMPs shall be implemented to address these issues:

GEO-2 *Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. If covering is not feasible, then measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the Project site for future cleanup.*

GEO-3 *All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the Coachella Travel Centre is being constructed.*

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

- c. *Less Than Significant With Mitigation Incorporated* – According to the City of Coachella General Plan Update 2035 EIR Liquefaction Risk map (Figure VI-3), the project is located within an area of high liquefaction susceptibility, though the Geotechnical Investigation (Appendix 4), determined that the liquefaction susceptibility is moderate and can be minimized through the implementation of mitigation measure **GEO-1** above (implementation of recommended seismic and design measure from the Geotechnical Investigation, Appendix 4). The potential for shrinkage or subsidence at the site was determined to be very low by the data compiled in the Geotechnical Investigation. Though subsidence can occur throughout the City of Coachella, the proposed project site has been previously rough graded, which minimizes the potential for subsidence to occur at the project site. Therefore, based on the discussions under issue VI(c&d) above and the data provided in the Geotechnical Investigation, with implementation of the above mitigation measure, there is a less than significant potential for the proposed project to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse.
- d. *Less Than Significant Impact* – The site is currently vacant and the surface of the site has been rough graded in the past due to agricultural use. The site contains non-native vegetation throughout the project site. The Geotechnical Investigation tested expansion potential in accordance with U.B.C Standard 18-2. In general soils sampled during the field investigation exhibited very low expansion potential. Given that the Project does not contain expansive soils, it is not anticipated that the project would have a significant impact that would create a substantial risk to life or property by being located on expansive soils. Impacts under this issue are considered less than significant.
- e. *No Impact* - This project will be connected to the regional wastewater collection system and it will not utilize any subsurface septic tank-leach system. Therefore, no impact to underlying soil from wastewater disposal can occur and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION: The following information utilized in this section was obtained from the technical study "Air Quality and GHG Impact Analysis Coachella Travel Centre Project, Coachella, California" prepared by Giroux & Associates dated March 16, 2019, and provided as Appendix 1 to this document.

a&b. Less Than Significant Impact –

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

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

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO₂ (Carbon Dioxide), N₂O (Nitrous Oxide), CH₄ (Methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the Earth's atmosphere, but prevent radiative heat from escaping, thus warming the Earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages. According to the California Air Resources Board (CARB), the climate change since the industrial revolution differs from previous climate changes in both rate and magnitude.

CARB compiles GHG inventories for the State of California. CARB GHG inventory data indicates that in 2014 (the most recent inventory of record) California GHG emissions totaled approximately 441.5 Million Metric Tons of Carbon Dioxide Equivalent (MMTCO₂e). "In 2010, California accounted for 6.8 percent of all emissions in the country [United States], and ranked second highest among the states with total emissions of 453 MMTCO₂e, only behind Texas with 763 MMTCO₂e. From a per capita standpoint, California has the 45th lowest emissions with 12.1 MMTCO₂e /person in 2010."

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO₂ equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a

threshold of 3,000 MT CO₂e for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

Construction Activity GHG Emissions

The project is assumed to require less than two years for construction. During project construction, the CalEEMod2016.3.2 computer model predicts that the construction activities will generate the annual CO₂e emissions identified in Table VII-1.

**Table VII-1
CONSTRUCTION EMISSIONS (METRIC TONS CO₂e)**

	CO₂e
Year 2019	36.1
Year 2020	727.2
Total	763.3
Amortized	25.4

CalEEMod Output provided in appendix

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less than significant.

Project Operational GHG Emissions

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional CO₂e emissions are summarized in the CalEEMod2016.3.2 output files found in the appendix of this report.

The total operational and annualized construction emissions for the proposed project are identified in Table VII-2. The project GHG emissions are considered less than significant.

**Table VII-2
OPERATIONAL EMISSIONS (METRIC TONS CO₂e)**

Consumption Source	
Area Sources	0.0
Energy Utilization	612.8
Mobile Source	756.2
Solid Waste Generation	99.8
Water Consumption	63.6
Construction	25.4
Total	1,557.8
Guideline Threshold	3,000

Consistency with GHG Plans, Programs and Policies

In the City of Coachella's Climate Action Plan (2014), the City proposes to set an efficiency-based greenhouse gas reduction target of 15% below 2010 per service population emissions by 2020 and an emissions reduction target of 49% per service population emissions by 2035.

The recent Coachella General Plan Update addresses GHG emissions as well. The General Plan Update proposes the significance criteria proposed but not adopted by the South Coast Air Quality Management District to evaluate air quality impacts. Since the project results in GHG emissions below the recommended SCAQMD 3,000 metric ton threshold, the project would not conflict with any applicable plan, policy, or regulation to reduce GHG emissions.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

a&b. *Less Than Significant With Mitigation Incorporated* – The project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or may create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. During construction, there is a potential for accidental release of petroleum products in sufficient

quantity to pose a significant hazard to people and the environment. The following mitigation measure will be incorporated into the Storm Water Pollution Prevention Plan (SWPPP) prepared for the project and implementation of this measure can reduce this potential hazard to a less than significant level.

HAZ-1 All spills or leakage of petroleum products during construction activities will be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure will be incorporated into the SWPPP prepared for the Project development.

The Riverside County Fire Department considers gasoline a hazardous material. Therefore, during the operation phase of the project, hazardous or potentially hazardous materials will be routinely handled, stored, and dispensed on the project site. Because the Project will include a gas station and truck stop, underground storage tanks (UST) will store gasoline and diesel on the project site as shown in the site plan (Figure 3). The UST will consist of double-walled, fiberglass fuel storage tank with leak detection sensors. Due to the nature of the proposed Project, and in particular the gas station and truck stop, the project will be subject to routine inspection by federal, State, and local regulatory agencies with jurisdiction over fuel dispensing facilities. These regulations and regulatory agencies include: provisions established by Section 2540.7, Gasoline Dispensing and Service Stations, of the California Occupational Safety and Health Regulations; Chapter 38, Liquefied Petroleum Gases, of the California Fire Code; Resource Conservation and Recovery Act (RCRA); and the Riverside County Fire Department. Under the above provisions—the routine inspection of the gas station, the permitted USTs, and all associated fuel delivery infrastructure, as well as compliance with all federal, state and local regulations—will ensure that the Project operates in a manner that poses no substantial hazards to the public or the environment. No further mitigation is required.

- c. *No Impact* – The proposed project site is not located within one quarter mile of a school. The nearest school is located about 0.4 miles south of the project site is Valle Del Sol Elementary School at 51433 Education Way, Coachella, CA 92236, which is part of the Coachella Valley Unified School District. Based on this information, implementation of the Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. No adverse impacts are anticipated. No additional mitigation is required.
- d. *No Impact* – The proposed project site has been vacant for several years and previously served as a site containing agricultural activities. The proposed project site would not be located on a site that is included on a list of hazardous materials sites that are currently under remediation. According to the California State Water Board's GeoTracker website (consistent with Government Code Section 65962.5), which provides information regarding Leaking Underground Storage Tanks (LUST), there are no active LUST sites located within the project site, the nearest open LUST Cleanup Site is located approximately one mile west of the project site at Highway 111 (Figure VIII-1 through VIII-3). This site has no potential to create a hazard that would affect the operations of the proposed Project. Therefore, the proposed construction and operation of the site as the Coachella Travel Centre will not create a significant hazard to the population or to the environment from their implementation. No impacts are anticipated. No mitigation is required.
- e&f. *No Impact* – According to a review of Google Maps (11/3/2017) the Project site is not located within two miles of an airport or private airstrip. The closest airport is the Jacqueline Cochran Regional Airport located approximately 11 miles south of the project site at 56-850 Higgins Drive, Thermal, CA 92274. Therefore, construction and operation of the project at this location would not result in a safety hazard for people residing or working in the project area as a result of proximity to a public airport or private airstrip. No impacts are anticipated and no mitigation is required.

- g. *Less Than Significant Impact* – The proposed project will occur entirely within the boundaries of the project site, which is located on Avenue 50 and Tyler Street. The project site is adjacent to Highway 86 to the East, which will allow traffic from Highway 86 to utilize the new site. It is not anticipated that development of the project site would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan because the site activities will be confined within the proposed project site. The proposed onsite parking and circulation plans will be reviewed by the local Fire Department and Police Department to ensure that the project's ingress/egress are adequate for accommodating emergency vehicles. Finally, a construction traffic plan will be required to be submitted to the Fire Department prior to development in order to provide adequate emergency access during construction of the proposed project. Therefore, there is no potential for the development of the Project to physically interfere with any adopted emergency response plans, or evacuation plans. No impacts are anticipated and no mitigation is required.
- h. *Less Than Significant Impact* – According to the City of Coachella General Plan 2035, the area east of the Coachella Canal is mapped as having moderate fuel rank and potential fire behavior. The proposed project is located on the west side of the Coachella Canal, and is in a developed area surrounded by both development and vacant land with very little fuel load in the surrounding area that could be susceptible to wildfires. Therefore, because the proposed project is located outside of the area identified as a high fire hazard zone within the City's General Plan, the proposed project has a less than significant potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation onsite or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

a&f. *Less Than Significant With Mitigation Incorporated* – The proposed project is located within a developed area within the Whitewater River watershed, which is within the Coachella Valley Planning Area of the Colorado River Basin Regional Water Quality Control Board (RWQCB). The Coachella Water Authority (CWA) is responsible for the water supply to the City, though it pays a replenishment charge to Coachella Valley Water District (CVWD). CWA's existing water system consists of different pressure zones, groundwater wells, storage reservoirs, booster pumping stations, and distribution facilities. CWA has one principal source of water supply, local groundwater

pumped from CWA owned and operated wells. CWA is required to meet potable water quality requirements of the Division of Drinking Water, State Water Resources Control Board (SWRCB).

For a developed area, the only three sources of potential violation of water quality standards or waste discharge requirements are from generation of municipal wastewater, stormwater runoff, and potential discharges of pollutants, such as accidental spills. Municipal wastewater is delivered to the Coachella Sanitation District, which meets the waste discharge requirements imposed by the RWQCB. Wastewater will be transported and processed at the wastewater treatment plant (WTP) located to the south on Avenue 54. Under the proposed project, a car wash will be constructed. The carwash will include a gray water recycling system, which will collect, treat, and filter gray water from previous car wash cycles for use with future car wash cycles. Through the use of this gray water recycling system, little or no gray water will be discharged into the municipal sewer system for wastewater treatment. Thus, the gray water will not further degrade water quality onsite. To address stormwater and accidental spills within this environment, any new project must ensure that site development implements a Storm Water Pollution Prevention Plan (SWPPP) and a National Pollutant Discharge Elimination System (NPDES) to control potential sources of water pollution that could violate any standards or discharge requirements during construction and a Water Quality Management Plan (WQMP) to ensure that project-related after development surface runoff meets discharge requirements over the short- and long-term. The WQMP would specify stormwater runoff permit Best Management Practices (BMPs) requirements for capturing, retaining, and treating on site stormwater once the Coachella Travel Centre has been developed. Because the project site consists of pervious surfaces, the Project has identified onsite drainage that will generally be directed to the onsite retention pond that will be developed as part of the project. The SWPPP would specify the BMPs that the Project would be required to implement during construction activities to ensure that all potential water pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. With implementation of these mandatory Plans and their BMPs, as well as mitigation measure HAZ-1 above, the development of Coachella Travel Centre will not cause a violation of any water quality standards or waste discharge requirements.

- b. *Less Than Significant Impact* – Implementation of the proposed Project will not deplete ground-water supplies that would substantially affect the water availability for existing or planned land uses or biological resources. The potential to directly intercept the groundwater table during development of this Project is not likely due to depths greater than the necessary excavation depths, which is approximately 20-40 feet below the ground surface according to the Geotechnical Investigation (Appendix 4). Excavation at these depths is not required to construct the proposed project. The Project will be supplied water by the CWA, which utilizes groundwater to supply its customers, though it pays water replenishment charges to CVWD. CWA produces all of its water supplies from the Coachella Valley Groundwater Basin, specifically, the East Whitewater River Subbasin, which is continuously replenished at the local and regional level pursuant to a variety of water supply projects and programs. By developing the proposed project, pervious area within this project site would decrease substantially. However, the proposed project would develop landscaping and Stormtech Subsurface Management System, that would allow much of the runoff to remain onsite and be infiltrated allowing for groundwater recharge at this location.

CWA states that Commercial uses required an average of 2.15 acre feet per acre per year (AF/A/Y) between the beginning of Fiscal Year (FY) 2012 and end of FY 2015¹. However, CWA plans for water usage to decrease in the future as the population grows with a limited water supply due to drought and a limit on State Water Project funds. Therefore, CWA assumes that future commercial uses will consume 1.78 AF/A/Y. Using this data as the basis for the quantifying the proposed project's water demand, it is anticipated that a 14.1 acre site would require a potable water supply of 25.1 acre feet per year (AFY). According to the CWA 2015 Urban Water Management Program

¹ <https://www.coachella.org/home/showdocument?id=5783>

(UWMP)², as of 2015, commercial uses demand 905 AFY of potable water. As the Coachella Valley continues to grow and develop with urban uses, the water demand for commercial uses will increase to 1,733.9 AFY by 2020, and to 3,314.4 AFY by 2040. Based on the assumed demand for potable water that that operations of the proposed project would required, the proposed Coachella Travel Centre will increase CWA's potable water demand by about 1.45%. As previously stated, by 2020, commercial connections within CWA's service area are projected to demand a total of 1,733.9 AFY, which is greater than the 2015 demand by 829.9 AFY. Given the projected demand CWA provides in their 2015 UWMP, the potable water demand that operation of proposed Coachella Travel Centre is anticipated to require would be well within CWA's projections for future water demand and future availability of potable water. Therefore, no significant adverse impacts to groundwater resources are forecast to occur from implementing the proposed Project. No mitigation is required.

- c. *Less Than Significant Impact* – The proposed project is not anticipated to significantly change the volume of flows downstream of the project site, and would not be anticipated to change the amount of surface water in any water body in an amount that could initiate a new cycle of erosion or sedimentation downstream of the project site. The onsite drainage will capture the incremental increase in runoff from the project site associated with project development. Runoff will be managed on the project site through a Stormtech Subsurface Management System that will be installed throughout the site (see Figures 16 and 17). Therefore, the proposed Coachella Travel Centre development will not substantially increase discharges to the City of Coachella's existing storm drain system. Therefore, implementation of the Project will not substantially alter the drainage pattern of the site in a manner that would result in substantial erosion or siltation onsite or offsite due to the construction of onsite drainage management facilities. Any impacts under this issue are considered less than significant. No mitigation is required.
- d. *Less Than Significant With Mitigation Incorporated* – Please refer to response IX(c) above. Impacts to the existing drainage pattern of the site or area could occur if the development of the project results in an increased amount of flooding onsite or offsite. Implementation of the proposed project will alter the existing drainage courses or patterns onsite but will maintain the existing offsite downstream drainage system through control of future discharges from the site. The proposed onsite drainage improvements include the installation of a Stormtech Subsurface Management System that will be installed throughout the site (see Figures 16 and 17) and will capture all runoff from the site. The site will be designed to direct onsite runoff to the retention pond. During construction runoff will be managed through implementation of a SWPPP, NPDEA, and WQMP, and implementation of mitigation measure HAZ-1, which will ensure that the project site is not substantially altered during construction, such that the rate or amount of surface runoff would not result in flooding onsite or offsite. Once the site has been developed as the Coachella Travel Centre, runoff will be managed based on the current requirements, which places an emphasis on infiltration. In order to prevent an increase in the rate or amount of surface runoff from causing flooding onsite or offsite, the project site plan includes infiltration mechanisms that will collect runoff and allow it to infiltrate on site. As a result, the project will not substantially increase discharges to the City of Coachella's existing storm drain system. Therefore, with the implementation of mitigation measure HYD-1, implementation of the Project will not result in flooding onsite or offsite, and any impacts under this issue are considered less than significant.
- e. *Less Than Significant With Mitigation Incorporated* – As indicated under issues IX(a), IX(c) and IX(d) above, the project will not substantially create or contribute runoff water that would exceed the capacity of existing or planned stormwater capacity, or provide substantial additional sources of polluted water, particularly because the site plan includes infiltration mechanisms that will collect onsite runoff and ensure that polluted runoff does not leave the site. As stated under issue IX(d) above, runoff during construction will be managed through implementation of a SWPPP, NPDES, and WQMP, and implementation of mitigation measure HAZ-1 will ensure that discharge of polluted

² <https://www.coachella.org/Home/ShowDocument?id=4678>

material does not occur or is remediated in the event of an accidental spill. At present, the site is mostly pervious and runoff remains on site, thus with the proposed development of the Coachella Travel Centre, and the planned drainage systems, runoff from the site would be managed such that flooding on- or off- site is not anticipated. Therefore, with the implementation of mitigation measure HYD-1, implementation of the Project will not result in flooding onsite or offsite, and any impacts under this issue are considered less than significant.

- g&h. *Less Than Significant Impact* – According to the Geotechnical Investigation (Appendix 4), the proposed project site is located adjacent to the Coachella Stormwater Channel/Whitewater River, which is subject to overflow during periods of inclement weather. The channel is located within a 100-year flood zone; however, the proposed project is located in Zone X according to the City of Coachella General Plan Flood Hazard map (Figure IX-1). Zone X corresponds to areas of 500-year flood, areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 100-year floods. The project site is adjacent to a special flood hazard area as a result of being adjacent to the Whitewater River channel. However, as shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) 06065C2270H (Figure IX-2), the proposed project is elevated such that it is not located within an area of special flood hazard. The Project does not propose any housing as part of its implementation. Therefore, the Coachella Travel Centre would not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, and the project would have a less than significant potential to impede or redirect flood flows as the project site is not located within the 100-year flood hazard area. No mitigation is required.
- i. *Less Than Significant Impact* – As stated under issue IX(g-h), the proposed project is located adjacent to the Coachella Stormwater Channel/Whitewater River, which is subject to overflow during periods of inclement weather. According to the City of Coachella General Plan EIR, the Whitewater River levee is designed to hold double the amount of water that would flow in a 100-year flood. The levee and channelized portions of the Whitewater River are managed by the City of Coachella Engineering Department. Potential risks and planned responses associated with failures of these systems are addressed in the City's Local Hazard Mitigation Plan. The project does not include any housing, and therefore the potential to expose people or structures to a significant risk of loss, injury or death involving flooding; including flooding as a result of the failure of a levee or dam is considered less than significant. No mitigation is required.
- j. *No Impact* – Implementation of the Project will not expose people or structures to a significant risk of inundation by seiche, tsunami, or mudflow. The proposed project is located over 100 miles from the Pacific Ocean, therefore, there is no potential for tsunami to occur within the project area. According to the City of Coachella General Plan EIR, the proposed project and the entirety of the City are outside of the area that could be affected by seiches that could occur at the Salton Sea, which is over 10 miles away. Furthermore, the General Plan EIR identifies the Mecca Hills area as susceptible to mudflow and landslides, and thus, because the project is located outside of this area on a flat parcel of land, no impacts are anticipated to occur under this issue. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – The project site consists of one parcel of land, which is zoned for Agricultural Reserve (A-R) use, and designated Entertainment Commercial (CE) (Figures X-1 and X-2). Much of the surrounding area consists of vacant land, though the surrounding zoning classifications are Commercial Entertainment (C-E), which is what this Project proposes to change the site to through a zone classification change. The proposed project site, much like the surrounding area, is vacant, and development of the project site would not divide an established community. In fact, the proposed project would connect people traveling through the City on SR 86 with a new travel center within the City. Consequently, the development of the project site with the proposed use will not divide any established community in any manner. Therefore, no adverse impacts under this issue are anticipated and no mitigation is necessary.
- b. *Less Than Significant Impact* – Please refer to the discussion under issue II(a) –The City of Coachella recently updated the City's General Plan, and the project site is designated for Entertainment Commercial use; however, the zoning has not been updated to reflect this change as it is the current zoning designation is Agricultural Reserve. At present, no agricultural operations occur at the project site, nor have they occurred for many years. The City's Municipal Code defines Agricultural Reserve Zoning as “reserved for only those lands which are subject to recorded Williamson Act contracts.” Based on a review of the Riverside County Williamson Act FY 2015/2016 Map (Figure II-2), the project site is not designated as Williamson Act land, which would indicate that the proposed project site is not appropriately zoned at present, and is not considered agricultural land of value such that it would be designated as Williamson Act land. Given that the City has designated the proposed project site as Entertainment Commercial, the City's General Plan designation would indicate that the City intends for the project site to be developed for a use that would suit this land use designation. As stated under issue II(a), ultimately, the City's zoning codes exist to execute the objective of the City's land use designations; as such, given that this project requires a zone change, but does not require a change in land use designation, the goal of the developer appears to align with the City's goals for land use planning at this location. Therefore, though the proposed project is located within an A-R zoning classification, the underlying land use indicates that the proposed zone classification change to C-E would conform the City's Land Use Policies and Goals. Based on this information, the proposed project would have a less than significant potential to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- c. *No Impact* – According to the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP) and Natural Community Conservation Plan (NCCP) Conservation Area Map (Figure X-3),

the project is not located within any mapped Conservation Area. Therefore, the proposed Project is consistent with the Coachella Valley MSHCP and NCCP. As a result, implementation of the proposed Project will not conflict with any habitat conservation or natural community conservation plan adopted to protect environmental resources. Therefore, no impacts are anticipated to occur from implementing the proposed project under this issue. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION:

a&b. *No Impact* – The proposed site for the Coachella Travel Centre is in located on a vacant site adjacent to the Whitewater River to the west and SR 86 to the east. According to the Map prepared for the City of Coachella General Plan EIR depicting Mineral Resources (Figure XI-1), the proposed project is located in Mineral Resource Zone-1, which indicates an area where available geological information indicates that little likelihood exists for the presence of significant mineral resources. The project is designated for Entertainment Commercial uses, and is not designated for mineral resource-related land uses. Therefore, the development of the Project will not cause any loss of mineral resource values to the region or residents of the state, nor would it result in the loss of any locally important mineral resources identified in the City of Coachella General Plan. No impacts would occur under this issue. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

Background

Noise is generally described as unwanted sound. The Coachella Travel Centre will be developed within a 14.1-acre site that includes a 5 Story Hotel, a Restaurant, a Drive-Thru Restaurant, a Convenience Store, a Gas Station, and a Truck Stop, which includes Truck Fuel Pumps, a Truck Wash Facility, and a Car Wash Facility. The site is located adjacent to SR 86, and the general land use adjacent to the SR 86 is Entertainment Commercial, though the general area is somewhat sparsely developed. As the proposed project is located adjacent to a highway, there is intermittent heavy background noise from highway traffic.

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

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

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

- a. *Less Than Significant Impact* – The proposed project is located adjacent to SR-86 and is therefore in a high background noise environment. Short-term noise levels associated with project construction activities will not impact any sensitive receptors, as the noise generated from the SR-86 freeway would dominate the noise environment at the nearest sensitive receptors. The nearest sensitive receptor is located more than 600 feet from the boundary of the proposed project. As such, noise generated by the project would attenuate to a less than significant level, or an inaudible level by the time it reached the residences 600 feet southwest of the project site. The primary source of noise generated as a result of the operation of the Coachella Travel Centre will be vehicular traffic entering, exiting and accessing the site, maintenance equipment that may be required as needed, heating, ventilation and air conditioning units. The Coachella Land Use/Noise Compatibility Matrix (Figure XII-1) defines noise levels up to 80 CNEL within a Commercial Development-Regional, Village, District, Special (applicable to restaurants) and 70 CNEL within a Commercial Development-Regional, District (applicable to hotels and transient lodging) areas to be normally acceptable. The project is not anticipated to operate at a level greater than 70 CNEL. With no sensitive receptors nearby, the proposed project should not expose persons to or generation of noise levels in excess of established standards. Thus, based on the existing noise environment within this corridor, operation of the Coachella Travel Centre is forecast to be compatible with the surrounding land uses and is anticipated to be consistent with applicable noise standards.

Section 7.04.070 of the Coachella Municipal Code (CMC) specifically exempts noise sources associated with construction, erection, demolition, alteration, repair, addition to or improvement of any building, structure, road or improvement to realty, provided that such activities take place during daytime hours, as follows: October 1st through April 30th: Monday – Friday: 6:00 AM to 5:30 PM, May 1st through September 30th Monday – Friday: 5:00 AM to 7:00 PM, all year Saturday: 8:00 AM to 5:00 PM, all year Sunday: 8:00 AM to 5:00 PM, all year Holidays: 8:00 AM to 5:00 PM. The proposed project will limit construction to the hours outlined in the City Noise Ordinance, and therefore will not exceed City noise standards during the prohibited hours. The Project will comply with the City Municipal Code thereby preventing any significant impacts to nearby sensitive receptors. Thus, based on the existing noise circumstances within the vicinity of the project, impacts under this issue are considered less than significant. No mitigation is necessary.

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

The Federal Transit Authority (FTA) Noise and Vibration Assessment³ states that in contrast to airborne noise, ground-borne vibration is not a common environmental problem. Although the motion of the ground may be noticeable to people outside structures, without the effects associated with the shaking of a structure, the motion does not provoke the same adverse human reaction to people outside. Within structures, the effects of ground-borne vibration include noticeable movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. The FTA Assessment further states that it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. However, some common sources of vibration are trains, trucks on rough roads, and construction activities, such as blasting, pile driving, and heavy earth-moving equipment. The FTA guidelines identify a level of 80 VdB for sensitive land uses. This threshold provides a basis for determining the relative significance of potential Project related vibration impacts.

Due to the large size of the project site, and the lack of any sensitive receptors within a reasonable distance of the project site, the proposed project will not expose people to generation of excessive groundborne vibration or groundborne noise levels. During construction, certain construction activities have some potential to create vibration, but due to the size of the site and lack of sensitive receptors, any impacts are considered less than significant. Furthermore, the City of Coachella Municipal Code Section 7.04.070 places restrictions on hours of construction, which are outlined above under issue XII(a). The proposed project would comply with the construction hours established by the City's Municipal Code. Additionally, because the rubber tires and suspension systems of heavy trucks and other on-road vehicles provide vibration isolation and reduced noise, it is unusual for on-road vehicles to cause noticeable groundborne noise or vibration impact. Most problems with on-road vehicle-related noise and vibration can be directly related to a pothole, bump, expansion joint, or other discontinuity in the road surface. Smoothing a bump or filling a pothole will usually solve the problem. The proposed project would be constructed with smooth new pavement throughout the project and would not result in significant groundborne noise or vibration impacts from vehicular traffic. Thus, any impacts under this issue are considered less than significant and no mitigation is required.

- c. *Less Than Significant Impact* – Please refer to the discussion under issue XII(a) above. The long term of permanent change in the noise environment as a result of developing the Coachella Travel Centre is expected to be similar to or less than the existing background noise environment, which is dominated by traffic noise from SR 86. The primary source of noise generated as a result of the operation of the Coachella Travel Centre will be vehicular and truck traffic entering, exiting and accessing the site, maintenance equipment that may be required as needed, heating, ventilation and air conditioning units. As stated under section XII(a) above, the proposed project is not located in an area with any sensitive noise receptors nearby. Thus, the minor increase in noise levels relative to the background noise levels generated from nearby roadways and SR-86 is not expected to create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Therefore, based on the existing uses surrounding the project, the proposed project is anticipated to have a less than significant potential to substantially increase permanent ambient noise levels in the vicinity of the project above levels existing without the project.
- d. *Less Than Significant Impact* – Please refer to the discussion under issue XII(a) above. The proposed project will involve construction operations that have the potential to cause short-term noise impacts. In the short term, grading and excavation, and construction of the structures that will make up the Coachella Travel Centre will result in noise generated by dozers, pavers, air compressors, welders, generators, and other noise making equipment required to complete construction. Exterior noise-generating construction activities will be restricted to the hours identified in Section 7.04.070 of the City of Coachella Municipal Code, which exempts noise sources associated with construction, erection, demolition, alteration, repair, addition to or

³ https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

improvement of any building, structure, road or improvement to realty, provided that such activities take place during daytime hours, as follows: October 1st through April 30th: Monday – Friday: 6:00 AM to 5:30 PM, May 1st through September 30th Monday – Friday: 5:00 AM to 7:00 PM, all year Saturday: 8:00 AM to 5:00 PM, all year Sunday: 8:00 AM to 5:00 PM, all year Holidays: 8:00 AM to 5:00 PM. Construction equipment generates noise that ranges between approximately 75 and 90 dBA at a distance of 50 feet. Refer to Table XII-1, which shows construction equipment noise levels at 25, 50 and 100 feet from the noise source. However, there are no sensitive receptors within a distance from which noise generated at the Project site would be audible. Thus, the short-term noise impacts associated with Project construction activities are forecast to be less than significant through compliance with the City Municipal Code—as addressed above.

**Table XII-1
NOISE LEVELS OF CONSTRUCTION EQUIPMENT AT
25, 50 AND 100 FEET (in dBA Leq) FROM THE SOURCE**

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

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

e&f. *No Impact* – According to a review of Google Maps (1/30/2018) the Project site is not located within two miles of an airport or private airstrip. The closest airport is the Jacqueline Cochran Regional Airport located approximately 11 miles south of the project site at 56-850 Higgins Drive, Thermal, CA 92274. According to the General Plan Airport Noise Compatibility Contours (Figure XII-2), the proposed project is not located within the noise contours of the Jacqueline Cochran Regional Airport. Based on this information, the Project site is not located within an airport land use plan or, within two miles of a public or private airport and therefore, the proposed project has no potential to expose people residing or working in the Project area to excessive noise levels. Therefore, no impacts are anticipated and no mitigation is required.

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

SUBSTANTIATION

- a. *Less Than Significant Impact* – The proposed project will employ about 100 persons. It is unknown whether the new employees will be drawn from the general area or will be new residents to the project area. Relative to the total number residents of Coachella, approximately 45,407 persons in 2016 according to the Southern California Association of Governments (SCAG) Local Profile, an increase of about 100 employees as new residents represents a minor increase in the area population. According to the City of Coachella General Plan EIR, by 2020, an estimated 70,200 persons will reside in Coachella, with the population growing to 128,700 persons by 2035. The proposed Coachella Travel Centre is not anticipated to contribute to substantial growth in the area beyond that which has been planned by the City. Thus, based on the type of project (commercial), and the small increment of potential indirect population growth the project may generate, the population generation associated with project implementation will not induce substantial population growth that exceeds either local or regional projections.
- b&c. *No Impact* – No occupied residences are located on the project site; therefore, implementation of the proposed project will not displace substantial numbers of existing housing or persons, necessitating the construction of replacement housing elsewhere. No impacts will occur; therefore, no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – The City of Coachella contracts with Riverside County Fire Department for local fire protection services. The nearest fire station is Station 79 located at 1377 Sixth Street, which is less than a mile west of the project site. Development of the project will marginally increase demand for fire and emergency services within the City. Based on the location of the nearest fire station, the project site is clearly within a distance where any future calls can be responded to within 5 minutes, which is the City's target response time. Emergency access to the project site will be provided by the site entrance on Avenue 50. The Fire Department will require the proposed project site plan to ensure that it meets applicable fire standards and regulations. The proposed Project will incrementally add to the existing demand for fire protection services. Cumulative impacts are mitigated through the payment of the Development Impact Fee (DIF), which contains a Fire Facilities component. There is no identified near term need to expand facilities in a manner that could have adverse impacts on the environment. Any impacts are considered less than significant and no mitigation is required.
- b. *Less Than Significant Impact* – The City of Coachella Police Department operates a substation from the Riverside County Sheriff's Department. Local headquarters for the Police area located at 82-625 Airport Boulevard, approximately 4 miles southwest of the proposed project site. At the time that the City of Coachella General Plan EIR was compiled (2012), the Department had 36 sworn officers and two non-sworn personnel for a total of 38 positions. The proposed project will result in a marginal increase in demand for police services. Access to the site for Police protection services will be provided at the entrance to the project site on Avenue 50. The proposed project will incrementally add to the existing demand for police protection services. These incremental impacts are mitigated through the payment of the DIF, which contains a Law Enforcement component. Therefore, with payment of DIF, impacts to police protection services are considered less than significant.
- c. *Less Than Significant Impact* – The proposed project is a commercial development that is not forecast to generate any new direct demand for the area schools. The proposed project may place additional demand on school facilities, but such demand would be indirect and speculative. The Coachella Valley Unified School District (CVUSD) requires commercial developments such as the Coachella Travel Centre facility to pay a Developer Fee to support development of future facilities due to development within the City.⁴ The development impact fee mitigation program of the CVUSD

⁴ https://www.cvusd.us/uploaded/pdf_files/departments/business_services/facilities/Developer_Fees.pdf.pdf

adequately provides for mitigating the impacts of the proposed project in accordance with current state law. No other mitigation is identified or needed. Since this is a mandatory requirement, no additional mitigation measures are required to reduce school impacts of the proposed project to a less than significant level.

- d. *Less Than Significant Impact* – The proposed Project will not directly add to the existing demand on local recreational facilities. According to the City's General Plan EIR, as developments are built and constructed, developers would be subject to all provisions of the Coachella Quimby Ordinance 868 fees to set aside land or pay in-lieu fees to provide park and recreation facilities. However, at present, the City only requires residential development to pay Quimby Fees. Therefore, with no existing or planned park facilities located within the project site, and no required payment of fees, the proposed project would have a less than significant impact to parks and recreation facilities.
- e. *Less Than Significant Impact* – No impacts to other public service demands have been identified in conjunction with the proposed project. Therefore, any impacts are considered less than significant and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – The Coachella Valley Recreation and Park District (CVRPD) provides park and recreational services for the City. The nearest parks to the proposed project are Rancho De Oro Park, located about one quarter mile west of the project site at 84-600 50 Ave, and Coachella Veterans Memorial Park, located about 1000 feet west of the project site at 1500-1598 4th St, Coachella, CA 92236. Rancho Del Oro Park is 4 acres and contains the following amenities: baseball/softball, restrooms, playground, tables, open grass, soccer/football, and splash pad. Veterans Memorial Park is about 1.5 acres, and contains the following amenities: swimming pool, restrooms, playground, tables, benches, bleachers, open grass, drinking fountain, and a stage. As stated under issue XIV(d), the City of Coachella does not require commercial projects to pay Quimby Act fees dedicated to development of City parks. Additionally, the proposed project will be developed on land that is designated by the City's General Plan for Entertainment Commercial use, and is not listed in any planning documents as desirable land for future park development. Therefore, the proposed project would have a less than significant potential to physically deteriorate park or recreational facilities through increased use. No mitigation is required.
- b. *No Impact* – The proposed project consists of developing the Coachella Travel Centre, which will contain a 5 Story Hotel, a Restaurant, a Drive-Thru Restaurant, a Convenience Store, a Gas Station, and a Truck Stop, which includes Truck Fuel Pumps, a Truck Wash Facility, and a Car Wash Facility within the City of Coachella. The project will include a pool for hotel guest use only (it will not be a public pool); the impacts of developing this pool are not anticipated to be significant.

No public recreational facilities are part of the proposed project. The site is currently vacant, with no existing recreational facilities on or near the project site, and the Project site is in an area of the City that is designated for Entertainment Commercial. As a result, no other recreational facilities—existing or new—are required to serve the Project, thus any impacts under this issue are considered less than significant. No mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. TRANSPORTATION / TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

a&b. *Less Than Significant Impact* – Implementation of the proposed CoachellaGro project will not conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. The proposed project is located off of Harrison Street just south of Avenue 48. According to the City of Coachella General Plan, Avenue 50 is considered a Primary Arterial with Bicycle Facility at the entrance to the project site. The project site is also adjacent to Highway 86, which is a regional highway that extends north-south in the City of Coachella. The General Plan identifies existing traffic on Avenue 50 east of Harrison as being capable of handling about 35,714 trips per day, while the current volume on this roadway is only 7,500 and operates at a Level of Service (LOS) of C or better at present.

The proposed project is anticipated to employ about 100 persons, which would generate an average daily trip rate of 2 trips per day, which would result in about 200 trip ends per week day.

The proposed project would also generate customer trips to the various uses that make up the Coachella Travel Centre as follows:

1. Convenience Store/Gas Station/Car Wash: 1,800
2. Drive-Thru Restaurant: 300
3. Sit Down Restaurant: 500
4. Hotel: 90
5. Truck Stop: 150

Total Customer Trips = 2,840 trips.

Based on this information, the proposed project would contribute an average of 3,040 trips per day, the volume to capacity ratio would increase from 0.21 to 0.29, which would still allow this segment of roadway to operate at an LOS C or better for the foreseeable future, which is better than the City's standard of a minimum LOS D or better. It is also assumed that the traffic generated from this project site is comparable to the traffic projections outlined in the General Plan because the project will be consistent with the underlying land use of the project. The City of Coachella General Plan EIR indicates that—for the segment of roadway along Avenue 50 adjacent to the Project site—the 2035 roadway segment LOS, as forecast in the General Plan, at Avenue 50 east of SR-111 would be capable of handling 37,400 trips per day with a volume forecasted at 34,920 trips operating at an LOS E, which an unacceptable LOS. Mitigation identified in the General Plan EIR indicates that widening Avenue 50, east of SR-111, from 4 lanes to 6 lanes, would improve the roadway segment LOS from E to LOS C or better. Additionally, by 2035, the City intends to construct a signalized intersection at SR-86 and Avenue 50, which is forecast to operate at an LOS B or better for both south- and north-bound directions, which would benefit traffic flow in the area surrounding the proposed project. As such, the City of Coachella General Plan EIR states that it implements a DIF program that provides for the implementation of all of the roadway improvements identified in the Mobility Element, and thus, the proposed project will pay any applicable fees to improve the roadways that experience greater use as a result of the project. Therefore, the proposed project has a less than significant potential to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system or conflict with an applicable congestion management program. No mitigation is required.

- c. *No Impact* – According to a review of Google Maps (1/31/2018) the Project site is not located within two miles of an airport or private airstrip. The closest airport is the Jacqueline Cochran Regional Airport located approximately 11 miles south of the project site at 56-850 Higgins Drive, Thermal, CA 92274. According to the Riverside County Airport Land Use Compatibility Map of Jacqueline Cochran Regional Airport (Figure XVI-1), the proposed project is not located within the airport land use compatibility planning area. Therefore, no adverse impact to airport operations or from pattern overflights can result from implementing the proposed project.
- d&e. *Less Than Significant With Mitigation Incorporated* – The proposed project will occur entirely within the project site boundaries. However, construction activities will include curb improvements as well as installation of a driveway to provide access to the site. Large trucks delivering equipment or removing small quantities of excavated dirt or debris can enter the site without major conflicts with the flow of traffic on the roadways used to access the site. Primary access to the site will be provided by a new entrance on Avenue 50. Access to the site must comply with all City design standards, and would be reviewed by the City to ensure that inadequate design features or incompatible uses do not occur. The entrance to the site on Avenue 50 allows access to each of the entirety of the project site allowing any emergency vehicles to access any of the proposed uses that will make up the Coachella Travel Centre. Additionally, the proposed Project would be required to comply with all applicable fire code and ordinance requirements for construction and access to the site. Emergency response and evacuation procedures would be coordinated with the City, as well as the police and fire departments, resulting in less than significant impacts. However, mitigation to

ensure that access to the site does not interfere with the flow of traffic along Avenue 50 during construction shall be implemented as follows:

TRAF-1 The construction contractor will provide adequate traffic management resources, as determined by the City of Coachella. The City shall require a construction traffic management plan for work in public roads that complies with the Work Area Traffic Control Handbook, or other applicable standard, to provide adequate traffic control and safety during excavation activities. At a minimum this plan shall include how to minimize the amount of time spent on construction activities; how to minimize disruption of vehicle and alternative modes of transport traffic at all times, but particularly during periods of high traffic volumes; how to maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, flag persons or police assistance to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.

With implementation of the above mitigation measure, the project is not anticipated to either substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses or result in inadequate emergency access. No further mitigation is required.

- f. *Less Than Significant Impact* – Implementation of the proposed project will not conflict with policies or programs for alternative transportation requirements. The proposed project will not interfere with the nearby bus stop along Avenue 50. There is a Bus Line (#95) that travels along Avenue 50, with nearby stops along Harrison Street and Tyler Street. There is another Bus Line (#96) that stops at Harrison Street and Avenue 50, which is about one half mile west of the project. These stops would allow local access to the site, though generally the purpose of this project is to provide a stop for persons travelling along either the I-10 or SR-86; however, employees working at the Coachella Travel Centre would have alternative transit access to the site through the above bus stops, and through sidewalks and bike lanes along Avenue 50. Therefore, no significant adverse impacts to these alternative modes of transportation will occur and overall bus and bicycle access should be enhanced by the proposed intersection improvements. The proposed project's impacts are considered less than significant. No mitigation measures are required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial change in the significance of tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to the California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

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

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following: included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1;
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purpose of this paragraph, the lead agency shall consider the significance of the resources to a California American tribe;
- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape;
- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "non-unique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal resource if it conforms with the criteria of subdivision (a).

a&b. *Less Than Significant With Mitigation Incorporation* – The project site is located within the City of Coachella, which has been contacted pursuant to Public Resources Code section 21080.3.1 by the following California Native American tribes traditionally and cultural affiliated with the City of Coachella: Torres Martinez Desert Cahuilla Indians, Soboba Band of Luiseño Indians, Agua Caliente Band of Cahuilla Indians, Twenty-Nine Palms Band of Mission Indians, and Cabazon Band of Mission Indians. The AB 52 consultation letters were sent out to the above tribes on February 7, 2019. The Agua Caliente Band of Cahuilla Indians responded on February 26, 2019 and defers to the Cabazon Band of Mission Indians, concluding consultation efforts. The Twenty-Nine Palms Band of Mission Indians responded on February 25, 2019, requesting a copy of the cultural report,

and also noting that they elect to be a consulting party under CEQA. No other Tribes responded during the 30-day consultation period. The 29 Palms Band of Indians responded with a request for government-to-government consultation with the City of Coachella requesting a visual assessment of cultural resources that may be nominated to the National Register of Historic Places or the CA Register of Historical Resources be included in the environmental assessment. This consultation process was concluded in April 2019 after the Tribe had an opportunity to review the Cultural Resources Study and found adequacy with the standard mitigation measures included herein.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm-water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

- a. *Less Than Significant Impact* – There are two sources of wastewater that the proposed project will generate that could exceed wastewater treatment requirements of the Colorado River Regional Water Quality Control Board (RWQCB). The surface runoff from the site, nonpoint source storm water runoff, will be managed in accordance with the project's WQMP, once developed. By providing treatment of the storm water before discharge (during both construction and operation), the proposed project will not violate any requirements imposed by the Regional Board through its MS4 permit.

Municipal wastewater is delivered to the Coachella Sanitation District, which meets the waste discharge requirements imposed by the RWQCB. Wastewater will be transported and processed at the wastewater treatment plant (WTP) located in to the south on Avenue 54. The carwash will include a gray water recycling system, which will collect, treat, and filter gray water from previous

car wash cycles for use with future car wash cycles. Though the use of this gray water recycling system, little or no gray water will be discharged into the municipal sewer system for wastewater treatment. No other sources of wastewater will be produced by the proposed project. Therefore, the proposed project has a less than significant potential to exceed or violate any wastewater treatment requirements.

b,d

&e. *Less Than Significant With Mitigation Incorporated* – Implementation of the proposed project will result in a need for additional utilities and service systems that could cause significant environmental impacts, in order to maintain acceptable service levels or other performance objectives for any of the utilities and service systems including but not limited to those discussed below.

As stated under Hydrology and Water Quality above, CWA is responsible for the water supply for the City, though it pays a replenishment charge to CVWD. CWA is required to meet water quality requirements of the RWQCB. CWA assumes that future commercial uses will consume 1.78 AF/A/Y. Using this data as the basis for the quantifying the proposed project's water demand, it is anticipated that a 14.1 acre site would require a potable water supply of 25.1 acre feet per year (AFY). According to the CWA 2015 UWMP, as of 2015, commercial uses demand 905 AFY of potable water. Water demand for commercial uses is projected to increase to 1,733.9 AFY by 2020, and to 3,314.4 AFY by 2040. Additionally, approximately 80 percent of the water used for each car wash cycle will be recycled for reuse for future car wash cycles. Based on the assumed demand for potable water that that operations of the proposed project would require, the proposed Coachella Travel Centre will increase CWA's potable water demand by about 1.45%. Given the projected demand CWA provides in their 2015 UWMP, the potable water demand that operation of proposed Coachella Travel Centre is anticipated to require would be well within CWA's projections for future water demand and future availability of potable water. Through the payment of water standby charges, hookup and connection fees, the impact of implementing the proposed Project on water systems are forecast to be less than significant. A review of the CWA 2015 UWMP documents the water availability for this project and the whole of the CWA service area, when the water shortage contingency plan and demand management measures are taken into account. Based on these substantiating data, provision of domestic water supply can be accomplished without causing significant impacts on the existing water system or existing entitlements.

The Project is not subject to Senate Bill 221 requirements because it is not a commercial development of more than 500,000 square feet, and it will not increase the number of water service connections by 10 percent or more in a district with fewer than 5,000 service connections. This Project is not subject to Senate Bill 610 because it is not a large-scale development. Other than mandatory fees and installation of onsite utility infrastructure, specific mitigation is proposed below to address water demand by the project.

The Coachella Sanitary Division WTP has a capacity of 4.9 MGD. The WTP treats approximately 2.9 MGD of wastewater at present, which leaves approximately 2 MGD of capacity remaining. Based on the City of Coachella 2015 Sewer System Master Plan, Entertainment Commercial uses are estimated to have a wastewater flow rate of 600 gallons per day per acre.⁵ Therefore, the 14.1 acre site is anticipated to generate about 8,460 gallons of wastewater per day per acre. Based on this information, the proposed project is expected to require 0.17% of the WTP's 4.9 MGD capacity, which is minimal when compared to the 2 MGD of capacity remaining during daily operations. The Coachella WWTP implements all requirements of the RWQCB, State Water Resource Control Board and City of Coachella 2015 Sewer System Master Plan that protect water quality and monitor wastewater discharge. This consumption of capacity will not cause the construction of new wastewater treatment facilities. Thus, the proposed project will consume some capacity of the existing Water Reclamation Facility, but the level of adverse impact is considered less than significant.

⁵ <https://www.coachella.org/Home/ShowDocument?id=5678>

The following mitigation measure shall be implemented to reduce any impacts under the above issues to a level of less than significant:

UTL-1 *If recycled water becomes available at the project site, the Applicant shall connect to this system and utilize recycled water for landscape irrigation, and any other feasible uses of recycled water on the project site.*

With implementation of the above mitigation measures, any impacts under the above issues are considered less than significant.

- c. *Less Than Significant Impact* – Please refer to the discussion under Section IX, Hydrology and Water Quality, of this Initial Study. The project design incorporates a Stormtech Subsurface Management System that will be installed throughout the site to capture the additional increment of stormwater runoff generated by the proposed project development (see Figures 16 and 17). The main stormwater drainage infrastructure facility within the Coachella Valley is the WWRSC/CVSC, a portion of the Whitewater River that has been channelized to handle flood flows of up to 80,000 cubic feet per second and drains water into the Salton Sea. The proposed project will grade the site and direct drainage to the Stormtech Subsurface Management System that will catch onsite drainage. This system has been designed to intercept the peak 100-year flow rate from the project site. As a result, no offsite drainage system facilities will need to be expanded that could cause indirect significant adverse impacts.
- f&g. *Less Than Significant Impact* – The proposed project will generate demand for solid waste service system capacity and has a potential to contribute to potentially significant cumulative demand impacts on the solid waste system. Solid waste generation rates outlined on the CalRecycle⁶ website indicate the following solid waste generation rates for specific uses, also below are the solid waste generation rates calculated for the proposed project.

▪ Convenience Store (gas station): 0.9 lbs / 100 SF / day	=	34.2 lbs / day
▪ Sit Down Restaurant: 0.005 lbs / SF / day	=	27.77 lbs / day
▪ Drive Thru Restaurant: 17 lbs / employee / day	=	340 lbs / day
▪ Hotel: 2 lbs / room / day	=	232 lbs / day
▪ Truck Stop: 0.9 lbs / 100 SF / day	=	42.79 lbs / day
▪ Car Wash: 0.9 lbs / 100 SF / day	=	24.09 lbs / day
▪ TOTAL:	=	700.85 lbs / day

The total solid waste generated per year would equal about 127.91 tons, or after an assumed 50% diversion to be recycled per the state's solid waste diversion requirements under AB 939, the project solid waste generation will be about 63.95 tons per year. With the City's mandatory source reduction and recycling program, the proposed Project is not forecast to cause a significant adverse impact to the waste disposal system.

The City of Coachella General Plan identifies landfills that serve the planning area. The Lamb Canyon Sanitary Landfill and Badlands Landfill serve the project area. The Lamb Canyon Sanitary Landfill has a maximum permitted daily capacity of 5,500 tons per day, with a permitted capacity of 38,935,653 cubic yards (CY), with 19,242,950 CY of capacity remaining. The Badlands landfill has a maximum permitted daily capacity of 4,800 tons per day, with a permitted capacity of 34,400,000 CY, with 15,748,799 CY of capacity remaining. According to Jurisdiction Landfill Tonnage Reports from Riverside County Waste Management Department, 2,037,163 total tons of solid waste was hauled to County landfills in 2015. Therefore, the proposed project would consist of 0.0031% of solid waste generation within the County of Riverside. The City of Coachella contracts with Burrtec Waste and Recycling Services to provide regular trash, recycling, and green waste pickup. It is not anticipated that the project will generate a significant amount of construction waste, as the project

⁶ <https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>

aims to use any excavated material on site, with a neutral amount of cut and fill. However, should the proposed project need to remove any excess soils, the soil removal will be accomplished using trucks during normal working hours, with a maximum of 50 round trips per day. Furthermore, any hazardous materials collected on the project site during either construction of the Project will be transported and disposed of by a permitted and licensed hazardous materials service provider. Therefore, the Project is expected to comply with all regulations related to solid waste under federal, state, and local statutes. The Project is expected to comply with all regulations related to solid waste under federal, state, and local statutes and be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs. No further mitigation is necessary.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) 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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SUBSTANTIATION

The analysis in this Initial Study and the findings reached indicate that the proposed project can be implemented without causing any new project specific or cumulatively considerable unavoidable significant adverse environmental impacts. Mitigation is required to control potential environmental impacts of the proposed project to a less than significant impact level. The following findings are based on the detailed analysis of the Initial Study of all environmental topics and the implementation of the mitigation measures identified in the previous text and summarized following this section.

- a. *Less Than Significant With Mitigation Incorporated* – The Project has no potential to cause a significant impact any biological or cultural resources. The project has been identified as having minimal potential to degrade the quality of the natural environment, substantially reduce habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. Based on the historic disturbance of the project area, and its

current condition, the potential for impacting biological resources is low; however, mitigation has been identified in order to protect nesting birds. The cultural resources evaluation concluded that the Project footprint does not contain any known important cultural resources, but to ensure that any accidentally exposed subsurface cultural resources are properly handled, contingency mitigation measures will be implemented. With incorporation of Project mitigation measure all biology and cultural resource impacts will be reduced to a less than significant level.

- b. *Less Than Significant Impact* – The proposed project will not cause a significant impact on the environment once implemented or during construction with proper site design and mitigation. The nature of the Project as a Travel Center are such that without proper site design and mitigation, leaks and spills could occur. However, with the construction of Underground Storage Tanks for the gasoline and diesel storage that include leak detection, and a site design that ensures that no runoff from either minor fuel leaks or remnants of car wash solution, no significant long-term impacts to the environment would occur from Project operations. Based on the analysis in this Initial Study, any impacts under this issue are considered less than significant.
- c. *Less Than Significant With Mitigation Incorporated* – The Project has 10 potential impacts that are individually limited, but may be cumulatively considerable. These are: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Geology/Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Tribal Cultural Resources, and Utilities and Service Systems. The Project is not considered growth-inducing, as defined by *State CEQA Guidelines*. These issues require the implementation of mitigation measures to reduce impacts to a less than significant level and ensure that cumulative effects are not cumulatively considerable. All other environmental issues were found to have no significant impacts without implementation of mitigation. The potential cumulative environmental effects of implementing the proposed project have been determined to be less than considerable and thus, less than significant impacts.
- d. *Less Than Significant With Mitigation Incorporated* – The Project will achieve long-term community goals through the provision of growth in tax dollars generated within the City. The short-term impacts associated with the Project, which are mainly construction-related impacts, are less than significant with mitigation, and the proposed Project is compatible with long-term environmental protection. The issues of Air Quality, Geology and Soils, Hazards and Hazardous Materials, and Noise require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed project have been determined to be less than significant.

Conclusion

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

Based on the findings in this Initial Study, the City of Coachella proposes to adopt a Mitigated Negative Declaration (MND) for the Coachella Travel Centre Project. A Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) will be issued for this Project by the City. The Initial Study and NOI will be circulated for 30 days of public comment. At the end of the 30-day review period, a final MND package will be prepared and it will be reviewed by the City for possible adoption at a future City Council meeting, the date for which has yet to be determined. If you or your agency comments on the MND/NOI for this

Project, you will be notified about the meeting date in accordance with the requirements in Section 21092.5 of CEQA (statute).

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

Revised 2016

Authority: Public Resources Code sections 21083 and 21083.09

Reference: Public Resources Code sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3/ 21084.2 and 21084.3

SUMMARY OF MITIGATION MEASURES

Aesthetics

- AES-1 The proposed structures shall be painted in colors that closely match the surrounding desert landscape, so as to create continuity in the potentially obscured views. The colors chosen shall be approved by the City of Coachella's architectural review process.
- AES-2 Prior to approval of the Final Design, an analysis of potential glare from sunlight or exterior lighting to impact vehicles traveling on adjacent roadways shall be submitted to the City for review and approval. This analysis shall demonstrate that due to building orientation or exterior treatment, no significant glare may be caused that could negatively impact drivers on the local roadways or impact adjacent land uses. If potential glare impacts are identified, the building orientation, use of non-glare reflective materials or other design solutions acceptable to the City of Coachella shall be implemented to eliminate glare impacts.

Air Quality

- AQ-1 Fugitive Dust Control. The following measures shall be incorporated into Project plans and specifications for implementation:
- Apply soil stabilizers or moisten inactive areas;
 - Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day);
 - Cover all stock piles with tarps at the end of each day or as needed;
 - Provide water spray during loading and unloading of earthen materials;
 - Minimize in-out traffic from construction zone;
 - Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard; and
 - Sweep streets daily if visible soil material is carried out from the construction site.
- AQ-2 Exhaust Emissions Control
- Utilize well-tuned off-road construction equipment.
 - Establish a preference for contractors using Tier 3-rated or better heavy equipment.
 - Enforce 5-minute idling limits for both on-road trucks and off-road equipment.
- AQ-3 Exposed surfaces shall be watered at least three times per day during grading activities.

Biological Resources

- BIO-1 The State of California prohibits the "take" of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal should be conducted outside of the the State identified nesting season (Raptor nesting season is February 15 through July 31; and migratory bird nesting season is March 15 through September 1). Alternatively, the site shall be evaluated by a qualified biologist prior to the initiation of ground disturbance to determine the presence or absence of nesting birds. Active bird nests MUST be avoided during the nesting season. If an active nest is located in the project construction area it will be flagged and a 300-foot avoidance buffer placed around it. No activity shall occur within the 300-foot buffer until the young have fledged the nest.

Cultural Resources

- CUL-1 Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an

onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the City's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

- CUL-2 Should any paleontological resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection should be performed immediately by a qualified paleontologist. Responsibility for making this determination shall be with the City's onsite inspector. The paleontological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.

Geology and Soils

- GEO-1 Based upon the geotechnical investigation (Appendix 4), all of the recommended design and construction measures identified in Appendix 4 (listed on Pages 12-25) as well as the Seismic Design Parameters (Pages 10-11) shall be implemented by the Applicant into the project design. Implementation of these specific measures will address all of the identified geotechnical constraints identified at project site.
- GEO-2 Stored backfill material shall be covered with water resistant material during periods of heavy precipitation to reduce the potential for rainfall erosion of stored backfill material. If covering is not feasible, then measures such as the use of straw bales or sand bags shall be used to capture and hold eroded material on the Project site for future cleanup.
- GEO-3 All exposed, disturbed soil (trenches, stored backfill, etc.) shall be sprayed with water or soil binders twice a day, or more frequently if fugitive dust is observed migrating from the site within which the Coachella Travel Centre is being constructed.

Hazards and Hazardous Materials

- HAZ-1 All spills or leakage of petroleum products during construction activities will be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately licensed disposal or treatment facility. This measure will be incorporated into the SWPPP prepared for the Project development.

Transportation / Traffic

- TRAF-1 The construction contractor will provide adequate traffic management resources, as determined by the City of Coachella. The City shall require a construction traffic management plan for work in public roads that complies with the Work Area Traffic Control Handbook, or other applicable standard, to provide adequate traffic control and safety during excavation activities. At a minimum this plan shall include how to minimize the amount of time spent on construction activities; how to minimize disruption of vehicle and alternative modes of transport traffic at all times, but particularly during periods of high traffic volumes; how to maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, flag persons or police assistance to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.

Utilities and Service Systems

- UTL-1 If recycled water becomes available at the project site, the Applicant shall connect to this system and utilize recycled water for landscape irrigation, and any other feasible uses of recycled water on the project site.

REFERENCES

City of Coachella, General Plan Update, Adopted April 22, 2015

CRM TECH, *"Historical/Archaeological Resources Survey Report: Coachella Travel Centre Project, Assessor's Parcel Number 763-020-021, City of Coachella, Riverside County, California"* dated March 15, 2019

Giroux & Associates, "Air Quality and GHG Impact Analysis Coachella Travel Centre Project, Coachella, California" dated March 16, 2019

Goodman & Associates, Inc., "Project Specific Water Quality Management Plan for Coachella Travel Center, Avenue 50 & State Route 86" dated January 2019

Jericho Systems, Inc., "Biological Resources Assessment & Jurisdictional Delineation, Coachella Travel Centre, APN 763-020-01, Avenue 50 and Highway 86, -Coachella, CA" dated February 14, 2019

Soils Southwest, Inc., "Feasibility Study Preliminary Report of Soils and Foundation Evaluations, Proposed Commercial Development Planned Gas Station/Retail, Restaurant, Car Wash, and Hotel, SWC Avenue 50 & State Route 86, APN 763-0020-021-7" dated February 28, 2019

"State Route 86/Avenue 50 New Interchange Project, Initial Study with (Proposed) Mitigation Negative Declaration/Environmental Assessment" prepared by the State of California, Department of Transportation and the City of Coachella dated November 2018

<https://www.coachella.org/home/showdocument?id=5783>

<https://www.coachella.org/Home/ShowDocument?id=4678>

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf

https://www.cvsd.us/uploaded/pdf_files/departments/business_services/facilities/Developer_Fees.pdf.pdf

<https://www.coachella.org/Home/ShowDocument?id=5678>

<https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates>

FIGURES

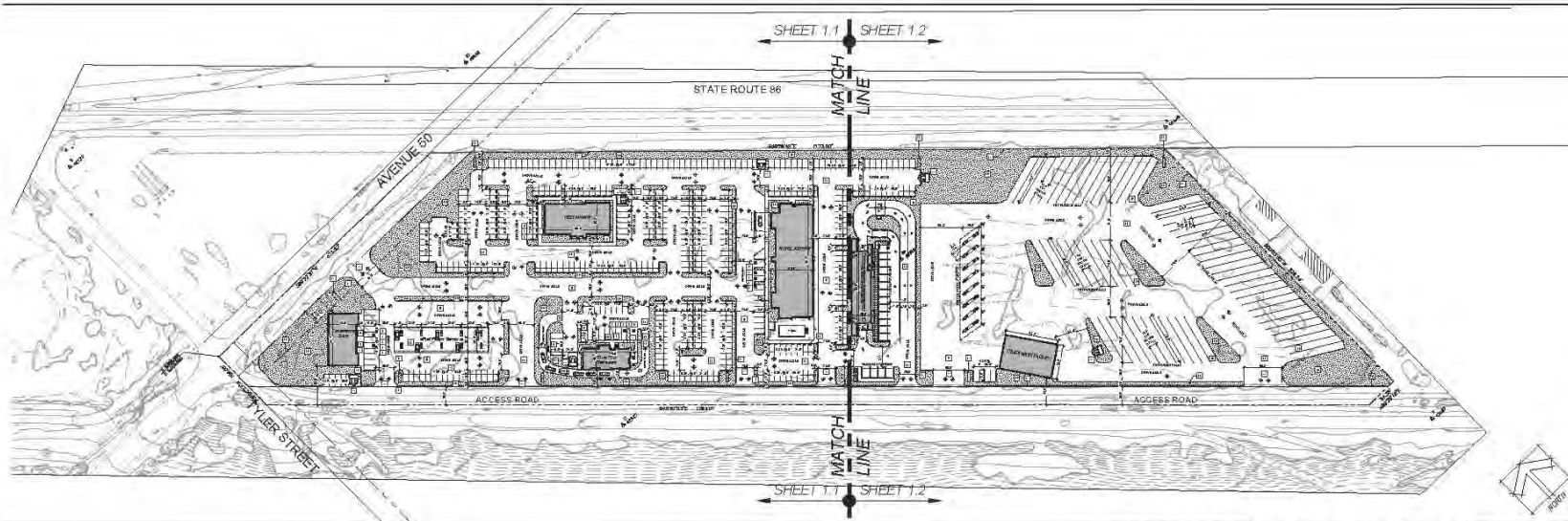
FIGURE 1
Regional Location



FIGURE 2
Site Location



FIGURE 3 Site Plan



FOR :

COACHELLA TRAVEL CENTRE

MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

[illegible]

KEYNOTES

1 ACCESSIBLE PATH OF TRAVEL FROM PUBLIC WAY -5% MAX. SLOPE	9 INDICATES VEHICLE LENGTH (8'-0")
2 ACCESSIBLE PATH OF TRAVEL -5% MAX. SLOPE	10 MONUMENT SIGNAGE
3 "UNAUTHORIZED PARKING IN ACCESSIBLE SPACES." SIGNAGE	11 DRIVE THRU ENTRANCE
4 YELLOW TRUNCATED DOMES	12 CONCRETE WHEEL STOP, TYPICAL
5 ACCESSIBLE PARKING SIGNAGE WITH "VAN ACCESSIBLE" SIGNAGE AND MINIMUM FINE SIGNAGE	13 CARWASH SELECTION BOARD
6 ACCESSIBLE PARKING SIGNAGE WITH MINIMUM FINE SIGNAGE	14 DRIVE THRU EXIT
7 ACCESSIBLE VAN PARKING STALL	15 ASPHALT PAVING TYPICAL
8 ACCESSIBLE PARKING STALL	16 CONCRETE PAVING AT CANOPY AREA
9 ACCESSIBLE ACCESS AISLE	17 PYLON SIGN
10 BUILDING ACCESSIBLE ENTRY SIGNAGE	18 LANDSCAPE TYPICAL
11 NEW TRASH ENCLOSURE	19 INDICATES TRUCK PARKING (30'-0")
12 STRIPED WALKWAY AT DRIVE AISLE	20 CHAIN LINK FENCE
13 2 BICYCLE PARKING	
14 NEW DRIVE WAY	
15 LOADING SPACE - 15' X 10'	
16 UNDERGROUND FUEL TANK LOCATION	
17 MENU BOARD	
18 :	
19 :	

VICINITY MAP

AVE 60

AVE 80

TYLER ST

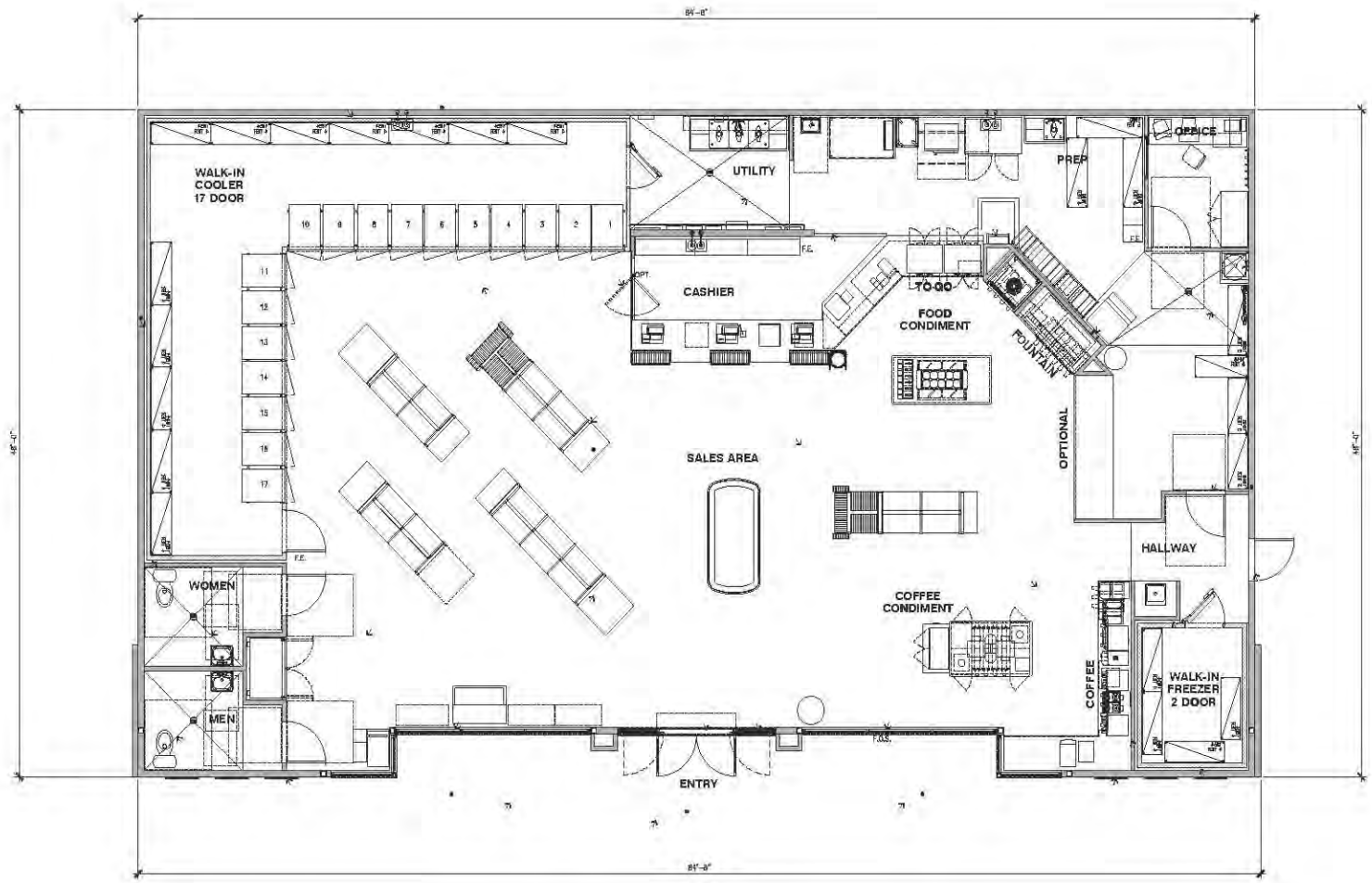
STATE ROUTE 86

CITY OF COACHELLA

PROJECT LOCATION

REVISIONS
CONTR.
BD
PLAN ORICE
SCALE
DATE
PROJECT NO.
PROJECT NAME
PROPOSED ARCHITECTURAL SITE PLAN
SHEET NO.
1.0
SHEET OF

FIGURE 4 **Convenience Store Floor Plan**



FOR :

COACHELLA TRAVEL CENTRE

MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

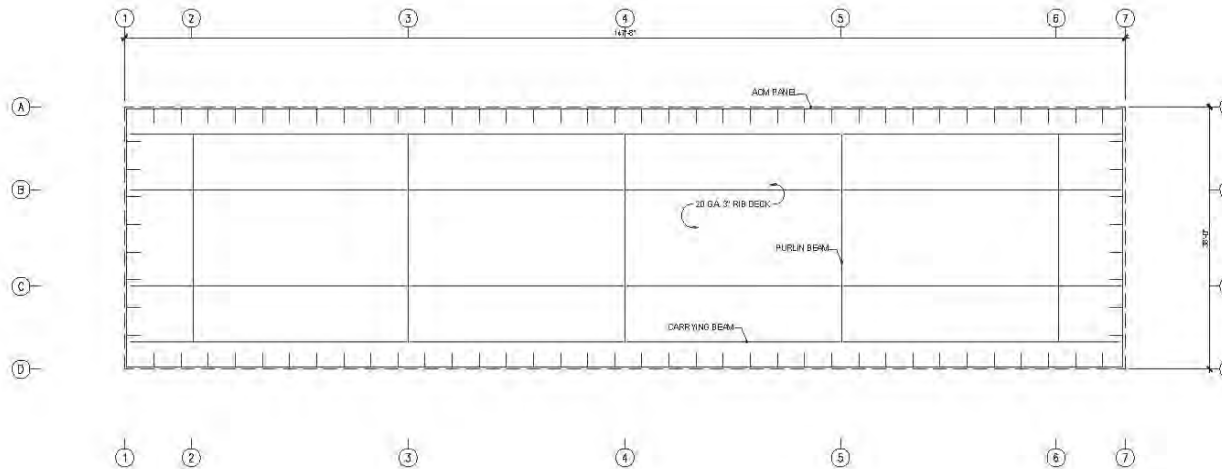
REVISIONS	
CONTR.	
RD	
PLAN DATE	
DESIGN	YM
ADD NO.	17-026
SHEET NAME	
FLOOR PLAN	
CONVENIENCE STORE	

SHEET NO. **2.0**

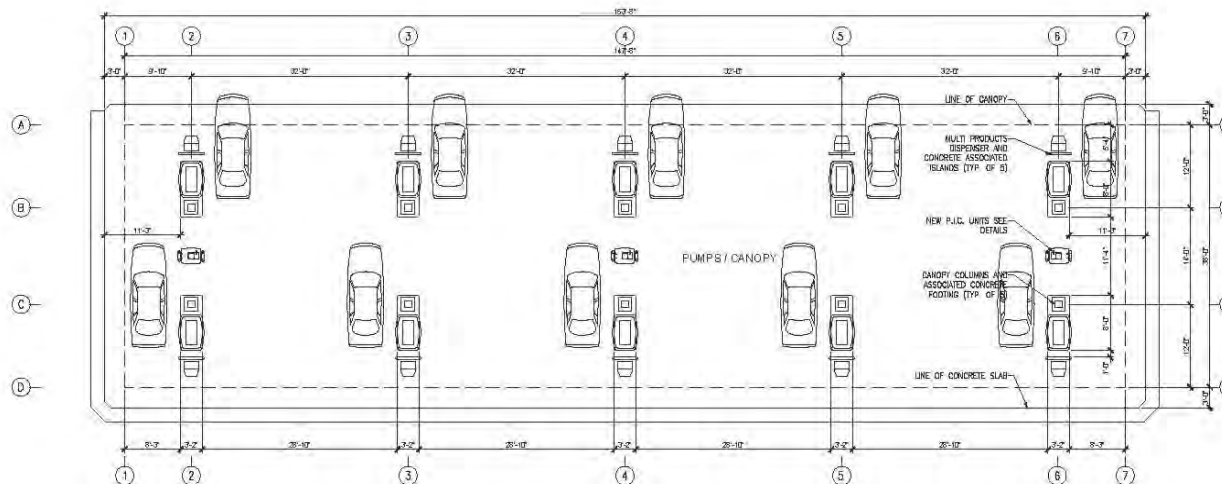
SHEET - OF -

CONVENIENCE STORE - FLOOR PLAN SCALE: 1/4" = 1'-0"

FIGURE 5
Gas Station Floor Plan



FUEL CANOPY - ROOF PLAN SCALE: 1/8"=1'-0" 2



FUEL CANOPY - FLOOR PLAN SCALE: 1/8"=1'-0" 1



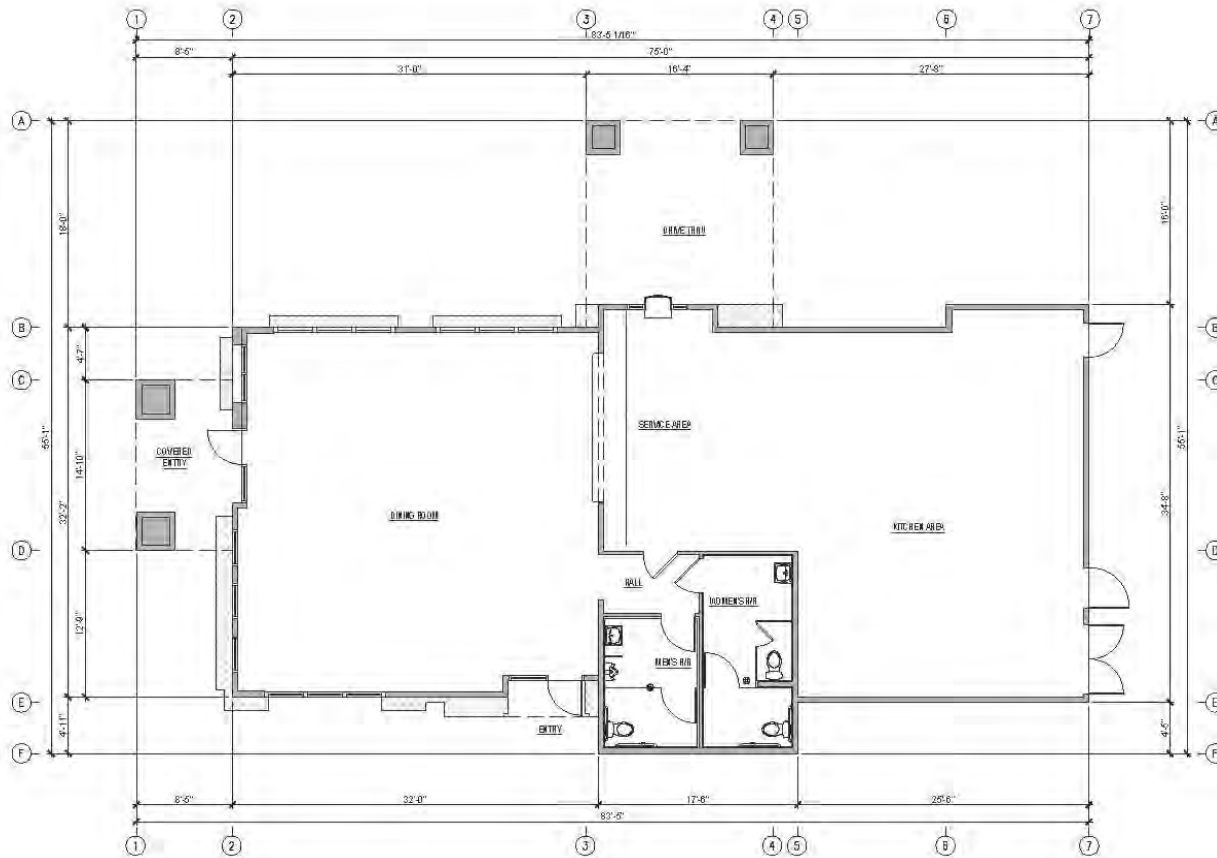
FOR :

COACHELLA TRAVEL CENTRE
MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

REVISIONS
CONTR.
DES.
PLAN CHECK
DATE: 1/11/2011
SHEET NAME:
FLOOR PLAN & ROOF PLAN
FUEL CANOPY

SHEET NO. 3.0
SHEET 1 OF 1

FIGURE 6
Drive-Thru Restaurant Floor Plan



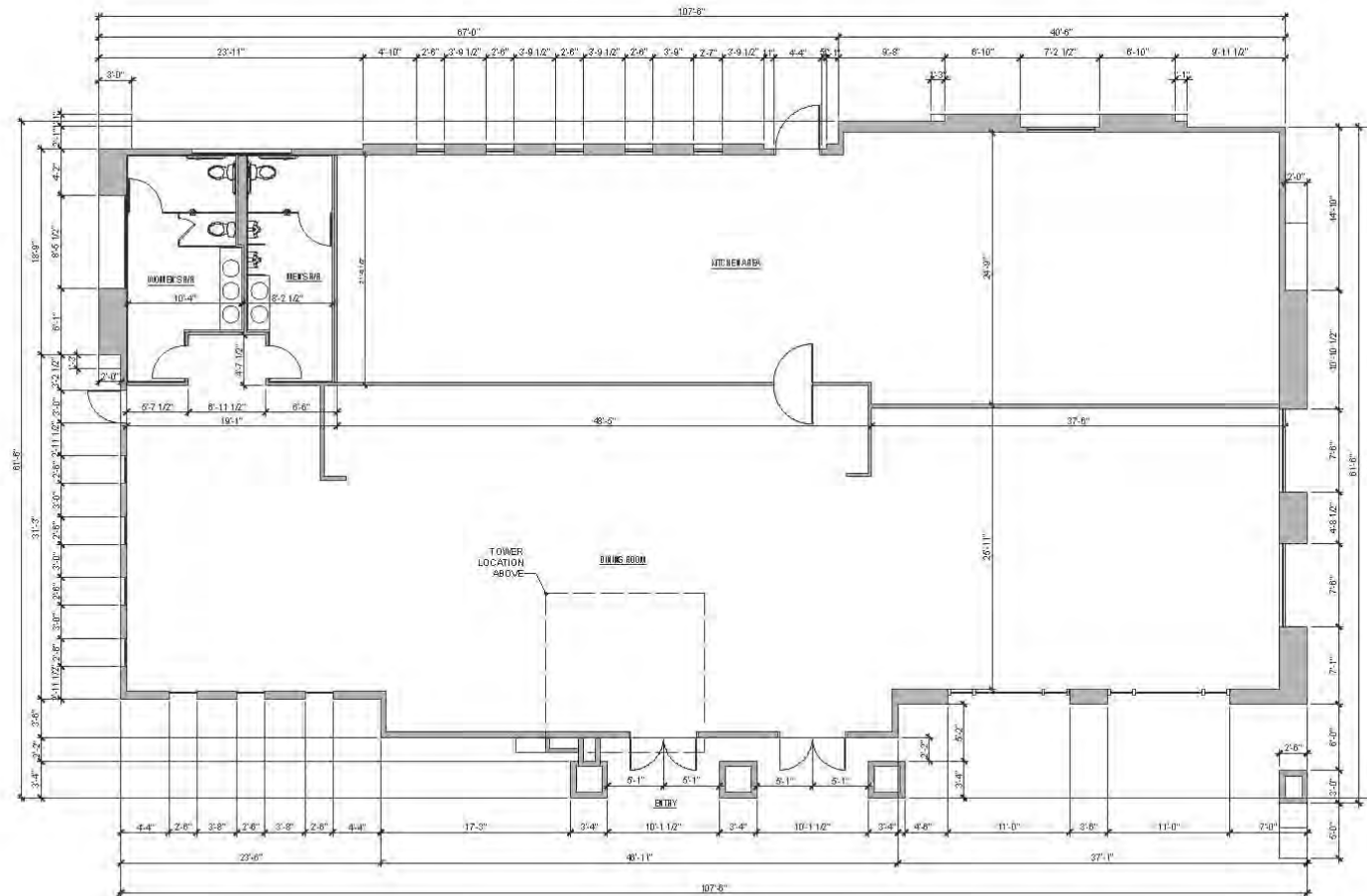
FOR :
COACHELLA TRAVEL CENTRE
MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

REVISIONS	
DATE	
BY	
PLAN CHECK	
DRAWN	VM
JOB NO.	17-028
SHEET NAME	
FLOOR PLAN	
PAST FLOOR	
SHEET NO.	
5.0	
SHEET	OF



FAST FOOD - FLOOR PLAN SCALE: 3/16"=1'-0" 7

FIGURE 7
Sit Down Restaurant Floor Plan



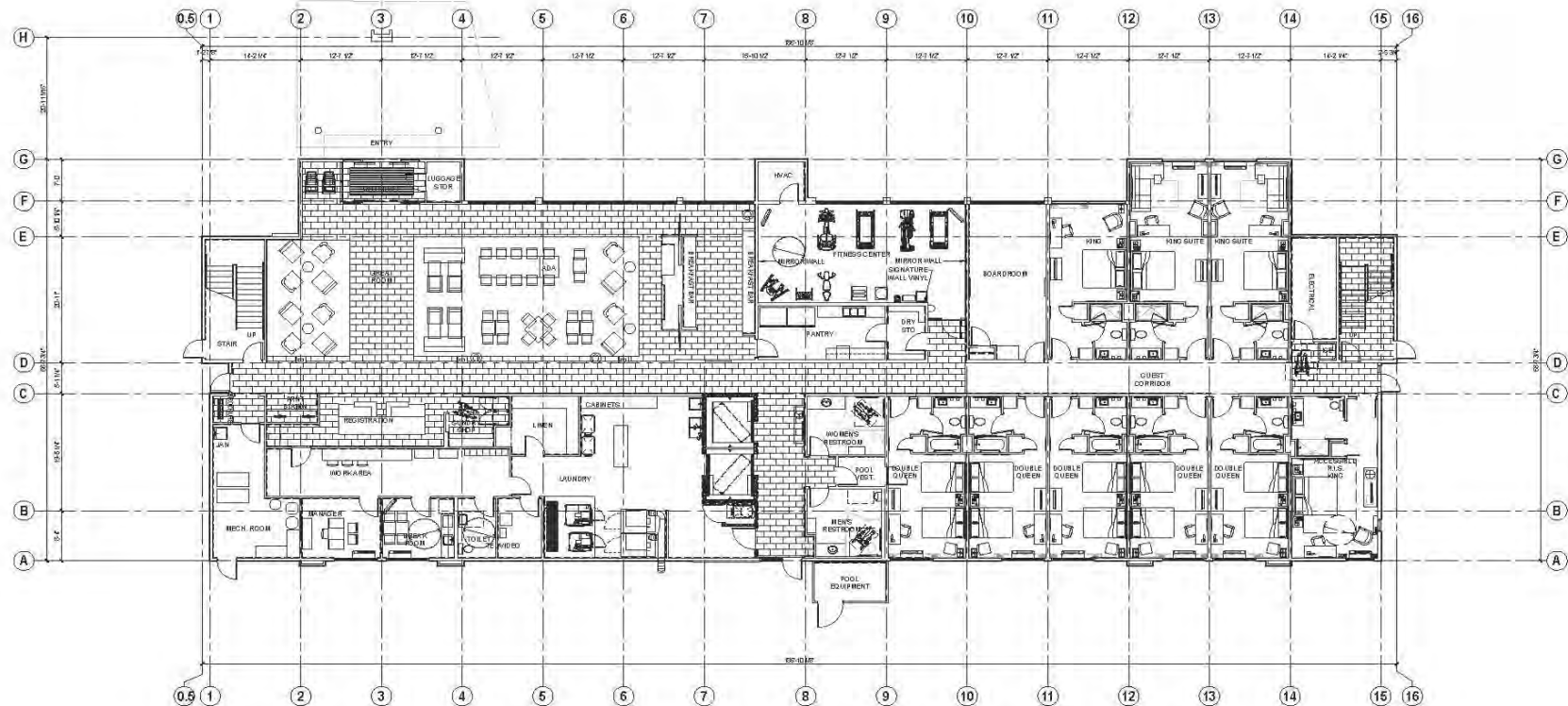
FOR :
COACHELLA TRAVEL CENTRE
MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

REVISIONS	
CONSTR.	
RD	
PLAN CHECK	
DESIGN	YM
JOB NO.	17-028
SHEET NAME	
FLOOR PLAN	
RESTAURANT	
SHEET NO.	
6.0	
SHEET	OF

RESTAURANT - FLOOR PLAN

SCALE	1
3/8"=1'-0"	

Hotel Floor Plan, 1st Floor



Metrics
DESIGN AND STUDIO

877 IOAHIO STREET, STE. 200A
REDLANDS, CALIF. 92374

FOR :

COACHELLA TRAVEL CENTRE

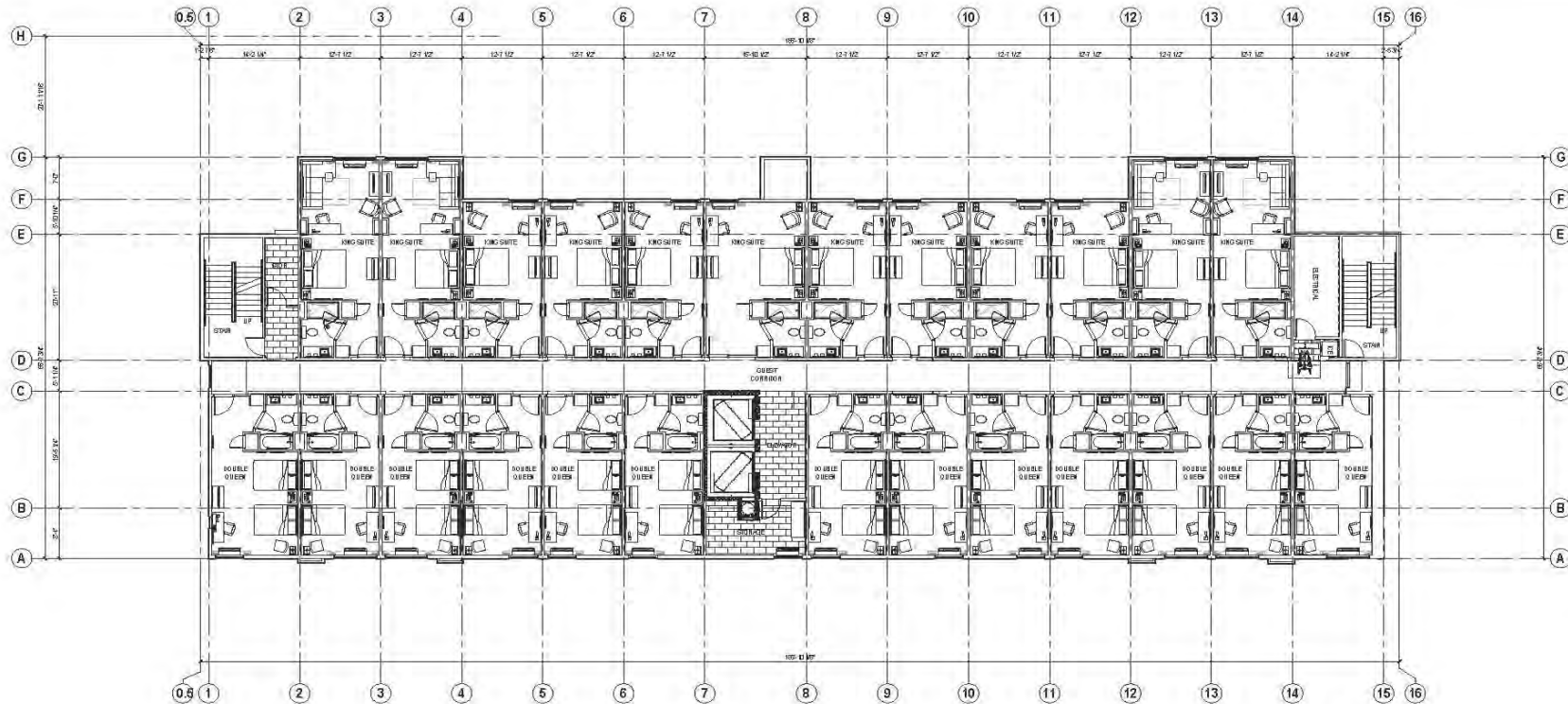
MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

REVISIONS _____
 COMMENTS _____
 BY _____
 PLAN CHECK _____
 DRAWN BY VM _____
 JOB NO. 17-028 _____
 SHEET NAME _____
 FLOOR PLAN-1ST _____
 HOTEL _____
 SHEET NO. _____

SHEET NO. 7.0
SHEET - OF -

HOTEL - 1 ST. FLOOR PLAN	SCALE: 1/8"=1'-0"	1
--------------------------	----------------------	---

FIGURE 9
Hotel Floor Plan, 2nd Floor

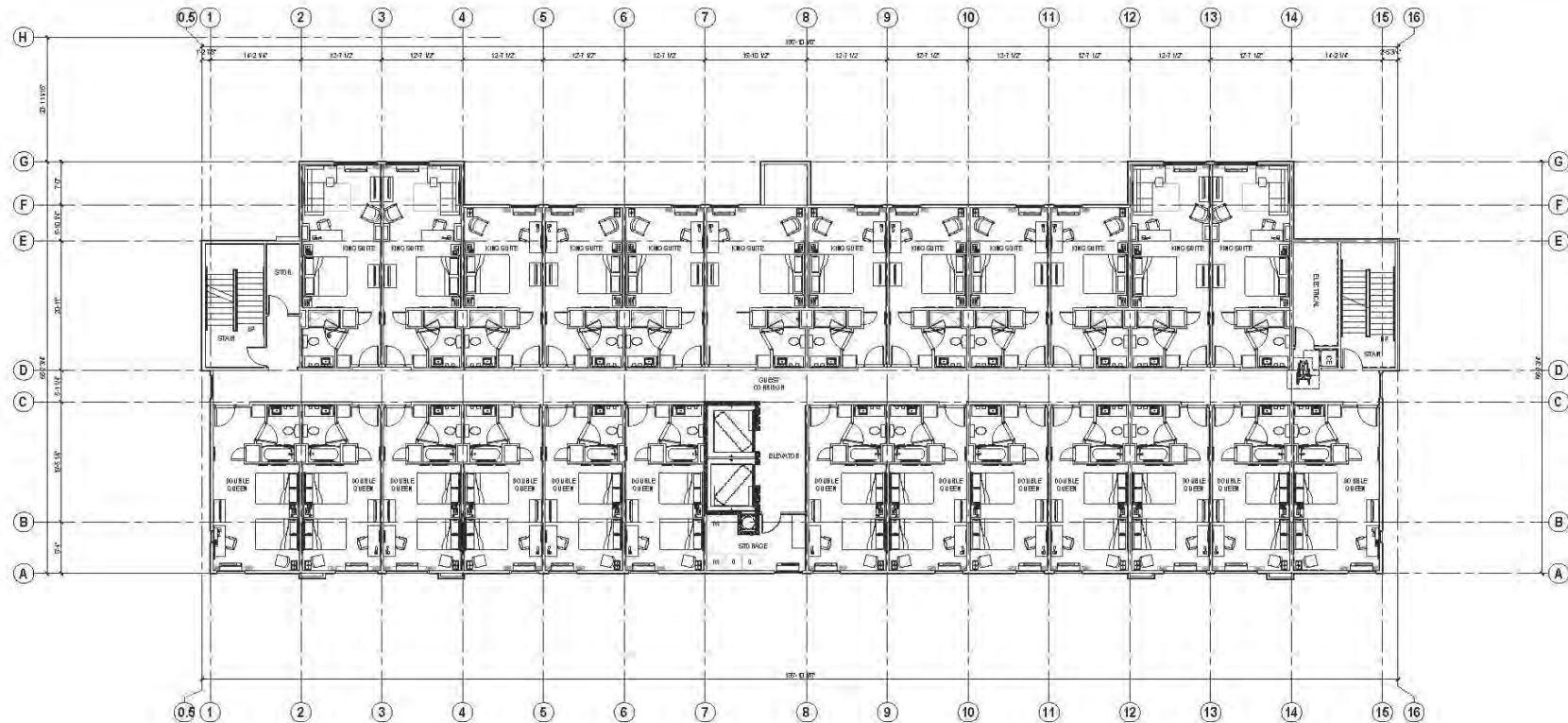


FOR :
COACHELLA TRAVEL CENTRE
MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

COVERED: _____
DATE: _____
BY: _____
PLAN CHECK: _____
DESIGN: VM
JOB NO.: 17-028
SHEET NAME: _____
FLOOR PLAN - 2 ND, HOTEL
SHEET NO.: _____
7.1
SHEET - OF -

HOTEL - 2 ND. FLOOR PLAN SCALE 1/8"=1'-0" 1

FIGURE 10
Hotel Floor Plan, 3rd Floor



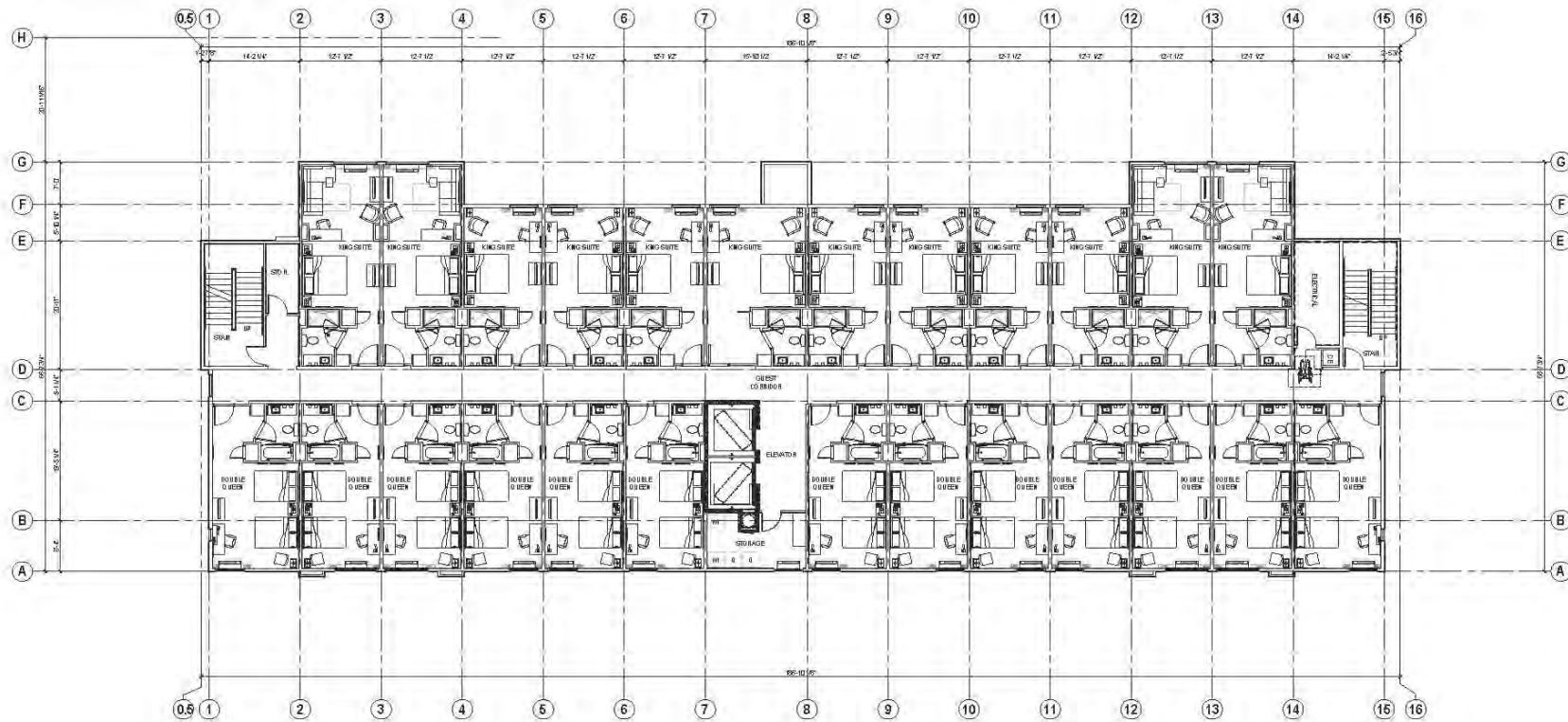
FOR :
COACHELLA TRAVEL CENTRE
MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

REVISIONS:
DATE: _____
BY: _____
PLAN CHECK: _____
DRAWN: _____
DATE: 17-02-04
SHEET NAME:
FLOOR PLAN - 3 RD HOTEL

SHEET NO. 7.2

HOTEL - 3 RD FLOOR PLAN SCALE: 1/8"=1'-0" 1

FIGURE 11
Hotel Floor Plan, 4th Floor



FOR :
COACHELLA TRAVEL CENTRE

MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

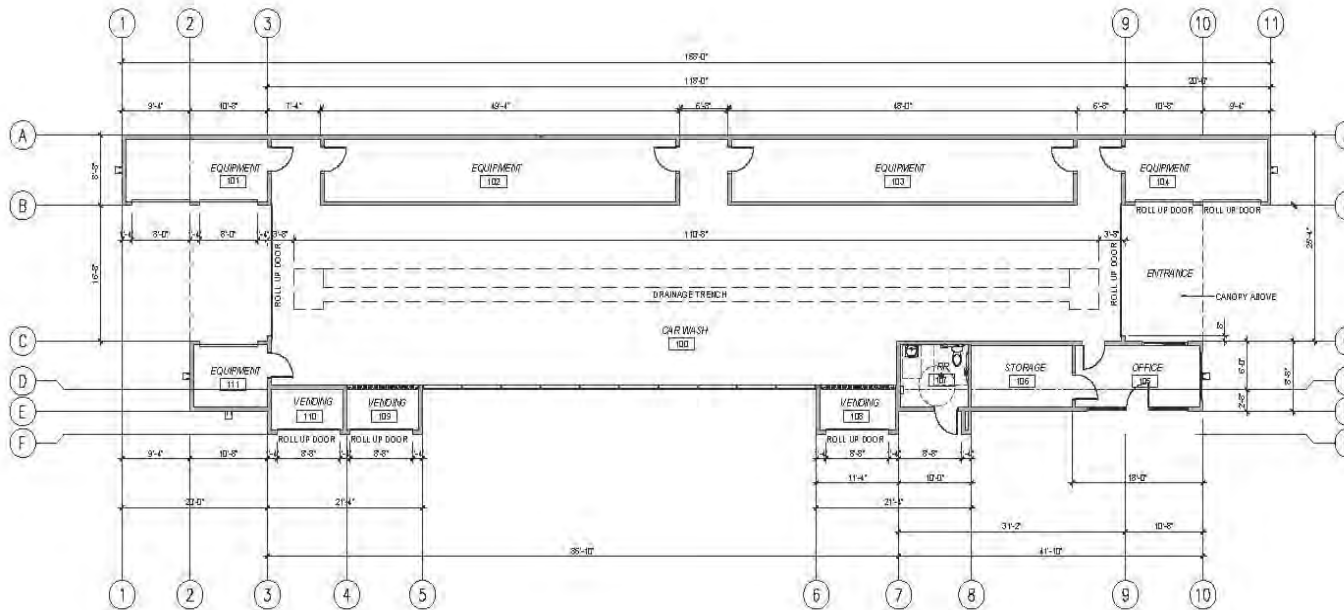
REVISIONS:
DATE: _____
BY: _____
PLAN CHECK: _____
DATE: _____
JOB NO.: 17-028
SHEET NAME:
FLOOR PLAN - 4TH
HOTEL

SHEET NO.: **7.3**
SHEET - OF -

HOTEL - 4TH FLOOR PLAN

SCALE:
1/8"=1'-0"

FIGURE 12
Carwash Floor Plan

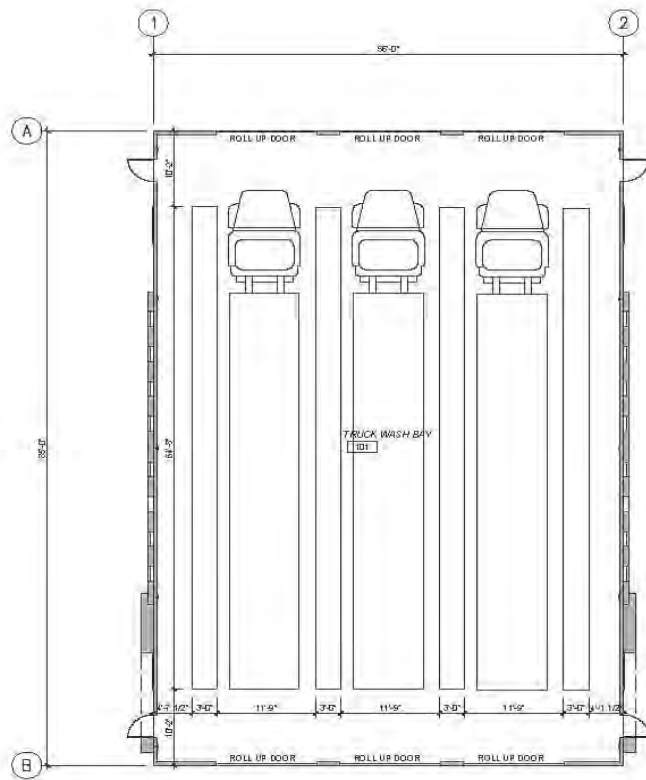


FOR :
COACHELLA TRAVEL CENTRE
MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

REVISIONS
DATE: _____
BY: _____
PLAN CHECK: _____
DESIGN: VM
JOB NO. 17-028
SHEET NAME: FLOOR PLAN CARWASH
SHEET NO. 4.0
SHEET 1 OF 1

CARWASH - FLOOR PLAN SCALE 1/8"=1'-0" 1

FIGURE 13 **Truck Wash Bay Floor Plan**



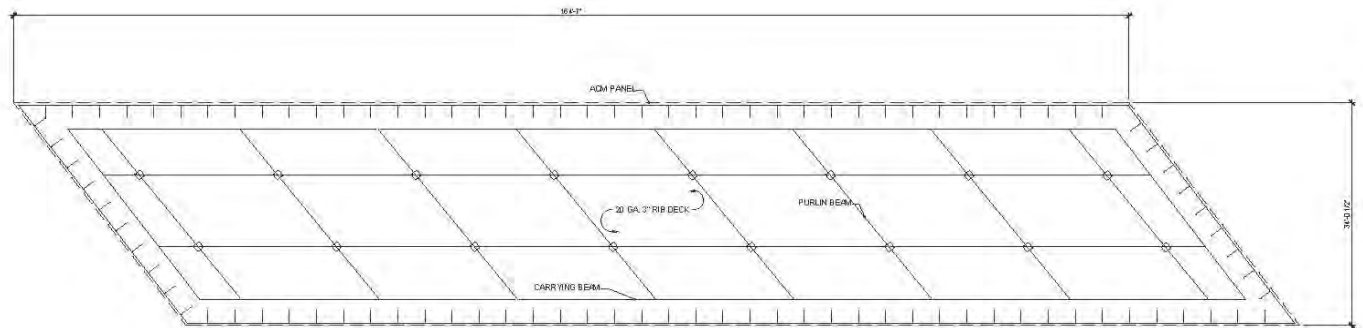
FOR :
COACHELLA TRAVEL CENTRE
 MR. ED HADDAD
 AVENUE 50 / TYLER STREET
 AVENUE 50 & STATE ROUTE 86
 COACHELLA, CA

REVISIONS	
DATE	
BY	
PLAN CHECK	
DRAWN	VM
DATE	17-02-08
SHEET NAME	
FLOOR PLAN	
TRUCK CARWASH	

SHEET NO. **9.0**
 SHEET - OF -

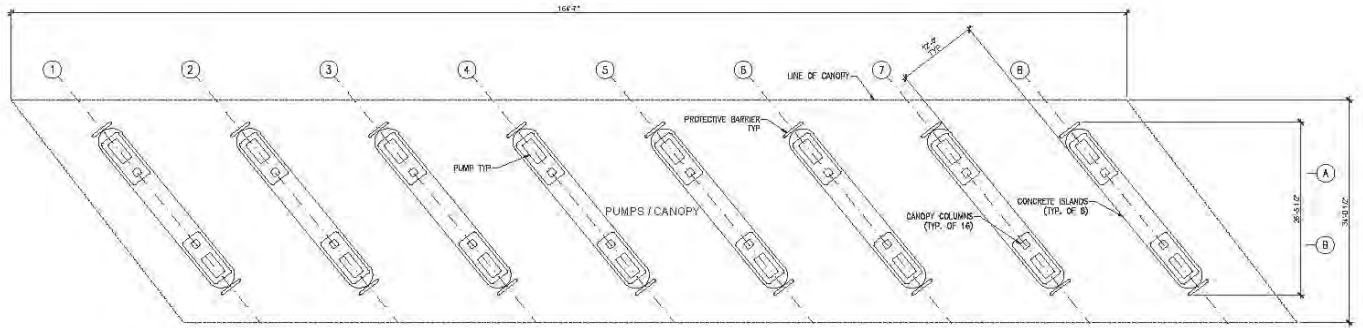
TRUCK CARWASH - FLOOR PLAN SCALE: 1/8"=1'-0" 1

FIGURE 14 **Truck Fuel Canopy Floor Plan**



FUEL CANOPY - ROOF PLAN

SCALE	2
1/8" = 1'-0"	



TRUCK FUEL CANOPY - FLOOR PLAN

SCALE	1
1/8" = 1'-0"	



FOR :

COACHELLA TRAVEL CENTRE
MR. ED HADDAD
AVENUE 50 / TYLER STREET
AVENUE 50 & STATE ROUTE 86
COACHELLA, CA

REVISIONS	
DATE	
BY	
PLAN CHECK	
DATE	1/11
JOB NO.	17-024
SHEET NAME	TRUCK FUEL CANOPY FLOOR PLAN & ROOF PLAN
SHEET NO.	

8.0

Landscape Plan



COACHELLA TRAVEL CENTER - CONCEPTUAL LANDSCAPE PLAN

AVENUE 50 / HIGHWAY 86, COACHELLA, CA 92236

Prepared For:
ED HADDAD
A.H.D. LIMITED PARTNERSHIP
422 WIER ROAD
SAN BERNARDINO, CA 92408

Project Location:
 AVENUE 50 / STATE ROUTE 86
 COACHELLA, CA 92236

LandArg, Inc.
885 S. Milliken Ave. Suite E
Ontario, CA 91761
Phone: 909-259-9428
Email: fausto@landarg.com

FIGURE 16
Preliminary Grading Plan, 1 of 2

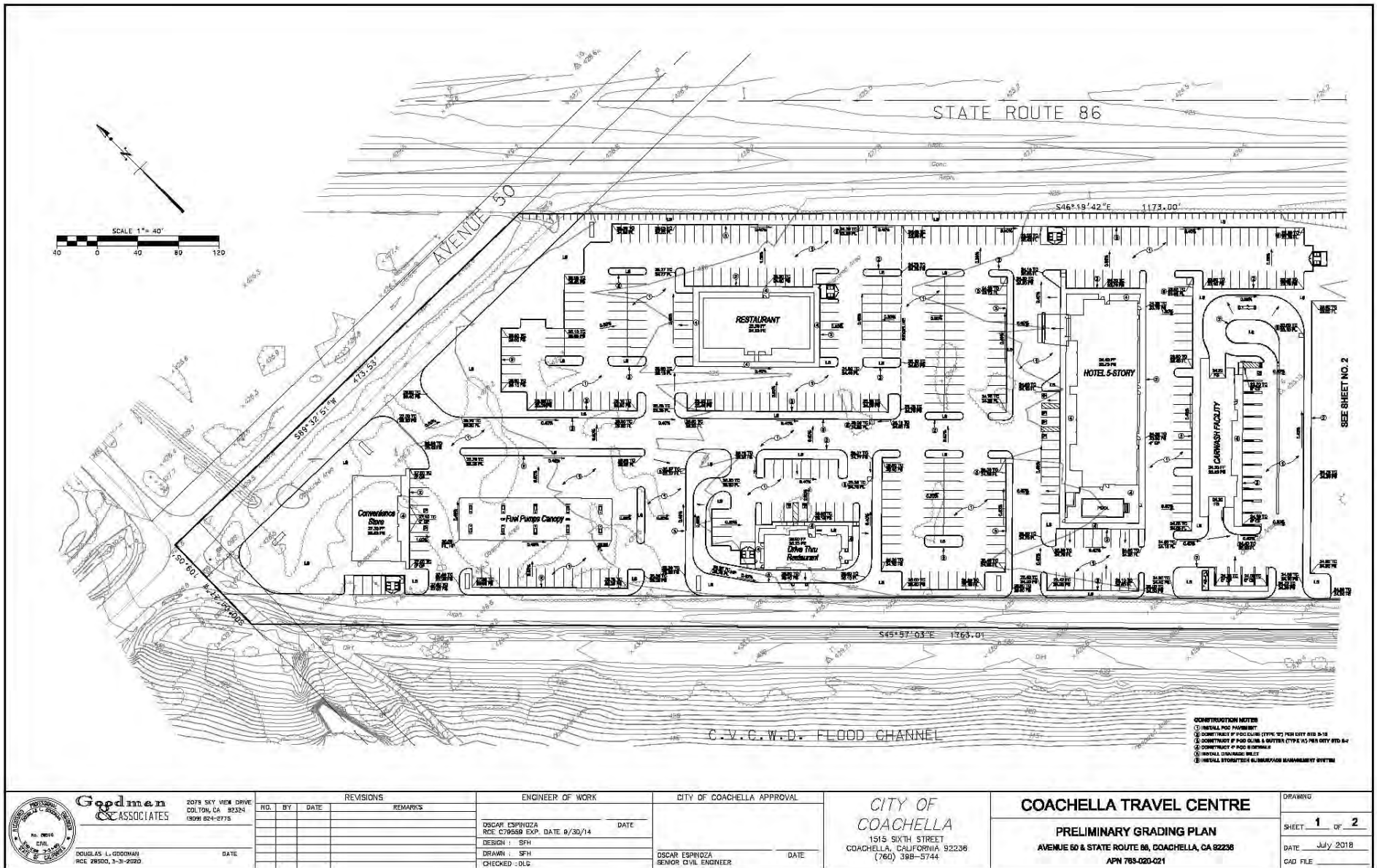
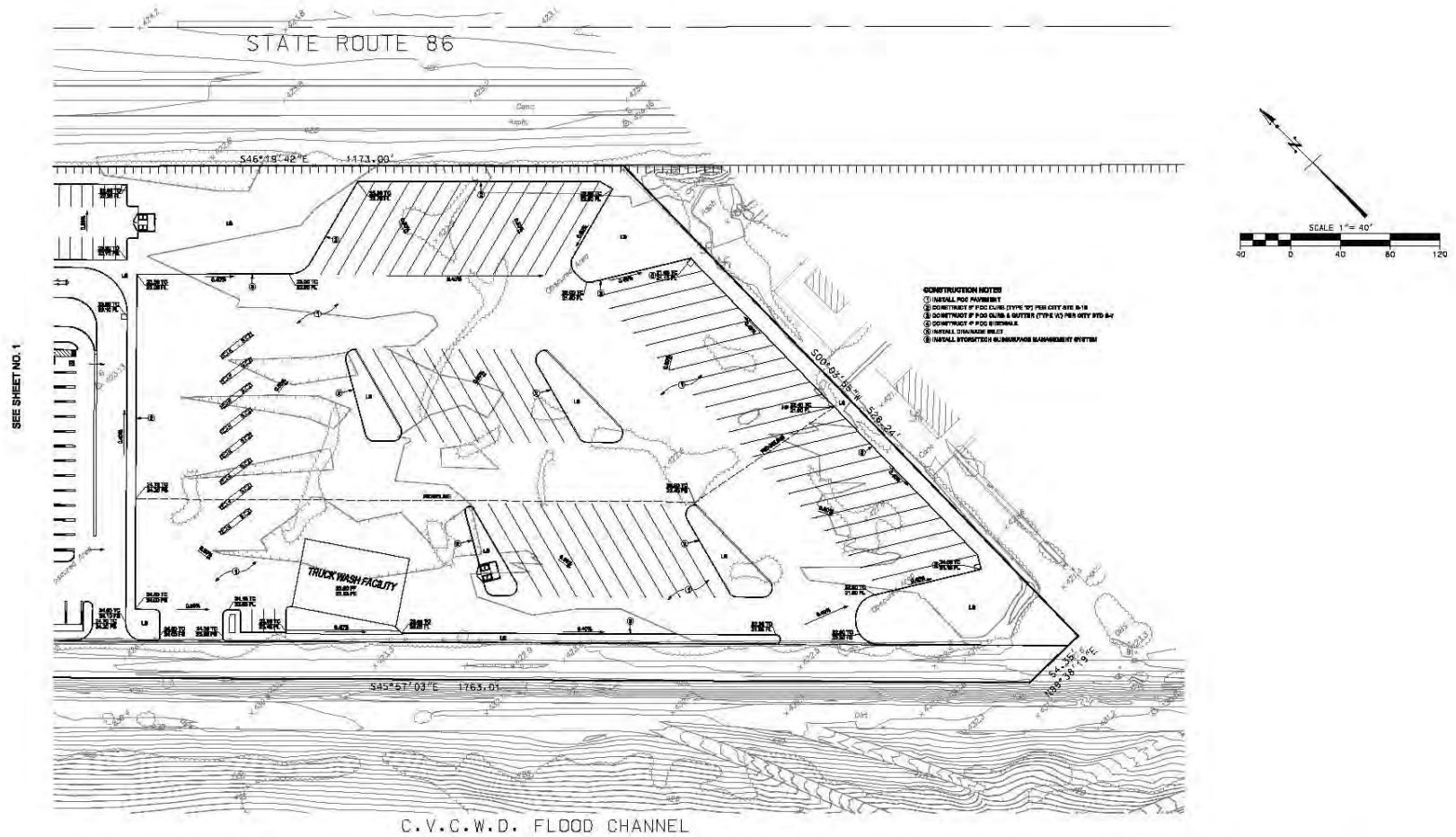
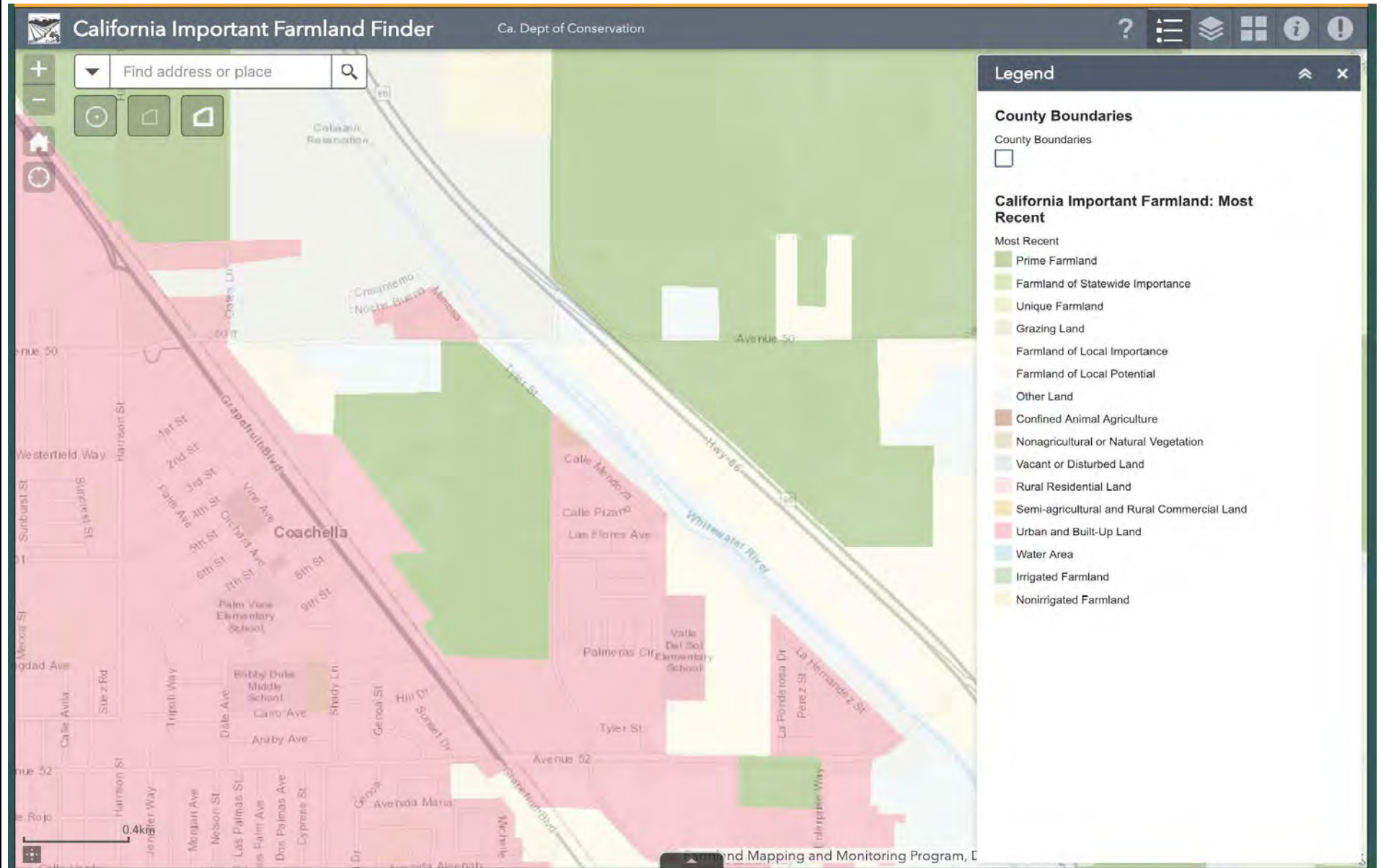


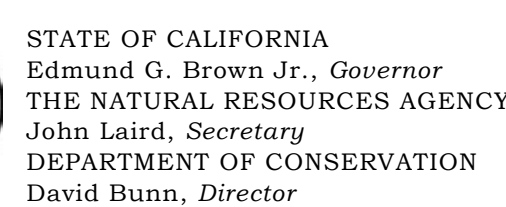
FIGURE 17
Preliminary Grading Plan, 2 of 2



<p>Goodman & Associates 2075 SKY VIEW DRIVE COLTON, CA 92324 (909) 624-2775</p>	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>BY</th> <th>DATE</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	BY	DATE	REMARKS													ENGINEER OF WORK OSCAR ESPINOZA RCE C79559 EXP. DATE 9/30/14 DESIGN: SPH DRAWN: SPH CHECKED: DLS	CITY OF COACHELLA APPROVAL OSCAR ESPINOZA SENIOR CIVIL ENGINEER	CITY OF COACHELLA 1515 SIXTH STREET COACHELLA, CALIFORNIA 92236 (760) 398-5744	COACHELLA TRAVEL CENTRE PRELIMINARY GRADING PLAN AVENUE 60 & STATE ROUTE 86, COACHELLA, CA 92236 APN 783-020-021	DRAWING SHEET 2 OF 2 DATE July 2018 CAD FILE
	NO.	BY	DATE	REMARKS																			
DOUGLAS L. GOODMAN RCE 26500, 3-3-2020	DATE																						

**FIGURE II-1
Farmland Map**



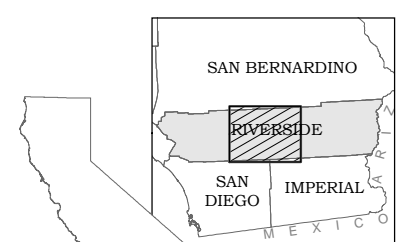


SHEET 2 OF 3

FIGURE II-2



1 square mile = 640 acres



The California Land Conservation Act of 1965 commonly referred to as the Williamson Act - is the State's primary program for the conservation of private land in agricultural and open space use. It is a voluntary, locally administered program that allows local governments to enter into long-term contracts with landowners on their own terms via contracts between individual landowners and local governments. For more information on the Williamson Act please contact:

Department of Conservation
Division of Land Resource Protection
801 Street, MS214-15
Sacramento, CA 95814

Phone (916) 224-0850;
web page: www.conservacion.ca.gov
email: drpl@conservation.ca.gov

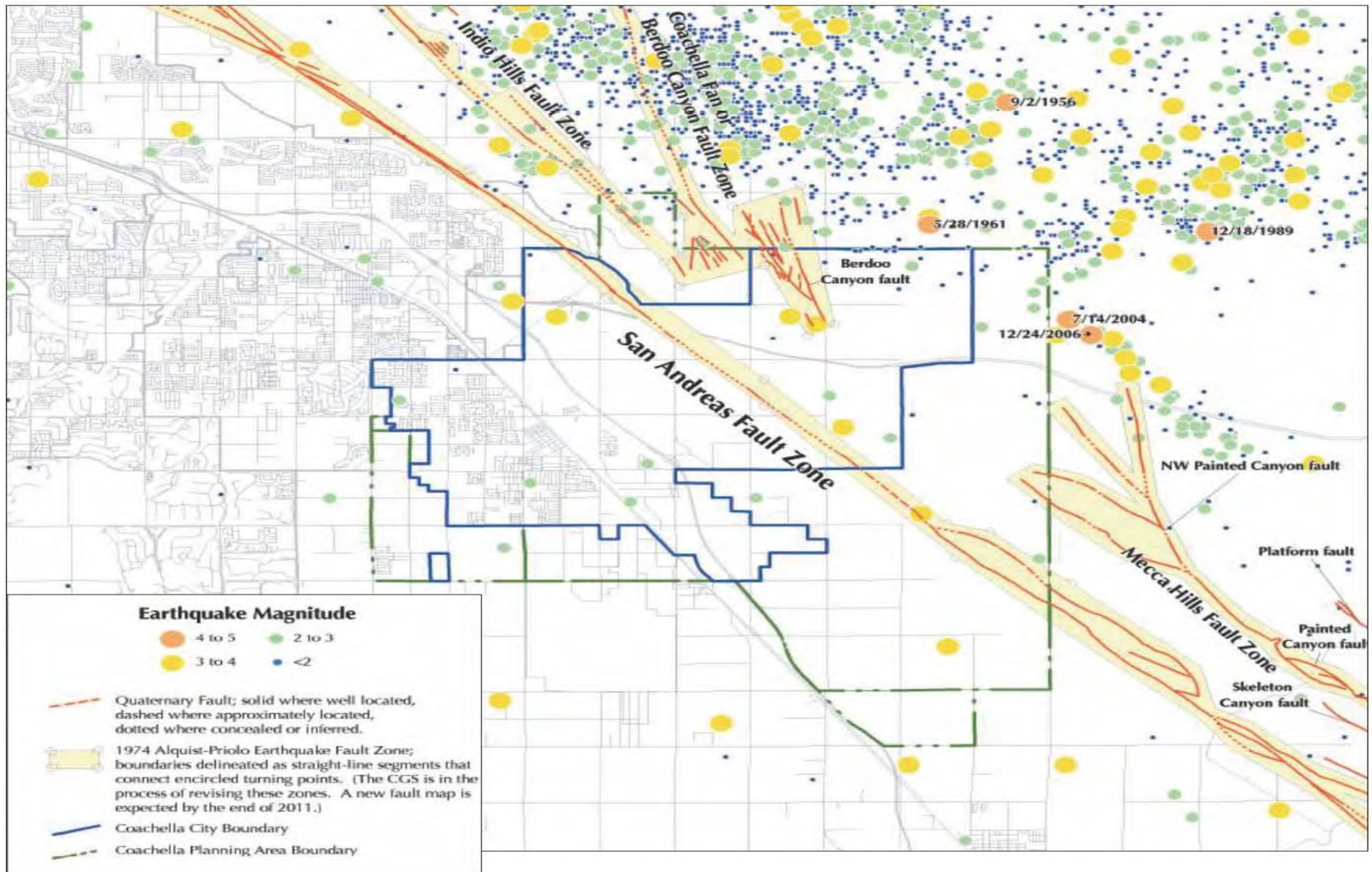
Maps depicting Williamson Act enrollment are produced in cooperation with the participating counties and the California Department of Conservation's Division of Land Resource Protection using Geographic Information Systems. The information contained in this map is derived from the most current data available. If you wish to obtain more information or to request data information regarding the status of specific contracted lands, contact the county assessor or planning agency office as the status of enrolled lands may change throughout the year.

Cultural base information was derived from public domain data sets, based upon design of the U.S. Geological Survey, with updates generated by digitizing over current imagery.

The Department of Conservation makes no warranties as to suitability of this map for any particular purpose.

Copyright: California Department of Conservation, Division of Land Resource Protection, 2016.

FIGURE VI-1
Fault and Historical (1800 - 2011) Seismicity Map



Map prepared by: Earth Consultants International

FIGURE VI-2

Earthquake Zones of Required Investigation

Indio Quadrangle

California Geological Survey

This Map Shows Alquist-Priolo Earthquake Fault Zones.
Seismic Hazard Zones Have Not Been Prepared for the Indio Quadrangle.

This map shows the location of Alquist-Priolo (AP) Earthquake Fault Zones referred to here as Earthquake Zones of Required Investigation. The Geographic Information System (GIS) digital files of these regulatory zones released by the California Geological Survey (CGS) are the "Official Maps." GIS files are available at the CGS website <http://maps.conservation.ca.gov/cgs/informationwarehouse/>. These zones will assist cities and counties in fulfilling their responsibilities for protecting the public from the effects of surface fault rupture and earthquake-triggered ground failure as required by the AP Earthquake Fault Zoning Act (Public Resources Code Sections 2621-2630) and the Seismic Hazards Mapping Act (Public Resources Code Sections 2690-2699.6). For

information regarding the general approach and recommended methods for preparing these zones, see CGS Special Publication 42, *Fault-Rupture Hazard Zones in California*, and Special Publication 118, *Recommended Criteria for Delineating Seismic Hazard Zones in California*. For information regarding the scope and recommended methods to be used in conducting required site investigations refer to CGS Special Publication 42, *Appendix C Guidelines for Evaluating the Hazard of Surface Rupture*, and CGS Special Publication 117A, *Guidelines for Evaluating and Mitigating Seismic Hazards in California*. For a general description of the AP and Seismic Hazards Mapping acts, the zoning programs, and related information, please refer to the website at www.conservation.ca.gov/cgs/.

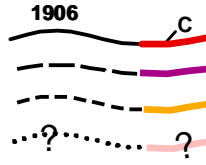
MAP EXPLANATION

ALQUIST-PRIOLO EARTHQUAKE FAULT ZONES

Earthquake Fault Zones
Zone boundaries are delineated by straight-line segments; the boundaries define the zone encompassing active faults that constitute a potential hazard to structures from surface faulting or fault creep such that avoidance as described in Public Resources Code Section 2621.5(a) would be required.



Active Fault Traces
Faults considered to have been active during Holocene time and to have potential for surface rupture: Solid Line in Black or Red where Accurately Located; Long Dash in Black or Solid Line in Purple where Approximately Located; Short Dash in Black or Solid Line in Orange where Inferred; Dotted Line in Black or Solid Line in Rose where Concealed; Query (?) indicates additional uncertainty. Evidence of historic offset indicated by year of earthquake, associated event or C for displacement caused by fault creep.



ADDITIONAL INFORMATION

For additional information on the zones of required investigation presented on this map, the data and methodology used to prepare them, and additional references consulted, please refer to the following:

San Andreas, Skeleton Canyon, Indio Hills, Northwest Painted Canyon, Coachella Fan, Berdoo Canyon, and Related Faults, Riverside County, California.
California Geological Survey, Fault Evaluation Report FER-250.
<http://gms.conservation.ca.gov/SHP/EZRIM/Reports/FER/250/>

For more information on the Alquist-Priolo Earthquake Fault Zoning Act please refer to:
<http://www.conservation.ca.gov/cgs/rghm/ap/Pages/main.aspx>

Click the link below to learn how to take greater advantage of the GeoPDF format of this map after downloading.
<http://gmw.conservation.ca.gov/SHP/EZRIM/Docs/TerragoUserGuide.pdf>

INDIO QUADRANGLE

EARTHQUAKE FAULT ZONES

Delineated in compliance with Chapter 7.5
Division 2 of the California Public Resources Code
(Alquist-Priolo Earthquake Fault Zoning Act)

REVISED OFFICIAL MAP

Released: December 4, 2015

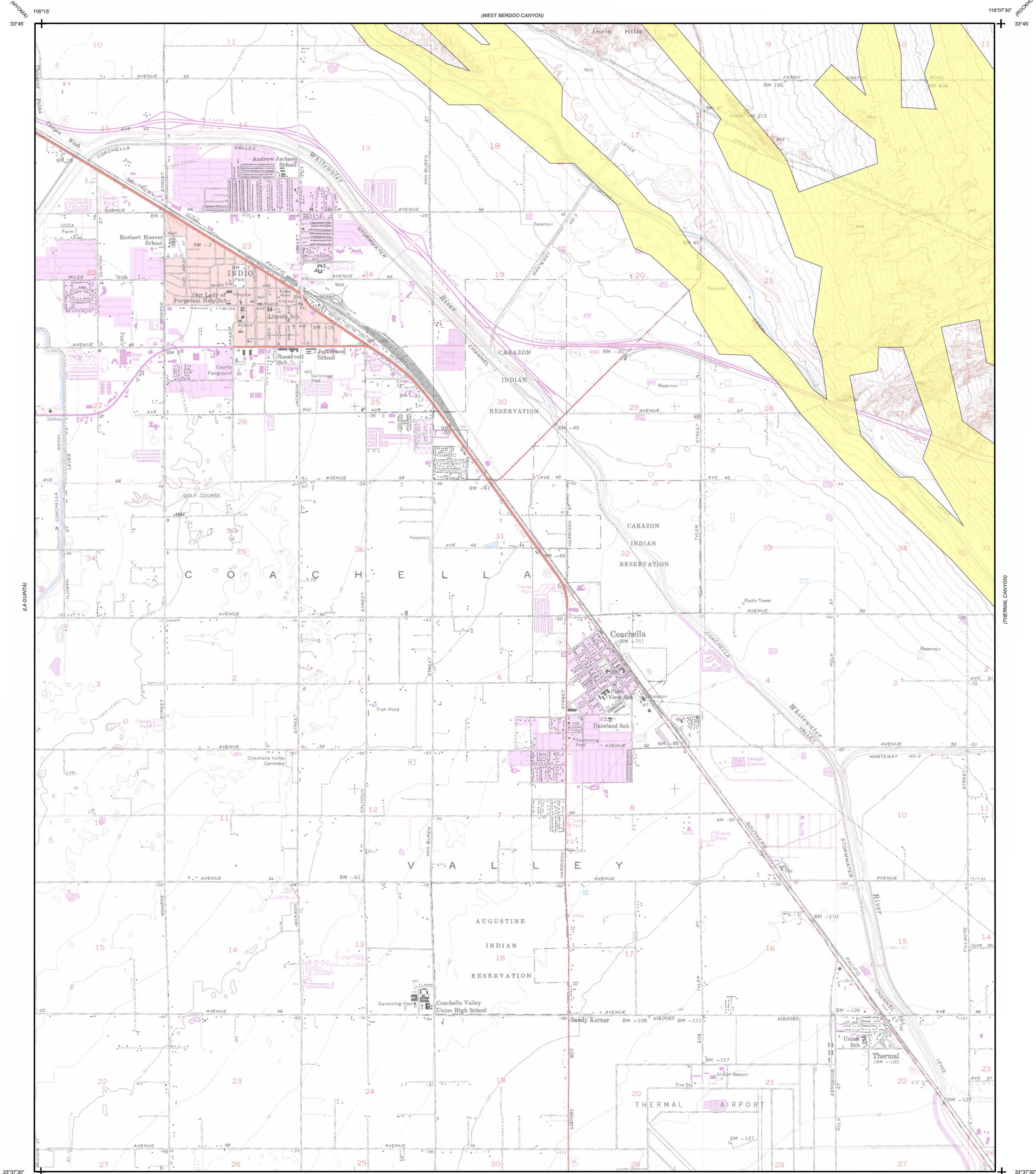
John G. Parrish
STATE GEOLOGIST



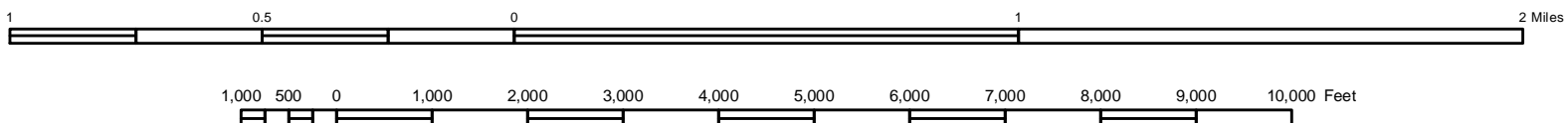
IMPORTANT

PLEASE NOTE THE FOLLOWING FOR ZONES SHOWN ON THIS MAP

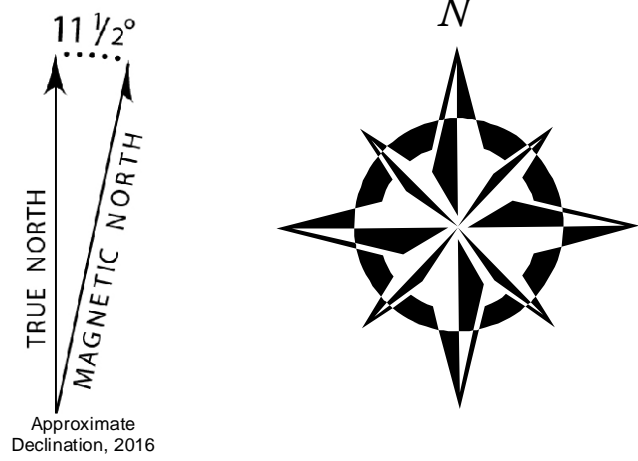
- This map may not show all faults that have the potential for surface fault rupture, either within the Earthquake Fault Zones or outside their boundaries. Additionally, this map may not show all areas that have the potential for liquefaction, landsliding, strong earthquake ground shaking or other earthquake and geologic hazards. Also, a single earthquake capable of causing liquefaction or triggering landslide failure will not uniformly affect the entire area zoned.
- Faults shown are the basis for establishing the boundaries of the Earthquake Fault Zones.
- The identification and location of these faults are based on the best available data. However, the quality of data used is varied. Traces have been depicted as accurately as possible at a map scale of 1:24,000.
- Liquefaction zones may also contain areas susceptible to the effects of earthquake-induced landslides. This situation typically exists at or near the toes of existing landslides, downslope from rockfall or debris flow source areas, or adjacent to steep stream banks.
- Landslide zones on this map were determined, in part, by adapting methods first developed by the U.S. Geological Survey (USGS). Landslide hazard maps prepared by the USGS typically use experimental approaches to assess earthquake-induced and other types of landslide hazards. Although aspects of these new methodologies may be incorporated in future CGS seismic hazard zone maps, USGS maps should not be used as substitutes for these Official SEISMIC HAZARD ZONES maps.
- USGS base map standards provide that 80 percent of cultural features be located within 40 feet (horizontal accuracy) at the scale of this map. The identification and location of liquefaction and earthquake-induced landslide zones are based on available data. However, the quality of data used is varied. The zone boundaries depicted have been drawn as accurately as possible at this scale.
- Information on this map is not sufficient to serve as a substitute for the geologic and geotechnical site investigations required under Chapters 7.5 and 7.8 of Division 2 of the California Public Resources Code.
- Seismic Hazard Zones identified on this map may include developed land where delineated hazards have already been mitigated to city or county standards. Check with your local building/planning department for information regarding the location of such mitigated areas.
- DISCLAIMER: The State of California and the Department of Conservation make no representations or warranties regarding the accuracy of the data from which these maps were derived. Neither the State nor the Department shall be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.



Scale 1: 24000



Contour Interval 10 Feet



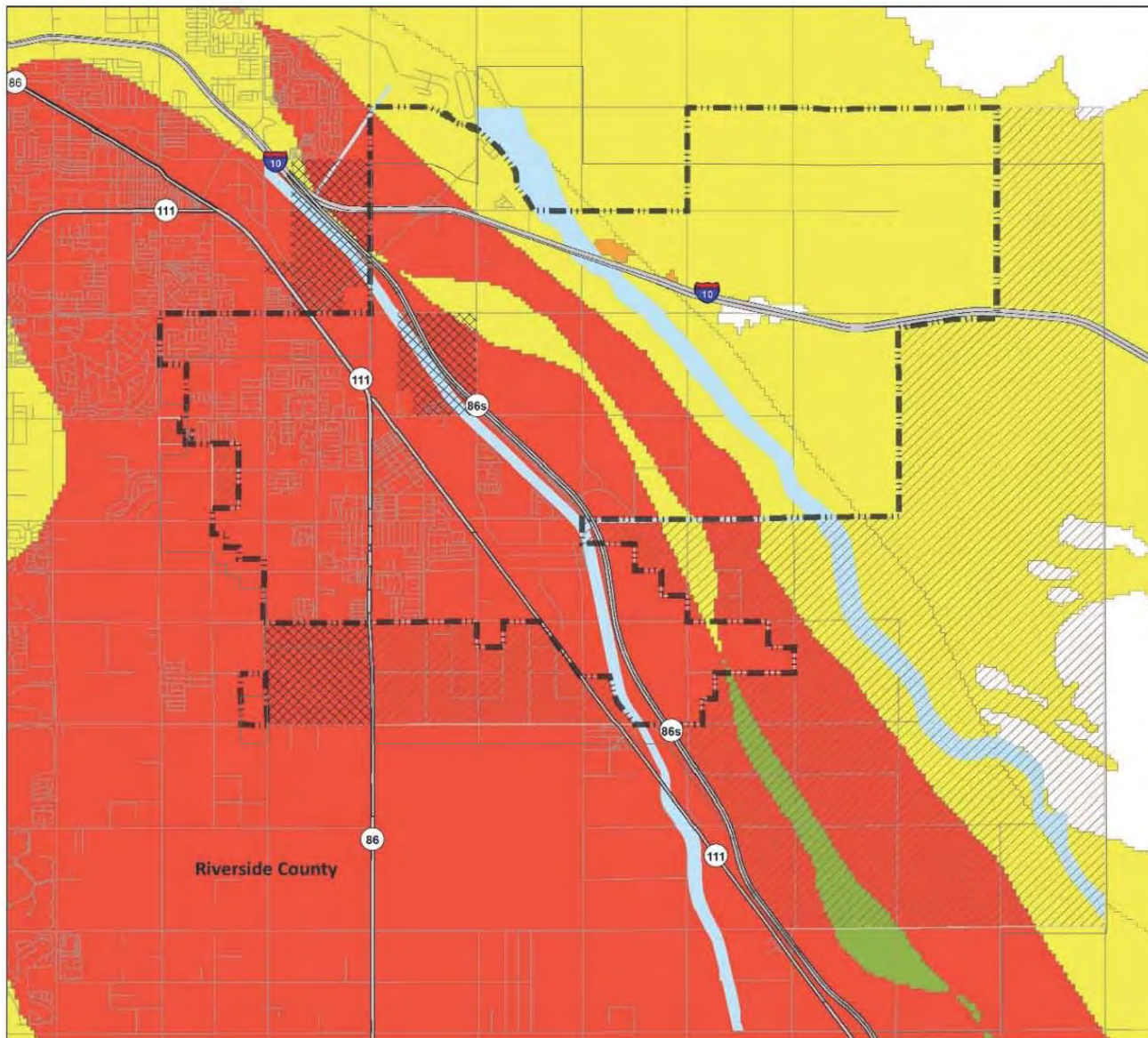
California Geological Survey
Geologic Information and Publications
801 K Street, MS 14-34
Sacramento, CA 95814-3532
www.conservation.ca.gov/cgs



Myoma	West Berdoo Canyon	Rockhouse Canyon
La Quinta	Indio	Thermal Canyon
Marinez Mountain	Valerie	Mecca



FIGURE VI-3
Liquefaction Risk



City of Coachella
General Plan Update 2035
Environmental Impact Report

Liquefaction Risk

Legend

- Coachella City Limits
- Tribal Land
- General Plan Planning Area

Liquefaction Susceptibility

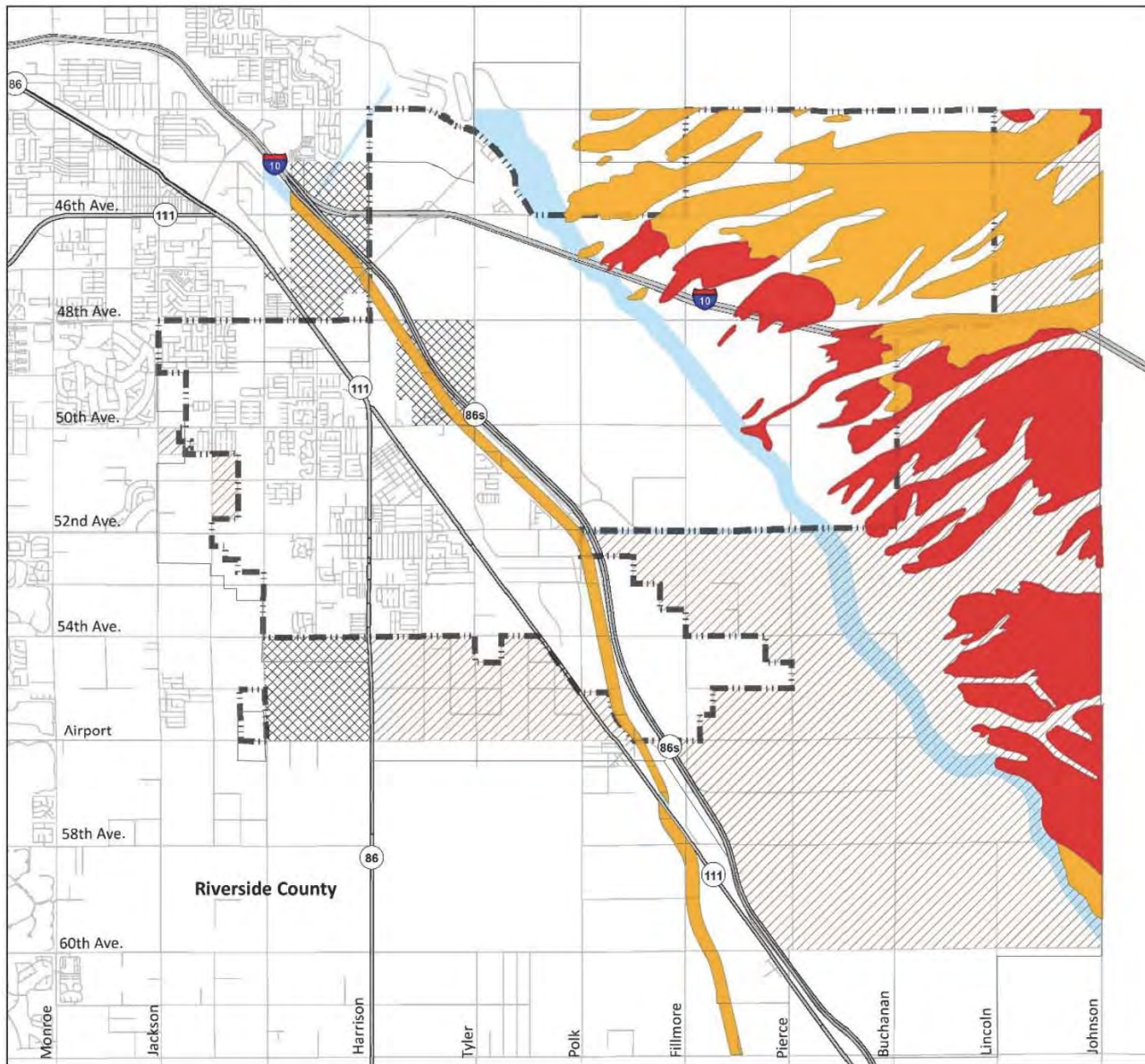
- High
- Low
- Moderate
- Very High
- Very low



raimi+ associates

Source: City of Coachella and
Riverside County
Date: August 2012

**FIGURE VI-4
Landslide Risk**



City of Coachella
General Plan Update 2035
Environmental Impact Report

Landslide Risk

Legend

Landslide Potential

- Moderate to High
- Low to Moderate
- Coachella City Limits
- Tribal Land
- Sphere of Influence
- General Plan Planning Area



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associates

Source: City of Coachella and
Riverside County
Date: August 2012

FIGURE VIII-1
GeoTracker, page 1

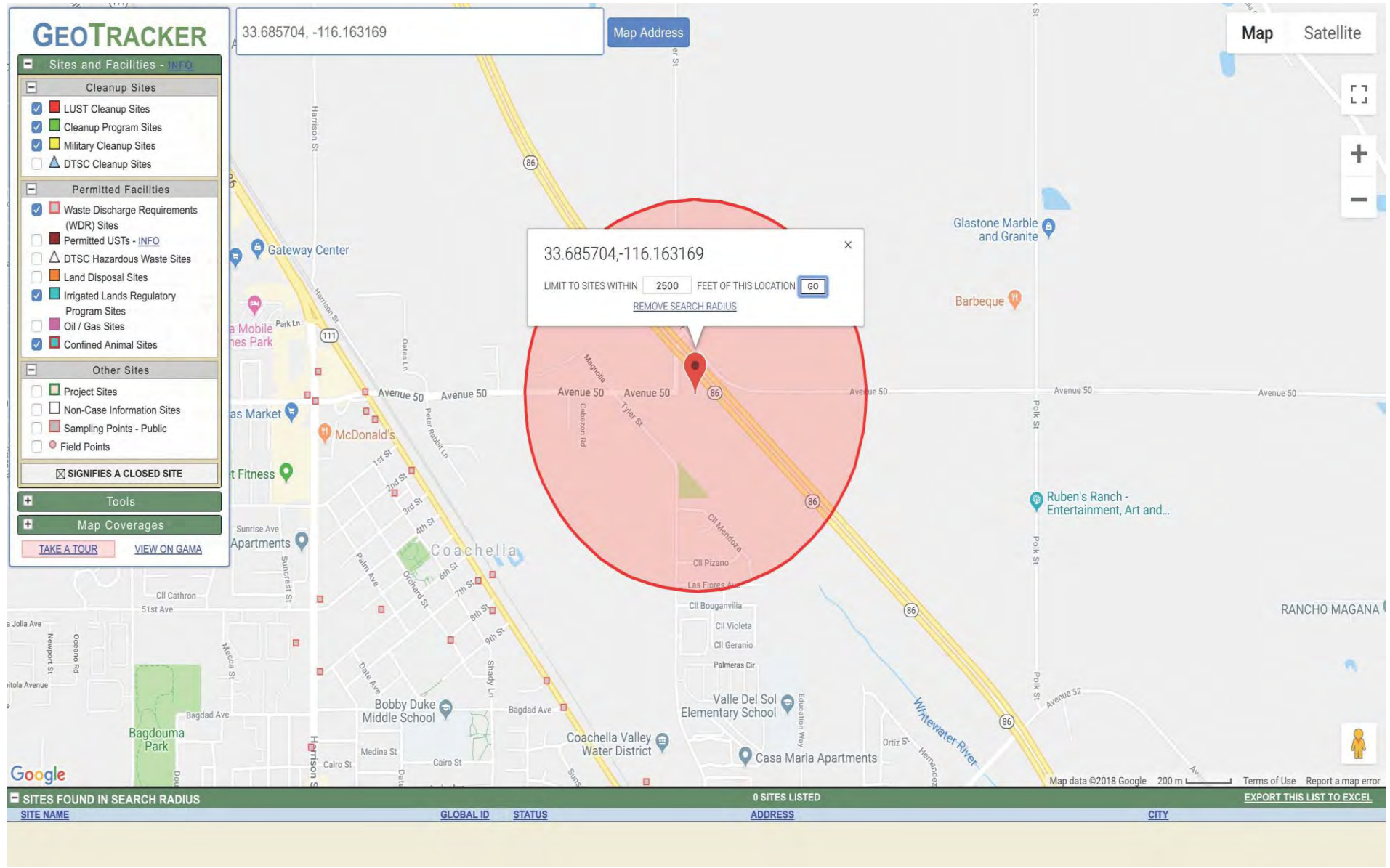


FIGURE VIII-2
GeoTracker, page 2

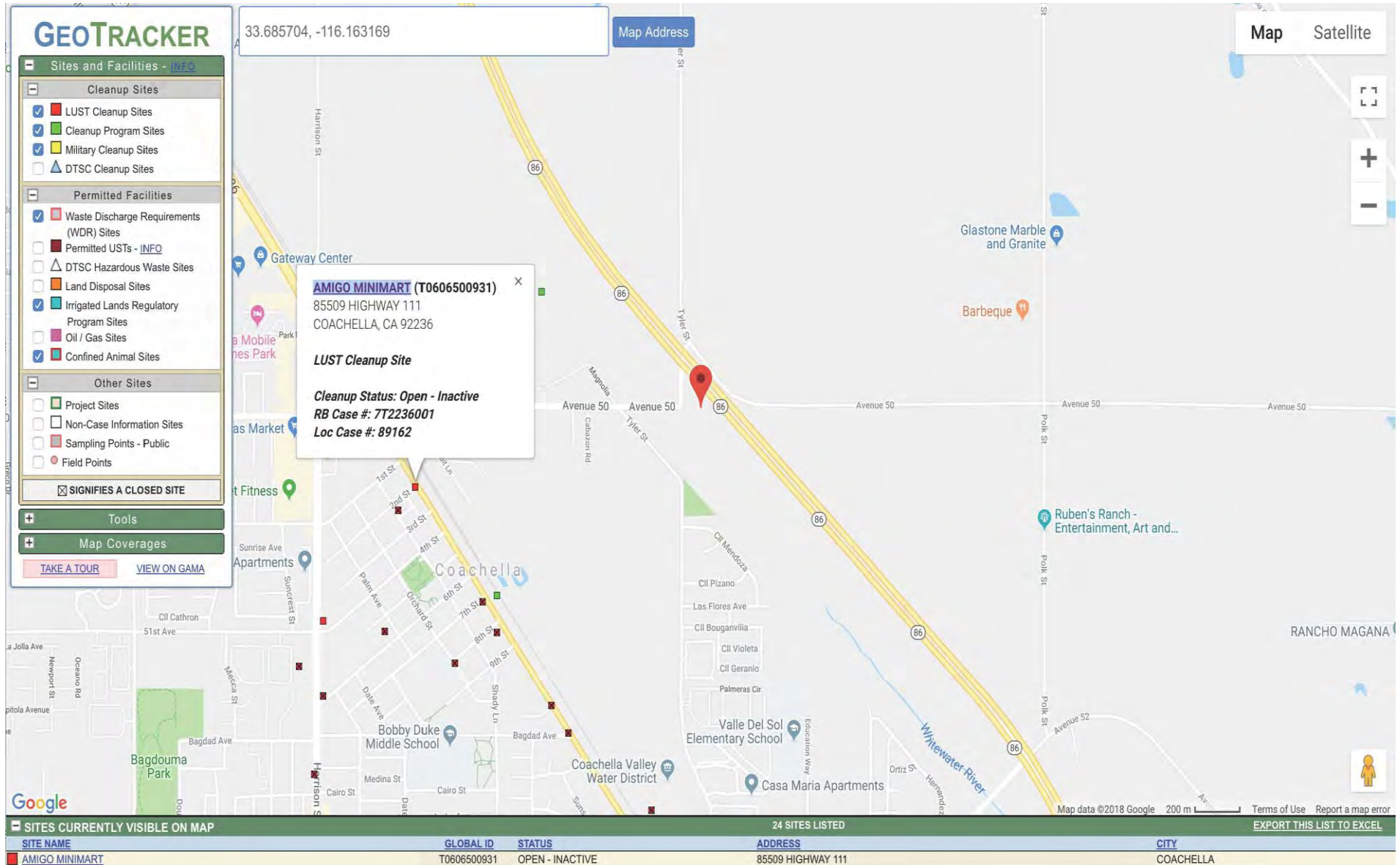





FIGURE VIII-3
GeoTracker, page 3



STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER


Tools
Reports
UST Case Closures
Information


AMIGO MINIMART (T0606500931) - [\(MAP\)](#)
SIGN UP FOR EMAIL ALERTS

85509 HIGHWAY 111
COACHELLA, CA 92236
RIVERSIDE COUNTY
LUST CLEANUP SITE [\(INFO\)](#)
[PRINTABLE CASE SUMMARY](#) / [CSM REPORT](#)

CLEANUP OVERSIGHT AGENCIES
COLORADO RIVER BASIN RWQCB (REGION 7) **(LEAD)** - CASE #: 7T2236001
CASEWORKER: [THERESA KIMSEY](#)
RIVERSIDE COUNTY LOP - CASE #: 89162
CUF Claim #: 1545
CUF Priority Assigned: B
CUF Amount Paid:

[Summary](#)
[Case Reviews](#)
[Cleanup Action Report](#)
[Regulatory Activities](#)
[Environmental Data \(ESI\)](#)
[Site Maps / Documents](#)
[Community Involvement](#)
[Related Cases](#)

Regulatory Profile
PRINTABLE CASE SUMMARY

CLEANUP STATUS - [DEFINITIONS](#)
OPEN - INACTIVE AS OF 3/24/2014 - [CLEANUP STATUS HISTORY](#)
POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE
FILE LOCATION
REGIONAL BOARD
DWR GROUNDWATER SUB-BASIN NAME
Coachella Valley - Indio (7-021.01)

POTENTIAL MEDIA OF CONCERN
AQUIFER USED FOR DRINKING WATER SUPPLY
USER DEFINED BENEFICIAL USE
GW - MUNICIPAL AND DOMESTIC SUPPLY
DESIGNATED BENEFICIAL USE(S) - [DEFINITIONS](#)
MUN, AGR, IND
CALWATER WATERSHED NAME
Whitewater - Coachella - Indio (719.47)

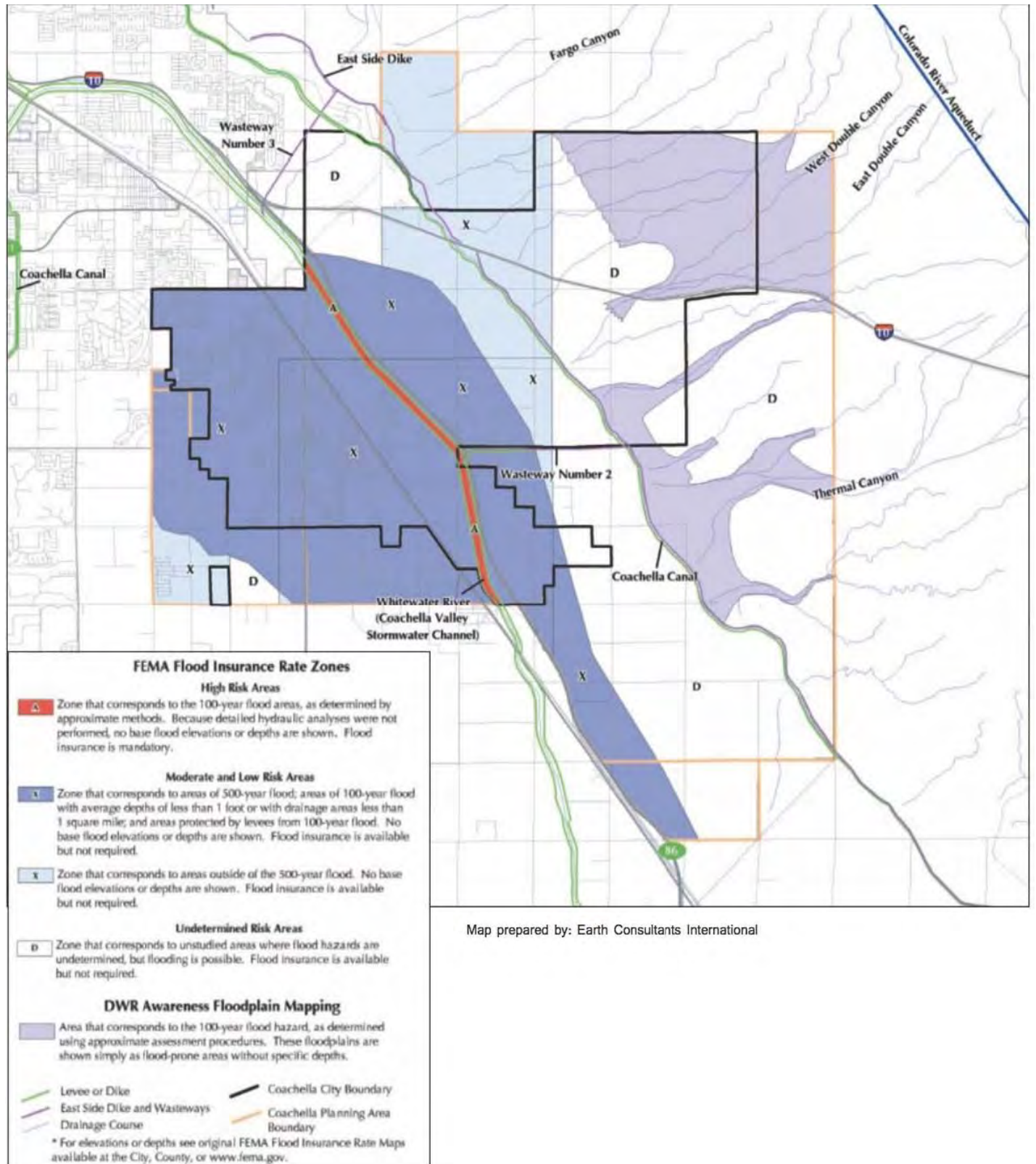
Site History

The property consisted of a gasoline service station, two pump islands, and three underground storage tanks (USTs). In 1986 two (2) 8,000 gallon USTs and one (1) 10,000 gallon UST. During the removal operation a hole was identified in bottom of the 10,000 gallon UST. It is estimated that gasoline leaked from the tank since 1976 Contaminated soils were removed from the area on May 20, 1986.

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**FIGURE IX-1
Flood Hazards**



Map prepared by: Earth Consultants International

**FIGURE IX-2
FEMA Map**

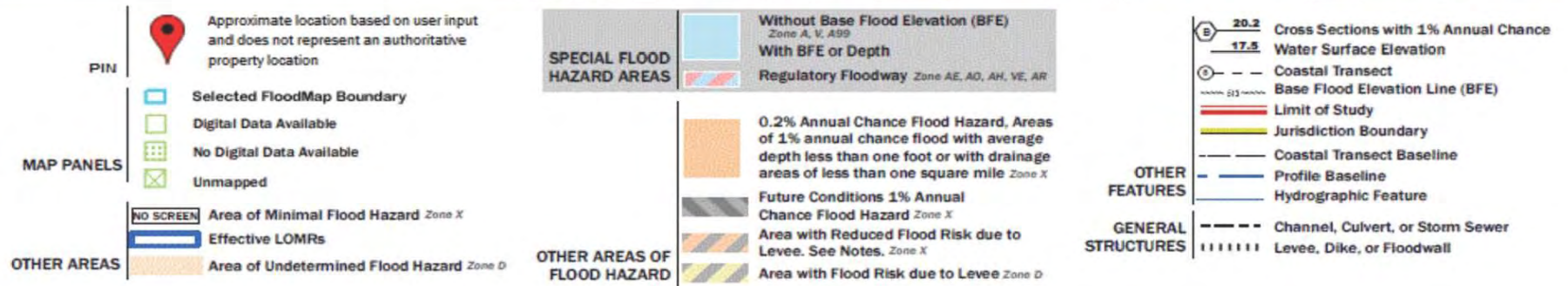
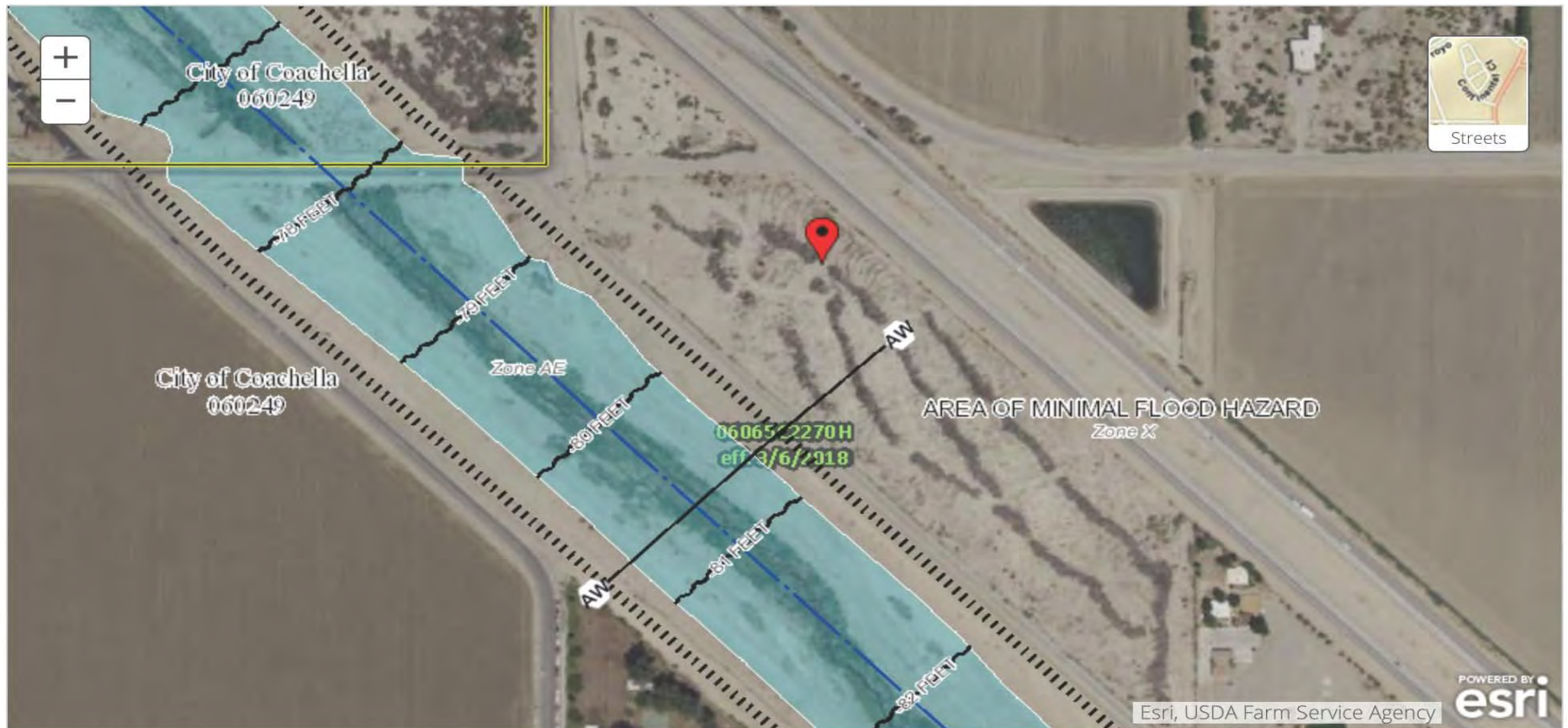


FIGURE X-1
City of Coachella, Official General Plan Map

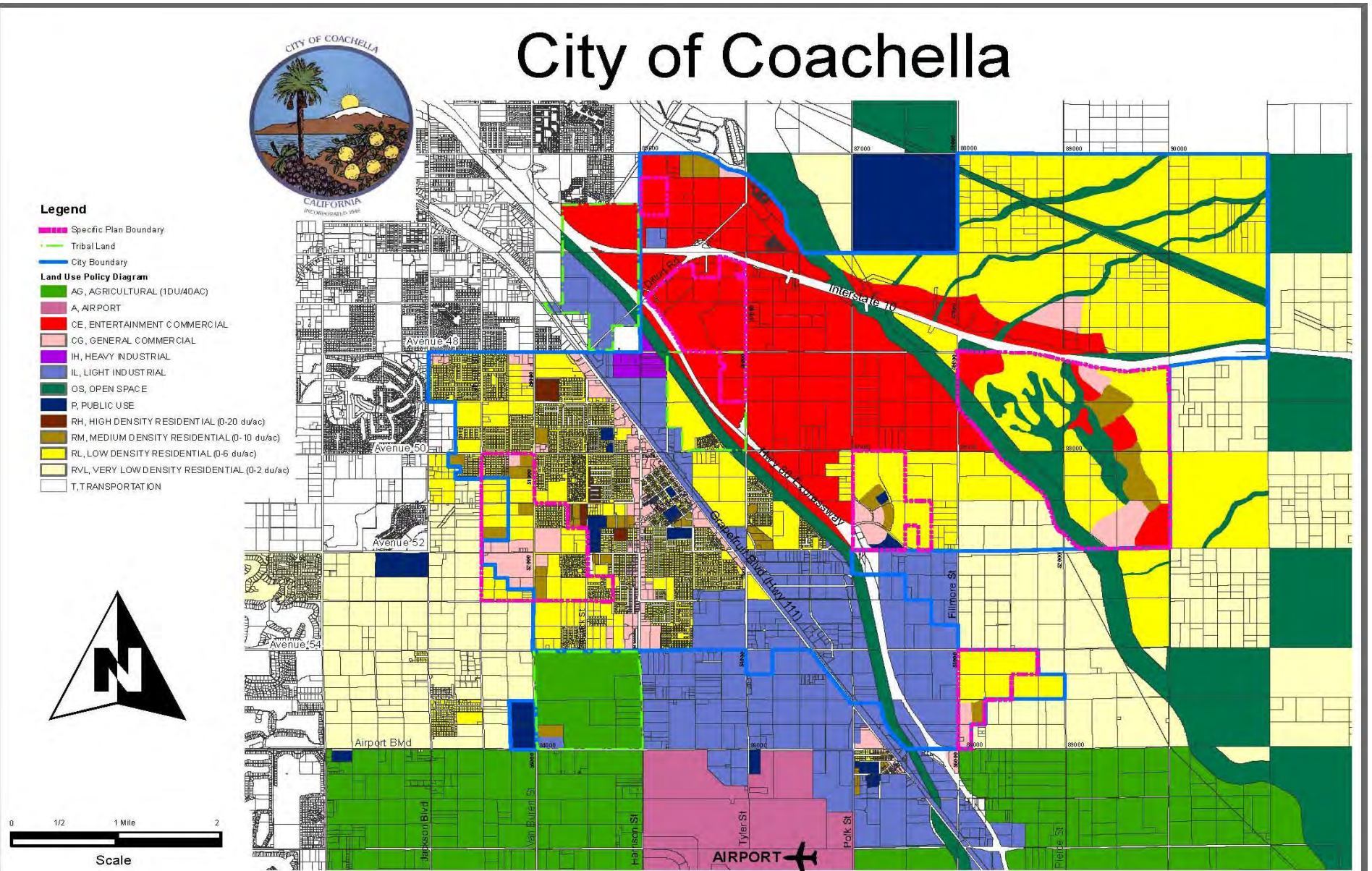


FIGURE X-2
City of Coachella, Official Zoning Map

Legend

- Tribal Land
- Specific Plan Boundary
- City Boundary

ZONING

- A, AGRICULTURAL
- A-R, AGRICULTURAL RESERVE
- A-T, AGRICULTURAL TRANSITION
- C-E, COMMERCIAL ENTERTAINMENT
- C-G, GENERAL COMMERCIAL
- C-N, NEIGHBORHOOD COMMERCIAL
- C-T, TOURIST COMMERCIAL
- C-T, PUD, COMMERCIAL TOURIST PLANNED UNIT DEVELOPMENT
- M-W, WRECKING YARD
- M-H, HEAVY INDUSTRIAL
- M-S, MANUFACTURING SERVICE
- O-S, OPEN SPACE
- R-E, RESIDENTIAL ESTATE
- R-M, RESIDENTIAL MULTIPLE FAMILY
- R-M, PUD, RESIDENTIAL MULTIPLE FAMILY, PLANNED UNIT DEVELOPMENT
- R-M-4300, RESIDENTIAL MULTIPLE FAMILY, 4300
- R-MH, RESIDENTIAL MOBILE HOME
- R-O-6000, RESIDENTIAL OVERLAY 6000
- R-PUD, RESIDENTIAL PLANNED UNIT DEVELOPMENT
- R-S, RESIDENTIAL SINGLE FAMILY
- T, TRANSPORTATION
- SHO, SENIOR HOUSING OVERLAY DISTRICT



City of Coachella

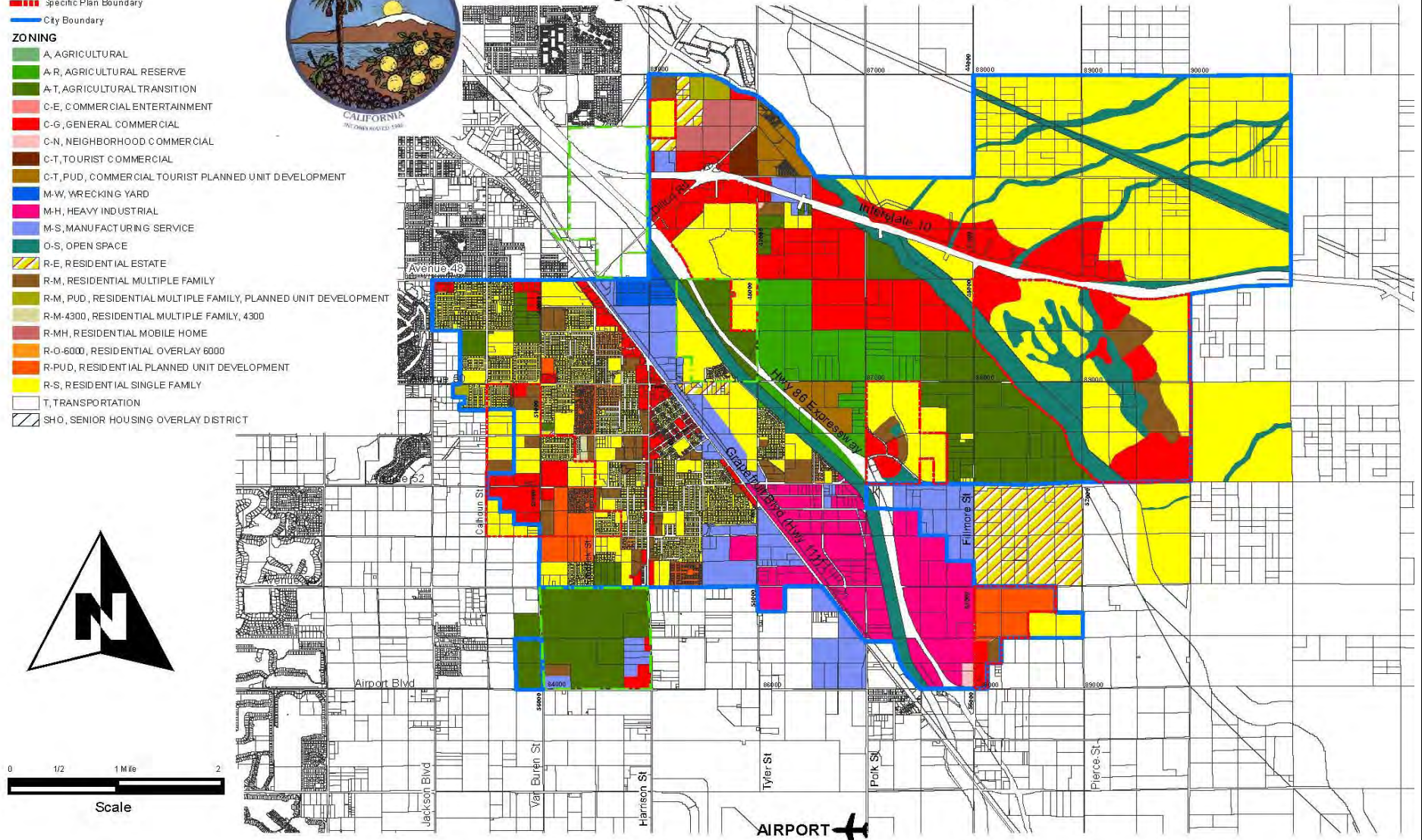


FIGURE X-3
Conservation Areas

***Recirculated Final Coachella Valley Multiple Species Habitat Conservation Plan
and
Natural Community Conservation Plan***

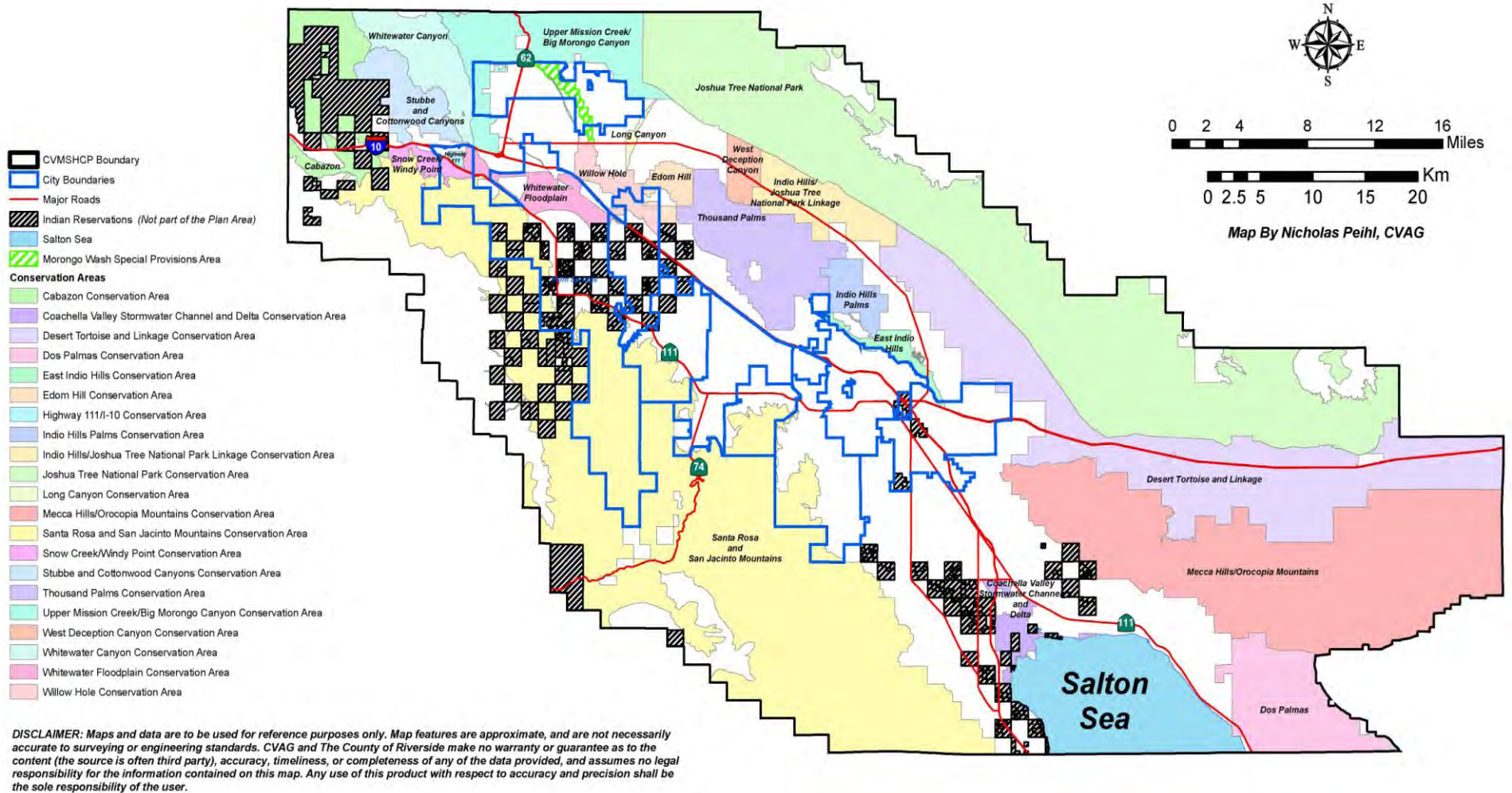
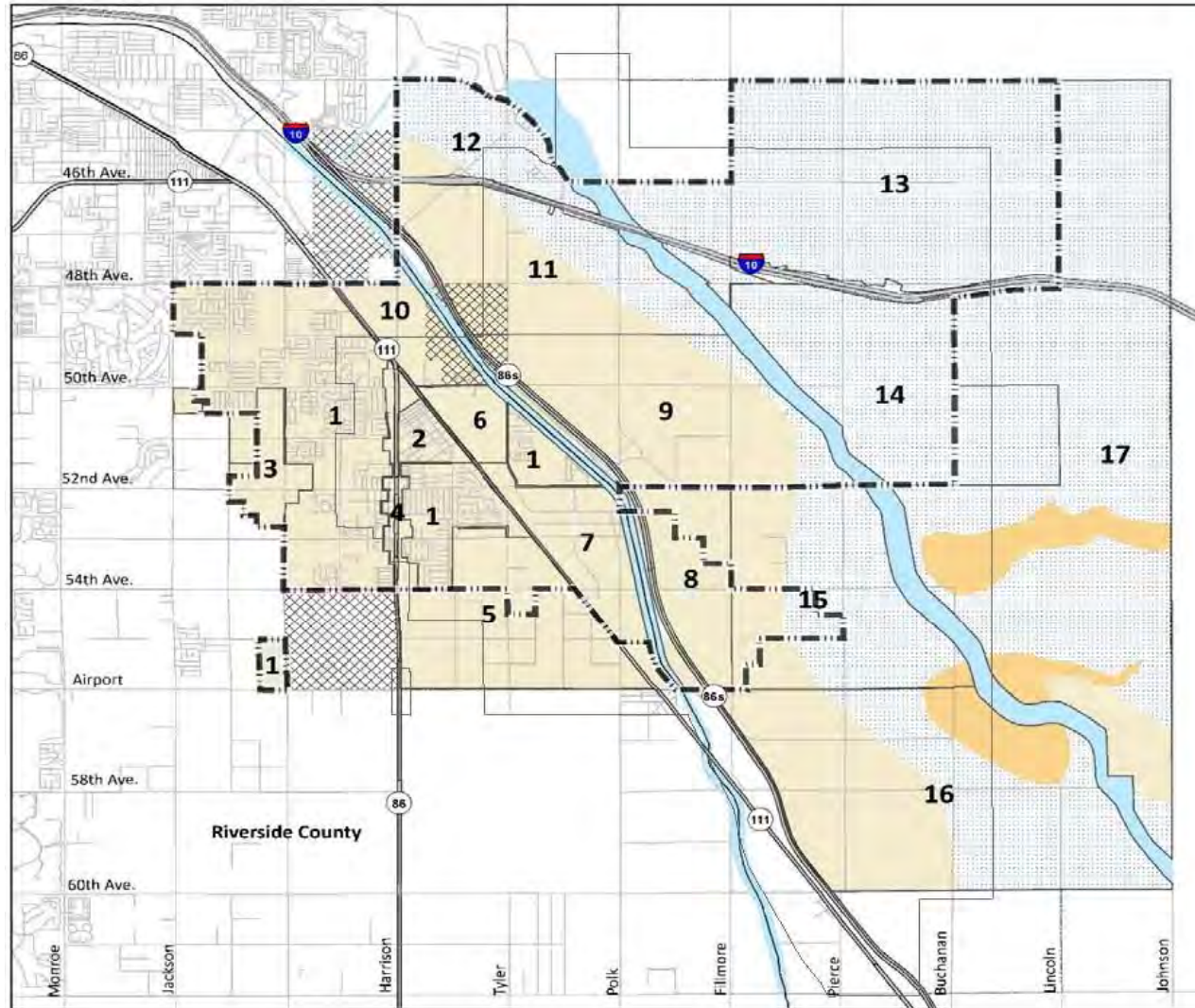


FIGURE XI-1
Mineral Resources



City of Coachella
General Plan Update 2035

Mineral Resource Zones in Planning Area

Legend

- Coachella City Limits
- Tribal Land
- General Plan Planning Area

USGS Mineral Resource Zones

- Mineral Resource Zone-1
- Mineral Resource Zone-2
- Mineral Resource Zone-3
- Mineral Resource Zone-4



raimi+ associates

Source: City of Coachella and
Riverside County
Date: October 2013

FIGURE XII-1 Coachella Land Use / Noise Compatibility Matrix

Figure 10-1 shows which land uses are satisfactory within different noise environments. Green indicates an acceptable noise level within which a use could be located. Red indicates an unacceptable noise level within which a use could be located.

LAND USE CATEGORIES		CNEL					
CATEGORIES	USES	55	60	65	70	75	80
RESIDENTIAL	Single Family, Duplex, Multiple Family	Green	Green	Yellow	Yellow	Orange	Red
RESIDENTIAL	Mobile Homes	Green	Green	Yellow	Orange	Orange	Red
COMMERCIAL - Regional, District	Hotel, Motel, Transient Lodging	Green	Green	Yellow	Yellow	Orange	Red
COMMERCIAL - Regional, Village District, Special	Commercial Retail, Bank, Restaurant, Movie Theater	Green	Green	Green	Green	Yellow	Yellow
COMMERCIAL INDUSTRIAL	Office Building, Research and Development, Professional Offices, City Office Building	Green	Green	Green	Yellow	Yellow	Orange
COMMERCIAL - Recreation INSTITUTIONAL - Civic Center	Amphitheater, Concert Hall Auditorium, Meeting Hall	Yellow	Yellow	Orange	Orange	Red	Red
COMMERCIAL - Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	Green	Green	Green	Yellow	Yellow	Red
COMMERCIAL - General, Special INDUSTRIAL, INSTITUTIONAL	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	Green	Green	Green	Green	Yellow	Yellow
INSTITUTIONAL - General	Hospital, Church, Library, School Classroom	Green	Green	Yellow	Orange	Orange	Red
OPEN SPACE	Parks	Green	Green	Green	Yellow	Orange	Red
OPEN SPACE	Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	Green	Green	Green	Green	Yellow	Orange
AGRICULTURE	Agriculture	Green	Green	Green	Green	Green	Green

INTERPRETATION

ZONE A (GREEN)
CLEARLY COMPATIBLE

Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal construction, without any special noise insulation requirements.

ZONE B (YELLOW)
NORMALLY COMPATIBLE

New construction or development should be undertaken only after an analysis of the noise reduction requirements is made and needed noise insulation features included in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning will normally suffice.

ZONE C (ORANGE)
NORMALLY INCOMPATIBLE

New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

ZONE D (RED)
CLEARLY INCOMPATIBLE

New construction or development should generally not be undertaken.

* Construction of new residential uses will not be allowed within the 65 dBA CNEL contour for airport noise.

**FIGURE XII-2
Airport Noise Compatibility Contours**

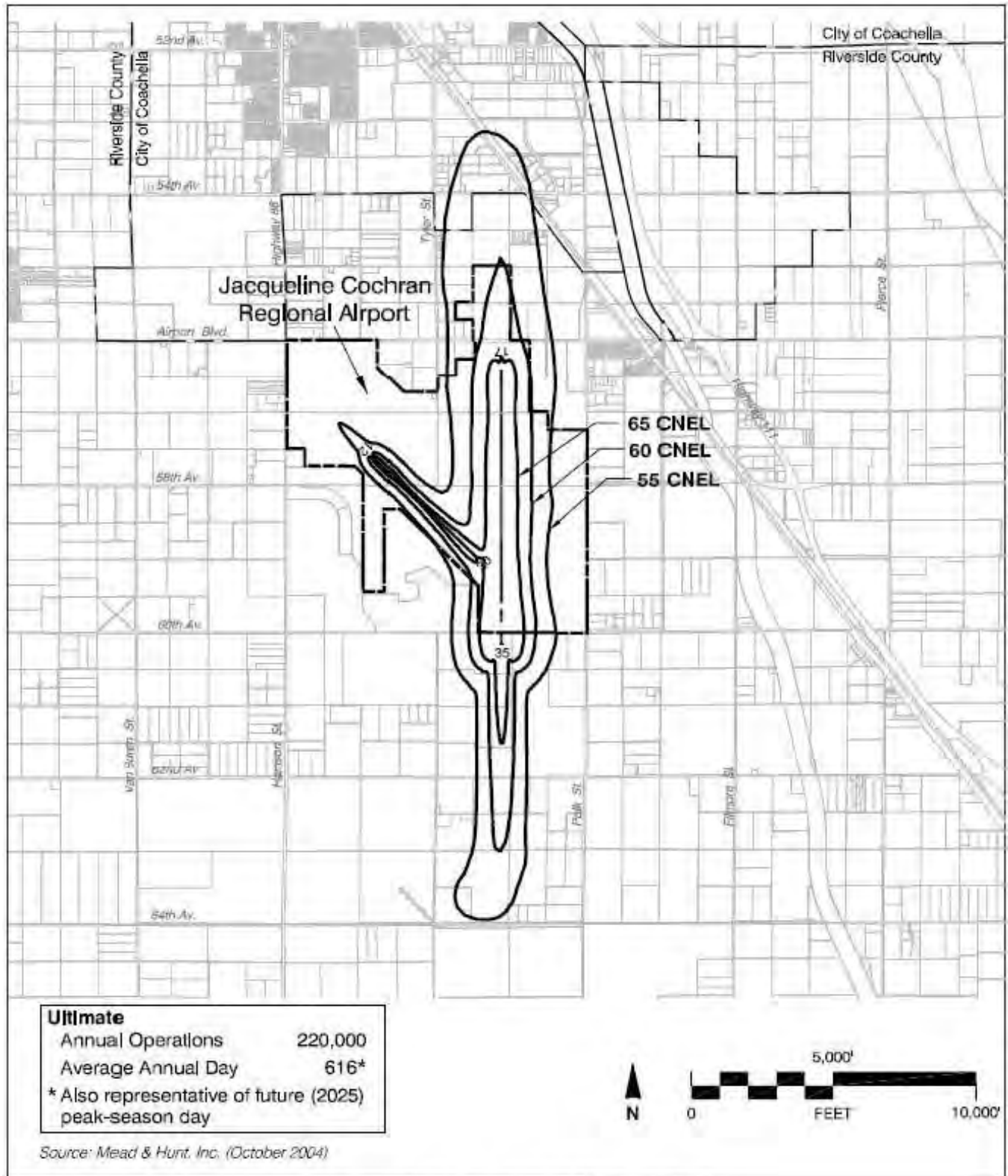
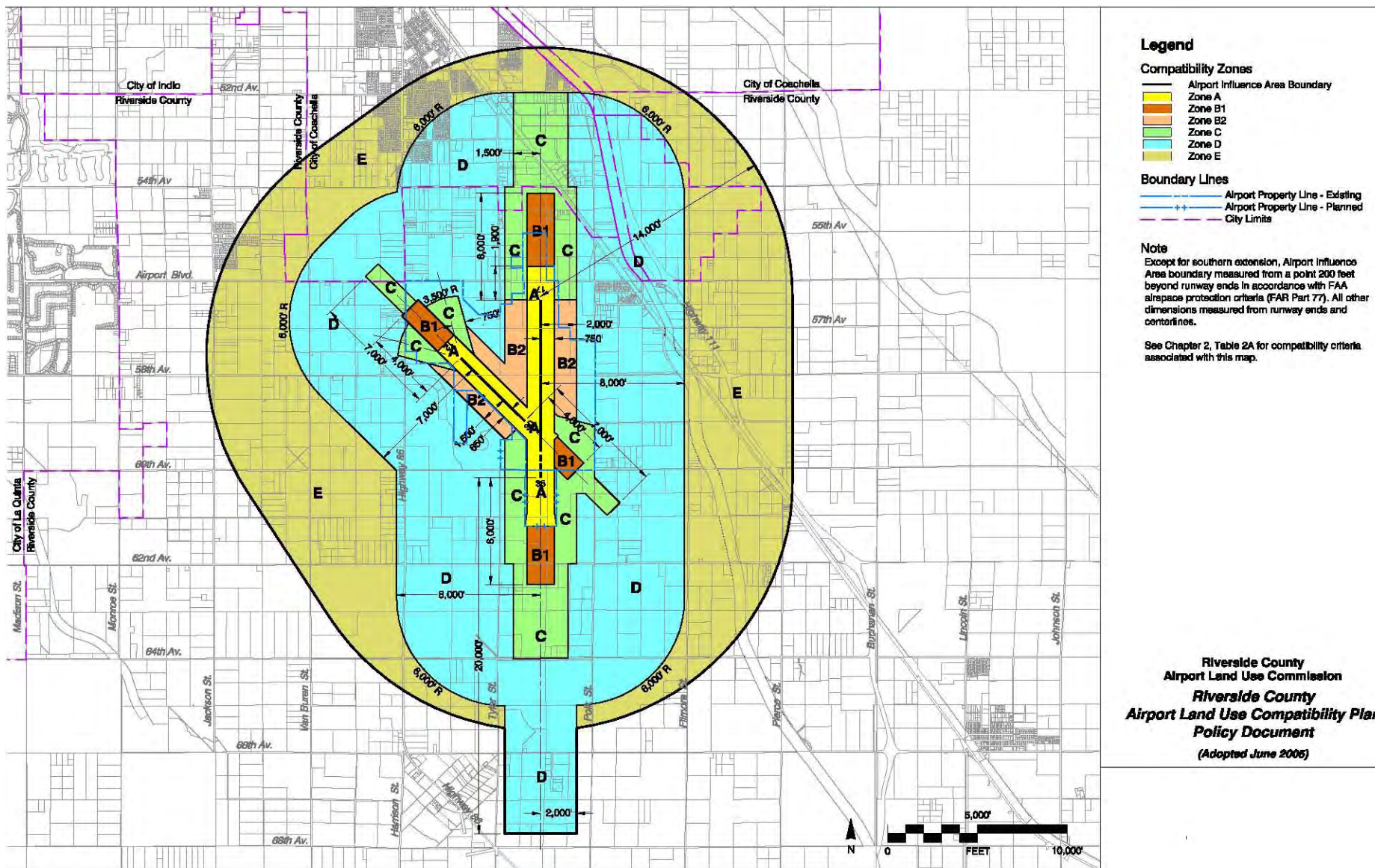


FIGURE XVI-1
Compatibility Map (Jacqueline Cochran Regional Airport)



APPENDIX 1

AIR QUALITY and GHG IMPACT ANALYSES
COACHELLA TRAVEL CENTRE PROJECT
COACHELLA, CALIFORNIA

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Santa Ana, CA 92705

Prepared for:

Tom Dodson & Associates
Attn: Kaitlyn Dodson
2150 N. Arrowhead Avenue
San Bernardino, California 92405

Date:

March 16, 2019

Project No.: P19-011 AQ

ATMOSPHERIC SETTING

The proposed project site is located in the Coachella Valley Planning Area (CVPA) of the Salton Sea Air Basin (SSAB). The SSAB was part of the Southeast Desert Air Basin (SEDAB) until May, 1996 when the SSAB was created. The project site is in the hottest and driest parts of California. The climate is characterized by hot, dry summers and relatively mild winters. Rainfall is scant in all seasons, so differences between the seasons are characterized principally by differences in temperature. Average annual precipitation in the air basin ranges from 2 to 6 inches per year.

Seasonal temperature differences in the basin are large, confirming the absence of marine influences due to the blocking action of the mountains to the west. Average monthly maximum temperatures in the project vicinity range from 108°F in July to 57°F in January. The average monthly minima range from about 40°F in January to about 80°F in July.

During much of the year, California is covered by a moderately intense high-pressure system. In winter, the Pacific High retreats to the south, so that frontal systems from the North Pacific can move onto the California coast. On average, 20 to 30 frontal systems pass through California each winter. The first front usually arrives around the middle of October, and the average period of frontal activity is five to six months. Most of these systems are relatively weak by the time they reach the SSAB, however, and they become more diffuse as they move southeastward.

Spring is a transition season between the winter period of frontal activity and the generally dry summer; some precipitation continues during the early part of the season.

During the summer, the Pacific High is well developed to the west of California, and a thermal trough overlies the SSAB. The intensity and orientation of the trough varies from day to day. Although the rugged mountainous country prevents a normal circulation, the influence of this trough does permit some inter-basin exchange with coastal locations through the passes. Summer is also the season with occasional moisture influx from the Gulfs of Mexico or California which causes isolated thundershowers and flash flooding (the summer "monsoon").

Fall is the transition period from the hot summer back to the season of frontal activity, but it is still very dry and temperatures are still mild.

Desert regions tend to be windy, since little friction is generated between the moving air and the low, sparse vegetation cover. In addition, the rapid daytime heating of the lower air over the desert leads to strong convection activity. This exchange of lower and upper air accelerates surface winds during the warm part of the day when convection is at a maximum. During winter, however, the rapid cooling in the surface layers at night retards this exchange of momentum, and the result is often a high frequency of nearly calm winds, especially at night.

During all seasons, the prevailing wind direction is predominantly from the west to east. Banning Pass is an area where air is squeezed through a narrow opening with accelerated airflow that supports wind farms. The strong winds also occasionally lead to blowing sand that sandblasts painted surfaces and makes driving unsafe. As the west to east winds fan out into the

Coachella Valley, they slow down quickly. By the time the onshore flow reaches the project site, it has again returned to its normal speed.

The mixing depth, i.e., the height available for dispersion of airborne pollutants emitted near the surface, is limited by the occurrence of temperature inversions. A temperature inversion is a layer of air in which the temperature increases with height. The temperature inversion conditions of the SSAB are quite different from those of the coastal regions of California. In coastal environments, warm, subsiding air aloft creates a lid above the shallow marine layer at the surface. The base of this subsidence inversion is perhaps 1,500 feet above the surface in coastal portions of the Los Angeles Basin. When a subsidence inversion exists over the desert, the height of the inversion base lies some 6,000 to 8,000 feet above the surface.

Nighttime surface inversions in the desert are common, especially during the cooler months. Mixing heights are predominantly 1,000 feet or less. These inversions are caused by nighttime radiational cooling of the land surface in contact with overlying air that cools more slowly. They tend to be destroyed early in the day in summer, due to intense solar radiation and heating of the land surface. In winter, however, these radiation inversions tend to persist until mid-morning, limiting mixing in the lower atmosphere to heights of 200 to 2,000 feet above the surface. Nuisance air quality problems in the Coachella Valley, such as dust near mining operations or odors near feedlots or wastewater plants, occur mainly late at night or early in the morning when such radiation inversions are strongest.

AIR QUALITY SETTING

AMBIENT AIR QUALITY STANDARDS (AAQS)

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

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

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

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

Table 1

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

Table 1 (continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

Table 2
Health Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> • Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions. 	<ul style="list-style-type: none"> • Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> • Contaminated soil. 	<ul style="list-style-type: none"> • Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Respirable Particulate Matter (PM-10)	<ul style="list-style-type: none"> • Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions. 	<ul style="list-style-type: none"> • Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics. 	<ul style="list-style-type: none"> • Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes. 	<ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

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

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in 2005, which aligned with the exposure period for the federal 8-hour standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.075 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress towards attaining state standards, but there are no hard deadlines or any consequences of non-attainment. During the same re-evaluation process, the ARB adopted an annual state standard for nitrogen dioxide (NO₂) that is more stringent than the corresponding federal standard, and strengthened the state one-hour NO₂ standard.

As part of EPA's 2002 consent decree on clean air standards, a further review of airborne particulate matter (PM) and human health was initiated. A substantial modification of federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to 10 micron size was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted. In December, 2012, the federal annual standard for PM-2.5 was reduced from 15 µg/m³ to 12 µg/m³ which matches the California AAQS. The severity of the basin's non-attainment status for PM-2.5 may be increased by this action and thus require accelerated planning for future PM-2.5 attainment.

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

In 2010 a new federal one-hour primary standard for nitrogen dioxide (NO₂) was adopted. This standard is more stringent than the existing state standard. Based upon air quality monitoring data in the South Coast Air Basin, the California Air Resources Board has requested the EPA to designate the basin as being in attainment for this standard. The federal standard for sulfur dioxide (SO₂) was also recently revised. However, with minimal combustion of coal and mandatory use of low sulfur fuels in California, SO₂ is typically not a problem pollutant.

BASELINE AIR QUALITY

In the CVPA portion of the SSAB, air quality planning, enforcement and monitoring responsibilities are carried out by the South Coast Air Quality Management District (SCAQMD). Existing and probable future levels of air quality around the project area can be best inferred from ambient air quality measurements conducted by the SCAQMD at the Indio and Palm Springs air quality monitoring stations. In Indio, ozone and 10 microns or less in diameter, (respirable) particulates called PM-10, are monitored. These two pollutants are the main air pollution problems in the CVPA portion of the SSAB. Vehicular pollution levels such as carbon monoxide (CO) and nitrogen dioxide (NO₂) are monitored at Palm Springs. Levels of CO and NO₂ at the project site are likely lower than those monitored in Palm Springs. However, because CO and NO₂ levels in Palm Springs are well within acceptable limits, their use to characterize the project site introduces no complications. The last four years of published data from Indio and Palm Springs stations are summarized in Table 3. The following conclusions can be drawn from this data:

Photochemical smog (ozone) levels periodically exceed standards. The 1-hour state standard was violated less than one percent of all days in the last four years near Indio. The 8-hour state ozone standard has been exceeded an average of eight percent of all days per year in the same time period. The Federal eight-hour ozone standard is violated on around four percent of all days per year. Ozone levels are much lower than 10 to 20 years ago. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade.

Carbon monoxide (CO) measurements near the project site have declined throughout the last decade, and 8-hour CO levels were at their lowest in 2017. Federal and state CO standards have not been exceeded in the last 10+ years. Despite continued basin-wide growth, maximum CO levels at the closest air monitoring station are less than 25 percent of their most stringent standards because of continued vehicular improvements.

PM-10 levels as measured at Indio, have exceeded the state 24-hour standard on 15 percent of all measurement days in the last four years, but the national 24-hour particulate standard has not been exceeded during the same period. Particulate levels have frequently exceeded the more restrictive state standard.

A fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). There have no violations of the 24-hour federal PM-2.5 standard in recent years. With dustier conditions along the I-10 Corridor, there may be occasional violations of PM-2.5 standards at the project site.

Table 3
Air Quality Monitoring Summary
(Days Standards Were Exceeded and Maximum Observed Concentrations 2014-2017)

Pollutant/Standard	2014	2015	2016	2017
Ozone ^a				
1-Hour > 0.09 ppm (S)	2	0	2	8
8-Hour > 0.07 ppm (S)	30	12	27	44
8- Hour > 0.075 ppm (F)	10	4	12	27
Max. 1-Hour Conc. (ppm)	0.095	0.093	0.099	0.107
Max. 8-Hour Conc. (ppm)	0.091	0.085	0.089	0.093
Carbon Monoxide ^b				
1-hour > 20. ppm (S)	0	0	0	0
8- Hour > 9. ppm (S,F)	0	0	0	0
Max 8-hour Conc. (ppm)	0.9	0.7	1.5	0.5
Nitrogen Dioxide ^b				
1-Hour > 0.18 ppm (S)	0	0	0	0
Max 1-hour Conc. (ppm)	0.05	0.04	0.04	0.04
Respirable Particulates (PM-10) ^a				
24-hour > 50 µg/m ³ (S)	64/359	36/270	56/313	43/363
24-hour > 150 µg/m ³ (F)	1/359*	0/270	0/313	0/363
Max. 24-Hr. Conc. (µg/m ³)	152*	145.	137.	128.
Ultra-Fine Particulates (PM-2.5) ^a				
24-Hour > 35 µg/m ³ (F)	0/112	0/94	0/115	0/110
Max. 24-Hr. Conc. (µg/m ³)	26.5	24.6	25.8	18.8

*high wind event, excluded from annual statistics

(S) = state standard, (F) = federal standard

^aData from Indio monitoring station.

^bData from Palm Springs air monitoring station.

Source: SCAQMD Air Monitoring Summaries.

AIR QUALITY PLANNING

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The 1990 Federal Clean Air Act Amendment (CAAA) required that all states with air-sheds with “serious” or worse ozone problems submit a revision to the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised and approved over the past decade. The most current regional attainment emissions forecast for ozone precursors (ROG and NO_x) and for carbon monoxide (CO) and for particulate matter are shown in Table 4. Substantial reductions in emissions of ROG, NO_x and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

The Air Quality Management District (AQMD) adopted an updated clean air “blueprint” in August 2003. The 2003 Air Quality Management Plan (AQMP) was approved by the EPA in 2004. The AQMP outlined the air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated.

With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. As previously noted, the attainment date was to “slip” from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard.

Because projected attainment by 2021 required control technologies that did not exist yet, the SCAQMD requested a voluntary “bump-up” from a “severe non-attainment” area to an “extreme non-attainment” designation for ozone. The extreme designation was to allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on “black-box” measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from “severe-17” to “extreme.” This reclassification set a later attainment deadline (2024), but also required the air basin to adopt even more stringent emissions controls.

Table 4
South Coast Air Basin Emissions Forecasts (Emissions in tons/day)

Pollutant	2015^a	2020^b	2025^b	2030^b
NOx	357	289	266	257
VOC	400	393	393	391
PM-10	161	165	170	172
PM-2.5	67	68	70	71

^a2015 Base Year.

^bWith current emissions reduction programs and adopted growth forecasts.

Source: California Air Resources Board, 2013 Almanac of Air Quality

In other air quality attainment plan reviews, EPA had disapproved part of the SCAB PM-2.5 attainment plan included in the AQMP. EPA stated that the current attainment plan relied on PM-2.5 control regulations that had not yet been approved or implemented. It was expected that a number of rules that were pending approval would remove the identified deficiencies. If these issues were not resolved within the next several years, federal funding sanctions for transportation projects could result. The 2012 AQMP included in the current California State Implementation Plan (SIP) was expected to remedy identified PM-2.5 planning deficiencies.

The federal Clean Air Act requires that non-attainment air basins have EPA approved attainment plans in place. This requirement includes the federal one-hour ozone standard even though that standard was revoked almost ten years ago. There was no approved attainment plan for the one-hour federal standard at the time of revocation. Through a legal quirk, the SCAQMD is now required to develop an AQMP for the long since revoked one-hour federal ozone standard. Because the current SIP for the basin contains a number of control measures for the 8-hour ozone standard that are equally effective for one-hour levels, the 2012 AQMP was believed to satisfy hourly attainment planning requirements.

AQMPs are required to be updated every three years. The 2012 AQMP was adopted in early 2013. An updated AQMP was required for completion in 2016. The 2016 AQMP was adopted by the SCAQMD Board in March, 2017, and has been submitted the California Air Resources Board for forwarding to the EPA. The 2016 AQMP acknowledges that motor vehicle emissions have been effectively controlled and that reductions in NOx, the continuing ozone problem pollutant, may need to come from major stationary sources (power plants, refineries, landfill flares, etc.) . The current attainment deadlines for all federal non-attainment pollutants are now as follows:

8-hour ozone (70 ppb)	2032
Annual PM-2.5 (12 µg/m ³)	2025
8-hour ozone (75 ppb)	2024 (old standard)
1-hour ozone (120 ppb)	2023 (rescinded standard)

24-hour PM-2.5 (35 µg/m³) 2019

The key challenge is that NO_x emission levels, as a critical ozone precursor pollutant, are forecast to continue to exceed the levels that would allow the above deadlines to be met. Unless additional stringent NO_x control measures are adopted and implemented, ozone attainment goals may not be met.

The proposed project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing general development projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

AIR QUALITY IMPACT

STANDARDS OF SIGNIFICANCE

Air quality impacts are considered “significant” if they cause clean air standards to be violated where they are currently met, or if they “substantially” contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following five tests of air quality impact significance. A project would have a potentially significant impact if it:

- a. Conflicts with or obstructs implementation of the applicable air quality plan.
- b. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
- c. Results in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- d. Exposes sensitive receptors to substantial pollutant concentrations.
- e. Creates objectionable odors affecting a substantial number of people.

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based

upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects in the Coachella Valley portion of the SCAQMD with daily emissions that exceed any of the following emission thresholds are to be considered significant under CEQA guidelines.

Table 5
Daily Emissions Thresholds

Pollutant	Construction¹	Operations²
ROG	75	75
NOx	100	100
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

¹ Construction thresholds apply to both the SCAB and the Coachella Valley (Salton Sea and Mojave Desert Air Basins).

² For Coachella Valley the mass daily emissions thresholds for operation are the same as the construction daily emissions thresholds.

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.
- Project could generate vehicle trips that cause a CO hot spot.

CONSTRUCTION ACTIVITY IMPACTS

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

The proposed site will be developed with 5 buildings; a convenience store as part of a 10-pump gas station, a drive thru restaurant, a sit-down restaurant, a 116 room hotel and carwash facility. Estimated construction emissions were modeled using CalEEMod2016.3.2 to identify maximum daily emissions for each pollutant during project construction. Construction was modeled using default construction equipment and schedule for a project of this size as shown in Table 6.

Table 6
Construction Activity Equipment Fleet

Phase Name and Duration	Equipment
Site Prep (10)	3 Dozers
	3 Loader/Backhoes
Grading (20 days)	1 Grader
	1 Excavator
	1 Dozer
	3 Loader/Backhoes
Construction (230 days)	1 Crane
	3 Loader/Backhoes
	1 Welder
	1 Generator Set
	3 Forklifts
Paving (20 days)	2 Pavers
	2 Paving Equipment
	2 Rollers

Utilizing this indicated equipment fleet and durations shown in Table 6 the following worst case daily construction emissions are calculated by CalEEMod and are listed in Table 7.

Table 7
Construction Activity Emissions
Maximum Daily Emissions (pounds/day)

Maximal Construction Emissions	ROG	NO_x	CO	SO₂	PM-10	PM-2.5
2019						
Unmitigated	4.4	45.6	22.7	0.0	20.6	12.2
Mitigated	4.4	45.6	22.7	0.0	9.6	6.1
2020						
Unmitigated	43.4	28.9	26.1	0.1	7.9	4.6
Mitigated	43.4	28.9	26.1	0.1	7.9	2.8
SCAQMD Thresholds	75	100	550	150	150	55

Peak daily construction activity emissions are estimated be below SCAQMD CEQA thresholds without the need for added mitigation. The only model-based mitigation measured applied for this project was watering exposed dirt surfaces three times per day to minimize the generation of fugitive dust generation during grading.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

LOCALIZED SIGNIFICANCE THRESHOLDS

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

Use of an LST analysis for a project is optional. For the proposed project, the primary source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based

on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500 meter source-receptor distances. For this project, since there is a single residential use just south of the site the most conservative 25-meter distance was modeled. However, only paving activities will be adjacent to this receptor. The closest structure is more than 400 feet from this residence. The receptors closest to the primary construction area have more than a 600-foot setback from the site.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for 1, 2 and 5 acre sites for varying distances. For this project, because of size, the screening thresholds for 5 acres were used.

The following thresholds and emissions in Table 8 are therefore determined (pounds per day):

Table 8
LST and Project Emissions (pounds/day)

LST Coachella Valley	CO	NO_x	PM-10	PM-2.5
LST Threshold	2292	304	14	8
Max On-Site Emissions				
Unmitigated	27	46	21	12
Mitigated	27	46	8	5

CalEEMod Output in Appendix

LSTs were compared to the maximum daily construction activities. As seen in Table 8, with active dust suppression, mitigated emissions meet the LST for construction thresholds. LST impacts are less-than-significant.

Therefore, the following construction mitigation measure is necessary to ensure LST thresholds are maintained below significance thresholds:

- Exposed surfaces will be watered at least three times per day during grading activities

OPERATIONAL IMPACTS

The project would be expected to generate approximately 1,800 daily trips using trip generation numbers provided by the applicant which includes internal trip capture. Operational emissions were calculated using CalEEMod2016.3.2 for an assumed full occupancy year of 2020. The operational impacts are shown in Table 9. As shown, operational emissions will not exceed applicable SCAQMD operational emissions CEQA thresholds of significance.

Table 9
Proposed Uses Daily Operational Impacts (2020)

	Operational Emissions (lbs/day)					
Source	ROG	NO_x	CO	SO₂	PM-10	PM-2.5
Area	0.9	0.0	0.1	0.0	0.0	0.0
Energy	0.1	0.8	0.7	0.0	0.1	0.1
Mobile	2.8	17.0	14.0	0.0	2.1	0.6
Total	3.8	17.8	14.8	0.1	2.2	0.7
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Output in Appendix

CONSTRUCTION EMISSIONS MINIMIZATION

Construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds. Nevertheless, emissions minimization through enhanced dust control measures is recommended for use because of the non-attainment status of the air and proximity of residential uses. Recommended measures include:

Fugitive Dust Control

- Apply soil stabilizers or moisten inactive areas.
- Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day).
- Cover all stock piles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site

Similarly, ozone precursor emissions (ROG and NO_x) are calculated to be below SCAQMD CEQA thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control options include:

Exhaust Emissions Control

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better rated heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

GREENHOUSE GAS EMISSIONS

“Greenhouse gases” (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as “global warming.” These greenhouse gases contribute to an increase in the temperature of the earth’s atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statutes and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07.

AB 32 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California’s reputation as a “national and international leader on energy conservation and environmental stewardship.” It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Requires immediate “early action” control programs on the most readily controlled GHG sources.
- Mandates that by 2020, California’s GHG emissions be reduced to 1990 levels.
- Forces an overall reduction of GHG gases in California by 25-40%, from business as usual, to be achieved by 2020.
- Must complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been

developed. GHG sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

THRESHOLDS OF SIGNIFICANCE

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

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or,
- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

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

Emissions identification may be quantitative, qualitative or based on performance standards. CEQA guidelines allow the lead agency to “select the model or methodology it considers most appropriate.” The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the ensuing analysis.

The significance of those emissions then must be evaluated; the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO₂ equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT CO₂e for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

PROJECT RELATED GHG EMISSIONS GENERATION

Construction Activity GHG Emissions

The project is assumed to require less than two years for construction. During project construction, the CalEEMod2016.3.2 computer model predicts that the construction activities will generate the annual CO₂e emissions identified in Table 10.

Table 10
Construction Emissions (Metric Tons CO₂e)

	CO₂e
Year 2019	36.1
Year 2020	727.2
Total	763.3
Amortized	25.4

CalEEMod Output provided in appendix

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less-than-significant.

Project Operational GHG Emissions

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional CO₂e emissions are summarized in the CalEEMod2016.3.2 output files found in the appendix of this report.

The total operational and annualized construction emissions for the proposed project are identified in Table 11. The project GHG emissions are considered less-than-significant.

Table 11
Operational Emissions
(Metric Tons CO₂e)

Consumption Source	
Area Sources	0.0
Energy Utilization	612.8
Mobile Source	756.2
Solid Waste Generation	99.8
Water Consumption	63.6
Construction	25.4
Total	1,557.8
Guideline Threshold	3,000

Consistency with GHG Plans, Programs and Policies

In the City of Coachella's Climate Action Plan (2014), the City proposes to set an efficiency-based greenhouse gas reduction target of 15% below 2010 per service population emissions by 2020 and an emissions reduction target of 49% per service population emissions by 2035.

The recent Coachella General Plan Update addresses GHG emissions as well. The General Plan Update proposes the significance criteria proposed but not adopted by the South Coast Air Quality Management District to evaluate air quality impacts. Since the project results in GHG emissions below the recommended SCAQMD 3,000 metric ton threshold, the project would not conflict with any applicable plan, policy, or regulation to reduce GHG emissions.

CALEEMOD2016.3.2 COMPUTER MODEL OUTPUT

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

Coachella Travel Centre - Riverside-Salton Sea County, Summer

Coachella Travel Centre

Riverside-Salton Sea County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	2.53	1000sqft	0.06	2,533.00	0
High Turnover (Sit Down Restaurant)	5.55	1000sqft	0.13	5,555.00	0
Hotel	116.00	Room	3.87	11,259.00	0
Convenience Market With Gas Pumps	3.80	1000sqft	0.09	3,800.00	0
Automobile Care Center	7.43	1000sqft	0.17	7,431.00	0
Parking Lot	412.00	Space	3.71	164,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	15			Operational Year	2020
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MW hr)	1270.9	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Coachella Travel Centre - Riverside-Salton Sea County, Summer

Project Characteristics -

Land Use - hotel is 116 rooms and 11,259 sf

Construction Phase -

Vehicle Trips - trip rates provided by applicant

Construction Off-road Equipment Mitigation -

Coachella Travel Centre - Riverside-Salton Sea County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	1/21/2021	12/24/2020
tblConstructionPhase	PhaseStartDate	12/25/2020	11/27/2020
tblLandUse	LandUseSquareFeet	2,530.00	2,533.00
tblLandUse	LandUseSquareFeet	5,550.00	5,555.00
tblLandUse	LandUseSquareFeet	168,432.00	11,259.00
tblLandUse	LandUseSquareFeet	7,430.00	7,431.00
tblVehicleTrips	ST_TR	23.72	20.20
tblVehicleTrips	ST_TR	1,448.33	284.20
tblVehicleTrips	ST_TR	722.03	71.10
tblVehicleTrips	ST_TR	158.37	54.00
tblVehicleTrips	ST_TR	8.19	0.80
tblVehicleTrips	SU_TR	11.88	20.20
tblVehicleTrips	SU_TR	1,182.08	284.20
tblVehicleTrips	SU_TR	542.72	71.10
tblVehicleTrips	SU_TR	131.84	54.00
tblVehicleTrips	SU_TR	5.95	0.80
tblVehicleTrips	WD_TR	23.72	20.20
tblVehicleTrips	WD_TR	845.60	284.20
tblVehicleTrips	WD_TR	496.12	71.10
tblVehicleTrips	WD_TR	127.15	54.00
tblVehicleTrips	WD_TR	8.17	0.80

2.0 Emissions Summary

Coachella Travel Centre - Riverside-Salton Sea County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	4.4167	45.6199	22.6825	0.0396	18.2169	2.3913	20.6082	9.9706	2.2000	12.1706	0.0000	3,920.7313	3,920.7313	1.1961	0.0000	3,950.6329
2020	43.4429	28.9167	26.0936	0.0684	6.7342	1.2742	7.9521	3.4008	1.1723	4.5730	0.0000	6,809.8136	6,809.8136	0.9323	0.0000	6,831.5044
Maximum	43.4429	45.6199	26.0936	0.0684	18.2169	2.3913	20.6082	9.9706	2.2000	12.1706	0.0000	6,809.8136	6,809.8136	1.1961	0.0000	6,831.5044

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	4.4167	45.6199	22.6825	0.0396	7.1964	2.3913	9.5878	3.9129	2.2000	6.1129	0.0000	3,920.7313	3,920.7313	1.1961	0.0000	3,950.6329
2020	43.4429	28.9167	26.0936	0.0684	6.7342	1.2742	7.9085	1.7137	1.1723	2.8184	0.0000	6,809.8136	6,809.8136	0.9323	0.0000	6,831.5044
Maximum	43.4429	45.6199	26.0936	0.0684	7.1964	2.3913	9.5878	3.9129	2.2000	6.1129	0.0000	6,809.8136	6,809.8136	1.1961	0.0000	6,831.5044

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	44.17	0.00	38.74	57.92	0.00	46.66	0.00	0.00	0.00	0.00	0.00	0.00

Coachella Travel Centre - Riverside-Salton Sea County, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.9436	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1198	0.1198	3.2000e-004		0.1278
Energy	0.0927	0.8426	0.7078	5.0600e-003		0.0640	0.0640		0.0640	0.0640		1,011.1538	1,011.1538	0.0194	0.0185	1,017.1625
Mobile	2.8364	16.9863	14.0108	0.0469	2.0982	0.0374	2.1356	0.5615	0.0352	0.5966		4,825.5054	4,825.5054	0.5297		4,838.7488
Total	3.8727	17.8294	14.7748	0.0520	2.0982	0.1017	2.1998	0.5615	0.0994	0.6609		5,836.7789	5,836.7789	0.5494	0.0185	5,856.0392

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	0.9436	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1198	0.1198	3.2000e-004		0.1278
Energy	0.0927	0.8426	0.7078	5.0600e-003		0.0640	0.0640		0.0640	0.0640		1,011.1538	1,011.1538	0.0194	0.0185	1,017.1625
Mobile	2.8364	16.9863	14.0108	0.0469	2.0982	0.0374	2.1356	0.5615	0.0352	0.5966		4,825.5054	4,825.5054	0.5297		4,838.7488
Total	3.8727	17.8294	14.7748	0.0520	2.0982	0.1017	2.1998	0.5615	0.0994	0.6609		5,836.7789	5,836.7789	0.5494	0.0185	5,856.0392

Coachella Travel Centre - Riverside-Salton Sea County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/29/2019	12/12/2019	5	10	
2	Grading	Grading	12/13/2019	1/9/2020	5	20	
3	Building Construction	Building Construction	1/10/2020	11/26/2020	5	230	
4	Paving	Paving	11/27/2020	12/24/2020	5	20	
5	Architectural Coating	Architectural Coating	11/27/2020	12/24/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 3.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,867; Non-Residential Outdoor: 15,289; Striped Parking Area: 9,888 (Architectural Coating – sqft)

OffRoad Equipment

Coachella Travel Centre - Riverside-Salton Sea County, Summer

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

Trips and VMT

Coachella Travel Centre - Riverside-Salton Sea County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	81.00	32.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	32.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	32.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.2 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	0.0817	0.0471	0.6195	1.5500e-003	0.1506	9.6000e-004	0.1516	0.0400	8.8000e-004	0.0408		154.2784	154.2784	4.4000e-003		154.3884
Total	0.0817	0.0471	0.6195	1.5500e-003	0.1506	9.6000e-004	0.1516	0.0400	8.8000e-004	0.0408		154.2784	154.2784	4.4000e-003		154.3884

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	7.0458	2.3904	9.4362	3.8730	2.1991	6.0721	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.2 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	0.0817	0.0471	0.6195	1.5500e-003	0.1506	9.6000e-004	0.1516	0.0400	8.8000e-004	0.0408		154.2784	154.2784	4.4000e-003		154.3884
Total	0.0817	0.0471	0.6195	1.5500e-003	0.1506	9.6000e-004	0.1516	0.0400	8.8000e-004	0.0408		154.2784	154.2784	4.4000e-003		154.3884

3.3 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					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	6.5523	1.3974	7.9497	3.3675	1.2856	4.6531		2,936.8068	2,936.8068	0.9292		2,960.0361

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.3 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	0.0000	0.0000	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	0.0681	0.0393	0.5163	1.2900e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		128.5653	128.5653	3.6700e-003		128.6570
Total	0.0681	0.0393	0.5163	1.2900e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		128.5653	128.5653	3.6700e-003		128.6570

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
Total	2.5805	28.3480	16.2934	0.0297	2.5554	1.3974	3.9528	1.3133	1.2856	2.5989	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.3 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	0.0000	0.0000	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	0.0681	0.0393	0.5163	1.2900e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		128.5653	128.5653	3.6700e-003		128.6570
Total	0.0681	0.0393	0.5163	1.2900e-003	0.1255	8.0000e-004	0.1263	0.0333	7.4000e-004	0.0340		128.5653	128.5653	3.6700e-003		128.6570

3.3 Grading - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.485 1	2,872.485 1	0.9290		2,895.710 6
Total	2.4288	26.3859	16.0530	0.0297	6.5523	1.2734	7.8258	3.3675	1.1716	4.5390		2,872.485 1	2,872.485 1	0.9290		2,895.710 6

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.3 Grading - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0350	0.4683	1.2500e-003	0.1255	7.8000e-004	0.1263	0.0333	7.2000e-004	0.0340		124.5072	124.5072	3.2500e-003		124.5885
Total	0.0629	0.0350	0.4683	1.2500e-003	0.1255	7.8000e-004	0.1263	0.0333	7.2000e-004	0.0340		124.5072	124.5072	3.2500e-003		124.5885

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					2.5554	0.0000	2.5554	1.3133	0.0000	1.3133			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.485 1	2,872.485 1	0.9290		2,895.710 6
Total	2.4288	26.3859	16.0530	0.0297	2.5554	1.2734	3.8288	1.3133	1.1716	2.4849	0.0000	2,872.485 1	2,872.485 1	0.9290		2,895.710 6

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.3 Grading - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0350	0.4683	1.2500e-003	0.1255	7.8000e-004	0.1263	0.0333	7.2000e-004	0.0340		124.5072	124.5072	3.2500e-003		124.5885
Total	0.0629	0.0350	0.4683	1.2500e-003	0.1255	7.8000e-004	0.1263	0.0333	7.2000e-004	0.0340		124.5072	124.5072	3.2500e-003		124.5885

3.4 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.4 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2415	9.1643	1.6583	0.0212	1.1670	0.0446	1.2116	0.3070	0.0427	0.3496		2,239.733 3	2,239.733 3	0.1921		2,244.536 5
Worker	1.0188	0.5664	7.5868	0.0203	5.5671	0.0127	5.5798	1.4067	0.0117	1.4184		2,017.017 2	2,017.017 2	0.0527		2,018.333 5
Total	1.2603	9.7306	9.2451	0.0415	6.7342	0.0573	6.7914	1.7137	0.0543	1.7680		4,256.750 5	4,256.750 5	0.2448		4,262.869 9

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.4 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2415	9.1643	1.6583	0.0212	1.1670	0.0446	1.2116	0.3070	0.0427	0.3496		2,239.733 3	2,239.733 3	0.1921		2,244.536 5
Worker	1.0188	0.5664	7.5868	0.0203	5.5671	0.0127	5.5798	1.4067	0.0117	1.4184		2,017.017 2	2,017.017 2	0.0527		2,018.333 5
Total	1.2603	9.7306	9.2451	0.0415	6.7342	0.0573	6.7914	1.7137	0.0543	1.7680		4,256.750 5	4,256.750 5	0.2448		4,262.869 9

3.5 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1
Paving	0.4860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.8426	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.733 4	2,207.733 4	0.7140		2,225.584 1

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.5 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0350	0.4683	1.2500e-003	0.1255	7.8000e-004	0.1263	0.0333	7.2000e-004	0.0340		124.5072	124.5072	3.2500e-003		124.5885
Total	0.0629	0.0350	0.4683	1.2500e-003	0.1255	7.8000e-004	0.1263	0.0333	7.2000e-004	0.0340		124.5072	124.5072	3.2500e-003		124.5885

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.4860					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.8426	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.5 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0629	0.0350	0.4683	1.2500e-003	0.1255	7.8000e-004	0.1263	0.0333	7.2000e-004	0.0340		124.5072	124.5072	3.2500e-003		124.5885
Total	0.0629	0.0350	0.4683	1.2500e-003	0.1255	7.8000e-004	0.1263	0.0333	7.2000e-004	0.0340		124.5072	124.5072	3.2500e-003		124.5885

3.6 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	41.1611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928
Total	41.4033	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109		281.4481	281.4481	0.0218		281.9928

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.6 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1342	0.0746	0.9991	2.6700e-003	0.5004	1.6700e-003	0.5021	0.1281	1.5400e-003	0.1297		265.6154	265.6154	6.9300e-003		265.7888
Total	0.1342	0.0746	0.9991	2.6700e-003	0.5004	1.6700e-003	0.5021	0.1281	1.5400e-003	0.1297		265.6154	265.6154	6.9300e-003		265.7888

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	41.1611					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928
Total	41.4033	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109	0.0000	281.4481	281.4481	0.0218		281.9928

Coachella Travel Centre - Riverside-Salton Sea County, Summer

3.6 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1342	0.0746	0.9991	2.6700e-003	0.5004	1.6700e-003	0.5021	0.1281	1.5400e-003	0.1297		265.6154	265.6154	6.9300e-003		265.7888
Total	0.1342	0.0746	0.9991	2.6700e-003	0.5004	1.6700e-003	0.5021	0.1281	1.5400e-003	0.1297		265.6154	265.6154	6.9300e-003		265.7888

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Coachella Travel Centre - Riverside-Salton Sea County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8364	16.9863	14.0108	0.0469	2.0982	0.0374	2.1356	0.5615	0.0352	0.5966		4,825.505 4	4,825.505 4	0.5297		4,838.748 8
Unmitigated	2.8364	16.9863	14.0108	0.0469	2.0982	0.0374	2.1356	0.5615	0.0352	0.5966		4,825.505 4	4,825.505 4	0.5297		4,838.748 8

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	150.09	150.09	150.09	133,675	133,675
Convenience Market With Gas Pumps	1,079.96	1,079.96	1,079.96	365,656	365,656
Fast Food Restaurant with Drive Thru	179.88	179.88	179.88	106,671	106,671
High Turnover (Sit Down Restaurant)	299.70	299.70	299.70	239,898	239,898
Hotel	92.80	92.80	92.80	137,812	137,812
Parking Lot	0.00	0.00	0.00		
Total	1,802.43	1,802.43	1,802.43	983,712	983,712

4.3 Trip Type Information

Coachella Travel Centre - Riverside-Salton Sea County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	12.50	4.20	5.40	33.00	48.00	19.00	21	51	28
Convenience Market With Gas	12.50	4.20	5.40	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	12.50	4.20	5.40	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	12.50	4.20	5.40	8.50	72.50	19.00	37	20	43
Hotel	12.50	4.20	5.40	19.40	61.60	19.00	58	38	4
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	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
Convenience Market With Gas Pumps	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
Fast Food Restaurant with Drive Thru	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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Parking Lot	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

Coachella Travel Centre - Riverside-Salton Sea County, Summer

	ROG	NOx	CO	SO2	Fugitive 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	0.0927	0.8426	0.7078	5.0600e-003		0.0640	0.0640		0.0640	0.0640		1,011.1538	1,011.1538	0.0194	0.0185	1,017.1625
NaturalGas Unmitigated	0.0927	0.8426	0.7078	5.0600e-003		0.0640	0.0640		0.0640	0.0640		1,011.1538	1,011.1538	0.0194	0.0185	1,017.1625

Coachella Travel Centre - Riverside-Salton Sea County, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Automobile Care Center	661.461	7.1300e-003	0.0649	0.0545	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003		77.8189	77.8189	1.4900e-003	1.4300e-003	78.2814
Convenience Market With Gas Pumps	23.1123	2.5000e-004	2.2700e-003	1.9000e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7191	2.7191	5.0000e-005	5.0000e-005	2.7353
Fast Food Restaurant with Drive Thru	1897.6	0.0205	0.1860	0.1563	1.1200e-003		0.0141	0.0141		0.0141	0.0141		223.2469	223.2469	4.2800e-003	4.0900e-003	224.5736
High Turnover (Sit Down Restaurant)	4161.53	0.0449	0.4080	0.3427	2.4500e-003		0.0310	0.0310		0.0310	0.0310		489.5920	489.5920	9.3800e-003	8.9800e-003	492.5014
Hotel	1851.1	0.0200	0.1815	0.1524	1.0900e-003		0.0138	0.0138		0.0138	0.0138		217.7768	217.7768	4.1700e-003	3.9900e-003	219.0710
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0927	0.8426	0.7078	5.0600e-003		0.0640	0.0640		0.0640	0.0640		1,011.1538	1,011.1538	0.0194	0.0185	1,017.1625

Coachella Travel Centre - Riverside-Salton Sea County, Summer

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					
Automobile Care Center	0.661461	7.1300e-003	0.0649	0.0545	3.9000e-004		4.9300e-003	4.9300e-003		4.9300e-003	4.9300e-003		77.8189	77.8189	1.4900e-003	1.4300e-003	78.2814
Convenience Market With Gas Pumps	0.0231123	2.5000e-004	2.2700e-003	1.9000e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7191	2.7191	5.0000e-005	5.0000e-005	2.7353
Fast Food Restaurant with Drive Thru	1.8976	0.0205	0.1860	0.1563	1.1200e-003		0.0141	0.0141		0.0141	0.0141		223.2469	223.2469	4.2800e-003	4.0900e-003	224.5736
High Turnover (Sit Down Restaurant)	4.16153	0.0449	0.4080	0.3427	2.4500e-003		0.0310	0.0310		0.0310	0.0310		489.5920	489.5920	9.3800e-003	8.9800e-003	492.5014
Hotel	1.8511	0.0200	0.1815	0.1524	1.0900e-003		0.0138	0.0138		0.0138	0.0138		217.7768	217.7768	4.1700e-003	3.9900e-003	219.0710
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0927	0.8426	0.7078	5.0600e-003		0.0640	0.0640		0.0640	0.0640		1,011.1538	1,011.1538	0.0194	0.0185	1,017.1625

6.0 Area Detail**6.1 Mitigation Measures Area**

Coachella Travel Centre - Riverside-Salton Sea County, Summer

	ROG	NOx	CO	SO2	Fugitive 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	0.9436	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1198	0.1198	3.2000e-004		0.1278
Unmitigated	0.9436	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1198	0.1198	3.2000e-004		0.1278

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7127					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2900e-003	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1198	0.1198	3.2000e-004		0.1278
Total	0.9436	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1198	0.1198	3.2000e-004		0.1278

Coachella Travel Centre - Riverside-Salton Sea County, Summer

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2255					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7127					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.2900e-003	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1198	0.1198	3.2000e-004		0.1278
Total	0.9436	5.2000e-004	0.0562	0.0000		2.0000e-004	2.0000e-004		2.0000e-004	2.0000e-004		0.1198	0.1198	3.2000e-004		0.1278

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
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

Coachella Travel Centre - Riverside-Salton Sea County, Summer

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

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

Equipment Type	Number
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11.0 Vegetation

Coachella Travel Centre - Riverside-Salton Sea County, Annual

Coachella Travel Centre

Riverside-Salton Sea County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	2.53	1000sqft	0.06	2,533.00	0
High Turnover (Sit Down Restaurant)	5.55	1000sqft	0.13	5,555.00	0
Hotel	116.00	Room	3.87	11,259.00	0
Convenience Market With Gas Pumps	3.80	1000sqft	0.09	3,800.00	0
Automobile Care Center	7.43	1000sqft	0.17	7,431.00	0
Parking Lot	412.00	Space	3.71	164,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	15			Operational Year	2020
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MW hr)	1270.9	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Coachella Travel Centre - Riverside-Salton Sea County, Annual

Project Characteristics -

Land Use - hotel is 116 rooms and 11,259 sf

Construction Phase -

Vehicle Trips - trip rates provided by applicant

Construction Off-road Equipment Mitigation -

Coachella Travel Centre - Riverside-Salton Sea County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	1/21/2021	12/24/2020
tblConstructionPhase	PhaseStartDate	12/25/2020	11/27/2020
tblLandUse	LandUseSquareFeet	2,530.00	2,533.00
tblLandUse	LandUseSquareFeet	5,550.00	5,555.00
tblLandUse	LandUseSquareFeet	168,432.00	11,259.00
tblLandUse	LandUseSquareFeet	7,430.00	7,431.00
tblVehicleTrips	ST_TR	23.72	20.20
tblVehicleTrips	ST_TR	1,448.33	284.20
tblVehicleTrips	ST_TR	722.03	71.10
tblVehicleTrips	ST_TR	158.37	54.00
tblVehicleTrips	ST_TR	8.19	0.80
tblVehicleTrips	SU_TR	11.88	20.20
tblVehicleTrips	SU_TR	1,182.08	284.20
tblVehicleTrips	SU_TR	542.72	71.10
tblVehicleTrips	SU_TR	131.84	54.00
tblVehicleTrips	SU_TR	5.95	0.80
tblVehicleTrips	WD_TR	23.72	20.20
tblVehicleTrips	WD_TR	845.60	284.20
tblVehicleTrips	WD_TR	496.12	71.10
tblVehicleTrips	WD_TR	127.15	54.00
tblVehicleTrips	WD_TR	8.17	0.80

2.0 Emissions Summary

Coachella Travel Centre - Riverside-Salton Sea County, Annual

2.1 Overall Construction**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.0392	0.4127	0.2218	4.0000e-004	0.1363	0.0210	0.1574	0.0722	0.0194	0.0915	0.0000	35.7439	35.7439	0.0109	0.0000	36.0170
2020	0.8190	3.5885	3.1321	8.0400e-003	0.7934	0.1482	0.9416	0.2075	0.1392	0.3467	0.0000	724.6973	724.6973	0.1007	0.0000	727.2154
Maximum	0.8190	3.5885	3.1321	8.0400e-003	0.7934	0.1482	0.9416	0.2075	0.1392	0.3467	0.0000	724.6973	724.6973	0.1007	0.0000	727.2154

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	0.0392	0.4127	0.2218	4.0000e-004	0.0541	0.0210	0.0752	0.0284	0.0194	0.0478	0.0000	35.7439	35.7439	0.0109	0.0000	36.0170
2020	0.8190	3.5885	3.1320	8.0400e-003	0.7773	0.1482	0.9255	0.2001	0.1392	0.3393	0.0000	724.6969	724.6969	0.1007	0.0000	727.2150
Maximum	0.8190	3.5885	3.1320	8.0400e-003	0.7773	0.1482	0.9255	0.2001	0.1392	0.3393	0.0000	724.6969	724.6969	0.1007	0.0000	727.2150

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	10.57	0.00	8.94	18.30	0.00	11.68	0.00	0.00	0.00	0.00	0.00	0.00

Coachella Travel Centre - Riverside-Salton Sea County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2019	1-31-2020	0.8067	0.8067
2	2-1-2020	4-30-2020	1.0360	1.0360
3	5-1-2020	7-31-2020	1.0612	1.0612
4	8-1-2020	9-30-2020	0.7036	0.7036
		Highest	1.0612	1.0612

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1717	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0169	0.1538	0.1292	9.2000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	610.9184	610.9184	0.0133	5.1600e-003	612.7902
Mobile	0.4201	3.0733	2.5626	8.0800e-003	0.3756	6.9100e-003	0.3825	0.1007	6.5000e-003	0.1072	0.0000	753.9331	753.9331	0.0914	0.0000	756.2174
Waste						0.0000	0.0000		0.0000	0.0000	40.2937	0.0000	40.2937	2.3813	0.0000	99.8260
Water						0.0000	0.0000		0.0000	0.0000	2.0227	54.8021	56.8248	0.2090	5.1600e-003	63.5887
Total	0.6087	3.2271	2.6969	9.0000e-003	0.3756	0.0186	0.3943	0.1007	0.0182	0.1189	42.3164	1,419.6634	1,461.9798	2.6950	0.0103	1,532.4326

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1717	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Energy	0.0169	0.1538	0.1292	9.2000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	610.9184	610.9184	0.0133	5.1600e-003	612.7902
Mobile	0.4201	3.0733	2.5626	8.0800e-003	0.3756	6.9100e-003	0.3825	0.1007	6.5000e-003	0.1072	0.0000	753.9331	753.9331	0.0914	0.0000	756.2174
Waste						0.0000	0.0000		0.0000	0.0000	40.2937	0.0000	40.2937	2.3813	0.0000	99.8260
Water						0.0000	0.0000		0.0000	0.0000	2.0227	54.8021	56.8248	0.2090	5.1600e-003	63.5887
Total	0.6087	3.2271	2.6969	9.0000e-003	0.3756	0.0186	0.3943	0.1007	0.0182	0.1189	42.3164	1,419.6634	1,461.9798	2.6950	0.0103	1,532.4326

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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**

Coachella Travel Centre - Riverside-Salton Sea County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	11/29/2019	12/12/2019	5	10	
2	Grading	Grading	12/13/2019	1/9/2020	5	20	
3	Building Construction	Building Construction	1/10/2020	11/26/2020	5	230	
4	Paving	Paving	11/27/2020	12/24/2020	5	20	
5	Architectural Coating	Architectural Coating	11/27/2020	12/24/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 3.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 45,867; Non-Residential Outdoor: 15,289; Striped Parking Area: 9,888 (Architectural Coating – sqft)

OffRoad Equipment

Coachella Travel Centre - Riverside-Salton Sea County, Annual

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

Trips and VMT

Coachella Travel Centre - Riverside-Salton Sea County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction	9	81.00	32.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	32.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	81.00	32.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	16.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195

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3.2 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.5000e-004	2.6700e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6442	0.6442	2.0000e-005	0.0000	0.6447
Total	3.6000e-004	2.5000e-004	2.6700e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6442	0.6442	2.0000e-005	0.0000	0.6447

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0352	0.0000	0.0352	0.0194	0.0000	0.0194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0352	0.0120	0.0472	0.0194	0.0110	0.0304	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195

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3.2 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6000e-004	2.5000e-004	2.6700e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6442	0.6442	2.0000e-005	0.0000	0.6447
Total	3.6000e-004	2.5000e-004	2.6700e-003	1.0000e-005	7.4000e-004	0.0000	7.5000e-004	2.0000e-004	0.0000	2.0000e-004	0.0000	0.6442	0.6442	2.0000e-005	0.0000	0.6447

3.3 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					0.0445	0.0000	0.0445	0.0221	0.0000	0.0221	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.1843	0.1059	1.9000e-004		9.0800e-003	9.0800e-003		8.3600e-003	8.3600e-003	0.0000	17.3175	17.3175	5.4800e-003	0.0000	17.4545
Total	0.0168	0.1843	0.1059	1.9000e-004	0.0445	9.0800e-003	0.0535	0.0221	8.3600e-003	0.0305	0.0000	17.3175	17.3175	5.4800e-003	0.0000	17.4545

Coachella Travel Centre - Riverside-Salton Sea County, Annual

3.3 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.7000e-004	2.9000e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6979	0.6979	2.0000e-005	0.0000	0.6984
Total	3.9000e-004	2.7000e-004	2.9000e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6979	0.6979	2.0000e-005	0.0000	0.6984

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0173	0.0000	0.0173	8.6100e-003	0.0000	8.6100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0168	0.1843	0.1059	1.9000e-004		9.0800e-003	9.0800e-003		8.3600e-003	8.3600e-003	0.0000	17.3175	17.3175	5.4800e-003	0.0000	17.4544
Total	0.0168	0.1843	0.1059	1.9000e-004	0.0173	9.0800e-003	0.0264	8.6100e-003	8.3600e-003	0.0170	0.0000	17.3175	17.3175	5.4800e-003	0.0000	17.4544

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3.3 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	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.9000e-004	2.7000e-004	2.9000e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6979	0.6979	2.0000e-005	0.0000	0.6984
Total	3.9000e-004	2.7000e-004	2.9000e-003	1.0000e-005	8.0000e-004	1.0000e-005	8.1000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6979	0.6979	2.0000e-005	0.0000	0.6984

3.3 Grading - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0264	0.0000	0.0264	0.0122	0.0000	0.0122	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5000e-003	0.0924	0.0562	1.0000e-004		4.4600e-003	4.4600e-003		4.1000e-003	4.1000e-003	0.0000	9.1206	9.1206	2.9500e-003	0.0000	9.1943
Total	8.5000e-003	0.0924	0.0562	1.0000e-004	0.0264	4.4600e-003	0.0308	0.0122	4.1000e-003	0.0163	0.0000	9.1206	9.1206	2.9500e-003	0.0000	9.1943

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3.3 Grading - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.3000e-004	1.4100e-003	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3639	0.3639	1.0000e-005	0.0000	0.3642
Total	2.0000e-004	1.3000e-004	1.4100e-003	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3639	0.3639	1.0000e-005	0.0000	0.3642

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0103	0.0000	0.0103	4.7400e-003	0.0000	4.7400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.5000e-003	0.0924	0.0562	1.0000e-004		4.4600e-003	4.4600e-003		4.1000e-003	4.1000e-003	0.0000	9.1206	9.1206	2.9500e-003	0.0000	9.1943
Total	8.5000e-003	0.0924	0.0562	1.0000e-004	0.0103	4.4600e-003	0.0148	4.7400e-003	4.1000e-003	8.8400e-003	0.0000	9.1206	9.1206	2.9500e-003	0.0000	9.1943

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3.3 Grading - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.3000e-004	1.4100e-003	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3639	0.3639	1.0000e-005	0.0000	0.3642
Total	2.0000e-004	1.3000e-004	1.4100e-003	0.0000	4.3000e-004	0.0000	4.3000e-004	1.1000e-004	0.0000	1.2000e-004	0.0000	0.3639	0.3639	1.0000e-005	0.0000	0.3642

3.4 Building Construction - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2438	2.2064	1.9376	3.1000e-003		0.1285	0.1285		0.1208	0.1208	0.0000	266.3515	266.3515	0.0650	0.0000	267.9760
Total	0.2438	2.2064	1.9376	3.1000e-003		0.1285	0.1285		0.1208	0.1208	0.0000	266.3515	266.3515	0.0650	0.0000	267.9760

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3.4 Building Construction - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0284	1.0613	0.2076	2.4000e-003	0.1319	5.1600e-003	0.1371	0.0347	4.9400e-003	0.0397	0.0000	229.3102	229.3102	0.0211	0.0000	229.8366
Worker	0.1040	0.0696	0.7518	2.1400e-003	0.6285	1.4600e-003	0.6300	0.1589	1.3400e-003	0.1603	0.0000	193.7117	193.7117	4.9700e-003	0.0000	193.8359
Total	0.1324	1.1309	0.9594	4.5400e-003	0.7605	6.6200e-003	0.7671	0.1936	6.2800e-003	0.1999	0.0000	423.0218	423.0218	0.0260	0.0000	423.6725

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	0.2438	2.2064	1.9376	3.1000e-003		0.1285	0.1285		0.1208	0.1208	0.0000	266.3512	266.3512	0.0650	0.0000	267.9757
Total	0.2438	2.2064	1.9376	3.1000e-003		0.1285	0.1285		0.1208	0.1208	0.0000	266.3512	266.3512	0.0650	0.0000	267.9757

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3.4 Building Construction - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0284	1.0613	0.2076	2.4000e-003	0.1319	5.1600e-003	0.1371	0.0347	4.9400e-003	0.0397	0.0000	229.3102	229.3102	0.0211	0.0000	229.8366
Worker	0.1040	0.0696	0.7518	2.1400e-003	0.6285	1.4600e-003	0.6300	0.1589	1.3400e-003	0.1603	0.0000	193.7117	193.7117	4.9700e-003	0.0000	193.8359
Total	0.1324	1.1309	0.9594	4.5400e-003	0.7605	6.6200e-003	0.7671	0.1936	6.2800e-003	0.1999	0.0000	423.0218	423.0218	0.0260	0.0000	423.6725

3.5 Paving - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	4.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0184	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902

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3.5 Paving - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.7000e-004	4.0400e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	1.0398	1.0398	3.0000e-005	0.0000	1.0405
Total	5.6000e-004	3.7000e-004	4.0400e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	1.0398	1.0398	3.0000e-005	0.0000	1.0405

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	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	4.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0184	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901

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3.5 Paving - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.7000e-004	4.0400e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	1.0398	1.0398	3.0000e-005	0.0000	1.0405
Total	5.6000e-004	3.7000e-004	4.0400e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.3000e-004	0.0000	1.0398	1.0398	3.0000e-005	0.0000	1.0405

3.6 Architectural Coating - 2020**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	0.4140	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

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3.6 Architectural Coating - 2020**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1900e-003	8.0000e-004	8.6100e-003	2.0000e-005	4.9200e-003	2.0000e-005	4.9300e-003	1.2600e-003	2.0000e-005	1.2700e-003	0.0000	2.2182	2.2182	6.0000e-005	0.0000	2.2196
Total	1.1900e-003	8.0000e-004	8.6100e-003	2.0000e-005	4.9200e-003	2.0000e-005	4.9300e-003	1.2600e-003	2.0000e-005	1.2700e-003	0.0000	2.2182	2.2182	6.0000e-005	0.0000	2.2196

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4200e-003	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582
Total	0.4140	0.0168	0.0183	3.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	2.5533	2.5533	2.0000e-004	0.0000	2.5582

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3.6 Architectural Coating - 2020**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1900e-003	8.0000e-004	8.6100e-003	2.0000e-005	4.9200e-003	2.0000e-005	4.9300e-003	1.2600e-003	2.0000e-005	1.2700e-003	0.0000	2.2182	2.2182	6.0000e-005	0.0000	2.2196
Total	1.1900e-003	8.0000e-004	8.6100e-003	2.0000e-005	4.9200e-003	2.0000e-005	4.9300e-003	1.2600e-003	2.0000e-005	1.2700e-003	0.0000	2.2182	2.2182	6.0000e-005	0.0000	2.2196

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4201	3.0733	2.5626	8.0800e-003	0.3756	6.9100e-003	0.3825	0.1007	6.5000e-003	0.1072	0.0000	753.9331	753.9331	0.0914	0.0000	756.2174
Unmitigated	0.4201	3.0733	2.5626	8.0800e-003	0.3756	6.9100e-003	0.3825	0.1007	6.5000e-003	0.1072	0.0000	753.9331	753.9331	0.0914	0.0000	756.2174

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	150.09	150.09	150.09	133,675	133,675
Convenience Market With Gas Pumps	1,079.96	1,079.96	1,079.96	365,656	365,656
Fast Food Restaurant with Drive Thru	179.88	179.88	179.88	106,671	106,671
High Turnover (Sit Down Restaurant)	299.70	299.70	299.70	239,898	239,898
Hotel	92.80	92.80	92.80	137,812	137,812
Parking Lot	0.00	0.00	0.00		
Total	1,802.43	1,802.43	1,802.43	983,712	983,712

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	12.50	4.20	5.40	33.00	48.00	19.00	21	51	28
Convenience Market With Gas	12.50	4.20	5.40	0.80	80.20	19.00	14	21	65
Fast Food Restaurant with Drive	12.50	4.20	5.40	2.20	78.80	19.00	29	21	50
High Turnover (Sit Down	12.50	4.20	5.40	8.50	72.50	19.00	37	20	43
Hotel	12.50	4.20	5.40	19.40	61.60	19.00	58	38	4
Parking Lot	12.50	4.20	5.40	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	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
Convenience Market With Gas Pumps	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
Fast Food Restaurant with Drive Thru	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
High Turnover (Sit Down Restaurant)	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
Hotel	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
Parking Lot	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

Coachella Travel Centre - Riverside-Salton Sea County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	443.5106	443.5106	0.0101	2.0900e-003	444.3876
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	443.5106	443.5106	0.0101	2.0900e-003	444.3876
NaturalGas Mitigated	0.0169	0.1538	0.1292	9.2000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	167.4078	167.4078	3.2100e-003	3.0700e-003	168.4027
NaturalGas Unmitigated	0.0169	0.1538	0.1292	9.2000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	167.4078	167.4078	3.2100e-003	3.0700e-003	168.4027

Coachella Travel Centre - Riverside-Salton Sea County, Annual

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					
Automobile Care Center	241433	1.3000e-003	0.0118	9.9400e-003	7.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	12.8838	12.8838	2.5000e-004	2.4000e-004	12.9604
Convenience Market With Gas Pumps	8436	5.0000e-005	4.1000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4502	0.4502	1.0000e-005	1.0000e-005	0.4529
Fast Food Restaurant with Drive Thru	692624	3.7300e-003	0.0340	0.0285	2.0000e-004		2.5800e-003	2.5800e-003		2.5800e-003	2.5800e-003	0.0000	36.9610	36.9610	7.1000e-004	6.8000e-004	37.1807
High Turnover (Sit Down Restaurant)	1.51896e+006	8.1900e-003	0.0745	0.0626	4.5000e-004		5.6600e-003	5.6600e-003		5.6600e-003	5.6600e-003	0.0000	81.0575	81.0575	1.5500e-003	1.4900e-003	81.5391
Hotel	675653	3.6400e-003	0.0331	0.0278	2.0000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	36.0554	36.0554	6.9000e-004	6.6000e-004	36.2697
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0169	0.1538	0.1292	9.2000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	167.4079	167.4079	3.2100e-003	3.0800e-003	168.4027

Coachella Travel Centre - Riverside-Salton Sea County, Annual

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Automobile Care Center	241433	1.3000e-003	0.0118	9.9400e-003	7.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	12.8838	12.8838	2.5000e-004	2.4000e-004	12.9604
Convenience Market With Gas Pumps	8436	5.0000e-005	4.1000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4502	0.4502	1.0000e-005	1.0000e-005	0.4529
Fast Food Restaurant with Drive Thru	692624	3.7300e-003	0.0340	0.0285	2.0000e-004		2.5800e-003	2.5800e-003		2.5800e-003	2.5800e-003	0.0000	36.9610	36.9610	7.1000e-004	6.8000e-004	37.1807
High Turnover (Sit Down Restaurant)	1.51896e+006	8.1900e-003	0.0745	0.0626	4.5000e-004		5.6600e-003	5.6600e-003		5.6600e-003	5.6600e-003	0.0000	81.0575	81.0575	1.5500e-003	1.4900e-003	81.5391
Hotel	675653	3.6400e-003	0.0331	0.0278	2.0000e-004		2.5200e-003	2.5200e-003		2.5200e-003	2.5200e-003	0.0000	36.0554	36.0554	6.9000e-004	6.6000e-004	36.2697
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0169	0.1538	0.1292	9.2000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	167.4079	167.4079	3.2100e-003	3.0800e-003	168.4027

Coachella Travel Centre - Riverside-Salton Sea County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	75424.7	43.4801	9.9000e-004	2.1000e-004	43.5661
Convenience Market With Gas Pumps	47994	27.6671	6.3000e-004	1.3000e-004	27.7218
Fast Food Restaurant with Drive Thru	120267	69.3303	1.5800e-003	3.3000e-004	69.4674
High Turnover (Sit Down Restaurant)	263751	152.0449	3.4700e-003	7.2000e-004	152.3456
Hotel	204238	117.7373	2.6900e-003	5.6000e-004	117.9702
Parking Lot	57680	33.2508	7.6000e-004	1.6000e-004	33.3166
Total		443.5106	0.0101	2.1100e-003	444.3876

Coachella Travel Centre - Riverside-Salton Sea County, Annual

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Automobile Care Center	75424.7	43.4801	9.9000e-004	2.1000e-004	43.5661
Convenience Market With Gas Pumps	47994	27.6671	6.3000e-004	1.3000e-004	27.7218
Fast Food Restaurant with Drive Thru	120267	69.3303	1.5800e-003	3.3000e-004	69.4674
High Turnover (Sit Down Restaurant)	263751	152.0449	3.4700e-003	7.2000e-004	152.3456
Hotel	204238	117.7373	2.6900e-003	5.6000e-004	117.9702
Parking Lot	57680	33.2508	7.6000e-004	1.6000e-004	33.3166
Total		443.5106	0.0101	2.1100e-003	444.3876

6.0 Area Detail**6.1 Mitigation Measures Area**

Coachella Travel Centre - Riverside-Salton Sea County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1717	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Unmitigated	0.1717	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0412					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1301					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	0.1717	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

Coachella Travel Centre - Riverside-Salton Sea County, Annual

6.2 Area by SubCategory**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0412					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1301					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104
Total	0.1717	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7800e-003	9.7800e-003	3.0000e-005	0.0000	0.0104

7.0 Water Detail**7.1 Mitigation Measures Water**

Coachella Travel Centre - Riverside-Salton Sea County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	56.8248	0.2090	5.1600e-003	63.5887
Unmitigated	56.8248	0.2090	5.1600e-003	63.5887

Coachella Travel Centre - Riverside-Salton Sea County, Annual

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.699023 / 0.428433	8.2127	0.0230	5.8000e-004	8.9582
Convenience Market With Gas Pumps	0.281476 / 0.172517	3.3070	9.2500e-003	2.3000e-004	3.6072
Fast Food Restaurant with Drive Thru	0.76794 / 0.0490175	6.3219	0.0252	6.2000e-004	7.1356
High Turnover (Sit Down Restaurant)	1.68461 / 0.107528	13.8682	0.0552	1.3600e-003	15.6531
Hotel	2.94255 / 0.326949	25.1149	0.0964	2.3800e-003	28.2345
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		56.8248	0.2090	5.1700e-003	63.5887

Coachella Travel Centre - Riverside-Salton Sea County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Automobile Care Center	0.699023 / 0.428433	8.2127	0.0230	5.8000e-004	8.9582
Convenience Market With Gas Pumps	0.281476 / 0.172517	3.3070	9.2500e-003	2.3000e-004	3.6072
Fast Food Restaurant with Drive Thru	0.76794 / 0.0490175	6.3219	0.0252	6.2000e-004	7.1356
High Turnover (Sit Down Restaurant)	1.68461 / 0.107528	13.8682	0.0552	1.3600e-003	15.6531
Hotel	2.94255 / 0.326949	25.1149	0.0964	2.3800e-003	28.2345
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		56.8248	0.2090	5.1700e-003	63.5887

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Coachella Travel Centre - Riverside-Salton Sea County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	40.2937	2.3813	0.0000	99.8260
Unmitigated	40.2937	2.3813	0.0000	99.8260

Coachella Travel Centre - Riverside-Salton Sea County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Automobile Care Center	28.38	5.7609	0.3405	0.0000	14.2724
Convenience Market With Gas Pumps	11.42	2.3182	0.1370	0.0000	5.7431
Fast Food Restaurant with Drive Thru	29.14	5.9152	0.3496	0.0000	14.6546
High Turnover (Sit Down Restaurant)	66.05	13.4076	0.7924	0.0000	33.2167
Hotel	63.51	12.8920	0.7619	0.0000	31.9393
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		40.2937	2.3813	0.0000	99.8260

Coachella Travel Centre - Riverside-Salton Sea County, Annual

8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	tons	MT/yr			
Automobile Care Center	28.38	5.7609	0.3405	0.0000	14.2724
Convenience Market With Gas Pumps	11.42	2.3182	0.1370	0.0000	5.7431
Fast Food Restaurant with Drive Thru	29.14	5.9152	0.3496	0.0000	14.6546
High Turnover (Sit Down Restaurant)	66.05	13.4076	0.7924	0.0000	33.2167
Hotel	63.51	12.8920	0.7619	0.0000	31.9393
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		40.2937	2.3813	0.0000	99.8260

9.0 Operational Offroad

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

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

Coachella Travel Centre - Riverside-Salton Sea County, Annual

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

Equipment Type	Number
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11.0 Vegetation

APPENDIX 2



47 1st Street, Suite 1
Redlands, CA 92373-4601
(909) 915-5900

February 14, 2019

Kaitlyn Dodson
Tom Dodson & Associates
2150 North Arrowhead Avenue
San Bernardino, CA 92405

RE: BIOLOGICAL RESOURCES ASSESSMENT & JURISDICTIONAL DELINEATION
COACHELLA TRAVEL CENTER, APN 763-020-01,
AVENUE 50 AND HIGHWAY 86 -COACHELLA, CA

Dear Ms. Dodson:

Jericho Systems, Inc. (Jericho) is pleased to provide this letter report that details the results of a general Biological Resources Assessment/Jurisdictional Waters Delineation (BRA/JD) for a proposed 14.1-acre Travel Center (Project) located at Avenue 50 and Highway 86 in the City of Coachella within Assessor's Parcel Number (APN) 763-020-01

The purpose of the BRA was to address potential project-related impacts on designated critical habitats and/or any special status species protected under the federal Endangered Species Act (ESA), California Endangered Species Act (CESA), California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS) and/or the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP). Jericho assessed the subject parcel for the potential of occurrence of listed species and species of special concern that have been documented in the local vicinity and/or whose habitat requirements are present within the Site.

In addition to the BRA, a Jurisdictional Delineation (JD) assessment of the project site was conducted. The purpose of the JD is to determine the extent, if any, of State and /or federal jurisdictional waters that are subject to Sections 404 and 401 of the federal Clean Water Act (CWA) regulated by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) respectively; and/or Section 1602 of the California Fish and Game Code (FCG) administered by the CDFW.

Finally, the project site falls entirely within the CVMSHCP. Therefore, a Land Use Consistency analysis to determine whether the project is consistent with the Conservation Goals and Objectives of CVMSHCP still needs to be prepared

PROJECT LOCATION

The Study Area is identified as APN 763-020-021, an approximately 14-acre parcel located in the City of Coachella, County of Riverside, California.. The Project site is surrounded by primarily vacant land. It is bounded on the north by Avenue 50/Tyler Street, on the east by Highway 86, on the west by the Whitewater River on the west, and on the south by a single-family residence and vacant land. The site can be found on the NW corner of the *Indio* U.S. Geological Survey 7.5' Quadrangle Map within Section 4, Township 6 South, Range 8 East.

PROJECT UNDERSTANDING

The Project proposes to develop a Travel Center within a 14.1-acre site that includes a five-story Hotel, a Restaurant, a Drive-Thru Restaurant, a Convenience Store, a Gas Station, and a Truck Stop, which includes Truck Fuel Pumps, a Truck Wash Facility, and a Car Wash Facility. The need for a project of this type at this location is such that this area of the City of Coachella is underserved for this type of use, particularly given that plans have been approved to extend Avenue 50 to Interstate 10, which would create a new freeway on- and off-ramp that will connect this portion of the City with interstate travelers looking to visit the Coachella Valley and beyond.

The project will require a zone classification change from Agricultural Reserve (A-R) to Commercial Entertainment (C-E). The project will also require a development permit and design review by the City of Coachella.

Based on Jericho's database screening, the Project site is located

- Within the home range of the Coachella Valley fringe-toed lizard habitat, and on-site soils appear to be of a similar type
- Within one mile of documented occurrences for burrowing owl
- Adjacent to the Whitewater River

SETTING

The subject parcel is located in an area with an average annual precipitation of 3.69 inches. Hydrologically, the Coachella Valley area is located within the Indio Hydrologic Sub-Area (HSA 719.47) which comprises a 540057-acre drainage area within the larger Whitewater River Watershed (HUC 181002010705). The Whitewater River is the major hydrogeomorphic feature within this watershed.

The general project vicinity consists primarily of undeveloped open space, existing paved and unpaved roads, and transportation corridor to the south (SR-86). Additionally, there is a private residence adjacent the southernmost boundary of the project site. Habitat on site and within the area surrounding the project site is best described as Four-wing saltbush scrub (*Atriplex canescens*) Shrubland Alliance (Holland: Desert saltbush bush scrub)

The site is relatively flat, and the on-site soils consist of Indio, very fine sandy loam.

METHODS

Data regarding biological resources on the project site were obtained through literature review and field investigations. Prior to performing the surveys, available databases and documentation relevant to the project site were reviewed for documented occurrences of sensitive species in the area. The site is located in the *Indio* USGS 7.5-minute series quadrangle, but its proximity to the *Thermal Canyon* USGS Quad led to the inclusion of this quad in the database search. Database searches included the U.S. Fish and Wildlife Service (USFWS) threatened and endangered species occurrence data overlay, as well as the most recent versions of the California Natural Diversity Database (CNDDB) and California Native Plant Society Electronic Inventory (CNPSEI) databases, within the *Indio* and *Thermal Canyon* USGS 7.5-minute series quadrangles. These databases contain records of reported occurrences of State- and federally-listed species or otherwise sensitive species and habitats that may occur within the vicinity of

the project site. Other available technical information on the biological resources of the area was also reviewed including previous surveys and recent findings.

Jericho biologists Shay Lawrey and Christian Nordal conducted a biological resources assessment of the project area on February 10, 2019. The survey area encompassed the entire project site and included 100 percent coverage of the site with transects spaced 30 meters apart. Wildlife species were detected during field surveys by sight, calls, tracks, scat, or other sign. In addition to species observed, expected wildlife usage of the site was determined per known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The focus of the faunal species surveys was to identify potential habitat for special status wildlife within the project area.

In addition to investigating biological resources the surveyors also evaluated the project site and adjacent areas for the presence of riverine/riparian/wetland habitat and jurisdictional waters, i.e. waters of the U.S. as regulated by the USACE and RWQCB, and/or jurisdictional streambed and associated riparian habitat as regulated by the CDFW.

Prior to field surveys, aerial imagery of the site was examined and compared with the surrounding USGS 7.5-minute topographic quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The USFWS National Wetland Inventory and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the Soil maps from the U.S. Department of Agriculture (USDA) - Natural Resources Conservation Service (NRCS) Web Soil Survey (USDA 2018) were reviewed to identify the soil series on site and to check if they have been identified regionally as hydric soils. Upstream and downstream connectivity of waterways (if present) was reviewed in the field, on aerial imagery, and topographic maps to determine jurisdictional status.

During the field surveys, the subject parcel site was assessed for depressions, inundation, presence of hydrophytic vegetation, staining, cracked soil, ponding, and indicators of active surface flow and corresponding physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris. Suspected jurisdictional areas were checked for the presence of definable channels, soils, and hydrology. Evaluation of potential federal jurisdiction followed the regulations set forth in 33CFR part 328 and the USACE guidance documents and evaluation of potential State jurisdiction followed guidance in the Fish and Game Code and A Review of Stream Processes and Forms in Dryland Watersheds (CDFW, 2010).

RESULTS

The project site is vacant land, consisting of flat terrain sandwiched between the northern levy of the Whitewater River and State Highway 86 along the north bank of the historic flood plain of the Whitewater River. The river traverses from northwest to southeast along the northern portion of the broad alluvial plain that comprises the southern portion of the Coachella Valley, between the Little San Bernardino Mountains to the north and the Santa Rosa Mountains to the south. The topography of the site is mostly uniform throughout. The site has been subject to human disturbance, both historic and ongoing. On site disturbances include vehicle travel and bulldozing of the original saltbush scrub habitat into rows of brush piles.

Habitat

Habitat within the project site consists primarily of highly disturbed Four-wing saltbush scrub (*Atriplex canescens*) Shrubland Alliance (Holland: Desert saltbush bush scrub). The site has recently been bulldozed into multiple linear brush piles. Total living vegetation cover is currently approximately 15%. Native plant species identified within the project area include four wing saltbush (*Atriplex canescens*), big saltbush (*Atriplex lentiformis*), honey mesquite (*Prosopis glandulosa*), Scalebroom (*Lepidospartum squamatum*), hairy-leaved sunflower (*Helianthus annuus*), and arrow weed (*Pluchea sericea*). Non-native, invasive plant species identified within the project area include foxtail brome (*Bromus madritensis*), Russian thistle (*Salsola tragus*), London rocket (*Sisymbrium irio*), and common Mediterranean grass (*Schismus barbatus*).

Wildlife

Amphibians and Reptiles

No amphibian species were observed or otherwise detected within the project area and none are expected to occur. The only reptile observed within the project area was the western side-blotched lizard (*Uta stansburiana elegans*). Other common species expected to occur within the project area include Great Basin whiptail (*Aspidoscelis tigris tigris*), Mojave shovel-nosed snake (*Chionactis occipitalis occipitalis*), desert banded gecko (*Coleonyx variegatus variegatus*), California kingsnake (*Lampropeltis californiae*), long-nosed snake (*Rhinocheilus lecontei*).

Birds

Avian species observed in the project area include verdin (*Auriparus flaviceps*), white-crowned sparrow (*Zonotrichia leucophrys*), Gambel's quail (*Callipepla gambelii*), greater roadrunner (*Geococcyx californianus*), and Cooper's hawk (*Accipiter cooperii*).

Mammals

Identification of mammals within the project area was generally determined by physical evidence rather than direct visual identification. This is because 1) many of the mammal species that potentially occur onsite are nocturnal and would not have been active during the survey and 2) no mammal trapping was performed. No mammal species were observed during site visit. Common species expected to occur within the project area include coyote (*Canis latrans*), Merriams' kangaroo rat (*Dipodomys merriami*), black-tailed jackrabbit (*Lepus californicus*), and desert cottontail (*Sylvilagus audubonii*).

Special Status Species and Habitats

An analysis of the likelihood for occurrence of all CNDDDB sensitive species documented in the *Indio* and *Thermal Canyon* USGS 7.5-minute series quadrangles quads is provided in Table 1. This analysis considers species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions.

No State- and/or federally-listed threatened or endangered species, or other sensitive species were observed on site during the reconnaissance-level field survey. However, there is some habitat within the

proposed project footprint, as well as the project vicinity, that may be suitable for several sensitive species identified in the literature review (Table 1) and several sensitive species have been documented near the project site.

Coachella Valley fringe-toed lizard – Threatened (Federal)/ Endangered (State)

The Coachella Valley fringe-toed lizard (CVFTL) is a medium-sized lizard that has physical adaptations to keep fine sand out of its eyes, mouth, nose, and ears and is restricted to sand dune habitats on the floor of the Coachella Valley in Riverside County, California (USFWS 2010). CVFTL is specialized to occupy a specific habitat type consisting of accumulations of windblown (aeolian) sand. Deeper sand deposits with more topographic relief are preferred by the species over flatter sand sheets (USFWS 2010). CVFTL are typically active from February to October and dormant from November to January. During the summer months, the lizards escape the heat by “swimming” or burrowing beneath the sand and restricts its activities to the early morning and late afternoon hours (USFWS 2010). Threats to CVFTL primarily consist of habitat destruction/alteration due to urban and agricultural development, OHV use, windbreaks, exotic vegetation, and other disruptions to the formation of the wind-blown sand drifts this lizard requires. It is estimated that approximately 90-95 percent of historical CVFTL habitat has been lost and currently only 15,000-20,000 acres remain available (USFWS 2010). Thus, the CVFTL was listed as threatened under the federal ESA on September 25, 1980 and as endangered under the CESA that same year. Critical Habitat was designated for this species by the USFWS at the time of listing.

Findings: A focused CVFTL survey was not performed, but no CVFTL were observed during the reconnaissance-level survey and none are expected to occur within the project area. Per the literature review, there are numerous historic CVFTL occurrences locally. However, the nearest known occurrence is approximately 1.25 miles west across the Whitewater River from the subject parcel at the intersection of Harrison St. and Ave. 50. This intersection is mostly developed currently.

The current soil conditions on site are stable and moist rendering them unsuitable for CVFTL. This species requires aeolian sand dunes, particularly deeper sand deposits with more topographic relief than flatter sand sheets (USFWS 2010). There is no sand dune habitat within the project site or immediate surrounding area. Rather, the habitat on site consists of relatively flat *Atriplex canescens* Shrubland Alliance. Soils on site are mostly stabilized due to previously moderately-dense vegetation cover and having been compacted recently by tracked heavy equipment (bulldozer) used to grub the site. Therefore, the site does not contain any habitat that would be considered suitable to support CVFTL and this species is not expected to occur within the project area. Per the USFWS CVFTL Critical Habitat overlay, the project site is not within any USFWS designated CVFTL Critical Habitat.

The CVMSHCP has modeled suitable CVFTL habitat within the plan area. Per the CVMSHCP CVFTL habitat overlay, the project site is completely outside of any areas of suitable CVFTL habitat.

Burrowing owl – SSC

The burrowing owl (BUOW) is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows. BUOW spend a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. They feed primarily on insects such as grasshoppers, June beetles and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31. BUOW have disappeared from significant portions of their range in the last 15 years and, overall, nearly 60% of the breeding groups of owls known to have existed in California during the 1980s had disappeared by the early 1990s (Burrowing Owl Consortium 1993). The BUOW is not listed under the State or federal ESA but is considered both a State and federal SSC. The BUOW is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code (CDFG Code #3513 & #3503.5).

Findings: Per the literature review, the nearest documented BUOW occurrence (April 1929) is approximately 0.6 miles NW of the project site. The assessment survey was structured, in part, to detect BUOW. The survey consisted of walking transects spaced to provide 100% visual coverage of the project site. The result of the survey was that no evidence of BUOW was found in the survey area. No BUOW individuals or sign including pellets, feathers or white wash were observed. Per the definition provided in the *2012 CDFG Staff Report on Burrowing Owl Mitigation*, “Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey.” Therefore, the project site and immediate vicinity does not contain suitable habitat for this species for the following reasons:

- *The site and immediate vicinity do not support areas of short, sparse vegetation;*
- *No appropriately sized mammal burrows were observed within the project area during survey; and*
- *BUOW host burrowers were not observed within the project area during survey.*
- *The soil type does not suitable for burrow construction/maintenance*

Therefore, BUOW are considered absent from the project area.

Waters of the U.S.

The USACE has authority to permit the discharge of dredged or fill material in waters of the U.S. under Section 404 CWA. WoUS are defined as: “All waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands

adjacent to these waters” (Section 404 of the CWA; 33 CFR 328.3 (a). CWA jurisdiction exists over the following:

1. all traditional navigable waters (TNWs);
2. all wetlands adjacent to TNWs;
3. non-navigable tributaries of TNWs that are relatively permanent waters (RPWs) i.e., tributaries that typically flow year-round or have continuous flow at least seasonally; and
4. every water body determined to have a significant nexus with TNWs.

No drainages or other water features were identified within the project site that would meet the definition of WoUS. The project site is immediately adjacent to the Whitewater River, which originates in the San Bernardino Mountains and terminates at the Salton Sea. The Salton Sea is a TNW. Therefore, Whitewater River and its tributaries are considered to have a significant nexus to a TNW and would be considered jurisdictional WoUS. There is a significant flood control levy between the site and the river preventing periodic inundation even at the 100-year storm levels. However, no drainages or other water features were identified within the project site that would meet the definition of WoUS. The field study was conducted following significant rainfall in the region and although there were some areas within the project site that appeared to have received temporary surface flow, there was no indication that these flows were tributary to the Whitewater River as they appeared to percolate on site.

USACE Wetlands

Areas meeting all three parameters of hydrophytic vegetation, hydric soils, and/or wetland hydrology would be designated as USACE wetlands. None of the three required parameters are present within the project site. Therefore, no wetlands were identified in the study area during this investigation based on the absence of hydrophytic vegetation, hydric soil indicators and/or wetland hydrology.

State Lake/Streambed

The project site is situated on flat to gently-sloped terrain consisting of *Atriplex canescens* Shrubland Alliance and there are no drainages or other water features that have a definable bed and bank or associated riparian vegetation that would be subject to the FGC under the jurisdiction of the CDFW.

CONCLUSIONS

Sensitive Biological Resources

No State- and/or federally-listed threatened or endangered species, or other sensitive species were observed on site during the field survey. None of the sensitive habitats identified during the literature review exist within the project site.

The site is not suitable to support CVFT and/or BUOW and no further survey is warranted or recommended.

Nesting Birds

Habitat suitable for nesting birds does exist within the project site and adjacent areas. As discussed, most birds are protected by the MBTA. To avoid potential impacts to nesting birds during construction, the following measure is recommended:

- Recommendation: In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season, which is generally January/February to August/September, and by conducting a worker environmental awareness training. However, if all work cannot be conducted outside of nesting season, a project-specific Nesting Bird Management Plan can be prepared to determine suitable buffers. Preconstruction Nesting Bird Surveys are recommended prior to the commencement of any project activities that may occur within the nesting season (January to September), to avoid any potential project-related impacts to nesting birds within the project area.

No jurisdictional features subject to the CWA or FGC under the jurisdictions of the USACE, RWQCB, or CDFW exist within the project area. The project site is located entirely outside of any jurisdictional areas and no permanent or temporary impacts to jurisdictional features will result from the project. Therefore, no permits or authorizations from the USACE, RWQCB, or CDFW will be required.

Jericho appreciates the opportunity to continue to be of service. If you have any questions or need any clarifications, feel free to contact me at (909) 915-5900 or at shay@jericho-systems.com

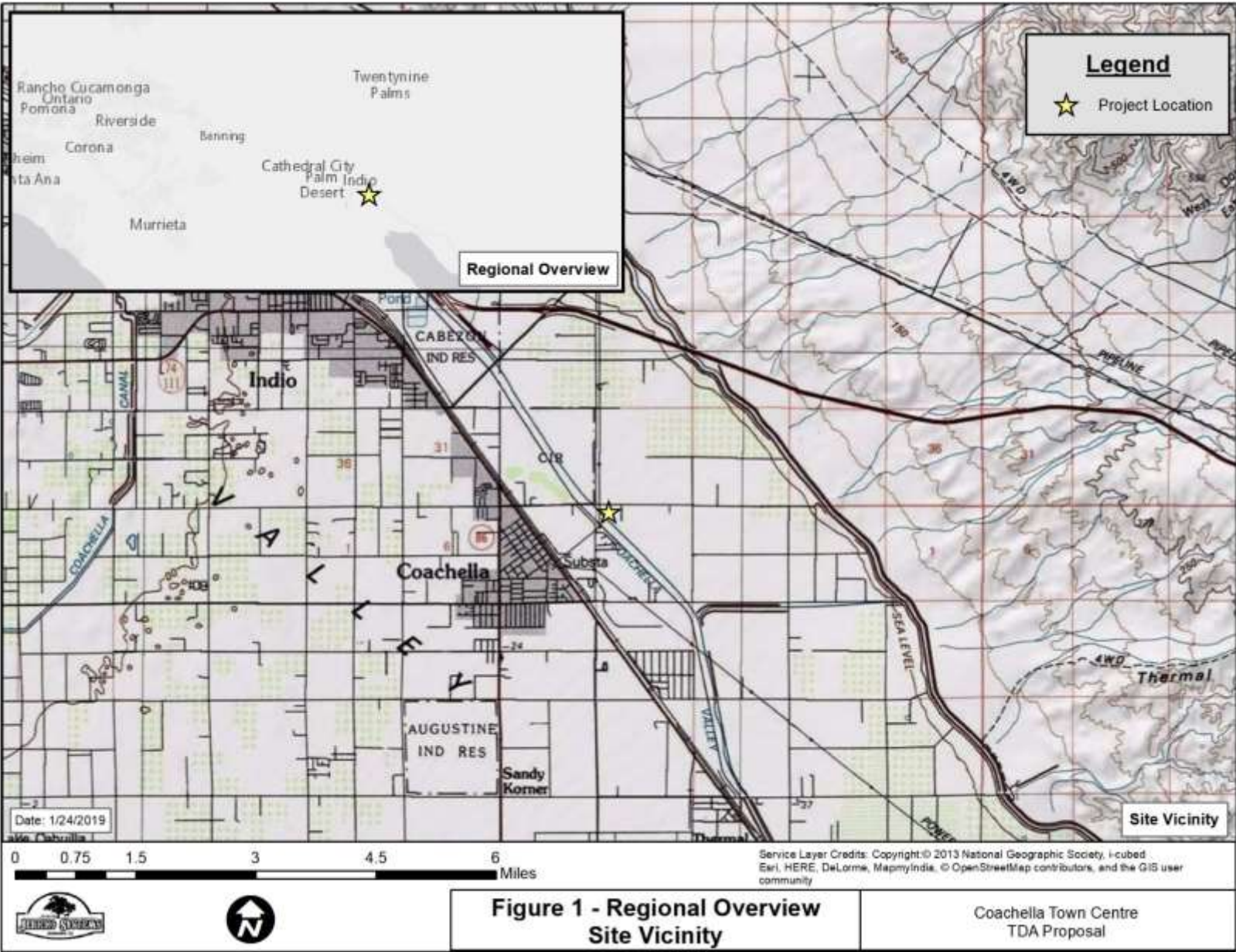
Sincerely,



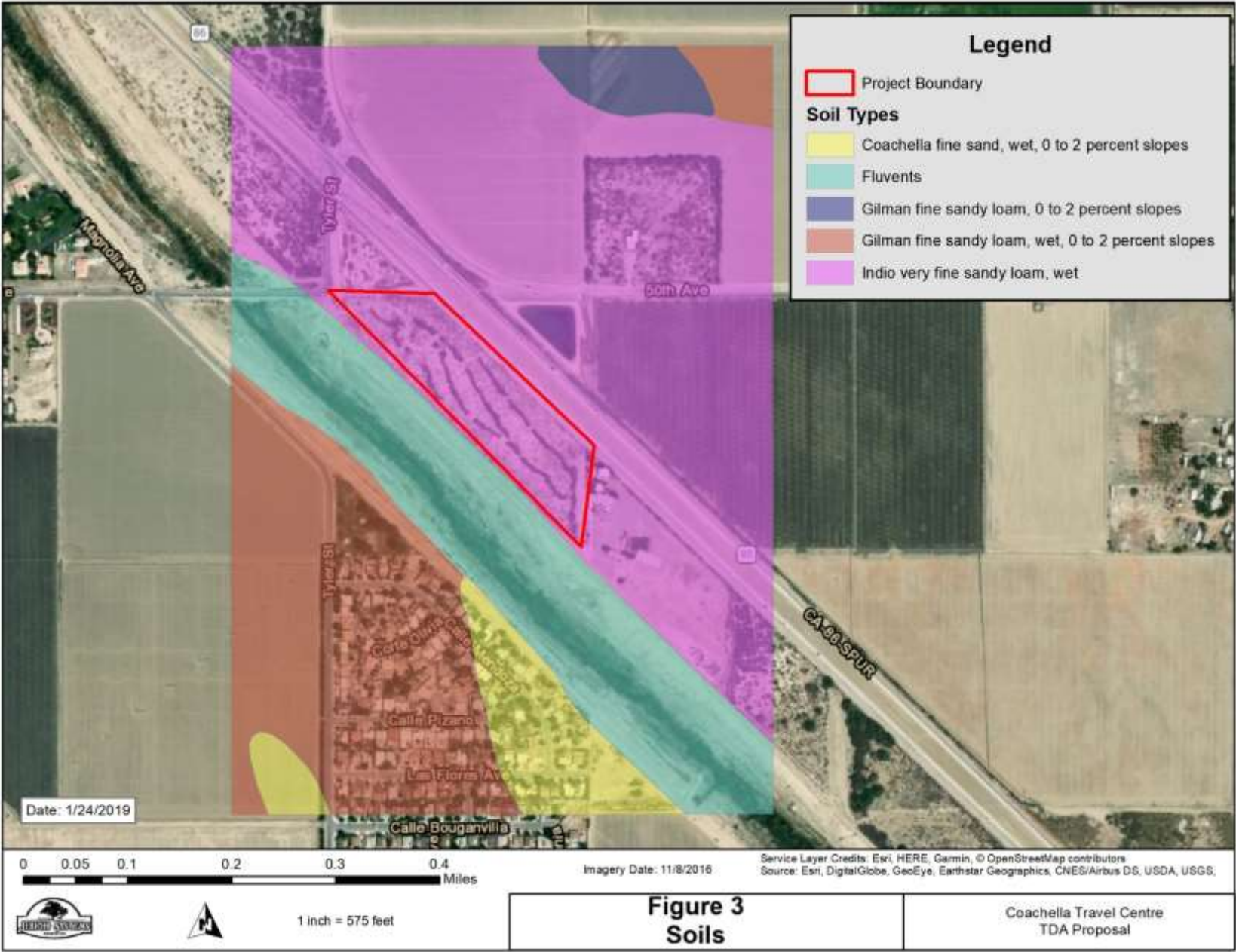
Shay Lawrey, President

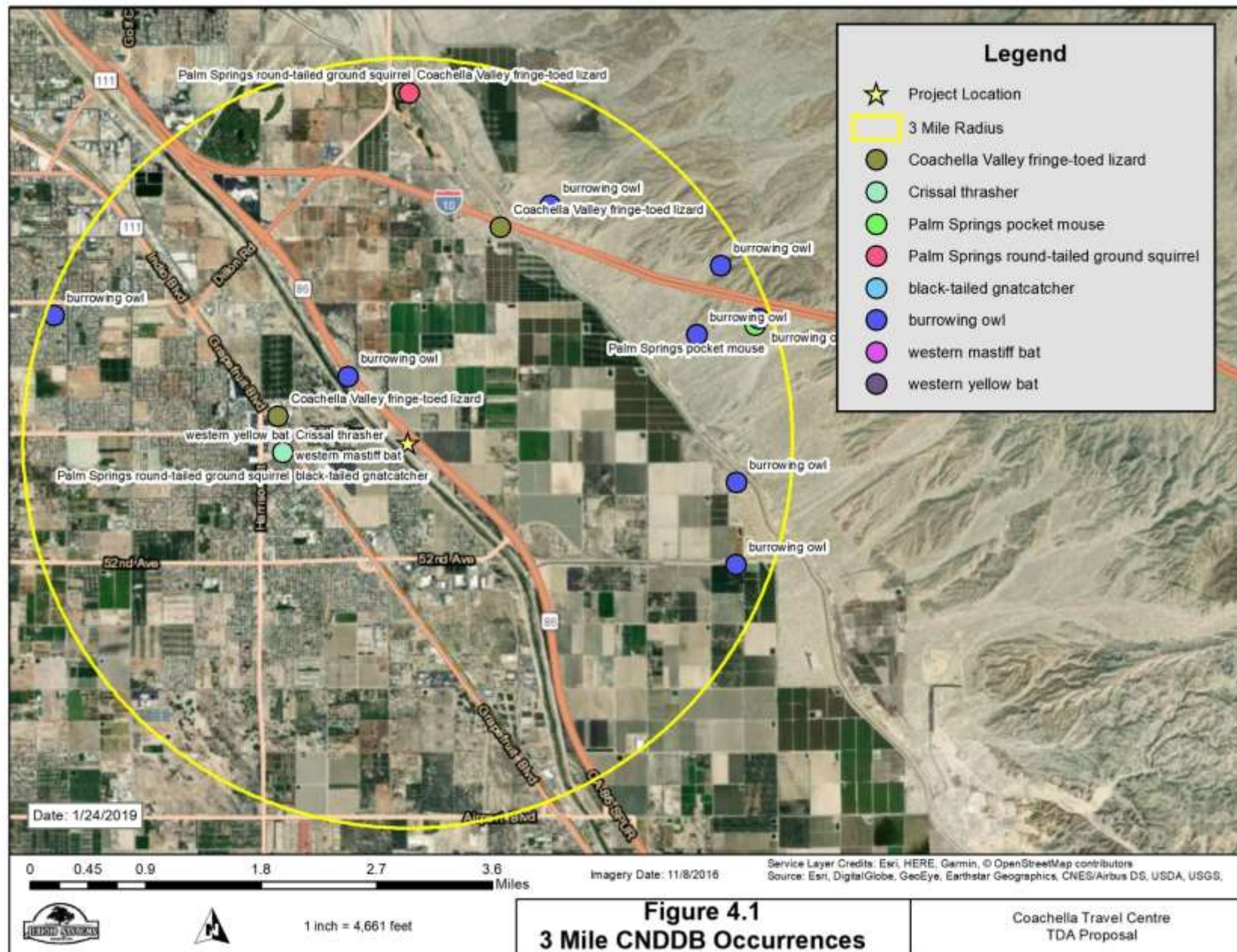
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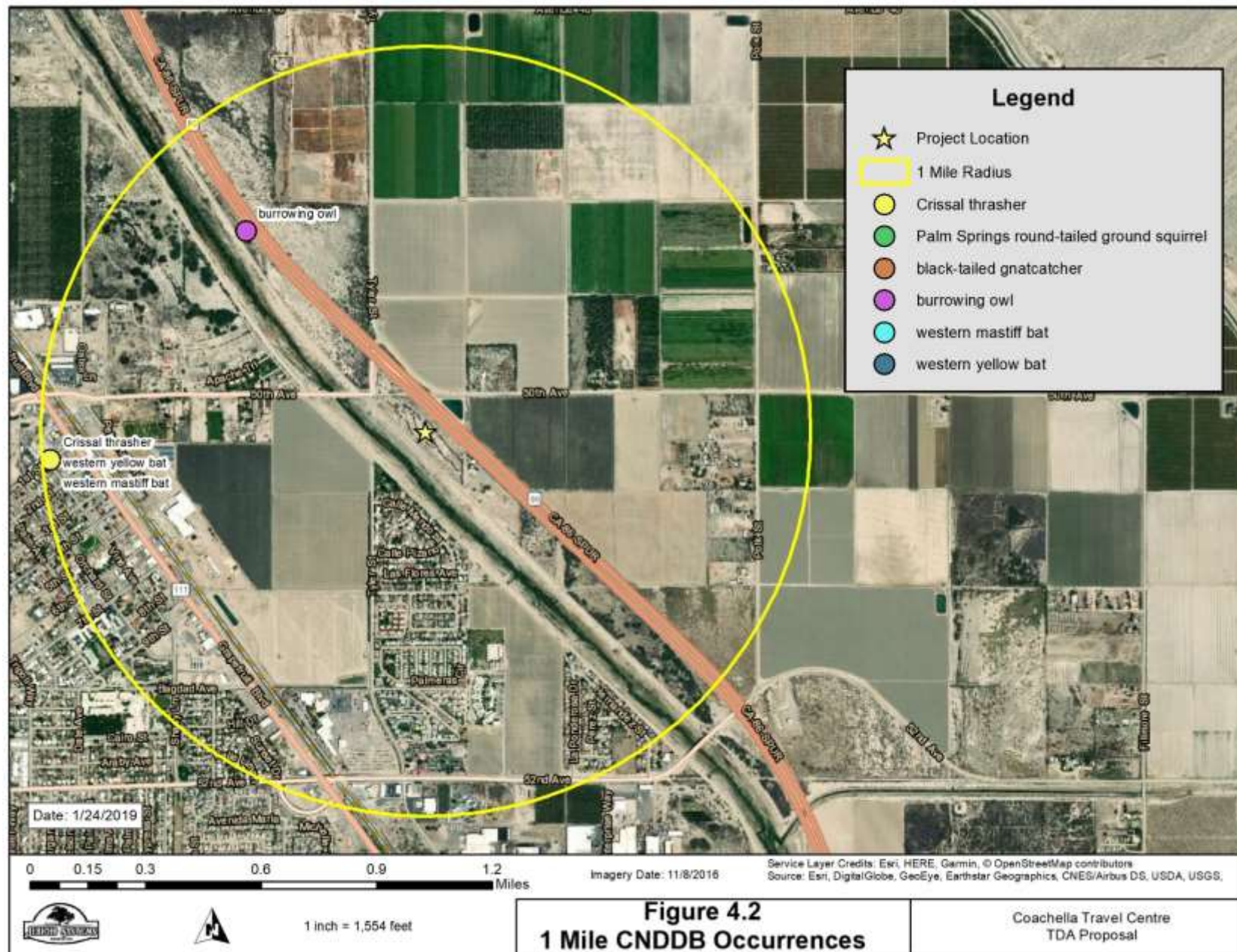
Attachment 1 - Figures
Attachment 2 – Table of Potential to Occur
Attachment 3 – Site Photos

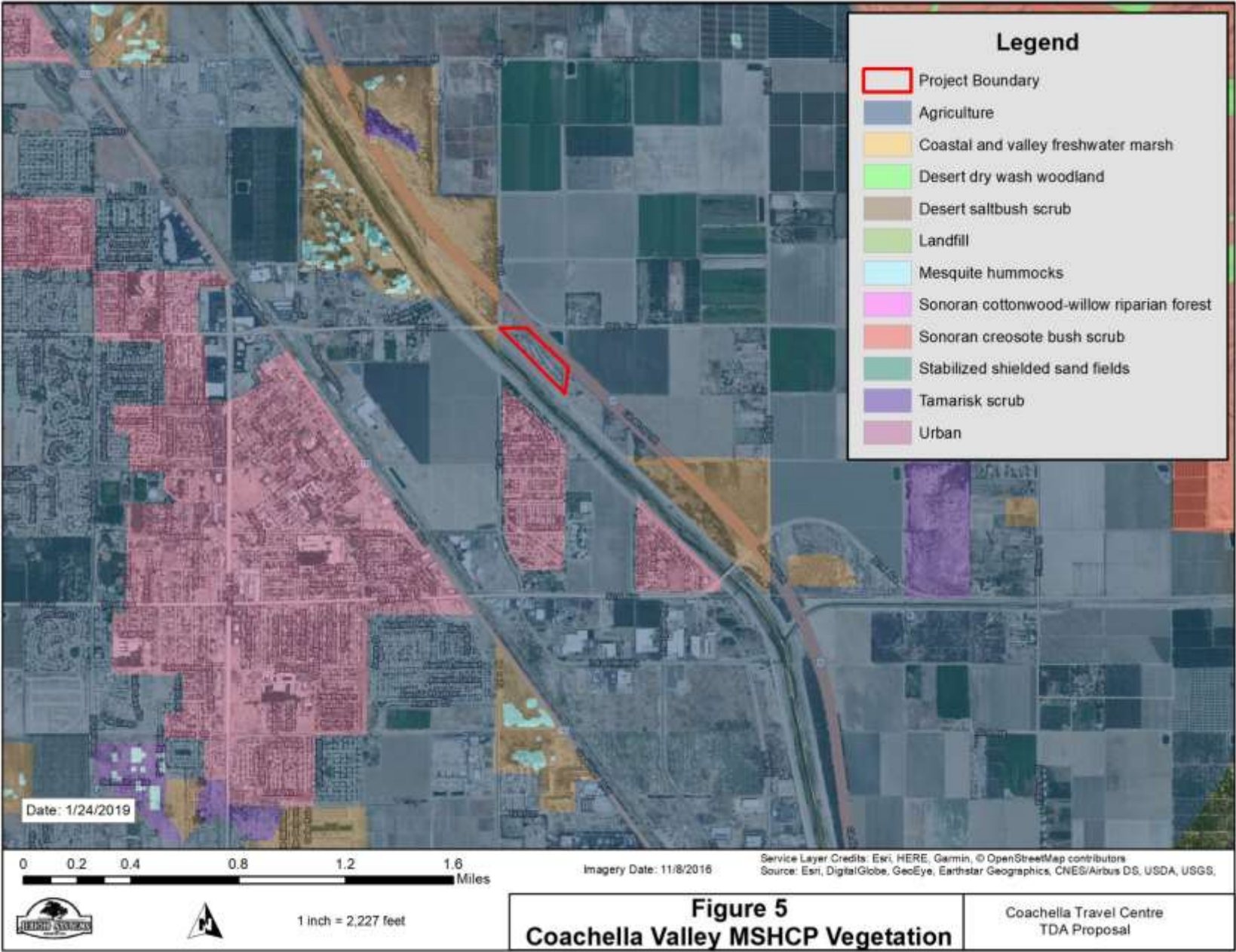


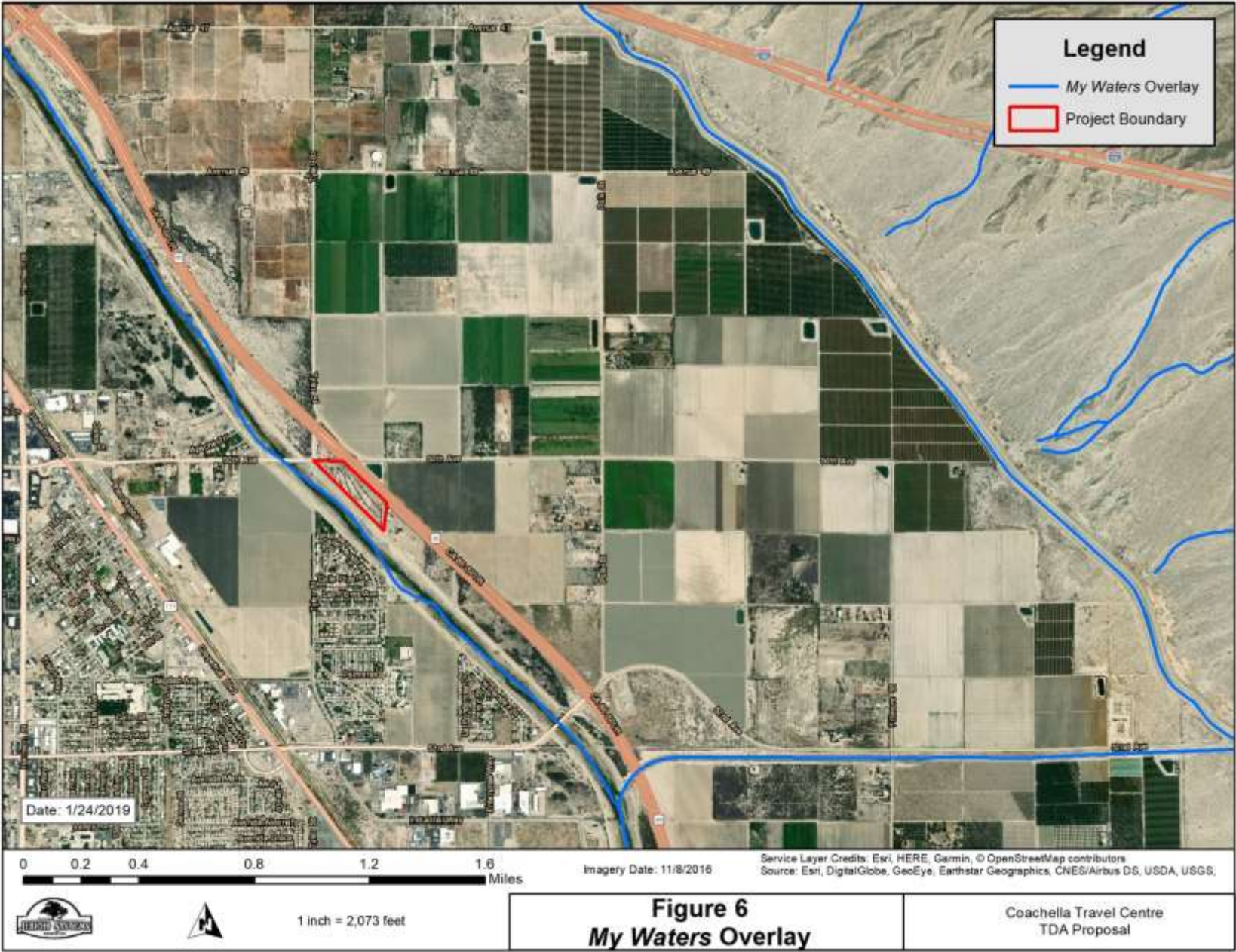














Scientific Name	Common Name	Federal/ State Rankings	Other Rankings	Habitat	Potential to Occur
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	None/None	G5T2T3, S2 CNPS 1B.1	Chaparral, coastal scrub, desert dunes. Sandy areas. -60-1570 m.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Astragalus lentiginosus</i> var. <i>coachellae</i>	Coachella Valley milk-vetch	Endangered/None	G5T1, S1 CNPS 1B.2	Sonoran desert scrub, desert dunes. Sandy flats, washes, outwash fans, sometimes on dunes. 35-695 m.	Site is outside elevational range for this species. Potential for this species to occur is low .
<i>Astragalus preussii</i> var. <i>laxiflorus</i>	Lancaster milk-vetch	None/None	G4T2, S1 CNPS 1B.1	Chenopod scrub. Alkaline clay flats or gravelly or sandy washes and along draws in gullied badlands. 700-735 m in California.	Site is outside elevational range for this species. Potential for this species to occur is low .
<i>Astragalus sabulonum</i>	gravel milk-vetch	None/None	G4G5, S2 CNPS 2B.2	Desert dunes, Mojavean desert scrub, Sonoran desert scrub. Sandy or gravelly flats, washes, and roadsides. -60-885 m.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Athene cunicularia</i>	burrowing owl	None/None	G4, S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat for this species occurs onsite. However, predators, including domestic dogs, are present in the immediate vicinity and no sign was detected during surveys. Species is absent from site.
<i>Buteo regalis</i>	ferruginous hawk	None/None	G4, S3S4	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Ditaxis claryana</i>	glandular ditaxis	None/None	G3G4, S2 CNPS 2B.2	Mojavean desert scrub, Sonoran desert scrub. In dry washes and on rocky hillsides. Sandy soils. 0-465 m.	Site is outside elevational range for this species. Potential for this species to occur is low .
<i>Eumops perotis californicus</i>	western mastiff bat	None/None	G5T4, S3S4 SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Lasiurus xanthinus</i>	western yellow bat	None/None	G5, S3 SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Suitable habitat for this species occurs adjacent to the project site. Potential for species to utilize project site for travel is low .
<i>Macrobaenetes valgum</i>	Coachella giant sand treader cricket	None/None	G1G2, S1S2	Known from the sand dune ridges in the vicinity of Coachella Valley. Population size regulated by amount of annual rainfall; some spots favor permanent habitation where springs dampen sand.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .

Scientific Name	Common Name	Federal/ State Rankings	Other Rankings	Habitat	Potential to Occur
<i>Perognathus longimembris bangsi</i>	Palm Springs pocket mouse	None/None	G5T2, S2 SSC	Desert riparian, desert scrub, desert wash and sagebrush habitats. Most common in creosote-dominated desert scrub. Rarely found on rocky sites. Occurs in all canopy coverage classes.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Phrynosoma mcallii</i>	flat-tailed horned lizard	None/None	G3, S2 SSC	Restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties. Critical habitat element is fine sand, into which lizards burrow to avoid temperature extremes; requires vegetative cover and ants.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Poliophtila melanura</i>	black-tailed gnatcatcher	None/None	G5, S3S4	Primarily inhabits wooded desert wash habitats; also occurs in desert scrub habitat, especially in winter. Nests in desert washes containing mesquite, palo verde, ironwood, acacia; absent from areas where salt cedar introduced.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Pyrocephalus rubinus</i>	vermillion flycatcher	None/None	G5, S2S3 SSC	During nesting, inhabits desert riparian adjacent to irrigated fields, irrigation ditches, pastures, and other open, mesic areas. Nest in cottonwood, willow, mesquite, and other large desert riparian trees.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Taxidea taxus</i>	American badger	None/None	G5, S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Toxostoma crissale</i>	Crissal thrasher	None/None	G5, S3 SSC	Resident of southeastern deserts in desert riparian and desert wash habitats. Nests in dense vegetation along streams/washes; mesquite, screwbean mesquite, ironwood, catclaw, acacia, arrowweed, willow.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Toxostoma lecontei</i>	Le Conte's thrasher	None/None	G4, S3 SSC	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Uma inornata</i>	Coachella Valley fringe-toed lizard	Threatened/ Endangered	G1Q, S1	Limited to sandy areas in the Coachella Valley, Riverside County. Requires fine, loose, windblown sand (for burrowing), interspersed with hardpan and widely-spaced desert shrubs.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .

Scientific Name	Common Name	Federal/ State Rankings	Other Rankings	Habitat	Potential to Occur
<i>Wislizenia refracta</i> ssp. <i>refracta</i>	jackass-clover	None/None	G5T5?, S1, 2B.2	Playas, desert dunes, Mojavean desert scrub, Sonoran Desert scrub. Sandy washes, roadsides, alkaline flats. 380-1160 m.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Xerospermophilus tereticaudus chlorus</i>	Palm Springs round-tailed ground squirrel	None/None	G5T2Q, S2 SSC	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees. Prefers open, flat, grassy areas in fine-textured, sandy soil. Density correlated with winter rainfall.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .
<i>Xylorhiza cognata</i>	Mecca-aster	None/None	G2, S2, 1B.2	Sonoran Desert scrub. Steep canyon slopes, in sandstone and clay. 20-305 m.	Suitable habitat for this species does not occur onsite. Potential for this species to occur is low .

Source: USFWS/NMFS- 2019 IPaC species list; CNDDDB 2019; CNPS 2019.

Status Codes:

E = endangered;
T = threatened;
P = proposed for listing;
C = candidate for listing; and
CH = designated critical habitat
CP = CA state proposed for listing;
FP = CDFW fully protected



Photo 1 - Adult Honey Mesquite (*Prosopis glandulosa*) to be removed.



Photo 2 - Tire tracks providing evidence of frequent off-road vehicle use.



Photo 3 - Example of woody debris pile found throughout the project site.



Photo 4 - Juvenile Honey Mesquite (*Prosopis glandulosa*) to be removed.



Photo 5 - View from the middle of the project vicinity of the levee that contains the



Photo 6 - View of the Highway 86 from the middle of the project vicinity.



Photo 7 - Photograph of the property boundary between the project property and adjacent



Photo 8 - View of the project area from the Northernmost area along 50th Avenue.

APPENDIX 3

HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT

COACHELLA TRAVEL CENTRE PROJECT

**Assessor's Parcel Number 763-020-021
City of Coachella, Riverside County, California**

For Submittal to:

City of Coachella
1515 Sixth Street
Coachella, CA 92236

Prepared for:

Tom Dodson & Associates
2150 N. Arrowhead Avenue
San Bernardino, CA 92405

Prepared by:

CRM TECH
1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

Bai "Tom" Tang, Principal Investigator
Michael Hogan, Principal Investigator

March 15, 2019
CRM TECH Contract No. 3442

Title: Historical/Archaeological Resources Survey Report: Coachella Travel Centre Project, Assessor's Parcel Number 763-020-021, City of Coachella, Riverside County, California

Author(s): Bai "Tom" Tang, Principal Investigator/Historian
Ben Kerridge, Archaeologist/Report Writer
Daniel Ballester, Archaeologist/Field Director
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Date: March 15, 2019

For Submittal to: Planning Division
Development Services Department
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Coachella, CA 92236
(760) 398-3502

Prepared for: Kaitlyn Dodson, President
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San Bernardino, CA 92405
(909) 882-3612

USGS Quadrangle: Indio, Calif., 7.5' quadrangle (Section 4, T6S R8E, San Bernardino Baseline and Meridian)

Project Size: Approximately 14.1 acres

Keywords: Coachella Valley, Colorado Desert region; Phase I cultural resources survey; Site 33-028167 (Devers-Coachella Valley 220 kV Transmission Line, 1950s); Site 33-028173 (Avenue 50, 1950s); Site 33-028175 (domestic refuse scatter, 1910s-1920s); no "historical resources" in the project area

MANAGEMENT SUMMARY

In February and March 2019, at the request of the Tom Dodson & Associates, CRM TECH performed a cultural resources study on approximately 14.1 acres undeveloped land in the City of Coachella, Riverside County, California. The subject property of the study, Assessor's Parcel Number 763-020-021, is located between State Route 86 and the Coachella Valley Stormwater Channel, on the south side of Avenue 50, and within the northwest quarter of Section 4, T6S R8E, San Bernardino Baseline and Meridian.

The study is part of the environmental review process for the proposed Coachella Travel Centre Project, which entails the construction of a four-story hotel, two restaurants, a convenience store, a gas station, a truck stop, and a car wash facility on the property. The City of Coachella, as the lead agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any "historical resources," as defined by CEQA, that may exist in or around the project area.

In order to identify such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, contacted Native American representatives, and carried out an intensive-level field survey of the entire project area. The results of these research procedures indicate that three historic-period sites, 33-028167 (Devers-Coachella Valley 220 kV Transmission Line), 33-028173 (Avenue 50), and 33-028175 (domestic refuse scatter), were previously recorded as lying within or partially within the project area. The presence of these sites was confirmed during the field survey, but none of them appears to meet the definition of a "historical resource" under CEQA provisions. No other potential "historical resources" were encountered within the project area.

Based on these findings, CRM TECH recommends to the City of Coachella a conclusion of *No Impact* on cultural resources, pending the completion of Native American consultation process by the City of Coachella pursuant to Assembly Bill 52. No further cultural resources investigation is recommended for the proposed project unless development plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are encountered inadvertently during any earth-moving operations associated with the project, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds. Human remains discovered during the project will need to be treated in accordance with the provisions of HSC §7050.5 and PRC §5097.98.

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INTRODUCTION

In February and March 2019, at the request of the Tom Dodson & Associates, CRM TECH performed a cultural resources study on approximately 14.1 acres undeveloped land in the City of Coachella, Riverside County, California (Figure 1). The subject property of the study, Assessor's Parcel Number 763-020-021, is located between State Route (SR) 86 and the Coachella Valley Stormwater Channel, on the south side of Avenue 50, and within the northwest quarter of Section 4, T6S R8E, San Bernardino Baseline and Meridian (Figures 2, 3).

The study is part of the environmental review process for the proposed Coachella Travel Centre Project, which entails the construction of a four-story hotel, two restaurants, a convenience store, a gas station, a truck stop, and a car wash facility on the property. The City of Coachella, as the lead agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA; PRC §21000, et seq.). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any "historical resources," as defined by CEQA, that may exist in or around the project area.

In order to identify such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, contacted Native American representatives, and carried out an intensive-level field survey of the entire project area. The following report is a complete account of the methods, results, and final conclusion of the study. Personnel who participated in the study are named in the appropriate sections below, and their qualifications are provided in Appendix 1.

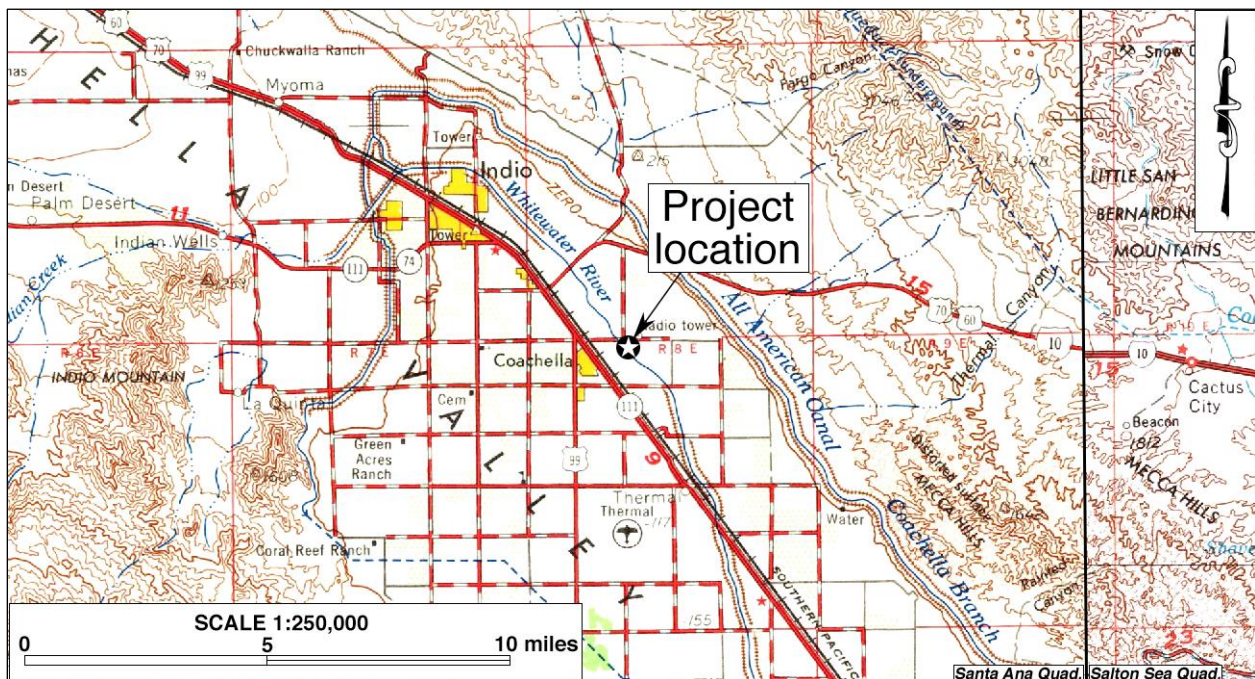


Figure 1. Project vicinity. (Based on USGS Santa Ana, Calif., and Salton Sea, Calif.-Ariz., 30'x60' quadrangles [USGS 1969; 1979])

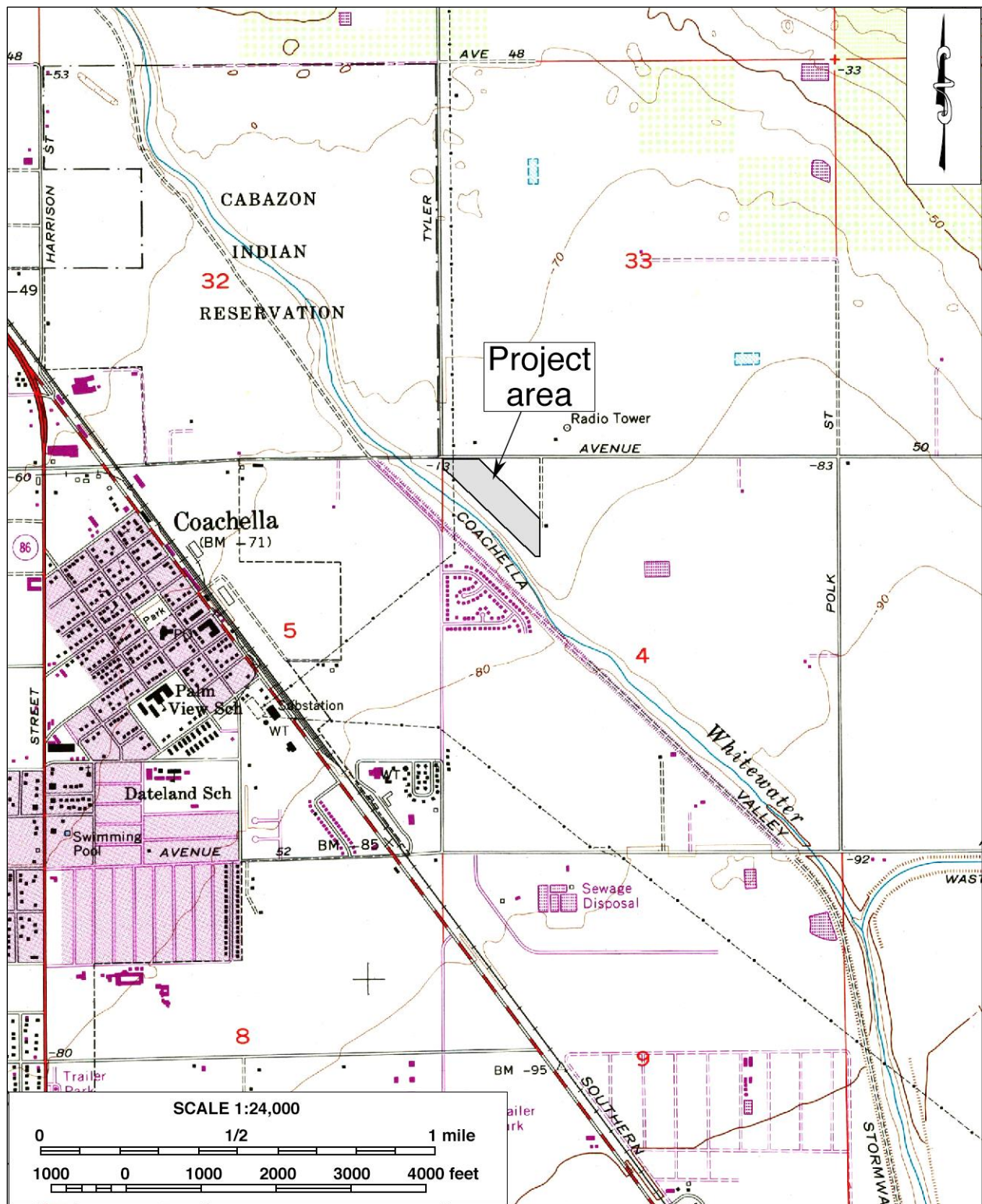


Figure 2. Project location. (Based on USGS Indio, Calif., 7.5' quadrangle [USGS 1972])



Figure 3. Aerial view of the project area.

SETTING

CURRENT NATURAL SETTING

The City of Coachella is located in the Coachella Valley, a northwest-southeast trending desert valley that constitutes the western end of the Colorado Desert. Dictated by this geographic setting, the climate and environment of the region are typical of the southern California desert country, marked by extremes in temperature and aridity. Temperatures in the region reach over 120 degrees in summer, and dip to freezing in winter. Average annual precipitation is less than five inches, and the average annual evaporation rate exceeds three feet.

The project area encompasses an irregularly shaped parcel of vacant land in the central portion of the city, on the northeastern edge of the town center, and includes a portion of the vacated Avenue 50 right-of-way along the northern edge. It is surrounded mostly by undeveloped land and agricultural fields, with a rural residence on adjacent land to the southeast and some suburban residential neighborhoods further to the west and the south (Figure 3).

The terrain in the project area is relatively level, with elevations ranging roughly between 70 and 80 feet below mean sea level, and the surface soils are composed of light grayish-brown, fine-grained sands and silt mixed with freshwater mollusk shells. Vegetation on the property consisted mainly of rabbitbrush, saltbush, tumbleweed, and other small desert shrubs and grasses, much of which had been uprooted in the past and piled into meandering rows (Figures 3, 4).



Figure 4. Overview of the project area. (Photograph taken on February 27, 2019; view to the west)

In past centuries, Native lifeways in the Coachella Valley were greatly influenced by the lacustral intervals—i.e., inundation and subsequent desiccation—of Holocene Lake Cahuilla, an ancient freshwater lake that repeatedly filled the present-day Salton Basin between 900 and 1700 A.D. The shoreline of the lake during its last high stand is estimated to have been at the elevation of 42 feet above mean sea level, and the project area would have been fully submerged by the lake at that time.

CULTURAL SETTING

Prehistoric Context

Numerous investigations on the history of cultural development in southern California have led researchers to propose a number of cultural chronologies for the desert regions. A specific cultural sequence for the Colorado Desert was offered by Schaefer (1994) on the basis of the many archaeological studies conducted in the area. The earliest time period identified is the Paleoindian (ca. 8,000 to 10,000-12,000 years ago), when “small, mobile bands” of hunters and gatherers, who relied on a variety of small and large game animals as well as wild plants for subsistence, roamed the region (*ibid.*:63). These small groups settled “on mesas and terraces overlooking larger washes” (*ibid.*:64). The artifact assemblage of that period typically consists of very simple stone tools, “cleared circles, rock rings, [and] some geoglyph types” (*ibid.*).

The Early Archaic Period follows and dates to ca. 8,000 to 4,000 years ago. It appears that a decrease in population density occurred at this time and that the indigenous groups of the area relied more on foraging than hunting. Very few archaeological remains have been identified to this time period. The ensuing Late Archaic Period (ca. 4,000 to 1,500 years ago) is characterized by continued low population densities and groups of “flexible” sizes that settled near available seasonal food resources and relied on “opportunistic” hunting of game animals. Groundstone artifacts for food processing were prominent during this time period.

The most recent period in Schaefer’s scheme, the Late Prehistoric, dates from ca. 1,500 years ago to the time of the Spanish missions, and saw the continuation of the seasonal settlement pattern. Peoples of the Late Prehistoric Period were associated with the Patayan cultural pattern and relied more heavily on the availability of seasonal “wild plants and animal resources” (Schaefer 1994:66). It was during this period that brown and buff ware ceramics were introduced into the region.

The shores of Holocene Lake Cahuilla, during times of its presence, attracted much settlement and resource procurement activities. In times of the lake’s desiccation and absence, according to Schaefer (1994:66), the Native people moved away from its receding shores towards rivers, streams, and mountains. Numerous archaeological sites dating to the last high stand of Holocene Lake Cahuilla have been identified along its former shoreline. Testing and mitigative excavations at these sites have recovered brownware and buffware ceramics, a variety of groundstone and projectile point types, ornaments, and cremation remains.

Ethnohistoric Context

The Coachella Valley is a historical center of Native American settlement, where U.S. surveyors noted large numbers of Indian villages and *rancherías*, occupied by the Cahuilla people, in the mid-

19th century. The Takic-speaking Cahuilla are generally divided by anthropologists into three groups, according to their geographic setting: the Pass Cahuilla of the San Geronimo Pass-Palm Springs area, the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountains and the Cahuilla Valley, and the Desert Cahuilla of the eastern Coachella Valley. The basic written sources on Cahuilla culture and history include Kroeber (1925), Strong (1929), and Bean (1978). The following ethnohistoric discussion is based primarily on these sources.

The Cahuilla did not have a single name that referred to an all-inclusive tribal affiliation. Instead, membership was in terms of lineages or clans. Each lineage or clan belonged to one of two main divisions of the people, known as moieties. Members of clans in one moiety had to marry into clans from the other moiety. Individual clans had villages, or central places, and territories they called their own, for purposes of hunting game, gathering food, or utilizing other necessary resources. They interacted with other clans through trade, intermarriage, and ceremonies.

Cahuilla people were primarily hunters and gatherers who exploited nearly all of the resources available in a highly developed seasonal mobility system. They were adapted to the arid conditions of the desert floor, the lacustral cycles of Holocene Lake Cahuilla, and the environments of the nearby mountains. When the lake was full, or nearly full, the Cahuilla would take advantage of the resources presented by the body of fresh water. Once the lake had desiccated, they utilized the available terrestrial resources. They also migrated to the higher elevations of the nearby mountains to take advantage of the resources and cooler temperatures available in that environment.

Cahuilla collected seeds, roots, wild fruits and berries, acorns, wild onions, piñon nuts, and mesquite and screw beans. Hunting techniques included throwing sticks, clubs, nets, traps, snares, as well as bows and arrow (Bean 1978; CSRI 2002), and common game animals included deer, antelope, big horn sheep, rabbits, wood rats and, when Holocene Lake Cahuilla was present, fish and waterfowls. Common household tools and utensils included manos and metates, mortars and pestles, hammerstones, fire drills, awls, arrow-straighteners, and stone knives and scrapers. These lithic tools were made from locally available material as well as exotic material procured through trade or travel. They also used wood, horn, and bone spoons and stirrers; baskets for winnowing, leaching, grinding, transporting, parching, storing, and cooking; and pottery vessels for carrying water, storage, cooking, and serving food and drink (*ibid.*).

Population data prior to European contact are almost impossible to obtain, but estimates range from 3,600 to as high as 10,000 persons. During the 19th century, however, the Cahuilla population was decimated as a result of European diseases, most notably smallpox, for which the Native peoples had no immunity. Today, Native Americans of Pass or Desert Cahuilla heritage are mostly affiliated with one or more of the Indian reservations in and near the Coachella Valley, including Agua Caliente, Morongo, Cabazon, Torres Martinez, and Augustine.

Historic Context

In 1823-1825, José Romero, José Maria Estudillo, and Romualdo Pacheco became the first noted European explorers to travel through the Coachella Valley when they led a series of expeditions in search of a route to Yuma (Johnston 1987:92-95). Due to its harsh environment, few non-Indians ventured into the desert valley during the Mexican and early American periods, except those who traveled along the established trails. The most important of these trails was the Cocomaricopa Trail,

an ancient Indian trading route that was “discovered” in 1862 by William David Bradshaw and known after that as the Bradshaw Trail (Gunther 1984:71; Ross 1992:25). In much of the Coachella Valley, this historic wagon road traversed a similar course to that of present-day SR 111, which runs northwest-southeast less than half of a mile to the west of the project area. During the 1860s-1870s, the Bradshaw Trail served as the main thoroughfare between coastal southern California and the Colorado River, until the completion of the Southern Pacific (now Union Pacific) Railroad in 1876-1877 brought an end to its heyday (Johnston 1987:185).

Non-Indian settlement in the Coachella Valley began in the 1870s with the establishment of railroad stations along the Southern Pacific Railroad, and spread further in the 1880s after public land was opened for claims under the Homestead Act, the Desert Land Act, and other federal land laws (Laflin 1998:35-36; Robinson 1948:169-171). Farming became the dominant economic activity in the valley thanks to the development of underground water sources, often in the form of artesian wells. Around the turn of the century, the date palm was introduced into the Coachella Valley, and by the late 1910s dates were the main agricultural crop and the tree an iconic image celebrating the region as the “Arabia of America” (Shields Date Gardens 1957). Then, starting in the 1920s, a new industry featuring equestrian camps, resorts, hotels, and eventually country clubs began to spread throughout the Coachella Valley, transforming it into southern California’s premier winter retreat.

The City of Coachella traces its roots to a siding on the Southern Pacific Railroad, known originally as Woodspur. In 1901-1902, a townsite was developed around the siding, and a new name for the locale, Coachella, was coined from Coahuilla and Conchilla, two names that had been used alternatively for the Coachella Valley (Gunther 1984:121-122). The Coachella post office was established in late 1901, and the plat of the townsite was filed by the Coachella Land and Water Company the next year. The town was incorporated in 1946 as the 12th city in Riverside County, and since then has grown into a city of more than 29 square miles and a population of more than 45,000 (City of Coachella 2016).

RESEARCH METHODS

RECORDS SEARCH

On July 19, 2018, CRM TECH archaeologist Nina Gallardo completed the records search at the Eastern Information Center (EIC), University of California, Riverside. During the records search, Gallardo examined maps and records on file at the EIC for previously identified cultural resources and existing cultural resources reports within a one-mile radius of the project area. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside County Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

HISTORICAL BACKGROUND RESEARCH

Historical background research for this study was conducted by CRM TECH principal investigator/historian Bai “Tom” Tang. Sources consulted during the research included published literature in

local and regional history, U.S. General Land Office (GLO) land survey plat maps dated 1856, U.S. Geological Survey (USGS) topographic maps dated 1904-1972, and aerial photographs taken in 1953-2018. The historic maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, located in Moreno Valley. The aerial photographs are available at the Nationwide Environmental Title Research (NETR) Online website and through the Google Earth software.

NATIVE AMERICAN PARTICIPATION

On February 6, 2019, CRM TECH submitted a written request to the State of California Native American Heritage Commission (NAHC) for a records search in the commission's Sacred Lands File. In the meantime, on February 7 and February 25, CRM TECH notified the nearby Torres Martinez Desert Cahuilla Indians of the upcoming archaeological fieldwork and invited tribal participation. Following the NAHC's recommendations and previously established consultation protocol, CRM TECH further contacted a total of 13 Native American representatives in the region in writing on February 15 for additional information on potential Native American cultural resources in the project vicinity. The correspondence between CRM TECH and the Native American representatives is attached to this report as Appendix 2.

FIELD SURVEY

On February 27, 2019, CRM TECH field director Daniel Ballester and project archaeologist Nina Gallardo carried out the field survey of the project area, accompanied by Native American Monitor Paul Mirelez from the Torres Martinez Desert Cahuilla Indians. The survey was completed on foot at an intensive level by walking a series of parallel northwest-southeast transects spaced 15 meters (approximately 50 feet). When the transect system was interrupted by the vegetation growth or dead vegetation piles, the field team stayed as close to the courses of the transects as possible and inspected the ground surface wherever it was exposed. In this way, the ground surface in the entire project area was systematically examined for any evidence of human activities dating to the prehistoric or historic period (i.e., 50 years ago or older). Ground visibility ranged from poor to excellent (10-90 percent) depending on the density of vegetation.

RESULTS AND FINDINGS

PREVIOUS CULTURAL RESOURCES STUDIES IN THE VICINITY

According to EIC records, portions of the project area were covered by a number of previous cultural resources studies. Between 1974 to 1992, a series of five studies were conducted for the SR 86 project along the northeastern project boundary. Another study, completed in 1995 for an Avenue 50 widening and SR 86 interchange project, covered the northerly two-thirds of the current project area. In addition to these, the project area was also included in two large-scale overview studies that did not require intensive-level field surveys. More recently, proposed road improvement projects along Avenue 50 necessitated two other surveys that involved the project area in 2016-2017 (see Appendix 3), but the reports for those studies are not yet available at the EIC. Due to the absence of the 2016-2017 reports, it is unclear whether the entire project area had been surveyed adequately and recently for statutory compliance purposes prior to this study.

As a result of these past survey efforts, three historic-period sites have been recorded as lying within or partially with the project area, as listed below (see Appendix 3 for further details):

- Site 33-028167: Devers-Coachella Valley 220 kV Transmission Line;
- Site 33-028173: Avenue 50;
- Site 33-028175: Domestic refuse scatter.

Outside the project boundaries but within a one-mile radius, EIC records show more than 30 other previous studies on various tracts of land and linear features. In all, over 80 percent of the land within the scope of the records search has been surveyed, which resulted in the identification of 50 additional sites and seven isolates—i.e., localities with fewer than three artifacts—within the one-mile radius.

Eighteen of these known sites and all of the isolates are of prehistoric—i.e., Native American—origin, including cremations remains, habitation debris, hearths, and scattered ceramic and lithic artifacts. These sites were scattered throughout the valley floor, especially along the course of the Whitewater River (now the Coachella Valley Stormwater Channel). The nearest among them was Site 33-002982, a late prehistoric to early historic-period Native American campsite or possible village site located approximately 770 feet northwest of the project area.

The other 32 sites dated to the historic period and included the various buildings, roads, refuse scatters, and water conveyance features, as well as a sewage treatment plant and the Southern Pacific Railroad. The nearest among these were the Coachella Valley Stormwater Channel (Site 33-017259/33-017913), Tyler Street (Site 33-028170), and the residential property on the adjacent property to the southeast (86275 Avenue 50; Site 33-028168), which dates to circa 1950. All three sites were recorded adjacent to or partially adjacent to—but outside—the project boundaries, and all three were previously determined not to be significant under the criteria for the National Register of Historic Places and the California Register of Historical Resources (see Appendix 3).

HISTORICAL OVERVIEW

Historical sources consulted for this study indicate no notable man-made features within or adjacent to the project area prior to 1950 except for the forerunner of Avenue 50 and the Coachella Valley Stormwater Channel (Figures 5, 6). In the 1850s, the project area was evidently a part of the unbridled Whitewater River wash (Figure 5). The present-day ground surface at this location, therefore, presumably resulted from the channelization of the Whitewater River, which began with the establishment of the Coachella Valley Stormwater District in 1915 (Laflin 1998:166). After a major flood significantly altered the course of the river in January 1916, the new riverbed became the “backbone” of the Coachella Valley Stormwater Channel, which carries the runoff to the Salton Sea (*ibid.*:167).

In the early 1940s, Avenue 50 remained an unpaved dirt road at and near the project location, and it curved to the north where it crossed the Coachella Valley Stormwater Channel (Figure 6). By the mid-1950s, Avenue 50 had been straightened and paved, and it was joined in the project vicinity by the Devers-Coachella Valley 220 kV Transmission Line and the residence at 86275 Avenue 50 (Figure 7; NETR Online 1953). Also by that time, much of the land around the project location had

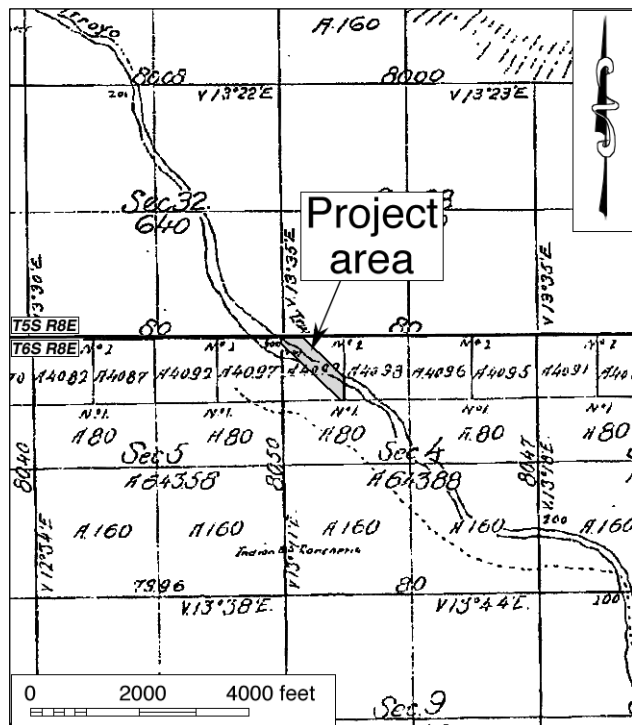


Figure 5. The project area and vicinity in 1855-1856.
(Source: GLO 1856a; 1856b)

been turned into cultivated agricultural fields, thanks partially to the completion of the Coachella Canal in 1948-1949 (NETR Online 1953).

The project area itself, in contrast, remained largely unused throughout the historic period and to the present time despite showing evidence of mechanical disturbance (NETR Online 1953-2014; Google Earth 1996-2018). The disturbance probably resulted from upgrading and maintenance of the adjacent infrastructure features, such as the levee along the Coachella Valley Stormwater Channel, as well as the construction of SR 86 in the 1990s-2000s. In addition, the formerly dense groundcover in the project area was cleared almost entirely between March 2013 and April 2014, and the uprooted vegetation was piled into the meandering rows that are still present on the property today (Google Earth 2013; 2014).

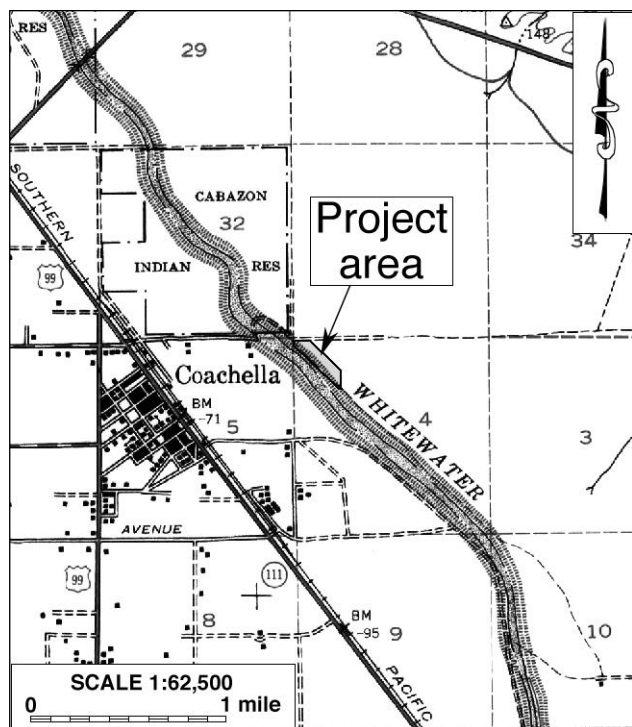


Figure 6. The project area and vicinity in 1941. (Source: USGS 1941)

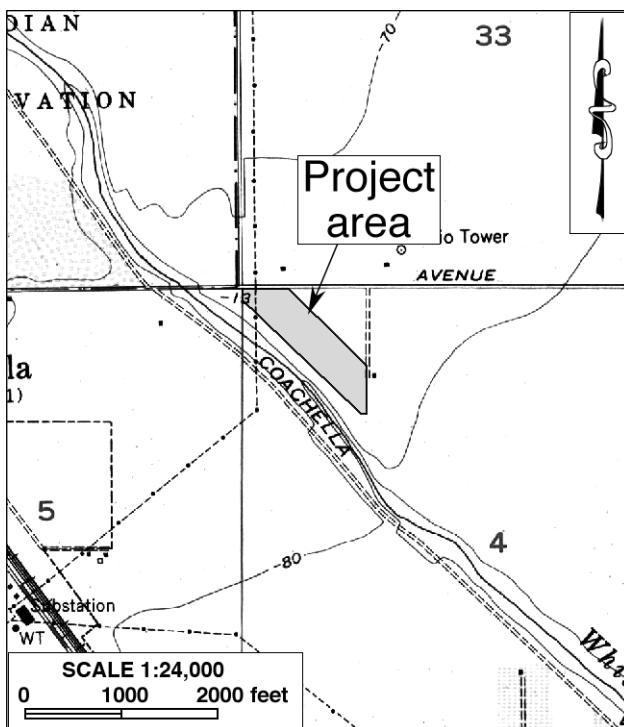


Figure 7. The project area and vicinity in 1953-1956.
(Source: USGS 1956)

NATIVE AMERICAN INPUT

In response to CRM TECH's inquiry, the NAHC reported that the Sacred Lands File identified no Native American cultural resources within the project area but recommended that local Native American groups be contacted for further information. For that purpose, the NAHC provided a list of potential contacts in the region (see Appendix 2). Upon receiving the NAHC's reply, CRM TECH sent written requests for comments to all 13 tribes on the referral list (see Appendix 2). For some of them, CRM TECH contacted the designated spokespersons on cultural resources issues in lieu of the individuals recommended by the NAHC, as recommended by the appropriate tribal government staff in the past. The 13 tribal representatives contacted are listed below:

- Patricia Garcia-Plotkin, Tribal Historic Preservation Office, Agua Caliente Band of Cahuilla Indians;
- Amanda Vance, Chairperson, Augustine Band of Cahuilla Mission Indians;
- Judy Stapp, Director of Cultural Affairs, Cabazon Band of Mission Indians;
- BobbyRay Esparza, Cultural Resources Coordinator, Cahuilla Band of Indians;
- Charles Wood, Chairperson, Chemehuevi Indian Reservation;
- Dennis Patch, Chairperson, Colorado River Indian Tribes;
- Shane Chapparosa, Chairperson, Los Coyotes Band of Cahuilla and Cupeño Indians;
- Travis Armstrong, Tribal Historic Preservation Officer, Morongo Band of Mission Indians;
- John Gomez, Cultural Resources Coordinator, Ramona Band of Cahuilla Indians;
- Gabriella Rubalcava, Environmental Director, Santa Rosa Band of Cahuilla Indians;
- Joseph Ontiveros, Tribal Historic Preservation Officer, Soboba Band of Luiseño Indians;
- Michael Mirelez, Cultural Resource Coordinator, Torres Martinez Desert Cahuilla Indians;
- Anthony Madrigal, Tribal Historic Preservation Officer, Twenty-Nine Palms Band of Mission Indians.

As of this time, four of the 13 tribes contacted have responded in writing (see Appendix 2). Among them, the Agua Caliente Band and the Morongo Band deferred to other tribes in closer proximity, specifically the Cabazon Band in the case of the Agua Caliente Band. The Augustine Band and the Cabazon Band stated that they had no information on any Native American cultural resources in the project vicinity, but both recommended archaeological monitoring during ground-disturbing activities associated with the project. Additionally, the Augustine Band encouraged further consultation with other Native American representatives in the area and requested immediate notification if any Native American cultural remains were to be discovered.

CULTURAL RESOURCES IDENTIFIED IN THE PROJECT AREA

The field survey confirmed the continued presence of Sites 33-028167, 33-028173, and 33-028175 in the project area but encountered no other potential "historical resources." Scattered modern refuse was observed over much of the project area, but none of the items is of any historical/archaeological interest. The three previously recorded sites in the project area are discussed further below, and pertinent information has been compiled into site record updates (see Appendix 3).

Site 33-028167: Site 33-028167 represents the Devers-Coachella Valley 220kV Transmission line. The original site record from 2017 identifies its construction date as 1959-1960 (see Appendix 3),

but the transmission line was evidently in existence across the project area by 1953-1956, as mentioned above (USGS 1956). In any event, the 2017 site record further notes that all of the power poles located in and near the current project area were replacements of the originals, installed in 1993 (see Appendix 3). During the field survey, a single wooden H-frame tower was found to be located in the northwestern portion of the project area (Figure 8), with the transmission line extending north and south beyond the project boundaries.

Site 33-028173: Site 33-028173 represents the historic-period alignment of Avenue 50, which ran east-west along the northern edge of the project area (see Appendix 3). While the origin of Avenue 50 predates 1941, as a paved road it has existed at this location only since 1953-1956 (NETR Online 1953; USGS 1956). The segment of the recorded alignment lying within and immediately adjacent to the project boundaries has now been abandoned as a result of the construction of SR 86 and the associated realignment of Avenue 50 in the 1990s (Google Earth 1996). It is currently blocked off from public access on both ends and is no longer maintained (Figure 9).

Site 33-028175: Located near the northwest corner of the project area, Site 33-028175 consists of a small historic-period domestic household refuse deposit dating to the 1910s and 1920s, apparently the result of opportunistic dumping by local residents (see Appendix 3). More than 20 artifacts were observed on the ground surface at the site in 2016, primarily bottle fragments and ceramic kitchenware sherds (see Appendix 3). During the field survey, it was noted that the site area had evidently undergone further disturbance since 2016, mainly additional trash dumping and off-road vehicle activities. However, a few historic-period glass fragments were found on the surface (Figure 10), representing the remnant of the refuse dump recorded in 2016.



Figure 8. Power pole within the project area, part of Site 33-028167. (Photograph taken on February 27, 2019; view to the south)



Figure 9. Abandoned segment of Avenue 50 (Site 33-028173) along the northern edge of the project area. (Google Earth image from October 2018; view to the east)

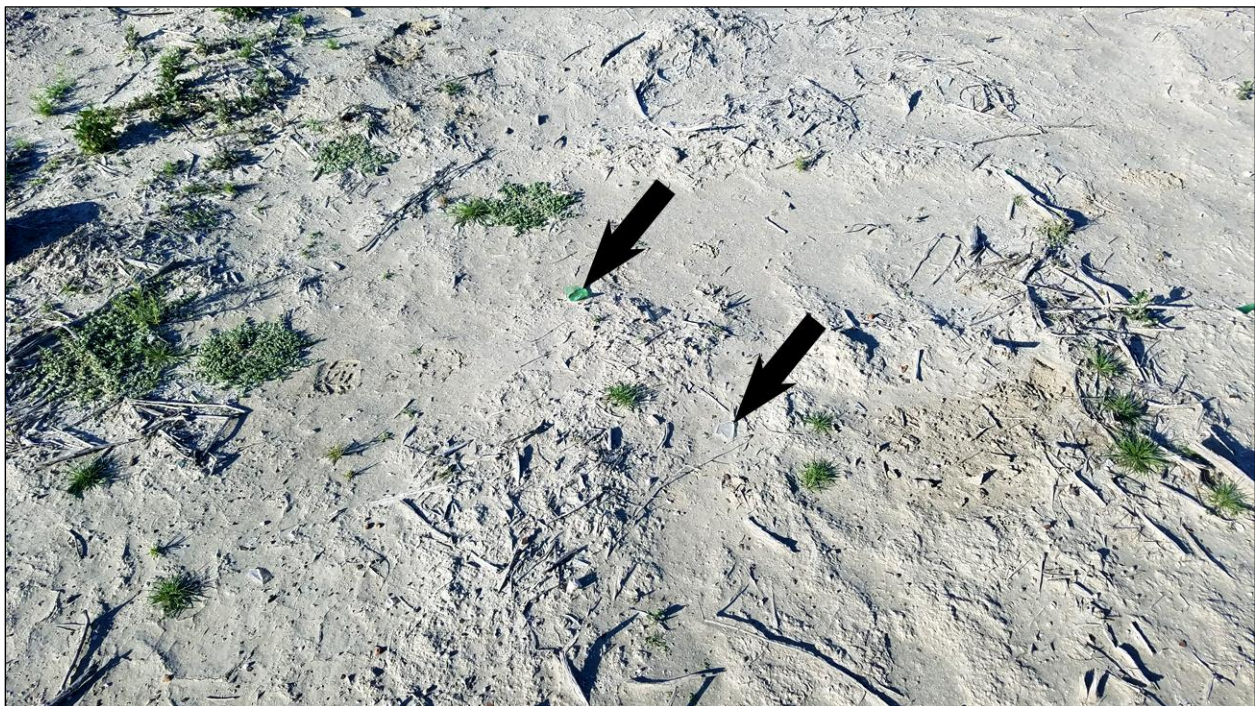


Figure 10. Historic-period glass fragments at Site 33-028175. (Photograph taken on February 27, 2019)

DISCUSSION

The purpose of this study is to identify any cultural resources within the project area and to assist the City of Coachella in determining whether such resources meet the official definition of “historical resources,” as provided in the California Public Resources Code, in particular CEQA. According to PRC §5020.1(j), “‘historical resource’ includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.”

More specifically, CEQA guidelines state that the term “historical resources” applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the lead agency (Title 14 CCR §15064.5(a)(1)-(3)). Regarding the proper criteria for the evaluation of historical significance, CEQA guidelines mandate that “generally a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing on the California Register of Historical Resources” (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

- (1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- (2) Is associated with the lives of persons important in our past.
- (3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- (4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

As discussed above, historic-period sites, 33-028167 (Devers-Coachella Valley 220 kV Transmission Line), 33-028173 (Avenue 50), and 33-028175 (domestic refuse scatter), were previously recorded as lying within or partially within the project area, and the presence of these sites was confirmed during the field survey. Among the three sites, 33-028167 and 33-028173 were previously evaluated and found not to be eligible for listing in the California Register (see Appendix 3). The present study has uncovered no new information that would warrant a reexamination of these conclusions, especially in light of the fact that the portions of these sites within the current project boundaries reflect primarily the results of modern alterations. Therefore, CRM TECH concurs to the previous evaluation of 33-028167 and 33-028173.

Site 33-028175 consists of a sparse surface scatter of common domestic refuse, which represents the most proliferate type of historic-period archaeological site in the southern California desert region. Such incidental, opportunistic refuse dumps generally do not demonstrate a close association with any persons or events of recognized significance in national, state, or local history, and this site is no exception. In the absence of an exceptional quantity or quality of artifacts, the site does not hold the potential for any important archaeological data, and what little data potential it may have is largely exhausted through its recordation into the California Historical Resources Inventory. Therefore, Site 33-028175 does not appear eligible for listing in the California Register of Historical Resources and does not constitute a “historical resource” under CEQA provisions.

CONCLUSION AND RECOMMENDATIONS

CEQA establishes that a project that may cause a substantial adverse change in the significance of a “historical resource” or a “tribal cultural resource” is a project that may have a significant effect on the environment (PRC §21084.1-2). “Substantial adverse change,” according to PRC §5020.1(q), “means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired.”

Based on the research results summarized above, this study concludes that no “historical resources” as defined by CEQA, are present within the project area. Therefore, CRM TECH presents the following recommendations to the City of Coachella:

- The proposed project will not cause a substantial adverse change to any known “historical resources.”
- A tentative conclusion of *No Impact* on cultural resources appears to be appropriate for this project, pending the completion of Native American consultation process by the City of Coachella pursuant to Assembly Bill 52 to ensure the proper identification of potential “tribal cultural resources.”
- No further cultural resources investigation will be necessary for the proposed project unless development plans undergo such changes as to include areas not covered by this study.
- If buried cultural materials are discovered inadvertently during any earth-moving operations associated with the project, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.
- If human remains are discovered, HSC §7050.5 prohibits any further disturbance until the Riverside County Coroner has made the necessary findings as to the origin. Human remains of Native American origin will need to be treated per consultations among the Most Likely Descendant, the City of Coachella, and the project proponent in accordance with PRC §5097.98.

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1856a Plat Map: Township No. 5 South Range No. 8 East, SBBM; surveyed in 1855-1856.

1856b Plat Map: Township No. 6 South Range No. 8 East, SBBM; surveyed in 1856.

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 1994 The Challenge of Archaeological Research in the Colorado Desert: Recent Approaches and Discoveries. *Journal of California and Great Basin Anthropology* 16(1):60-80.
- Shields Date Gardens
 1957 *Coachella Valley Desert Trails and the Romance and Sex Life of the Date*. Shields Date Gardens, Indio.
- Strong, William Duncan
 1929 *Aboriginal Society in Southern California*. University of California Publications in American Archaeology and Ethnology, Vol. 26. Reprinted by Malki Museum Press, Banning, California, 1972.
- USGS (United States Geological Survey, U.S. Department of the Interior)
 1941 Map: Coachella, Calif. (15', 1:62,500); aerial photographs taken in 1941.
 1956 Map: Indio, Calif. (7.5', 1:24,000); aerial photographs taken in 1953, field-checked in 1956.
 1969 Map: Salton Sea, Calif.-Ariz. (1:250,000); 1959 edition revised.
 1972 Map: Indio, Calif. (7.5', 1:24,000); 1956 edition photorevised in 1972.
 1979 Map: Santa Ana, Calif. (1:250,000); 1959 edition revised.

APPENDIX 1: PERSONNEL QUALIFICATIONS

PRINCIPAL INVESTIGATOR/HISTORIAN Bai “Tom” Tang, M.A.

Education

- 1988-1993 Graduate Program in Public History/Historic Preservation, UC Riverside.
- 1987 M.A., American History, Yale University, New Haven, Connecticut.
- 1982 B.A., History, Northwestern University, Xi’an, China.
- 2000 “Introduction to Section 106 Review,” presented by the Advisory Council on Historic Preservation and the University of Nevada, Reno.
- 1994 “Assessing the Significance of Historic Archaeological Sites,” presented by the Historic Preservation Program, University of Nevada, Reno.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside/Colton, California.
- 1993-2002 Project Historian/Architectural Historian, CRM TECH, Riverside, California.
- 1993-1997 Project Historian, Greenwood and Associates, Pacific Palisades, California.
- 1991-1993 Project Historian, Archaeological Research Unit, UC Riverside.
- 1990 Intern Researcher, California State Office of Historic Preservation, Sacramento.
- 1990-1992 Teaching Assistant, History of Modern World, UC Riverside.
- 1988-1993 Research Assistant, American Social History, UC Riverside.
- 1985-1988 Research Assistant, Modern Chinese History, Yale University.
- 1985-1986 Teaching Assistant, Modern Chinese History, Yale University.
- 1982-1985 Lecturer, History, Xi’an Foreign Languages Institute, Xi’an, China.

Cultural Resources Management Reports

Preliminary Analyses and Recommendations Regarding California’s Cultural Resources Inventory System (with Special Reference to Condition 14 of NPS 1990 Program Review Report). California State Office of Historic Preservation working paper, Sacramento, September 1990.

Numerous cultural resources management reports with the Archaeological Research Unit, Greenwood and Associates, and CRM TECH, since October 1991.

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST

Michael Hogan, Ph.D., RPA*

Education

- 1991 Ph.D., Anthropology, University of California, Riverside.
- 1981 B.S., Anthropology, University of California, Riverside; with honors.
- 1980-1981 Education Abroad Program, Lima, Peru.

- 2002 Section 106—National Historic Preservation Act: Federal Law at the Local Level. UCLA Extension Course #888.
- 2002 “Recognizing Historic Artifacts,” workshop presented by Richard Norwood, Historical Archaeologist.
- 2002 “Wending Your Way through the Regulatory Maze,” symposium presented by the Association of Environmental Professionals.
- 1992 “Southern California Ceramics Workshop,” presented by Jerry Schaefer.
- 1992 “Historic Artifact Workshop,” presented by Anne Duffield-Stoll.

Professional Experience

- 2002- Principal Investigator, CRM TECH, Riverside/Colton, California.
- 1999-2002 Project Archaeologist/Field Director, CRM TECH, Riverside.
- 1996-1998 Project Director and Ethnographer, Statistical Research, Inc., Redlands.
- 1992-1998 Assistant Research Anthropologist, University of California, Riverside
- 1992-1995 Project Director, Archaeological Research Unit, U. C. Riverside.
- 1993-1994 Adjunct Professor, Riverside Community College, Mt. San Jacinto College, U.C. Riverside, Chapman University, and San Bernardino Valley College.
- 1991-1992 Crew Chief, Archaeological Research Unit, U. C. Riverside.
- 1984-1998 Archaeological Technician, Field Director, and Project Director for various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural Diversity.

Cultural Resources Management Reports

Author and co-author of, contributor to, and principal investigator for numerous cultural resources management study reports since 1986.

Memberships

* Register of Professional Archaeologists; Society for American Archaeology; Society for California Archaeology; Pacific Coast Archaeological Society; Coachella Valley Archaeological Society.

PROJECT ARCHAEOLOGIST/REPORT WRITER
Ben Kerridge, M.A.

Education

2014 Archaeological Field School, Institute for Field Research, Kephallenia, Greece.
2010 M.A., Anthropology, California State University, Fullerton.
2009 Project Management Training, Project Management Institute/CH2M HILL, Santa
 Ana, California.
2004 B.A., Anthropology, California State University, Fullerton.

Professional Experience

2015- Project Archaeologist/Report Writer, CRM TECH, Colton, California.
2015 Teaching Assistant, Institute for Field Research, Kephallenia, Greece.
2009-2014 Publications Delivery Manager, CH2M HILL, Santa Ana, California.
2010- Naturalist, Newport Bay Conservancy, Newport Beach, California.
2006-2009 Technical Publishing Specialist, CH2M HILL, Santa Ana, California.
2002-2006 English Composition/College Preparation Tutor, various locations, California.

Papers Presented

- Geomorphological Survey of Tracts T126–T151 to Support Archaeological Shoreline Research Project. Institute for Field Research, Kephallenia, Greece, 2014.
- The Uncanny Valley of the Shadow of Modernity: A Re-examination of Anthropological Approaches to Christianity. Graduate Thesis, California State University, Fullerton, 2010.
- Ethnographic Endeavors into the World of Counterstrike. 74th Annual Conference of the Southwestern Anthropological Association, 2003.

Memberships

Society for California Archaeology; Pacific Coast Archaeological Society.

PROJECT ARCHAEOLOGIST/FIELD DIRECTOR
Daniel Ballester, M.S.

Education

- 2013 M.S., Geographic Information System (GIS), University of Redlands, California.
- 1998 B.A., Anthropology, California State University, San Bernardino.
- 1997 Archaeological Field School, University of Las Vegas and University of California, Riverside.
- 1994 University of Puerto Rico, Rio Piedras, Puerto Rico.

- 2007 Certificate in Geographic Information Systems (GIS), California State University, San Bernardino.
- 2002 “Historic Archaeology Workshop,” presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside, California.

Professional Experience

- 2002- Field Director/GIS Specialist, CRM TECH, Riverside/Colton, California.
- 1999-2002 Project Archaeologist, CRM TECH, Riverside, California.
- 1998-1999 Field Crew, K.E.A. Environmental, San Diego, California.
- 1998 Field Crew, A.S.M. Affiliates, Encinitas, California.
- 1998 Field Crew, Archaeological Research Unit, University of California, Riverside.

PROJECT ARCHAEOLOGIST/NATIVE AMERICAN LIAISON
Nina Gallardo, B.A.

Education

- 2004 B.A., Anthropology/Law and Society, University of California, Riverside.

Honors and Awards

- 2000 Dean’s Honors List, University of California, Riverside.

Professional Experience

- 2004- Project Archaeologist, CRM TECH, Riverside/Colton, California.

APPENDIX 2

**CORRESPONDENCE WITH
NATIVE AMERICAN REPRESENTATIVES***

* A total of 13 local Native American tribes were contacted; a sample letter is included in this report.

SACRED LANDS FILE & NATIVE AMERICAN CONTACTS LIST REQUEST

NATIVE AMERICAN HERITAGE COMMISSION

1550 Harbor Boulevard, Suite 100
West Sacramento, CA 95691
(916)373-3710
(916)373-5471 (Fax)
nahc@nahc.ca.gov

Project: Proposed Coachella Travel Centre Project; Assessor's Parcel Number 763-020-021 (CRM TECH No. 3442)

County: Riverside

USGS Quadrangle Name: Indio, Calif.

Township 6 South **Range** 8 East **SB BM; Section(s)** 4

Company/Firm/Agency: CRM TECH

Contact Person: Nina Gallardo

Street Address: 1016 E. Cooley Drive, Suite A/B

City: Colton, CA **Zip:** 92324

Phone: (909) 824-6400 **Fax:** (909) 824-6405

Email: ngallardo@crmtech.us

Project Description: The primary component of the project is to construct a travel center on approximately 14 acres of land located south of Avenue 50 and west of Highway 86 (APN 763-020-021), in the City of Coachella, Riverside County, California.

February 6, 2019

From: ngallardo@crmtech.us
Sent: Thursday, February 7, 2019 10:34 AM
To: mmirelez@tmdci.org
Subject: Participation in Fieldwork for the Proposed Coachella Travel Centre Project in the City of Coachella, Riverside County (CRM TECH No. 3442)

Hello Michael,

I'm emailing to inform you that CRM TECH will be conducting a cultural study for the proposed Coachella Travel Centre Project on APN 763-020-021 in the City of Coachella, Riverside County (CRM TECH No. 3442). I'm contacting you to see if the tribe would like to participate in the field survey for this project and we will contact the tribe again when we have a specific time and date for the fieldwork. I'm attaching the proposed project area map and other information.

Thank you for your time and input on this project.

Nina Gallardo
(909) 824-6400 (phone)
(909) 824-6405 (fax)
CRM TECH
1016 E. Cooley Drive, Ste. A/B
Colton, CA 92324

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: <http://www.nahc.ca.gov>
Twitter: @CA_NAHC



February 11, 2019

Nina Gallardo
CRM Tech

VIA Email to: ngallardo@crmtech.us

RE: Proposed Coachella Travel Centre Project, Riverside County

Dear Ms. Gallardo:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our lists contain current information. If you have any questions or need additional information, please contact me at my email address: steven.quinn@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Steven Quinn".

Steven Quinn
Associate Governmental Program Analyst

Attachment

**Native American Heritage Commission
Native American Contact List
Riverside County
2/11/2019**

Agua Caliente Band of Cahuilla Indians

Jeff Grubbe, Chairperson
5401 Dinah Shore Drive
Palm Springs, CA, 92264
Phone: (760) 699 - 6800
Fax: (760) 699-6919

Cahuilla
Luiseno

Chemehuevi Indian Reservation

Charles Wood, Chairperson
P.O. Box 1976 1990 Palo Verde Drive
Havasupai Lake, CA, 92363
Phone: (760) 858 - 4219
Fax: (760) 858-5400
chairman@cit-nsn.gov

Agua Caliente Band of Cahuilla Indians

Patricia Garcia-Plotkin, Director
5401 Dinah Shore Drive
Palm Springs, CA, 92264
Phone: (760) 699 - 6907
Fax: (760) 699-6924
ACBCI-THPO@aguacaliente.net

Cahuilla
Luiseno

Colorado River Indian Tribes

Dennis Patch, Chairman
26600 Mojave Road
Parker, AZ, 85344
Phone: (928) 669 - 9211
Fax: (928) 669-1925
amanda.barrera@crit-nsn.gov

Chemehuevi
Mojave

Augustine Band of Cahuilla Mission Indians

Amanda Vance, Chairperson
P.O. Box 846
Coachella, CA, 92236
Phone: (760) 398 - 4722
Fax: (760) 369-7161
hhaines@augustinetribe.com

Cahuilla

Los Coyotes Band of Cahuilla and Cupeño Indians

John Perada, Environmental Director
P. O. Box 189
Warner Springs, CA, 92086
Phone: (760) 782 - 0712
Fax: (760) 782-2730

Cahuilla

Cabazon Band of Mission Indians

Doug Welmas, Chairperson
84-245 Indio Springs Parkway
Indio, CA, 92203
Phone: (760) 342 - 2593
Fax: (760) 347-7880
jstapp@cabazonindians-nsn.gov

Cahuilla

Los Coyotes Band of Cahuilla and Cupeño Indians

Shane Chapparosa, Chairperson
P.O. Box 189
Warner Springs, CA, 92086-0189
Phone: (760) 782 - 0711
Fax: (760) 782-0712
Chapparosa@msn.com

Cahuilla

Cahuilla Band of Indians

Daniel Salgado, Chairperson
52701 U.S. Highway 371
Anza, CA, 92539
Phone: (951) 763 - 5549
Fax: (951) 763-2808
Chairman@cahuilla.net

Cahuilla

Morongo Band of Mission Indians

Denisa Torres, Cultural Resources Manager
12700 Pumarra Road
Banning, CA, 92220
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Cahuilla
Serrano

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Proposed Coachella Travel Centre Project, Riverside County.

**Native American Heritage Commission
Native American Contact List
Riverside County
2/11/2019**

Morongo Band of Mission Indians

Robert Martin, Chairperson
12700 Pumarra Road
Banning, CA, 92220
Phone: (951) 849 - 8807
Fax: (951) 922-8146
dtorres@morongo-nsn.gov

Cahuilla
Serrano

Soboba Band of Luiseno Indians

Scott Cozart, Chairperson
P. O. Box 487
San Jacinto, CA, 92583
Phone: (951) 654 - 2765
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Cahuilla
Luiseno

Ramona Band of Cahuilla

John Gomez, Environmental
Coordinator
P. O. Box 391670
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
jgomez@ramonatribe.com

Cahuilla

Torres-Martinez Desert Cahuilla Indians

Michael Mirelez, Cultural
Resource Coordinator
P.O. Box 1160
Thermal, CA, 92274
Phone: (760) 399 - 0022
Fax: (760) 397-8146
mmirelez@tmdci.org

Cahuilla

Ramona Band of Cahuilla

Joseph Hamilton, Chairperson
P.O. Box 391670
Anza, CA, 92539
Phone: (951) 763 - 4105
Fax: (951) 763-4325
admin@ramonatribe.com

Cahuilla

Twenty-Nine Palms Band of Mission Indians

Anthony Madrigal, Tribal Historic
Preservation Officer
46-200 Harrison Place
Coachella, CA, 92236
Phone: (760) 775 - 3259
amadrigal@29palmsbomi-nsn.gov

Chemehuevi

Santa Rosa Band of Cahuilla Indians

Steven Estrada, Chairperson
P.O. Box 391820
Anza, CA, 92539
Phone: (951) 659 - 2700
Fax: (951) 659-2228
mflaxbeard@santarosacahuilla-nsn.gov

Cahuilla

Twenty-Nine Palms Band of Mission Indians

Darrell Mike, Chairperson
46-200 Harrison Place
Coachella, CA, 92236
Phone: (760) 863 - 2444
Fax: (760) 863-2449
29chairman@29palmsbomi-nsn.gov

Chemehuevi

Soboba Band of Luiseno Indians

Joseph Ontiveros, Cultural
Resource Department
P.O. BOX 487
San Jacinto, CA, 92581
Phone: (951) 663 - 5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov

Cahuilla
Luiseno

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Proposed Coachella Travel Centre Project, Riverside County.

February 15, 2019

Patricia Garcia-Plotkin, Tribal Historic Preservation Officer
Agua Caliente Band of Cahuilla Indians
5401 Dinah Shore Drive
Palm Springs, CA 92264

RE: Proposed Coachella Travel Centre Project
Assessor's Parcel No. 763-020-021
14.1 Acres in the City of Coachella
Riverside County, California
CRM TECH Contract #3442

Dear Ms. Garcia-Plotkin:

I am writing to bring your attention to an ongoing CEQA-compliance study for the proposed project referenced above. The project entails the construction of a travel center that will include a five-story hotel, a restaurant, a drive-thru restaurant, a convenience store, a gas station, and a truck stop on approximately 14.1 acres of disturbed land (APN 763-020-021) located southwest of Avenue 50 and State Route 86, just east of the Coachella Valley Stormwater Channel (Whitewater River), in the City of Coachella. The accompanying map, based on the USGS Indio, Calif., 7.5' quadrangle, depicts the location of the project area in Section 4, T6S R8E, SBBM.

According to records on file at the Eastern Information Center (EIC), there are five known historical/archaeological sites within or directly adjacent to the boundaries of the proposed project. The previously recorded sites all dated to the historic period and include a small domestic household refuse deposit, a segment of the Devers-Coachella Valley 220kV Transmission line, the Coachella Valley Stormwater Channel, a multiple family property, and Avenue 50.

In a letter dated February 11, 2019, the Native American Heritage Commission reports that the sacred lands record search identified no Native American cultural resources within the project area, but recommends that local Native American groups be contacted for further information (see attached). Therefore, as part of the cultural resources study for this project, I am writing to request your input on potential Native American cultural resources in or near the project area.

Please respond at your earliest convenience if you have any specific knowledge of sacred/religious sites or other sites of Native American traditional cultural value in or near the project area, or any other information to consider during the cultural resources investigations. Any information or concerns may be forwarded to CRM TECH by telephone, e-mail, facsimile, or standard mail. Requests for documentation or information we cannot provide will be forwarded to our client and/or the lead agency, namely the City of Coachella.

We would also like to clarify that, as the cultural resources consultant for the project, CRM TECH is not involved in the AB 52-compliance process or in government-to-government consultations. The purpose of this letter is to seek any information that you may have to help us determine if there are

cultural resources in or near the project area that we should be aware of and to help us assess the sensitivity of the project area. Thank you for your time and effort in addressing this important matter.

Respectfully,

Nina Gallardo
Project Archaeologist/Native American liaison
CRM TECH
Email: ngallardo@crmtech.us
Encl.: NAHC response letter and project location map

From: thpo@morongo-nsn.gov
Sent: Friday February 15, 2019 10:03 AM
To: ngallardo@crmtech.us
Subject: RE: NA Scoping Letter for the Proposed Coachella Travel Centre Project; APN 763-020-21, in the City of Coachella, Riverside County (CRM TECH # 3442)

Hello,

Thank you for your letter regarding the project.

We have no additional information to provide at this time and will likely defer to other tribes in the area once formal government-to-government consultation is initiated by the lead agency for this project.

Thank you for reaching out to our office.

Sincerely,

Travis Armstrong
Tribal Historic Preservation Officer
Morongo Band of Mission Indians
951-755-5259
Email: thpo@morongo-nsn.gov

AGUA CALIENTE BAND OF CAHUILLA INDIANS

TRIBAL HISTORIC PRESERVATION



03-017-2019-002

February 19, 2019

[VIA EMAIL TO: ngallardo@crmtech.us]

CRM TECH

Ms. Nina Gallardo

1016 E. Cooley Drive, Suite A/B

Colton, CA 92324

Re: Coachella Travel Centre

Dear Ms. Nina Gallardo,

The Agua Caliente Band of Cahuilla Indians (ACBCI) appreciates your efforts to include the Tribal Historic Preservation Office (THPO) in the Coachella Travel Centre project. The project area is not located within the boundaries of the ACBCI Reservation. However, it is within the Tribe's Traditional Use Area. For this reason, the ACBCI THPO requests the following:

*At this time ACBCI defers to the Cabazon Band of Mission Indians. This letter shall conclude our consultation efforts.

Again, the Agua Caliente appreciates your interest in our cultural heritage. If you have questions or require additional information, please call me at (760)699-6956. You may also email me at ACBCI-THPO@aguacaliente.net.

Cordially,

Lacy Padilla

Archaeological Technician

Tribal Historic Preservation Office

AGUA CALIENTE BAND

OF CAHUILLA INDIANS

5401 DINAH SHORE DRIVE, PALM SPRINGS, CA 92264

T 760/699/6800 F 760/699/6924 WWW.AGUACALIENTE-NSN.GOV



AUGUSTINE BAND OF CAHUILLA INDIANS

PO Box 846 84-481 Avenue 54 Coachella CA 92236

Telephone: (760) 398-4722

Fax (760) 369-7161

Tribal Chairperson: Amanda Vance

Tribal Vice-Chairperson: William Vance

Tribal Secretary: Victoria Martin

February 21, 2019

Nina Gallardo

CRM TECH

1016 E. Cooley Drive, Suite A/B

Colton, CA 92324

**Re: Proposed Coachella Travel Centre Project. Assessor's Parcel No. 763-020-021
14.1 Acres in the City of Coachella, Riverside County, California
CRM TECH Contract # #3442**

Dear Ms. Gallardo-

Thank you for the opportunity to offer input concerning the development of the above-identified project. We appreciate your sensitivity to the cultural resources that may be impacted by your project, and the importance of these cultural resources to the Native American peoples that have occupied the land surrounding the area of your project for thousands of years. Unfortunately, increased development and lack of sensitivity to cultural resources has resulted in many significant cultural resources being destroyed or substantially altered and impacted. Your invitation to consult on this project is greatly appreciated.

At this time we are unaware of specific cultural resources that may be affected by the proposed project. We encourage you to contact other Native American Tribes and individuals within the immediate vicinity of the project site that may have specific information concerning cultural resources that may be located in the area. We also encourage you to contract with a monitor who is qualified in Native American cultural resources identification and who is able to be present on-site full-time during the pre-construction and construction phase of the project. Please notify us immediately should you discover any cultural resources during the development of this project.

Very truly yours,

Victoria Martin

Tribal Secretary

FEB 25 2019



February 21, 2019

Nina Gallardo
Project Archaeologist/Native American Liaison
CRM TECH
1016 E. Cooley Drive, Suite A/B
Colton, CA 92324

Re.: Proposed Coachella Travel Centre Project
Assessor's Parcel Number 763-020-021
14.1 Acres in the City of Coachella
Riverside County, California
CRM TECH Contract #3442

Dear Ms. Gallardo:

Thank you for contacting the Cabazon Band of Mission Indians concerning cultural resource information relative to the above referenced project.

The project is located outside of the Tribe's current reservation boundaries but within an area that may be considered a traditional use area. The Tribe has no specific archival information on the site indicating that it may be a sacred/religious site or other site of Native American traditional cultural value within the project area. The Cabazon Band suggests, however, there be an archaeologist on site during all ground disturbing activities to monitor for the discovery of unknown cultural resources.

We look forward to continued collaboration in the preservation of cultural resources or areas of traditional cultural importance.

Best regards,

Judy Stapp
Director of Cultural Affairs

RECEIVED
FEB 25 2019



From: Nina Gallardo <ngallardo@crmtech.us>
Sent: Monday, February 25, 2019 9:34 AM
To: Michael Mirelez
Subject: FW: Participation in Fieldwork for the Proposed Coachella Travel Centre Project in the City of Coachella, Riverside County (CRM TECH No. 3442)

Hello Michael,

I'm emailing to inform you that CRM TECH will be conducting the field survey for the above-referenced project on Wednesday morning (2/27/19) at 7 am. Please let me know if the tribe will be available to join Daniel Ballester, CRM Field Director, out there this Wednesday morning.

Thank you for your time and input on this project.

Nina Gallardo
(909) 824-6400 (phone)
(909) 824-6405 (fax)
CRM TECH
1016 E. Cooley Drive, Ste. A/B
Colton, CA 92324

APPENDIX 3

**KNOWN CULTURAL RESOURCES
WITHIN OR ADJACENT TO THE PROJECT AREA**

(Confidential)

33-17259

CA-RIV-10847

ALSO SEE

33-20750

CA-RIV-10672

PRIMARY RECORD

Primary # P-33-017259

HRI #

Trinomial

NRHP Status Code

CA-RV-10347

Other Listings

Review Code

Reviewer

Date

Page 1 of 14

*Resource Name or #: SRI-14202 (UPDATE)

RECEIVED IN

JUN 08 2012

EIC

P1. Other Identifier: SRI-14202

*P2. Location: ☒ Not for Publication ☐ Unrestricted *a. County: Riverside

*b. USGS Quad: 7.5' MECCA (2009); T 7S R 8E, NE¼ of NW¼ of Sec. 13; SBBM

c. Address:

d. UTM: Zone 11; 582819 mE/ 3714563 mN NAD27 GPS

e. Other Locational Data:

The site crosses Highway 111 southeast of Thermal, between postmiles 23.7 and 23.9. The site also crosses Highway 195 between postmiles 5.6 and 5.7, west of Mecca.

*P3a. Description:

This site consists is the Coachella Valley Stormwater Channel (P-33-17259), which crosses Highway 111, southeast of the town of Thermal and Highway 195, west of Mecca. The main channel consists of a wide expanse of land covered in various riparian species of plants and trees with the channelized Whitewater River located centrally. This channel is bound by wide earthen levees. Located atop these levees are graded access roads that covered with crushed granite.

At the interection with Highway 195, the channelized river passes through a concrete beneath the highway. The banks of the channel are fortified with concrete and boulders to reduce erosion. Like the segment crossing Highway 111, the channel is flanked by levees with access roads located on top of the levees. The roads are oriented northwest to southeast on both sides of Highway 195 and are covered with crushed granite. Access to these roads, as well as those associated with the levees on Highway 111, is blocked by large meal swinging gates. No cultural materials were observed. The site boundary is determined in part by the right-of-way established by Caltrans. The right-of-way extends 15 m from the edge of the highway. The site continues beyond the right-of-way, but these portions were not recorded.

*P3b. Resource Attributes: HP20 Canal; AH6 water conveyence system; AH7 Historical-period road, HP37 Historical-period road

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)



*P5b. Description of Photo:

Facing NW; 3/7/2012; eastern north road overview

*P6. Date Constructed/Age & Sources:

☒ Historic ☐ Prehistoric ☐ Both

*P7. Owner and Address:

PRIVATE PROPERTY, ADDRESS UNKNOWN

*P8. Recorded by:

Patrick Stanton

*P9. Date Recorded: 2/22/2012

*P10. Survey Type:

Reconnaissance survey of highway right-of-way

*P11. Citation: Report forthcoming

*Attachments: ☐ None ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☒ Archaeological Record ☐ District Record ☒ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☒ Photograph Record ☐ Other:

ARCHAEOLOGICAL SITE RECORD

Page 2 of 14

*Resource Name or #: SRI-14202 (UPDATE)

*A1. Dimensions: a. Length 259 m (E/W) x b. Width 56 m (N/S)

Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☒ GPS ☐ Other:

Method of Determination: ☐ Artifacts ☒ Features ☐ Soil ☐ Vegetation ☐ Topography ☐ Cut bank ☐ Animal burrow
☐ Excavation ☐ Property boundary ☒ Other: The site boundary is determined in part by the right-of-way established ...

Reliability of determination: ☒ High ☐ Medium ☐ Low

Explain: Because the site is bounded by two large, easily distinguished levees, the site boundaries are ...

Limitations: ☐ Restricted access ☐ Paved/built over ☒ Site limits incompletely defined ☐ Disturbances
☐ Vegetation ☐ Other:

A2. Depth: None ☒ None ☐ Unknown Method of determination: None

*A3. Human Remains: ☐ Present ☒ Absent ☐ Possible ☐ Unknown

*A4. Features:

This site consists is the Coachella Valley Stormwater Channel (P-33-17259), which crosses Highway 111, southeast of the town of Thermal and Highway 195, west of Mecca. The main channel (Feature 16216) consists of a wide expanse of land covered in various riparian species of plants and trees with the channelized Whitewater River located centrally. This channel is bound by wide earthen levees (Feature 16136-northwest and 16137-southeast). Located atop these levees are graded access roads that covered with crushed granite.

At the intersection with Highway 195, the channelized river (Feature 16216) passes through a concrete beneath the highway. The banks of the channel are fortified with concrete and boulders to reduce erosion. Like the segment crossing Highway 111, the channel is flanked by levees with access roads located on top of the levees. The roads (Features 16217-west road and 16218-east road) are oriented northwest to southeast on both sides of Highway 195 and are covered with crushed granite. Access to these roads, as well as those associated with the levees on Highway 111, is blocked by large metal swinging gates. No cultural materials were observed. The site boundary is determined in part by the right-of-way established by Caltrans. The right-of-way extends 15 m from the edge of the highway. The site continues beyond the right-of-way, but these portions were not recorded. The site was identified on the Coachella (1941, 1956) 15-minute and the Mecca (1955) 7.5-minute USGS topographic quads.

*A5. Cultural Constituents:

No cultural materials were observed.

*A6. Were Specimens Collected? ☒ No ☐ Yes

*A7. Site Condition ☒ Good ☐ Fair ☐ Poor

Because access roads run along the tops of the levees, the levees are covered with tire tracks and ruts.

*A8. Nearest Water: The channelized Whitewater River flows through the center of the canal.

*A9. Elevation: -57 m amsl

A10. Environmental Setting:

The site is located in the Coachella Valley. Vegetation associated with the levees is sparse and consists of scattered brush and grasses. In the channel, vegetation gets much denser with tall grasses, brush, and the occasional tree. The surrounding sediment is a fine silty sand with some smaller gravel deposits.

A11. Historical Information:

According to previous site records, after the Whitewater River's course was changed after torrential rains in 1916, the river was channelized and became "the 'backbone' of the Coachella Valley Stormwater Channel" (Ballester 2008). The site was identified on the Coachella (1941, 1956) 15-minute and the Mecca (1955) 7.5-minute USGS topographic quads.

*A12. Age: ☐ Prehistoric ☐ Protohistoric ☐ 1542-1769 ☐ 1769-1848 ☐ 1848-1880 ☒ 1880-1914 ☒ 1914-1945
☒ Post-1945 ☐ Undetermined

A13. Interpretations:

None

A14. Remarks:

There have been no changes since the previous site record was written in 2008.

A15. References:

Ballester, Daniel

2008 Archaeological Site Record for P-33-017259. On file at the Eastern Information Center. University of California, Riverside.

ARCHAEOLOGICAL SITE RECORD

Page 3 of 14

*Resource Name or #: SRI-14202 (UPDATE)

A16. Photographs: See photograph record

Original Media/Negatives Kept At: 21 W. Stuart Ave, Redlands, CA 92373

***A17. Form Prepared By:** Patrick Stanton

Date: 2/22/2012

Affiliation and Address: Statistical Research, Inc., 21 W. Stuart Ave, Redlands, CA 92373

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-33-017259

HRI #

Trinomial

CA-RIV-10847

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*Resource Name or #: SRI-14202 (UPDATE)

L1. Historic and/or Common Name: None

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:** Feature 16136

L2b. Location of Point or Segment:

Zone 11; 582704 mE/ 3714582 mN NAD27 GPS

Zone 11; 582731 mE/ 3714544 mN NAD27 GPS

Zone 11; 582904 mE/ 3714585 mN NAD27 GPS

Zone 11; 582935 mE/ 3714546 mN NAD27 GPS

L3. Description:

This site consists is the Coachella Valley Stormwater Channel (P-33-17259), which crosses Highway 111, southeast of the town of Thermal and Highway 195, west of Mecca. The main channel (Feature 16216) consists of a wide expanse of land covered in various riparian species of plants and trees with the channelized Whitewater River located centrally. This channel is bound by wide earthen levees (Feature 16136-northwest and 16137-southeast). Located atop these levees are graded access roads that covered with crushed granite.

At the interection with Highway 195, the channelized river (Feature 16216) passes through a concrete beneath the highway. The

L4. Dimensions:

a. **Top Width:** 100.00 m

b. **Bottom Width:** N/A

c. **Height or Depth:** None

d. **Length of Segment:** 45.00 m

L5. Associated Resources:

None

L4e. Sketch of Cross-Section:

Facing:

L6. Setting:

The site is located in the Coachella Valley. Vegetation associated with the levees is sparse and consists of scattered brush and grasses. In the channel, vegetation gets much denser with tall grasses, brush, and the occasional tree. The surrounding sediment is a fine silty sand with some smaller gravel deposits.

L7. Integrity Considerations:

Because access roads run along the tops of the levees, the levees are covered with tire tracks and ruts.

L8b. Description of Photo, Map, or Drawing

See sketch map

L9. Remarks:

There have been no chnges since the previous site record was written in 2008.

L10. Form Prepared By:

Patrick Stanton

L11. Date: 2/22/2012

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-33-017259

HRI #

Trinomial

CA-RIV-10847

Page 5 of 14

*Resource Name or #: SRI-14202 (UPDATE)

L1. Historic and/or Common Name: None

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:** Feature 16137

L2b. Location of Point or Segment:

Zone 11; 582704 mE/ 3714582 mN NAD27 GPS

Zone 11; 582731 mE/ 3714544 mN NAD27 GPS

Zone 11; 582904 mE/ 3714585 mN NAD27 GPS

Zone 11; 582935 mE/ 3714546 mN NAD27 GPS

L3. Description:

This site consists is the Coachella Valley Stormwater Channel (P-33-17259), which crosses Highway 111, southeast of the town of Thermal and Highway 195, west of Mecca. The main channel (Feature 16216) consists of a wide expanse of land covered in various riparian species of plants and trees with the channelized Whitewater River located centrally. This channel is bound by wide earthen levees (Feature 16136-northwest and 16137-southeast). Located atop these levees are graded access roads that covered with crushed granite.

L4. Dimensions:

a. Top Width: 100.00 m

b. Bottom Width: N/A

c. Height or Depth: None

d. Length of Segment: 100.00 m

L5. Associated Resources:

None

L4e. Sketch of Cross-Section:

Facing:

L6. Setting:

The site is located in the Coachella Valley. Vegetation associated with the levees is sparse and consists of scattered brush and grasses. In the channel, vegetation gets much denser with tall grasses, brush, and the occasional tree. The surrounding sediment is a fine silty sand with some smaller gravel deposits.

L7. Integrity Considerations:

Because access roads run along the tops of the levees, the levees are covered with tire tracks and ruts.

L8b. Description of Photo, Map, or Drawing

See sketch map

L9. Remarks:

There have been no chnges since the previous site record was written in 2008.

L10. Form Prepared By:

Patrick Stanton

L11. Date: 2/22/2012

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-33-017259

HRI #

Trinomial

CA-RIV-10847

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*Resource Name or #: SRI-14202 (UPDATE)

L1. Historic and/or Common Name: None

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:** Feature 16216

L2b. Location of Point or Segment:

Zone 11; 582704 mE/ 3714582 mN NAD27 GPS

Zone 11; 582731 mE/ 3714544 mN NAD27 GPS

Zone 11; 582904 mE/ 3714585 mN NAD27 GPS

Zone 11; 582935 mE/ 3714546 mN NAD27 GPS

L3. Description:

This site consists is the Coachella Valley Stormwater Channel (P-33-17259), which crosses Highway 111, southeast of the town of Thermal and Highway 195, west of Mecca. The main channel (Feature 16216) consists of a wide expanse of land covered in various riparian species of plants and trees with the channelized Whitewater River located centrally. This channel is bound by wide earthen levees (Feature 16136-northwest and 16137-southeast). Located atop these levees are graded access roads that covered with crushed granite.

L4. Dimensions:

a. Top Width: 12.00 m

b. Bottom Width: N/A

c. Height or Depth: None

d. Length of Segment: 15.00 m

L5. Associated Resources:

None

L4e. Sketch of Cross-Section:

Facing:

L6. Setting:

The site is located in the Coachella Valley. Vegetation associated with the levees is sparse and consists of scattered brush and grasses. In the channel, vegetation gets much denser with tall grasses, brush, and the occasional tree. The surrounding sediment is a fine silty sand with some smaller gravel deposits.

L7. Integrity Considerations:

Because access roads run along the tops of the levees, the levees are covered with tire tracks and ruts.

L8b. Description of Photo, Map, or Drawing

See sketch map

L9. Remarks:

There have been no changes since the previous site record was written in 2008.

L10. Form Prepared By:

Patrick Stanton

L11. Date: 2/22/2012

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-33-017259

HRI #

Trinomial

CA-RW-10347

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*Resource Name or #: SRI-14202 (UPDATE)

L1. Historic and/or Common Name: None

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:** Feature 16217

L2b. Location of Point or Segment:

Zone 11; 582704 mE/ 3714582 mN NAD27 GPS

Zone 11; 582731 mE/ 3714544 mN NAD27 GPS

Zone 11; 582904 mE/ 3714585 mN NAD27 GPS

Zone 11; 582935 mE/ 3714546 mN NAD27 GPS

L3. Description:

At the interection with Highway 195, the channelized river (Feature 16216) passes through a concrete beneath the highway. The banks of the channel are fortified with concrete and boulders to reduce erosion. Like the segment crossing Highway 111, the channel is flanked by levees with access roads located on top of the levees. The roads (Features 16217-west road and 16218-east road) are oriented northwest to southeast on both sides of Highway 195 and are covered with crushed granite. Access to these roads, as well as those associated with the levees on Highway 111, is blocked by large meal swinging gates.

L4. Dimensions:

a. Top Width: 5.00 m

b. Bottom Width: N/A

c. Height or Depth: None

d. Length of Segment: 51.00 m

L5. Associated Resources:

None

L4e. Sketch of Cross-Section:

Facing:

L6. Setting:

The site is located in the Coachella Valley. Vegetation associated with the levees is sparse and consists of scattered brush and grasses. In the channel, vegetation gets much denser with tall grasses, brush, and the occasional tree. The surrounding sediment is a fine silty sand with some smaller gravel deposits.

L7. Integrity Considerations:

Because access roads run along the tops of the levees, the levees are covered with tire tracks and ruts.

L8b. Description of Photo, Map, or Drawing

See sketch map

L9. Remarks:

There have been no chnges since the previous site record was written in 2008.

L10. Form Prepared By:

Patrick Stanton

L11. Date: 2/22/2012

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # P-33-017259

HRI #

Trinomial

CA-RIV-10847

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*Resource Name or #: SRI-14202 (UPDATE)

L1. Historic and/or Common Name: None

L2a. Portion Described: ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:** Feature 16218

L2b. Location of Point or Segment:

Zone 11; 582704 mE/ 3714582 mN NAD27 GPS

Zone 11; 582731 mE/ 3714544 mN NAD27 GPS

Zone 11; 582904 mE/ 3714585 mN NAD27 GPS

Zone 11; 582935 mE/ 3714546 mN NAD27 GPS

L3. Description:

At the intersection with Highway 195, the channelized river (Feature 16216) passes through a concrete beneath the highway. The banks of the channel are fortified with concrete and boulders to reduce erosion. Like the segment crossing Highway 111, the channel is flanked by levees with access roads located on top of the levees. The roads (Features 16217-west road and 16218-east road) are oriented northwest to southeast on both sides of Highway 195 and are covered with crushed granite. Access to these roads, as well as those associated with the levees on Highway 111, is blocked by large metal swinging gates.

L4. Dimensions:

a. Top Width: 5.00 m

b. Bottom Width: N/A

c. Height or Depth: None

d. Length of Segment: 92.00 m

L5. Associated Resources:

None

L4e. Sketch of Cross-Section:

Facing:

L6. Setting:

The site is located in the Coachella Valley. Vegetation associated with the levees is sparse and consists of scattered brush and grasses. In the channel, vegetation gets much denser with tall grasses, brush, and the occasional tree. The surrounding sediment is a fine silty sand with some smaller gravel deposits.

L7. Integrity Considerations:

Because access roads run along the tops of the levees, the levees are covered with tire tracks and ruts.

L8b. Description of Photo, Map, or Drawing

See sketch map

L9. Remarks:

There have been no changes since the previous site record was written in 2008.

L10. Form Prepared By:

Patrick Stanton

L11. Date: 2/22/2012

PHOTOGRAPH RECORD

Trinomial

CA-RIV-1084

***Resource Name or #:** SRI-14202 (UPDATE)

Lens Size:

Negatives Kept At: 21 W. Stuart Ave, Redlands, CA 92373

Date	Time	Exp/ Frame	Subject/Description	View Toward	Accession #
3/7/2012		5253	eastern north road overview	NW	
3/7/2012		5252	southern channel overview	S	
3/12/2012		5222	canal overview	NW	
3/7/2012		5251	overview	E	

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-33-017259

HRI #

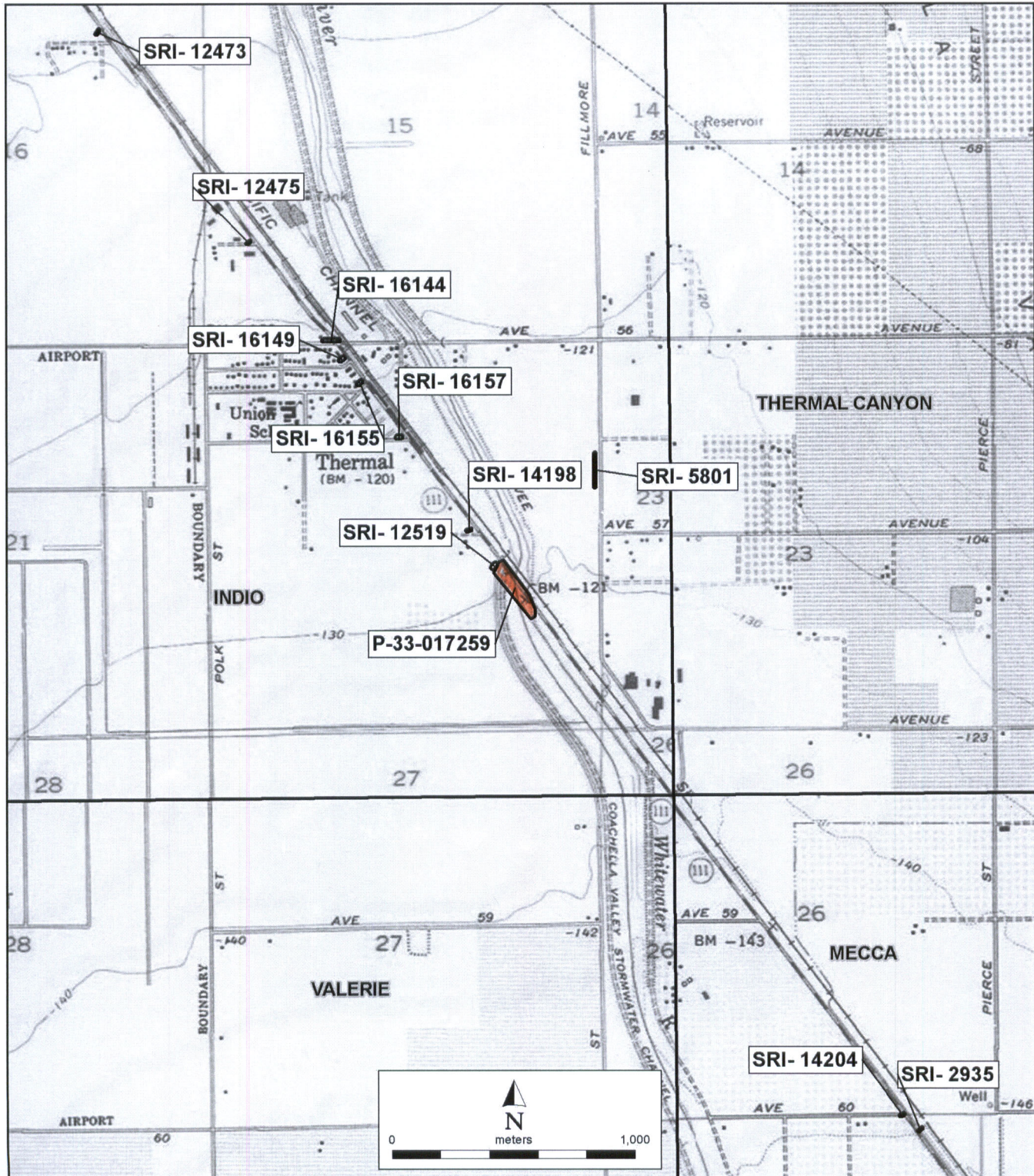
Trinomial CA-RIV-10847

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*Resource Name or #: SRI-14202 (UPDATE)

*Map Name: 7.5' MECCA USGS Topographic Quad Scale: 1:24,000

*Year: 2009



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # P-33-017259

HRI #

Trinomial

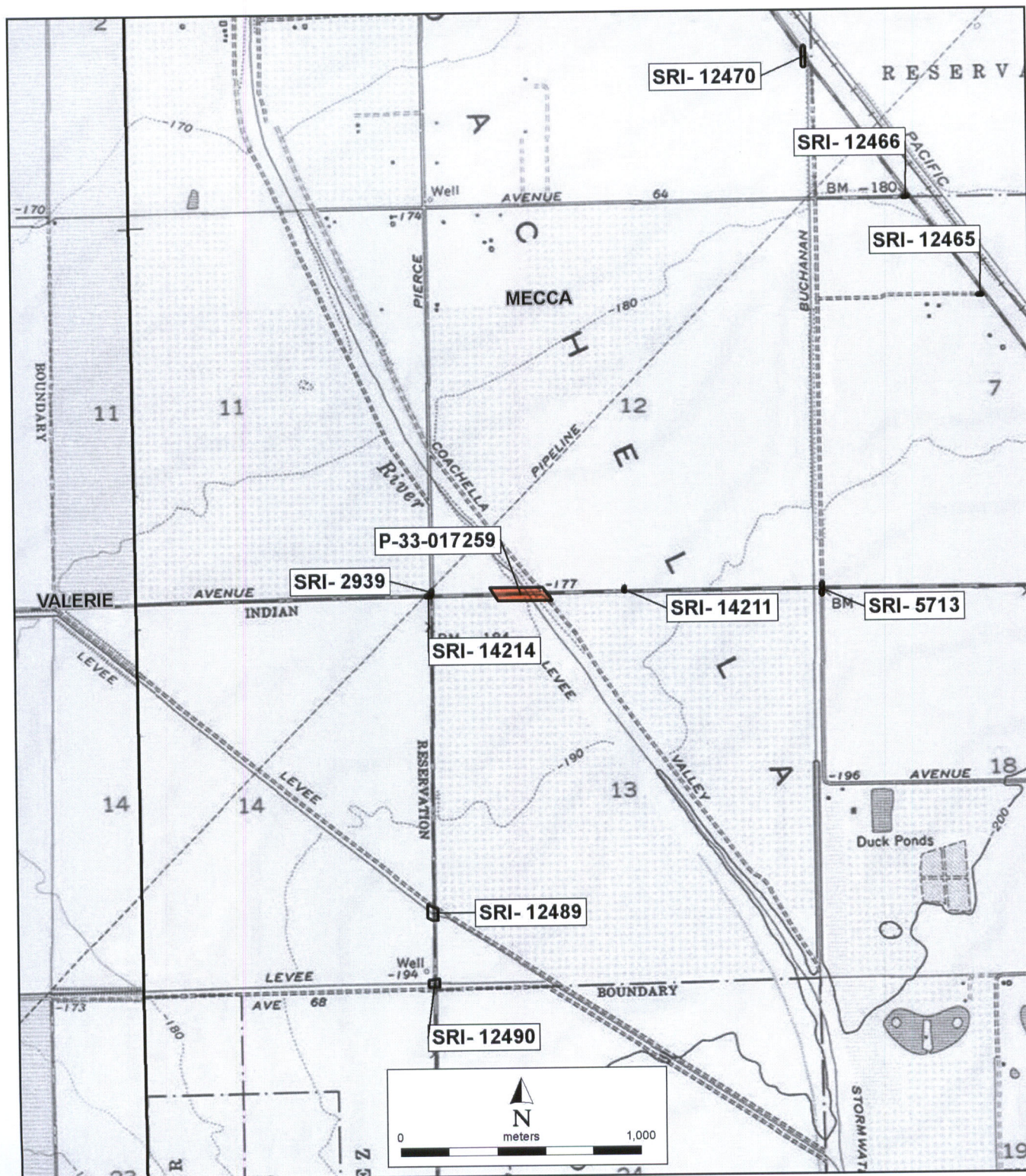
CA-RIV-10847

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*Resource Name or #: SRI-14202 (UPDATE)

*Map Name: 7.5' MECCA USGS Topographic Quad Scale: 1:24,000

*Year: 2009



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # P-33-017259

HRI #

Trinomial

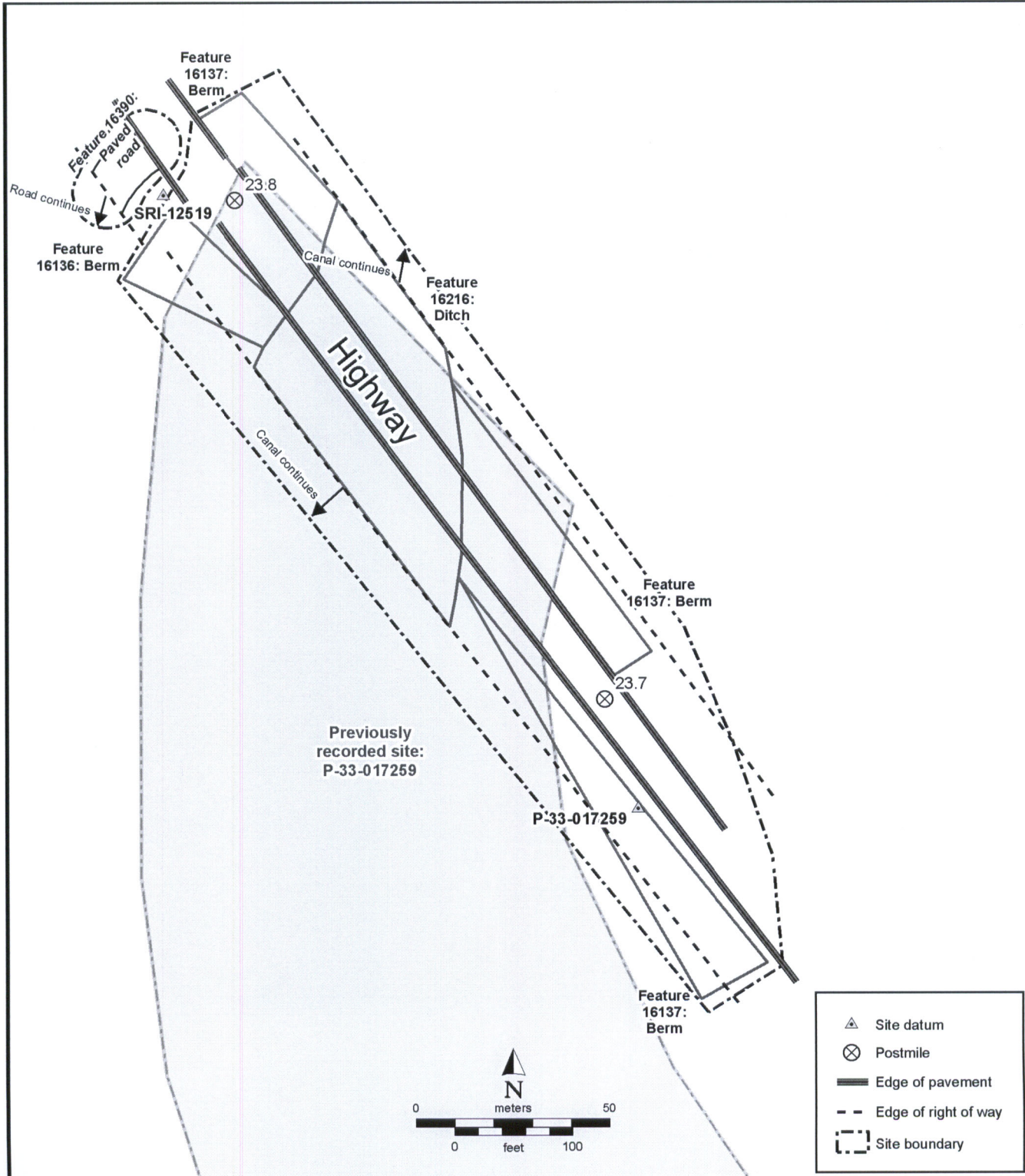
CA-RIV-10847

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*Resource Name or #: SRI-14202 (UPDATE)

*Drawn By: Patrick Stanton

*Date: 02/22/2012



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # P-33-017259

HRI #

Trinomial

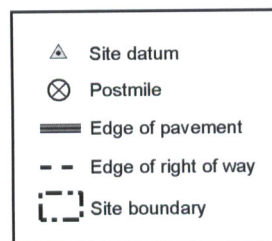
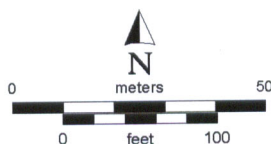
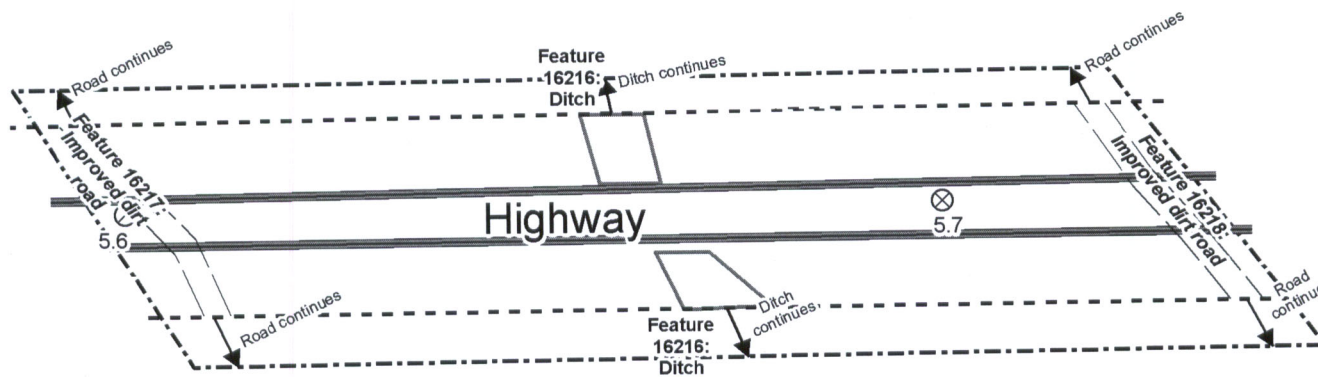
CA-RIV-10647

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*Resource Name or #: SRI-14202 (UPDATE)

*Drawn By: Patrick Stanton

*Date: 02/22/2012



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # P-33-017259

HRI #

Trinomial

CA-RIV-10847

Page 14 of 14

*Resource Name or #: SRI-14202 (UPDATE)

*Recorded By: Patrick Stanton

*Date: 2/22/2012

☒ Continuation

☐ Update

P2b. Legal description

T 7S R 8E; NW¼ of NW¼ of Sec 13; SBBM

T 7S R 8E; SE¼ of SW¼ of Sec 12; SBBM

T 7S R 8E; SW¼ of SW¼ of Sec 12; SBBM

P2d. UTM

Zone 11; 582731 mE/ 3714544 mN NAD27 GPS

Zone 11; 582904 mE/ 3714585 mN NAD27 GPS

Zone 11; 582935 mE/ 3714546 mN NAD27 GPS

P4. Resources Present

[X] Other (linear)

A1. Method of determination

by Caltrans. The right-of-way extends 15 m from the edge of the highway. The site continues beyond the right-of-way, but these portions were not recorded. The site was identified on the Coachella (1941, 1956) 15-minute and the Mecca (1955) 7.5-minute USGS topographic quads.

A1. Reliability of determination

readily apparent.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-33-017259 (Update)
HRI #
Trinomial CA-RIV-10847 (Update)
NRHP Status Code

Other Listings
Review Code

Reviewer **Date**

Resource Name or #: Coachella Valley Stormwater Channel

Page 1 of 6

P1. Other Identifier:

P2. Location: a. **County** Riverside, CA ☐ Not for Publication ☒ Unrestricted
b. **USGS 7.5' Quad** Cathedral City, CA **Date** 1958; photorevised 1981
T 4 S; R 5 E; Portions of Sections 28, 33, and 34; **S.B.B.M.**

c. **Address:** None **City** Cathedral City, CA **Zip**
d. **Zone** 11, NAD 83 **NW corner of segment (UTM A):** 548551 **mE/** 3740253 **mN**
NE corner of segment (UTM B): 548797 **mE/** 3740256 **mN**
SW corner of segment (UTM C): 551409 **mE/** 3737078 **mN**
SE corner of segment (UTM D): 551749 **mE/** 3737080 **mN**

e. Other Locational Data: The segment of the Coachella Valley Stormwater Channel documented by this record is located north of State Route (Highway 111) between Frank Sinatra Drive (south end) and Dinah Shore Drive (north end) in Cathedral City.

P3a. Description: This recorded segment of the Coachella Valley Stormwater Channel (CVSC) located between Frank Sinatra Drive (south end) and Dinah Shore Drive (north end) in Cathedral City, measures approximately 2.72 miles (14,375 ft or 4,380 m) long, and averages 643 ft (196 m) wide. The approximate southern two-thirds of this segment of the CVSC from its southern end at Frank Sinatra Drive north to Cathedral Canyon Drive consists of a channelized segment of the Whitewater River bordered along each side by cement-lined slopes. The northern part of the segment measuring approximately 0.88 miles (4,644 ft or 1,415 m) long from Cathedral Canyon Drive north to Dinah Shore Drive appears less channelized and more like the natural course of the Whitewater River drainage—the sides along this segment of the CVSC outside of the main drainage channel are not cement-lined, but landscaped and groomed gradual slopes that form portions of a golf course. Within the channelized portions with cement-lined side-slopes, the sides of the channel angle down at a 10 to 12 degree slope to the relatively flat bottom of the channel approximately 20 ft below street grade.

P3b. Resource Attributes: HP11: Engineering structure

P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District

P5. Photograph or Drawing: See attached Continuation Sheets for photographs.

P6. Date Constructed/Age and Source: ☐ Prehistoric ☒ Historic ☐ Both

P7. Owner and Address: Unknown

P8. Recorded by: Dennis McDougall, Applied EarthWorks, Inc., 3550 E. Florida Ave., Suite H, Hemet, CA 92544

P9. Date Recorded: January 12, 2017.

P10. Type of Survey: ☒ Intensive ☐ Reconnaissance ☐ Other
Describe: Maximum of 15-m pedestrian transects.

P11. Report Citation: *Cultural Resource Assessment for the Coachella Valley Water District's Whitewater River Stormwater Channel Bureau of Indian Affairs Easement Renewal Project, City of Rancho Mirage, Riverside County, California.* Report prepared for the Coachella Valley Water District by Applied EarthWorks, Inc., Hemet, California.

Attachments: ☐ None ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record **Other:**

BUILDING, STRUCTURE, OBJECT RECORD

Primary # P-33-017259 (Update)
HRI #
Trinomial CA-RIV-10847 (Update)
NRHP Status Code

Page 2 of 6

Resource Name or #: Coachella Valley Stormwater Channel

- B1. Historic Name:** Coachella Valley Stormwater Channel **B2. Common Name:** Same
- B3. Original Use:** Flood control **B4. Present Use:** Flood control
- B5. Architectural Style:** This segment of the CVSC is an earthen and cement-lined channel bordered by large earthen levees.
- B6. Construction History:** The Coachella Valley Stormwater District was initially organized in 1915 by settlers of the Coachella Valley with the objective of controlling floodwater flows and constructing flood channels and levees. Prior to their formation the Whitewater River periodically flooded its banks and damaged farm lands. An objective of the District was to replace individual ad hoc levee-building by individuals who often worked against each other, with one property-owner inadvertently causing damage to another in times of flood. The Coachella Valley Stormwater District and the Coachella Valley County Water District merged in 1937. After a March 1938 storm, the District repaired, relocated, and reconstructed the segment of channel between Indio and the Salton Sea (Nordland 1978:81). The channel was rebuilt again in the late 1960s and early 1970s. The channel is depicted on the USGS Coachella quadrangle edition of 1941 (USGS 1941).
- B7. Moved?** ☒ No ☐ Yes ☐ Unknown **Date:** **Original Location:**
- B8. Related Features:** None
- B9. a. Architect:** Coachella Valley Stormwater District
b. Builder: Coachella Valley Stormwater District/Coachella Valley County Water District
- B10. Significance: Theme:** Flood Control Systems
Area: Riverside County
Period of Significance: 1915–present
Property Type: Stormwater channel **Applicable Criteria:** None apply

The Coachella Valley Stormwater District was initially organized in 1915 by settlers of the Coachella Valley with the intention of controlling floodwater flows and constructing flood channels and levees (Nordland 1978:18–19). Dropping groundwater levels and plans to export Coachella Valley groundwater to Imperial Valley led local farmers to create the Coachella Valley County Water District (CVCWD) in 1918. An objective of the CVCWD was to replace individual ad hoc levee-building, which often worked at cross-purposes, with one property owner doing damage to another in times of flood. Devastating flooding in 1919 inundated Indio, Coachella, Thermal, and Mecca, underscoring the urgency for building appropriate flood control devices. Flooding had been a problem that predated settlement and development of the Coachella Valley, with major floods recorded as early as 1862 and nearly every decade since (Nordland 1978:18–20, 99–102).

The Stormwater District began building flood control levees in 1915 (i.e., the Coachella Valley Stormwater Channel [CVSC]), beginning with the Indio Levee, and continued efforts throughout the Coachella Valley during the 1920s and 1930s. The Whitewater River, the principal drainage in the Coachella Valley, would flood every few years. Prior to channelization of the Whitewater River between Palm Springs and the Salton Sea, its course of meandering flows was one of constant change. One of the greatest flood episodes occurred in January 1916, culminating from the combination of heavy rainfall in the valley and snow melt from the mountains. During the rain storm, 11 mi of Southern Pacific Railroad track and bed were washed out between Whitewater and Thousand Palms, with numerous other breaks along the line below Indio. Indio itself was covered with a sheet of water two feet deep and one mile wide. The river's channel had become a narrow, 50-ft-deep gorge in many areas. Another major flood occurred in 1927, and the Whitewater Channel was again deeply cut in many places. Improvements carried out to improve the Whitewater Channel at that time had included rebuilding a system of levees which were affected by the storm in the vicinity of Indio, Thermal, and Mecca. The Stormwater District and the CVCWD merged in 1937.

In March of 1938, another major storm occurred, which again caused deep gouging in the channel and levee damage. In the aftermath of this storm, rebuilding and improvement of the channel took place. The CVCWD applied to the State of California for \$80,000 in emergency funds "to repair, relocate and reconstruct the channel from Indio to the

BUILDING, STRUCTURE, OBJECT RECORD

Primary # P-33-017259 (Update)
HRI #
Trinomial CA-RIV-10847 (Update)
NRHP Status Code

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Resource Name or #: Coachella Valley Stormwater Channel

[Salton] sea" (Nordland 1978:81). The channel was again rebuilt in the late 1960s and early 1970s, partly with funds from the U.S. Army Corps of Engineers (Nordland 1978:101). It was estimated in the 1970s that nearly \$16,000,000 had been spent on protective works constructed on the Whitewater River Channel alone, and that \$34 million would be needed to provide the remaining protective works within the District (Nordland 1978:20).

Portions of the CVSC were initially constructed by the Coachella Valley Stormwater District as early as 1915 and through the 1930s to control floodwater flows in the valley, although it is unclear what the extent of their flood control channel, its design, and exact alignment were. The segment of the CVSC that extends from Indio to the Salton Sea was constructed as an earthen channel bordered by large earthen levees after the 1938 storm, and completed by at least 1941.

Other segments of the CVSC have been evaluated for historical significance and do not appear eligible for listing in the NRHP or CRHR (Tang and Jacquemain 2008:2-4; George and Mirro 2009:24; Smallwood 2012:2). The segment of the CVSC recorded during this study also does not appear eligible for the NRHP or CRHR. While it is associated with a trend of events that allowed for the improvement of agricultural lands during the mid-twentieth century, and development of the area into an urban center during the late twentieth century, the channel itself is not directly responsible for these developments, and did not play a significant role in the growth and development of the region. Rather, it is one of many factors in the overall scheme of Coachella Valley historical development. The stormwater channel is not directly associated with any historical events that have made a significant contribution to the broad patterns of our history (Criterion A/1). The stormwater channel is not directly associated with the productive life of any persons significant in our past (Criterion B/2). This earthen and cement-lined channel is relatively plain in appearance and utilitarian in nature, and its construction does not represent any innovative design or building technique. Therefore, it does not exhibit any distinctive architectural characteristics or engineering merits that would suggest it is significant under Criterion C/3. Finally, the channel does not have the potential to yield any information important to the study of twentieth century channel construction through intensive study of its design, materials, or construction methods (Criterion D/4).

B11. Additional Resource Attributes: None

B12. References:

- George, Joan and Vanessa Mirro
2009 Phase I Cultural Resources Assessment for the Coachella Valley Water District's Stormwater Channel Project, Riverside County, California. On file, Eastern Information Center, University of California, Riverside.
- Nordland, Ole J.
1978 *Coachella Valley's Golden Years*. Revised edition. Desert Printing Co., Inc., Indio, California.
- Smallwood, Josh
2012 DPR recording forms, P-33-017913 (Coachella Valley Stormwater Channel). On file, Eastern Information Center, University of California, Riverside.
- Tang, Tom, and Terri Jacquemain
2008 DPR recording forms, P-33-017259 (Coachella Valley Stormwater Channel). On file, Eastern Information Center, University of California, Riverside.
- USGS (U.S. Geological Survey, Washington D.C.)
1941 Coachella, Calif. (15-minute/1:62,500 scale). Aerial photographs taken 1941.

B13. Remarks: None

B14. Evaluator: Applied EarthWorks, Inc., 3550 E. Florida Ave., Suite I, Hemet, CA 92544
Date of Evaluation: January 2017



Channelized segment of the CVSC with cement-lined slopes between Frank Sinatra Drive and Cathedral Canyon Drive (view to the northwest; photograph taken January 10, 2017).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # 33-017259 (Update)

HRI#

Trinomial CA-RIV-10847H (Update)

Page 5 of 6

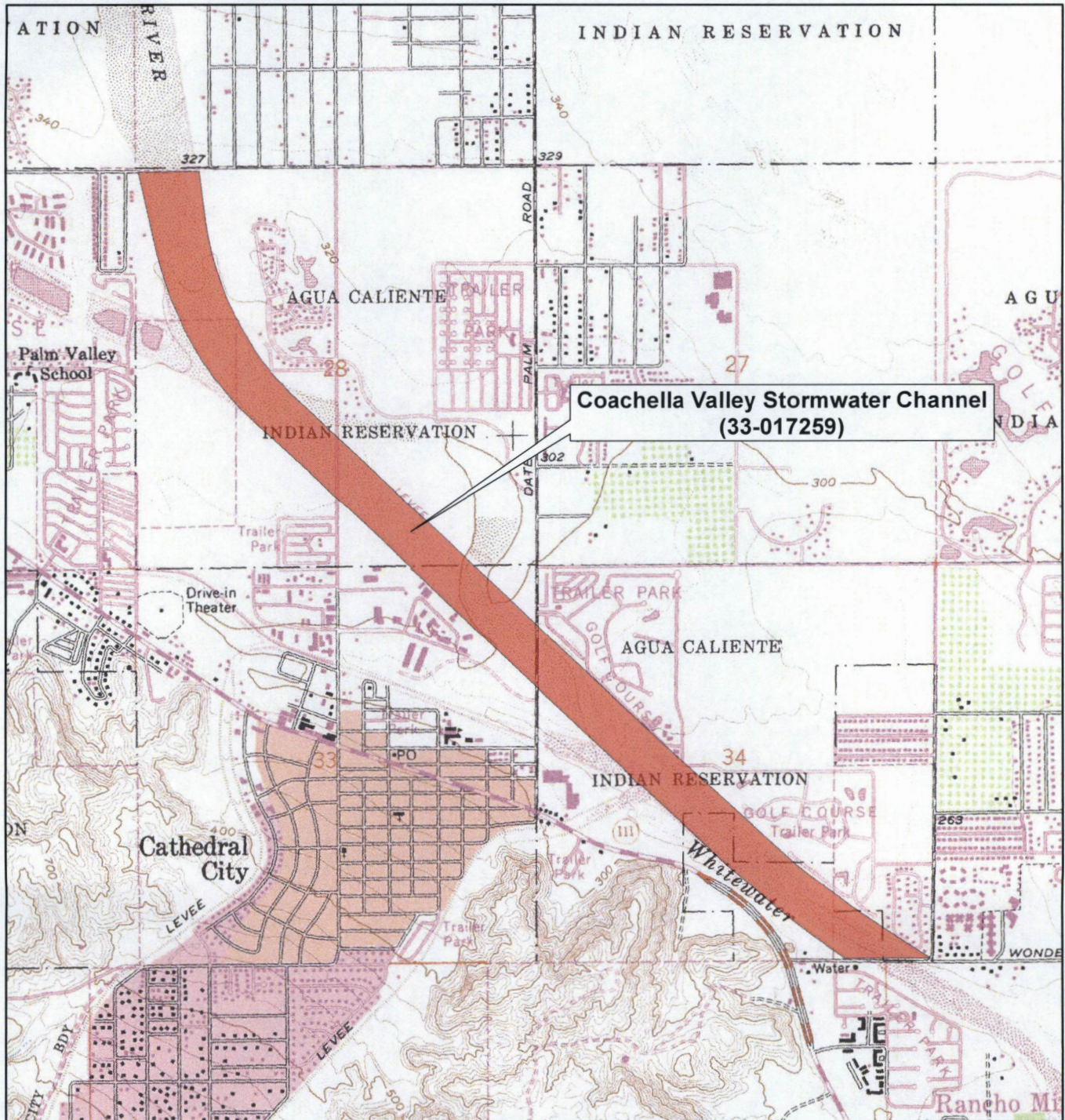
*Resource Name or #: (Assigned by recorder) Coachella Valley Stormwater Channel

*Drawn by: D. McDougall

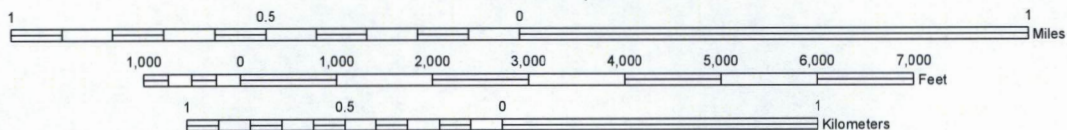
*Scale: 1 inch equals 1,500 feet

*Date of map: January 2017





SCALE 1:24,000



TRUE NORTH

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-017259(Update)
HRI #
Trinomial CA-RIV-10847 (Update)
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Resource Name or #: (Assigned by recorder) AE-1376T27-1H

Page 1 of 5

P1. Other Identifier: Coachella Valley Stormwater Channel

P2. Location: a. County Riverside, CA

☒ Not for Publication ☐ Unrestricted

b. USGS 7.5' Quad La Quinta, CA

Date 1959; photorevised 1980

T 5 S; R 7 E; NW & SW ¼ of NW ¼ of Sec 28;
NE & SE ¼ of NE ¼ of Sec 29; S.B.B.M.

c. Address: None

City La Quinta

Zip 92253

d. Zone 11, NAD 83 567,625 mE/ 3,730,333 mN (west end of segment)
567,867 mE/ 3,730,275 mN (east end of segment)

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): The segment of the Coachella Valley Stormwater Channel recorded herein intersects Jefferson Street approximately 0.22 mile north of Highway 111 in the City of La Quinta. It is situated nearly 2.4 miles south of the Interstate 10 freeway.

P3a. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): This recorded segment of the Coachella Valley Stormwater Channel measures approximately 669 feet long, covering a segment that is straddled by the Jefferson Street bridge. The segment consists of an earthen and partially concrete-lined channel oriented roughly southwest-to-northeast. It measures approximately 460 feet wide at this location. The south side of the channel at this location is concrete-faced to protect it from erosion. The north side and other portions of this segment have edges constructed of hard earthen berms. The sides slope approximately 10–12 degrees. The base is earth and relatively level, measuring approximately 300 feet wide from edge to edge. The center of the channel supports some vegetative growth.

P3b. Resource Attributes (List all attributes and codes): HP11: Engineering structure

P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District
☐ Other:

P5. Photograph or Drawing: (Photograph required for buildings, structures, and objects.) See attached photographs on following pages.

P6. Date Constructed/Age and Source: ☐ Prehistoric ☒ Historic ☐ Both

P7. Owner and Address: Coachella Valley Water District

P8. Recorded by (Name, affiliation, address): Cari Inoway, Applied EarthWorks, Inc., 3292 E. Florida Ave., Suite A, Hemet, CA 92544.

P9. Date Recorded: March 22, 2012

P10. Type of Survey: ☒ Intensive ☐ Reconnaissance ☐ Other
Describe: Maximum of 15-m pedestrian transects.

P11. Report Citation (Provide full citation or enter "none"): *Phase I Cultural Resources Assessment for the Jefferson Street Grade Control and Sewer Replacement Project, Riverside County, California*. Report prepared for the Coachella Valley Water District, Coachella, California. Prepared by Applied EarthWorks, Inc., Hemet, California.

Attachments: ☐ None ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record Other:

BUILDING, STRUCTURE, OBJECT RECORD

Primary # 33-017259 (Update)

HRI #

Trinomial CA-RIV-10847 (Update)

NRHP Status Code

Resource Name or #: AE-1376T27-1H

Page 2 of 5

B1. Historic Name: Coachella Valley Stormwater Channel

B2. Common Name: Same

B3. Original Use: Flood control

B4. Present Use: Flood control

B5. Architectural Style: This channel is earthen construction with a concrete face applied along its southern curvature to protect it from erosion.

B6. Construction History (Construction date, alterations, and date of alterations): The Coachella Valley Stormwater District was initially organized in 1915 by settlers of the Coachella Valley with the objective of controlling floodwater flows and constructing flood channels and levees. Prior to their formation the Whitewater River periodically flooded its banks and damaged farm lands. An objective of the District was to replace individual ad hoc levee-building by individuals who often worked against each other, with one property-owner inadvertently causing damage to another in times of flood. The Coachella Valley Stormwater District and the Coachella Valley County Water District merged in 1937. After a March 1938 storm, the District repaired, relocated, and reconstructed the segment of channel between Indio and the Salton Sea (Coachella Valley County Water District 1978). The channel was rebuilt again in the late 1960s and early 1970s. The channel is depicted on the Toro Peak 15' USGS quadrangle dating to 1941.

B7. Moved? ☒ No ☐ Yes ☐ Unknown **Date:** **Original Location:**

B8. Related Features: None

B9a. Architect: Unknown

b. Builder: Coachella Valley Stormwater District

B10. Significance: Theme: Flood Control Systems

Area: Riverside County

Period of Significance: 1915-present **Property Type:** Earthen channel **Applicable Criteria:** None apply (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity): The Coachella Valley Stormwater Channel was constructed by the local water district by at least 1939 to control floodwater flows. The stormwater channel does not appear eligible for the NRHP or CRHR. While it is associated with a trend of events that allowed for the improvement of agricultural lands during the mid-twentieth century, and development of the area into an urban center during the late twentieth century, the channel itself is not directly responsible for these developments, and did not play a significant role in the growth and development of the region. Rather, it is one of many factors in the overall scheme of Coachella Valley historical development. The stormwater channel is not directly associated with any historical events that have made a significant contribution to the broad patterns of our history (Criterion A/1). The stormwater channel is not directly associated with the productive life of any persons significant in our past (Criterion B/2). This earthen channel is relatively plain in appearance and utilitarian in nature, and its construction does not represent any innovative design or building technique. Therefore, it does not exhibit any distinctive characteristics or engineering merits that would suggest it is significant under Criterion C/3. Finally, the channel does not have the potential to yield any information important to the study of twentieth century channel construction through intensive study of its design, materials, or construction methods (Criterion D/4).

B11. Additional Resource Attributes (List attributes and codes):

B12. References: Coachella Valley County Water District (1978) Coachella Valley's Golden Years : the Early History of the Coachella Valley County Water District and Stories About the Discovery and Development of This Section of the Colorado Desert. Compiled by Ole J. Nordland. Coachella Valley County Water District, Coachella, Ca.

(This space reserved for official comment)

B13. Remarks: None.

B14. Evaluator: Josh Smallwood, Applied EarthWorks, Inc., 3292 E. Florida Ave., Suite A, Hemet, CA 92544.

Date of Evaluation: May 3, 2012



Figure 1. Overview of the Coachella Valley Stormwater Channel from the southeast edge of the channel (view to the northeast, photograph taken March 22, 2012.

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary # 33-0175259

HRI#

Trinomial CA-RIV-10847; Update

Page 4 of 5

*Resource Name or #: (Assigned by recorder)

Coachella Valley Stormwater Channel

*Drawn by: C. Inoway

*Scale: 1 inch equals 200 feet

*Date of map: April 2012



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # 33-017259

HRI#

Trinomial CA-RIV-10847; Update

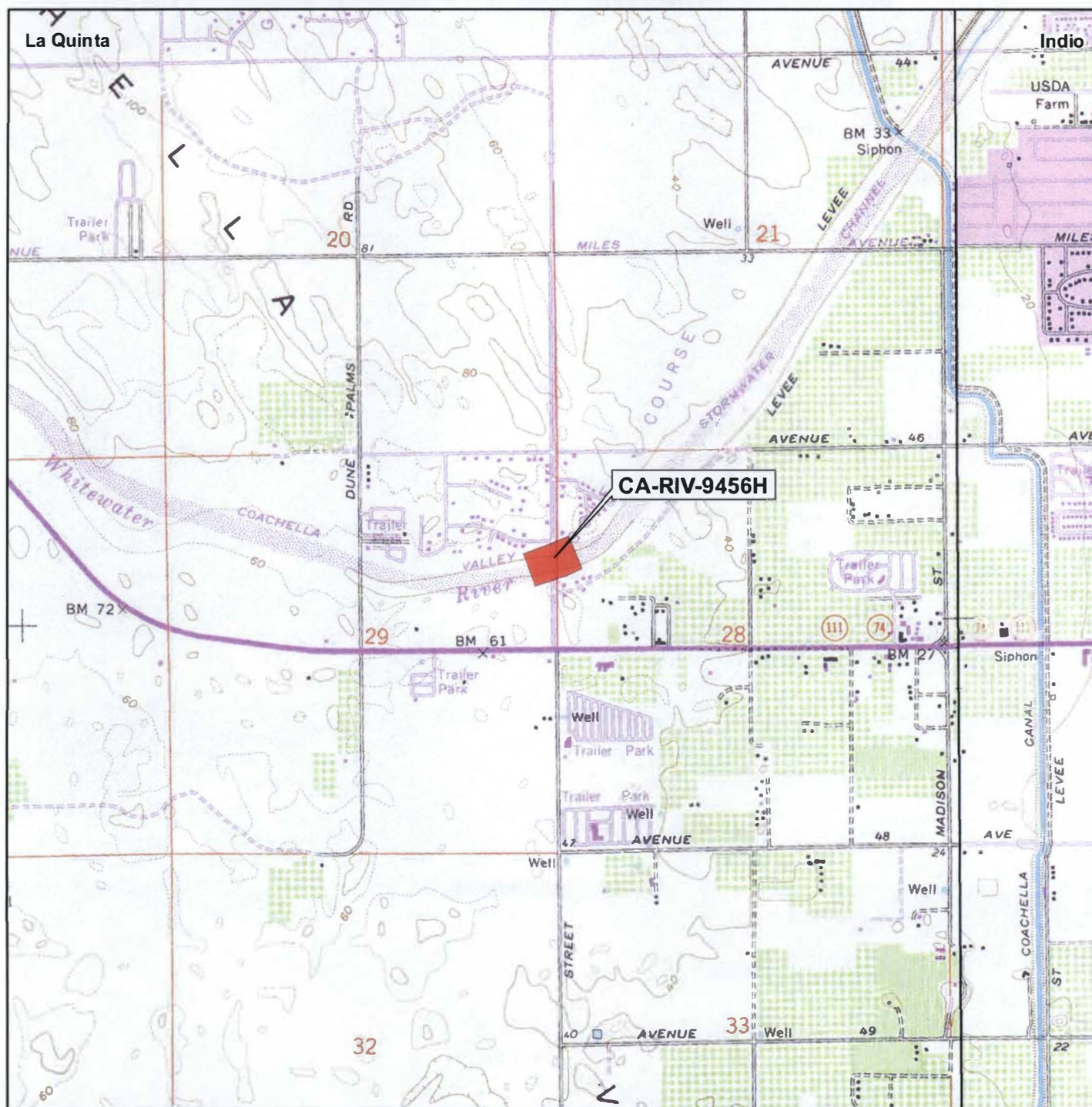
Page 5 of 5

*Resource Name or #: Coachella Valley Stormwater Channel

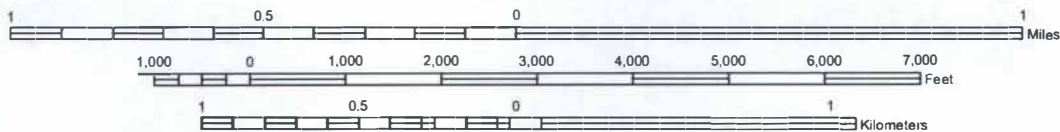
*Scale: 1:24,000

*Map Name: La Quinta (1959, 1980) and Indio (1956, 1972), CA, USGS 7.5' quadrangles

*Date: 2012



SCALE 1:24,000



TRUE NORTH

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-17259
HRI #
Trinomial CA-RIV-10847
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

*Resource Name or #: (Assigned by recorder) Æ-1376T25-1H

Page 1 of 5

P1. Other Identifier: Coachella Valley Stormwater Channel

*P2. Location: *a. County Riverside, CA

☒ Not for Publication ☐ Unrestricted

*b. USGS 7.5' Quad Indio, CA

Date 1956; photorevised 1972

T 6 S; R 8 E; NW & SW ¼ of NW ¼ of Sec 10; S.B.B.M.

NW & SW ¼ of SW ¼ of Sec 10;

NW ¼ of NW ¼ of Sec 15

c. Address: None

City Zip

d. Zone 11, NAD 83 597166 mE/ 3725685 mN (north end of segment)

579450 3724425 (south end of segment)

e. Other Locational Data (e.g., parcel #, legal description, directions to resource, additional UTM's, etc., when appropriate): The segment of the Whitewater Stormwater Channel (Temp. No. Æ-1376T25-1H) recorded herein is located approximately 2.0 miles southeast of the City of Coachella, immediately west of the 86S freeway between Industrial Way and Avenue 54.

*P3a. Description (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries): CA-RIV-9456H, or the Coachella Valley Stormwater Channel, is depicted on the Coachella 7.5' USGS quad dating to 1941. The Coachella Valley Stormwater District was initially organized in 1915 by settlers of the Coachella Valley with the objective of controlling floodwater flows and constructing flood channels and levees. An objective of the District was to replace individual ad hoc levee-building by individuals which often worked at cross-purposes, with one property-owner doing damage to another in times of flood. The Coachella Valley Stormwater District and the Coachella Valley County Water District merged in 1937. After the March 1938 storm, the District repaired, relocated and reconstructed the channel from Indio to the Salton Sea (Coachella Valley County Water District 1978).

*P3b. Resource Attributes (List all attributes and codes): HP 6: Water Conveyance System

*P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District
☐ Other:

P5. Photograph or Drawing: (Photograph required for buildings, structures, and objects.)

*P6. Date Constructed/Age and Source: ☒ Prehistoric ☐ Historic ☐ Both

*P7. Owner and Address: Coachella Valley Water District.

*P8. Recorded by (Name, affiliation, address): D. McDougall, Applied EarthWorks, Inc., 3292 E. Florida Ave., Suite A, Hemet, CA 92544.

P9. Date Recorded: 19 November 2009.

*P10. Type of Survey: ☒ Intensive ☐ Reconnaissance ☐ Other
Describe: Maximum of 15-m pedestrian transects.

*P11. Report Citation (Provide full citation or enter "none"): *Phase I Cultural Resources Assessment for the Coachella Valley Water District's Stormwater Channel Project, Riverside County, California*. Report prepared for the Coachella Valley Water District, Coachella, California. Prepared by Applied EarthWorks, Inc., Hemet, California.

Attachments: ☐ None ☒ Location Map ☐ Sketch Map ☐ Continuation Sheet ☐ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☒ Linear Feature Record ☐ Milling Station Record
☐ Rock Art Record ☐ Artifact Record ☒ Photograph Record Other:

- L1. Historic and/or Common Name:** Coachella Valley Stormwater Channel
- L2a. Portion Described:** ☐ Entire Resource ☒ Segment ☐ Point Observation **Designation:**
- b. Location of point or segment** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map): Located immediately west of the 86S freeway between Industrial Way and Avenue 54. The north end of the segment is located at UTM 579166 mE/3725685 mN; the south end is located at UTM 579450 mE/3724425 mN.
- L3. Description** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate): Approximately 4,770-ft long segment of the Coachella Valley Stormwater Channel oriented NNW/SSE. The channel is an earthen stormwater channel measuring approximately 600 ft wide and 35 ft deep flanked on both the eastern and western sides by raised levees/access roads 22 ft wide rising approximately 8 ft above the surrounding extant ground surfaces. The sides of the channel slope down on a 10–12 degree slope for approximately 150 ft to the relatively flat bottom of the channel, which is approximately 300 ft wide. The middle of the channel supports a dense growth of willow-riparian vegetation, including willow, bamboo, tules, tamarisk, arrow weed, and other non-native invasive species.
- L4. Dimensions** (In feet for historic features and meters for prehistoric features):
- a. Top width 600 ft
 - b. Bottom width 300 ft
 - c. Height or Depth 35 ft depth
 - d. Length of Segment 4,770 ft
- L5. Associated Resources:** None.
- L6. Setting** (Describe natural features, landscape characteristics, slope, etc., as appropriate): Situated on the Coachella Valley floor immediately west of the 86S freeway.
- L7. Integrity Considerations:** Integrity appears retained; no disturbances are readily apparent.
- L8a. Photograph, Map, or Drawing**

L4e. Sketch of Cross-Section



L8b. Description of Photo, Map, or Drawing (View, scale, etc.): Whitewater Stormwater Channel from south end of project APE due east of Avenue 54, showing channel and access road atop levee on west side of channel.

L9. Remarks: None.

L10. Form Prepared by (Name, affiliation, and address): D. McDougall, Applied EarthWorks, Inc., 3292 E. Florida Ave., Suite A, Hemet, CA 92544.

L11. Date: 11/19/09

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
BUILDING, STRUCTURE, OBJECT RECORD

Primary # 33-17259
HRI #
Trinomial CA-RIV-10847
NRHP Status Code

*Resource Name or #: AE-1376T25-1H

Page 3 of 5

- B1. **Historic Name:** Coachella Valley Stormwater Channel B2. **Common Name:**
- B3. **Original Use:** Flood control B4. **Present Use:** Flood control
- B5. **Architectural Style:** No style
- B6. **Construction History** (Construction date, alterations, and date of alterations): from 1915 – early 1940s
- B7. **Moved?** ☒ No ☐ Yes ☐ Unknown **Date:** **Original Location:**
- B8. **Related Features:** None
- B9a. **Architect:** Unknown b. **Builder:** Coachella Valley County Water District
- B10. **Significance: Theme:** Flood Control System **Area:** Riverside County
Period of Significance: early 1940s-Present **Property Type:** Water Conveyance **Applicable Criteria:** N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity): CA-RIV-9456H, the Coachella Valley Stormwater Channel, was constructed between 1915 and the early 1940s by the CVWD to control floodwater flows. The period of use for this segment of the resource appears to be from approximately 1940, when the canal was repaired, relocated, and reconstructed, through the present day, as water still flows through this channel. The channel was rebuilt again in the late 1960s and early 1970s. The segment of floodwater channel within the APE has retained integrity of location, setting, design, materials, workmanship, feeling, and association. While the resource has retained a high degree of integrity, it is not eligible for the NRHP or CRHR for the following reasons.
- CA-RIV-9456H is utilitarian in nature and played a significant role in controlling floodwater flows within the Coachella Valley. As such, it is part of an early system that expanded rapidly and was absorbed as an element of the emerging local floodwater infrastructure. The early system has evolved over time, changing as local needs arose. Individually, it is not eligible under Criterion A of the NRHP or the CRHR under Criterion 1. While associated with broad patterns of local history or events, it is an element of a utilitarian system similar to those that developed throughout southern California. It is neither unique nor innovative in its approach to managing a common problem of flooding in southern California.
- CA-RIV-9456H does not meet the requirements for listing in the NRHP under Criterion B or the CRHR under Criterion 2, because it is not associated with persons important to our past.
- It is not considered eligible for individual listing on the NRHP under Criterion C nor is it eligible for the CRHR under Criterion 3, because its construction does not represent any innovative design or building technique; it was constructed based on a standard design that the Coachella Valley Water District implemented, similar to other rural storm drain systems developed throughout the region.
- Under Criterion D, a building, structure or object may be eligible for listing in the NRHP if such an object is the principal source of information about historic development important in prehistory or history. While controlling floodwater was important to the functioning of the local community, the physical nature of the stormwater channel does not represent an unusual approach to managing these issues. Therefore, further investigation of the Coachella Valley Stormwater Channel has little potential to yield additional data and the channel is not eligible for listing on the NRHP under Criterion D or the CRHR under Criterion 4.
- B11. **Additional Resource Attributes** (List attributes and codes): HP 20: Canal/Aqueduct
- B12. **References:** Coachella Valley County Water District (1978) Coachella Valley's Golden Years : the Early History of the Coachella Valley County Water District and Stories About the Discovery and Development of This Section of the Colorado Desert. Compiled by Ole J. Nordland. Coachella Valley County Water District, Coachella, Ca.

(This space reserved for official comment)

B13. **Remarks:** None.

B14. **Evaluator:** M. C. Hamilton, Applied EarthWorks, Inc.,
3292 E. Florida Ave., Suite A, Hemet, CA 92544.

Date of Evaluation: December 14, 2009

PHOTOGRAPH RECORD

Page 4 of 5

*Resource Name or # (Assigned by recorder) Æ-1376T25-1H

Temporary Number/Resource Name: Æ-1376T25-1H

Project Name: Travertine Point Survey

Photographer: J. Coats

Image Type: ☐ (bw) 35mm B&W film ☐ (cp) 35mm Color Print film ☐ (cs) 35mm Color Slide film
☐ (df) Digital-Floppy disk ☒ (dm) Digital-Memory flash card

Camera Type and Model: Nikon Coolpix 4300

Film Type and Speed: Flashcard

Roll Number: 1376T23-1-dm

Year: 2009

Mo.	Day	Time	Frame/ File Name	Subject/Description	Facing
11	19	1100	DSCN0016	Whitewater Stormwater Channel (Temp. No. Æ-1376T25-1H) from south end of project APE due east of Avenue 54, showing channel and access road atop levee on west side of channel.	N
11	19	1130	DSCN0017	Middle of Whitewater Stormwater Channel taken from same point as Frame 0016.	NNE
11	19	1150	DSCN0018	Whitewater Stormwater Channel from north end of project APE due east of Industrial Way, showing channel and access road atop levee on west side of channel.	

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # 33-17259

Trinomial CA-RIV-10847

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*Resource Name or #: Æ-1376T25-1H

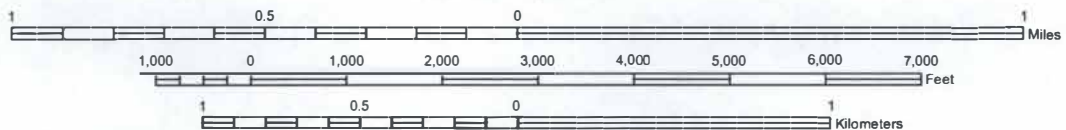
*Scale: 1:24,000

*Map Name: Indio (1956, 1972) and Thermal Canyon (1956, 1972), CA

*Date: 2009



SCALE 1:24,000



TRUE NORTH

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # 33-17259

HRI # _____

Trinomial _____

NRHP Status Code 6Z

Other Listings _____

Review Code _____

Reviewer _____

Date _____

Page 1 of 5

*Resource Name or # (Assigned by recorder) CRM TECH 2265-1

P1. Other Identifier: Coachella Valley Stormwater Channel/Whitewater River

*P2. Location: Not for Publication ☒ Unrestricted

*a. County Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Indio, Valerie and Mecca, Calif.

Date 1972

T6S; R8E; Sec 22, 23, 26 and 27 ; S.B. B.M.;

Elevation: Approximately -130 to -150 feet below mean sea level

c. Address N/A City Thermal Zip 92274

d. UTM: (Give more than one for large and/or linear resources) Zone 11; A 580440 mE/ 3721700 mN

B 581200 mE/ 3719400 mN

UTM Derivation: ☒ USGS Quad _____ GPS _____

e. Other Locational Data: (e.g., parcel #, directions to resource, etc., as appropriate) An approximately 1.5-mile-long segment of the Coachella Valley Stormwater Channel located southwest of Grapefruit Boulevard (SR 111) and north of Avenue 60.

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) The segment of the channel is defined by two parallel earthen levees, each topped by a dirt access road that run the entire length of the segment and beyond. The interior sides of the levees slope gently at approximately 18-20 degrees to the bottom of the riverbed, about 25-30 feet (Continued on p. 4)

*P3b. Resource Attributes: (List attributes and codes) AH6: Water conveyance system

*P4. Resources Present: Building ☒ Structure _____ Object _____ Site _____ District _____ Element of District _____
Other (isolates, etc.) _____

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)



P5b. Description of Photo: (view, date, accession #) Photo taken on August 11, 2008; view to the east

*P6. Date Constructed/Age of Sources:

☒ Historic _____ Prehistoric _____ Both _____

Ca. 1910s-1950s (see Items B6 and B12 for details)

*P7. Owner and Address: Unknown

*P8. Recorded by (Name, affiliation, and address): Daniel Ballester, CRM TECH, 1016 East Cooley Drive, Suite A/B, Colton, CA 92324

*P9. Date Recorded: August 2008

*P10. Survey Type: Intensive-level survey for CEQA-compliance purposes

*P11. Report Citation: (Cite survey report and other sources, or enter "none.") Bai "Tom" Tang and Harry M. Quinn (2008): Historical/Archaeological/Paleontological Survey of Whitewater River Channel, Thermal 551 Brookfield Project, near the Community of Thermal, Riverside County, California. On file, Eastern Information Center, University of California, Riverside.

*Attachments: None ☒ Location Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record
Archaeological Record _____ District Record ☒ Linear Resource Record _____ Milling Station Record _____
Rock Art Record _____ Artifact Record _____ Photograph Record _____ Other (List): _____

DPR 523A (1/95)

RECEIVED IN

*Required Information

OCT 07 2008

EIC

BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 5

*NRHP Status Code 6Z

*Resource Name or # (Assigned by recorder) CRM TECH 2265-1

- B1. Historic Name: Coachella Valley Stormwater Channel B2. Common Name: Same
B3. Original Use: Flood control B4. Present Use: Same
*B5. Architectural Style: N/A
*B6. Construction History: (Construction date, alterations, and date of alterations) After torrential flooding changed the course of the Whitewater River between Cathedral City and Point Happy in January 1916, the newly altered riverbed became the "backbone" of the Coachella Valley Stormwater Channel, which carries the runoff to the Salton Sea. The segment of the riverbed from Point Happy to
(Continued on p. 4)
*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: Original Location:
*B8. Related Features: See Item P3a.
B9a. Architect: Unknown b. Builder: Coachella Valley Stormwater District
*B10. Significance: Theme Flood protection/public works
Area Coachella Valley Period of Significance 1910s-1950s
Property Type Stormwater channel Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) This segment of the stormwater channel follows the natural course of the Whitewater River, but was "channelized" as a flood-control facility prior to the 1930s, possibly as early as the late 1910s. As such,
(Continued on p. 4)
B11. Additional Resource Attributes: (List attributes and codes) AH6: Water conveyance system
*B12. References: Coachella Valley Water District: Water and the Coachella Valley, http://www.cvwd.org/about/waterandcv; Patricia B. Laflin: Coachella Valley, California: A Pictorial History (The Donning Company Publishers, Virginia Beach, Virginia, 1998); Dennis Mahr (Director of Communications and Legislation, Coachella Valley Water District), telephone interview on August 12, 2008; U.S. Bureau of Reclamation: Boulder Dam Project, All-American Canal System, Calif. (topographic maps, Sheets C-2N-182, -239, and -241, 1938); USGS topographic maps, 1941 and 1956 (Coachella quadrangle, 15', 1:62,500).
B13. Remarks:
*B14. Evaluator: Bai "Tom" Tang and Terri Jacquemain
*Date of Evaluation: August 2008

(Sketch Map with north arrow required.)

(See p. 5)

(This space reserved for official comments.)

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LINEAR FEATURE RECORD

Primary # 33-17259

HRI # _____

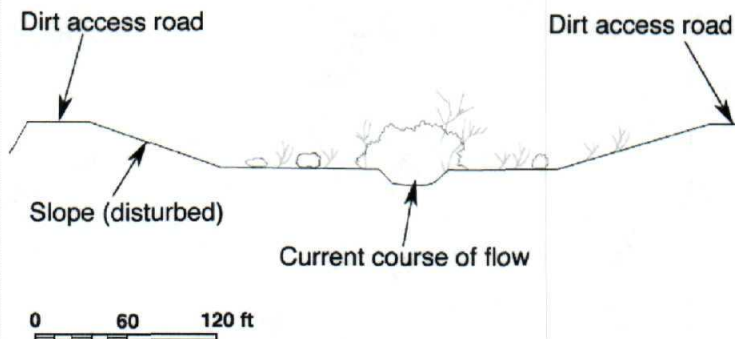
Trinomial _____

Page 3 of 5

*Resource Name or # (Assigned by recorder) CRM TECH 2265-1

- L1. **Historic and/or Common Name:** Coachella Valley Stormwater Channel
- L2a. **Portion Described:** Entire Resource ☒ Segment ☐ Point Observation **Designation:** _____
- b. **Location of Point or Segment:** (Provide UTM coordinates, legal description, and any other useful locational data. Show the area that has been field inspected on a Location Map.) See p. 1
- L3. **Description:** (Describe construction details, materials, and artifacts found at this segment/point. Provide plans/sections as appropriate.) The segment of the channel is defined by two parallel earthen levees, each topped by a dirt access road that run the entire length of the segment and beyond. The interior sides of the levees slope gently at approximately 18-20 degrees to the bottom of the riverbed, about 25-30 feet below the top of the levees. The slopes are mostly clear of vegetation, while dense vegetation grows near the narrow flow at the river bottom, including cottonwoods, arrow weeds, tumbleweeds, tamarisks, and small desert shrubs and grasses. The channel and the levees are well maintained, but do not demonstrate any notable characteristics in terms of design and engineering.
- L4. **Dimensions:** (In feet for historic features and meters for pre-historic features)
- a. **Top Width** 411-500 feet
- b. **Bottom Width** 220 feet
- c. **Height or Depth** 25-30 feet
- d. **Length of Segment** 1.5 miles
- L5. **Associated Resources:** _____

L4e. **Sketch of Cross-Section** (Include scale)
Facing: North



- L6. **Setting** (Describe natural features, landscape characteristics, slope, etc. as appropriate) At this location, the earthen levees are located along the original course of the Whitewater River, which is the main natural waterway across the arid Coachella Valley. The surrounding land use is mostly agricultural.
- L7. **Integrity Considerations:** The historic integrity of the features are uncertain but questionable due to repeated repairs and constant maintenance over the years.

L8a. **Photograph, Map or Drawing**

(See p. 1 and p. 5)

L8b. **Description of Photo, Map, or Drawing** (View, scale, etc.) _____

L9. **Remarks:** _____

L10. **Form Prepared by:** (Name, affiliation and address) Daniel Ballester and Terri Jacquemain, CRM TECH, 1016 East Cooley Drive, Suite A/B, Colton, CA 92324

L11. **Date:** August 20, 2008

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary # 33-17259

HRI #

Trinomial

Page 4 of 5

Resource name or # (Assigned by recorder) CRM TECH 2265-1

Recorded by: Daniel Ballester

*Date: August 2008

✓ Continuation Update

*P3a. **Description** (continued): below the top of the levees. The slopes are mostly clear of vegetation, while dense vegetation grows near the narrow flow at the river bottom, including cottonwoods, arrow weeds, tumbleweeds, tamarisks, and small desert shrubs and grasses. The channel and the levees are well maintained, but do not demonstrate any notable characteristics in terms of design and engineering.

*B6. **Construction History** (continued): the Salton Sea has also evolved into a man-made channel bent to skirt communities and provide flood-control protection through devices like the earthen levees in this segment. By the 1930s-1950s, the presence of levees and dykes along the course of the former Whitewater River wash was well documented in historic maps. Over the years, the channel and levees have undergone periodic repairs and routine maintenance to insure that the banks are stable and that the brush does not become overgrown.

*B10. **Significance**: it could be argued that the channel played an important part in the accelerated growth of the Coachella Valley since the early 20th century, which was certainly a pattern of events that made significant contributions to regional history. The development of the desert valley, by necessity, was contingent on not only the control but also the supply and distribution of water, in which the Whitewater River/Coachella Valley Stormwater Channel and the Coachella Canal served in similar capacities, if not with equal importance.

Unlike the Coachella Canal, however, the stormwater channel is based on a natural waterway with only limited human alterations, at least at this location, and does not demonstrate any notable design or engineering qualities. Furthermore, as an element of the historic-period infrastructure that remains in use today, the channel and its largely nondescript components do not retain any features that are particularly historic in appearance. Therefore, the channel's association with the pattern of events in its history and its potential period of significance is compromised considerably by the lack of any specifically historical characteristics and the questionable historic integrity.

For the same reasons, the existing stormwater channel does not represent an important example of its property type or method of construction. It is not recognized as a structure of high artistic or aesthetic value, nor is it known to be the work of a prominent designer, builder, or engineer. Despite extensive research, no persons or specific events of known historic significance have been identified in close association with the segment of stormwater channel at this location, or with the stormwater channel in general. Meanwhile, as a common infrastructure element that required only limited construction work to create, the channel retains little data potential for the study of regional history or the history of engineering.

Based on these considerations, the present study concludes that this segment of the Coachella Valley Stormwater Channel does not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary # 33-17259

HRI #

Trinomial

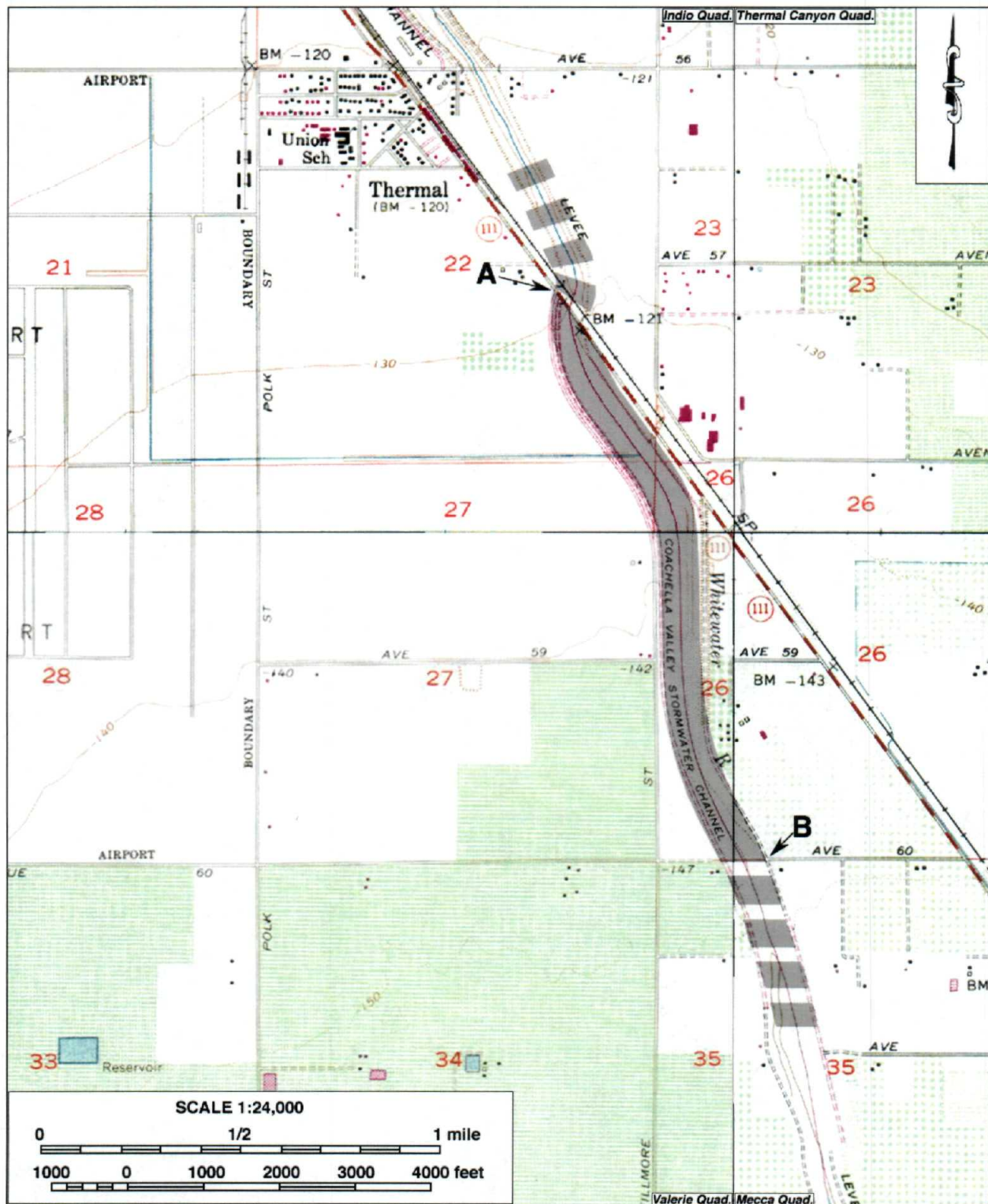
Page 5 of 5

*Resource Name or # (Assigned by recorder) CRM TECH 2265-1

*Map Names: (see labels in map)

*Scale: 1:24,000

*Date of Maps: 1972



PRIMARY RECORD

Primary #
HRI #

33 - 28167

Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 9

Resource Name or # Devers-Coachella Valley 220 kV Transmission Line (Map Reference No. 10)

P1. Other Identifier: Devers-Coachella Valley 220 kV Transmission Line

P2. Location: a. County: Riverside

☐ Not for Publication ☒ Unrestricted

b. USGS 7.5' Quad Indio, CA

Date: 1972

T 6 S; R 8 E; Section 4; S.B.B.M.

c. Address: Coachella, CA 92236

d. UTM: NAD: 83; Zone: 11S; 577516 mE / 3728142 mN (northern point); 11S; 5775426 mE / 3727180 mN (southern point)

e. Other Locational Data:

P3a. Description:

The recorded segment of the Devers-Coachella Valley 220 kV Transmission Line is a transmission line that was initially constructed between 1959 and 1960. Based on tags on the utility poles, the current utility poles replaced older poles in 1993. The transmission line is suspended from wood H-frame utility towers and wooden monopole utility poles. Transmission cabling and associated equipment is mounted on the top of each utility pole.

P3b. Resource Attributes: HP39. Transmission Line

P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other:

P5a. Photograph or Drawing: See attached Continuation sheets for photographs.

P5b. Description of Photo: All photographs were taken June 13, 2017

P6. Date Constructed/Age of Sources: ☐ Prehistoric ☒ Historic ☐ Both

P7. Owner and Address: Unknown

P8. Recorded by: en Mo e an nCa e App ed EarthWorks, Inc., 3550 E. Florida Avenue, Suite A, Hemet, CA 92544
Ken Mostak and Justin Castells

P9. Date Recorded: June 2017

P10. Type of Survey: ☐ Intensive ☒ Reconnaissance ☐ Other

Describe: Survey for Section 106 and CEQA compliance purposes

P11. Report Citation: Justin Castells and Josh Smallwood (2017): *Historical Resources Evaluation Report for the Avenue 50 Bridge over Coachella Valley Stormwater Channel Project, City of Coachella, Riverside County, California*. Prepared by Applied EarthWorks

Attachments: ☐ None ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record Other:

RECEIVED IN

APR 30 2018

EIC

BUILDING, STRUCTURE, OBJECT RECORD

NRHP Status Code

Page 2 of 9

Resource Name or # Devers-Coachella Valley 220 kV Transmission Line (Map Reference No. 10)

- B1. **Historic Name:** Devers-Coachella Valley 220 kV Transmission Line
B2. **Common Name:** Devers-Coachella Valley 220 kV Transmission Line
B3. **Original Use:** Transmission Line **B4. Present Use:** Transmission Line

B5. **Architectural Style:**

B6. **Construction History:** The transmission line was originally constructed between 1969 and 1960. The utility towers and poles were replaced in 1993.

B7. **Moved?** ☒ No ☐ Yes ☐ Unknown **Date:** **Original Location:**

B8. **Related Features:** None

B9a. **Architect:** unknown **b. Builder:** unknown

B10. **Significance:**
Theme: Electrical Power in the Coachella Valley
Area: Coachella Valley, CA
Period of Significance: 1960
Property Type: Transmission Line
Applicable Criteria: N/A

Very little is known about the historical developments in the Coachella Valley prior to 1820. However, in 1821, a party of Cocomaricopa Indians arrived at the San Gabriel Mission, announcing they had traveled from the Colorado River in only 6 days using the Cocomaricopa trail (von Till Warren et al. 1981:85). This Indian trail began east of Blythe and approximated the present route of I-100 across the Chuckwalla Valley, traversing the Mecca-Indio area and Coachella Valley to the San Geronio Pass (northwest of the Project area).

In the early 1850s, the Maricopa-Bradshaw route, paralleling the old Cocomaricopa trail, was established to serve the mining camps developing near La Paz, Arizona (von Till Warren et al. 1981:85). Also in the 1850s, the U.S. government strongly promoted the establishment of a railroad route to connect the east and west coasts. Because of competing economic and political considerations, however, it was not until 1877 that the Southern Pacific Railroad transversed the western Colorado Desert (von Till Warren et al. 1981:89). This route connected the San Geronio Pass to the town of Yuma via the eastern shore of the Salton Sea.

The process of surveying and mapping the Colorado Desert began in 1852, when Henry Washington and a small party of surveyors ascended the San Bernardino Mountains and established the San Bernardino Baseline and Meridian. From 1854 to 1857, Washington extended this line to the Colorado River, working his way through uncharted territory (von Till Warren et al. 1981:94).

Also in the 1850s, the U.S. government sent Indian Commissioners into the deserts of Southern California. Although not authorized to make any commitments to the Native Americans, the Commissioners set aside large tracts of land for reservations (von Till Warren et al. 1981:94). Most of these areas were never fully developed as reservations, although the Torres Martinez and Agua Caliente (Palm Springs) reservations were eventually set aside from the larger reserves delineated by the Indian Commission. Once the Indian population was confined to the reservations, the remaining land was made available for mining, ranching, and other uses through the homestead acts.

Management of the desert lands was largely the responsibility of the GLO, and later the Department of Agriculture Grazing Administration. Until the passage of the Taylor Grazing Act of 1934, however, no control was exercised over the California desert lands. Because of the extremely arid nature of the California deserts, this act had virtually no impact on the region. It was not until the responsibility for managing the desert came under control of the Bureau of Land Management (BLM) in 1946 that the first attempts were made at range management. Since that time, the BLM also has been engaged in evaluating lands for their "uses," and classifying them for different types of management (von Till Warren et al. 1981:95).

☒ Continuation ☐ Update

Page 3 of 9

Resource Name or # Devers-Coachella Valley 220 kV Transmission Line(Map Reference No. 10)

Recorded by: Applied Earthworks

Date June 2017

The paucity of water in many areas of the Colorado Desert discouraged farming, and agricultural development only flourished when water could be imported in significant quantities. Because of the relatively high water table in the Coachella Valley, however, the agricultural industry began to develop prior to the importation of water by means of drilling artesian wells. Beginning in the first decade of the twentieth century, Coachella Valley farmers planted extensive date, fig, and grape acreage. Towns that developed with the agricultural growth include Thermal, Mecca, Indio, and Coachella. Because of the extensive farming efforts, the water table in the Coachella Valley was seriously depleted, stimulating the formation of the Coachella Valley Water District (CVWD) to promote conservation and replenish the groundwater basin. Following passage of the Boulder Canyon Project Act of 1928, the waters of the Colorado River were harnessed for the development of agriculture in Imperial and Coachella Valleys. The CVWD cooperated with the Imperial Irrigation District to develop the All-American Canal and the Coachella Valley extension. Branching off from the All-American Canal, the Old Coachella Canal extends 123.5 miles north to the northern Coachella Valley, bringing the first imported irrigation water to the valley in 1949 (Nordland 1978).

The history of the town of Coachella dates back to 1877 with the construction of the Southern Pacific Railroad across the "Coahuila" Valley, as it was then known, from Los Angeles to Yuma (Nordland 1978:112). A siding along the railroad three miles southeast from Indian Wells (Indio) became known as Wood Spur, or Woodspur, as early as 1880. It was so named because the local Indians cut and sold mesquite wood at this siding to fuel the trains' locomotives. By 1898, a business entrepreneur by the name of Jason L. Rector arrived in the Coachella Valley. He was originally from Iowa and had settled in San Diego during the previous decade. Rector took control of the mesquite wood business at Woodspur and operated a thriving business for a couple of years (City of Coachella 2016). Rector then drilled a water well and laid out a town at Woodspur. After 8 months of drilling, Rector and his brother Lon B. Rector, tapped a good flow of artesian water at a depth of 550 feet. The Rector brothers completed the well in November, 1900, and a town site was laid out by January, 1901 (City of Coachella 2016).

Rector originally planned to name the town "Conchilla" for the little shells that littered the area, but half the townspeople preferred the name "Coahuila" for the Native Americans living in the area (Nordland 1978:68). The dispute was settled by combining the names into "Coachella." The USGS Indio 30-minute map of 1904, surveyed in 1901, depicts the town as "Coachella," while the desert valley is labeled as "Conchilla Desert" and "Conchilla Valley" (USGS 1904). The Euro-American occupants of the valley apparently preferred the name Coachella Valley, as various industries are known to have used this name in the 1900s and 1910s. Soon, Coachella Valley became the namesake for the entire valley, and by the time of their next map series in 1941, USGS used this name for the region (USGS 1941).

In order to promote land sales, Rector formed the Coachella Land & Water Company. He built an adobe house along Front Street where he conducted business locating available lots for settlers at a cost of \$10 per filing. In 1902, he established and became president and manager of the Coachella Valley Produce Association and began shipping produce from the valley to Los Angeles by train. In 1904, he organized the Coachella Valley Refrigerating Company, built a pre-cooling plant and started manufacturing ice (City of Coachella 2016). A weekly newspaper called the Coachella Valley Submarine was started by Randolph R. Freeman on November 27, 1901 (Nordland 1978:114). That year, the Valley's population claimed to total 250 whites and about 600 Indians. A post office was established in Coachella on November 30, 1901, with George C. Huntington as postmaster.

Rector maintained an active interest in the town as its unofficial mayor and held properties throughout the valley until his death at his Los Angeles home on September 24, 1919. The town of Coachella remained a small farming community through the 1920s and 1930s and was eventually incorporated as a city on December 13, 1946. The City Hall and City Hall Park were dedicated on October 29, 1949 (City of Coachella 2016).

At the beginning of World War II, General George S. Patton established a Desert Training Center in the desert of eastern Riverside and San Bernardino counties. There were 11 divisional camps located in the California and Arizona deserts, and Patton made use of the towns in the region that were situated alongside a railroad siding. These were temporary campsites used for staging activities or for transporting men by train to the divisional camps. A

☒ Continuation ☐ Update

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Resource Name or # Devers-Coachella Valley 220 kV Transmission Line (Map Reference No. 10)

Recorded by: Applied Earthworks Date June 2017

temporary camp is known to have existed in Coachella, however, its precise location is currently unknown (Dighera 2011).

The city of Coachella, positioned along the Southern Pacific Railroad, State Route 111, and U.S. Highway 99, with quick access to U.S. 60/70, expanded outward from its traditional core during the post-war boom period (USGS 1956a, 1956b). The I-10 freeway was constructed to replace U.S. 60/70 in the 1960s (USGS 1972). The 86S Expressway through this area was completed in the 1990s–2000s, replacing the previous U.S. 99 / SR 86 designation that traversed along Harrison Street through rural farm communities. The new, divided highway facilitates a great deal of truck traffic to and from Mexico. It also provides a farm-to-market trucking highway between Mexicali and the I-10 via the Imperial Valley and Coachella Valley.

The 1928 passage of the Boulder Canyon Project Act was the springboard for hydroelectric power in the Coachella and Imperial valleys. Part of the Act required the Secretary of the Interior to obtain local guarantees of repayment for the construction costs of the All-American Canal. The Imperial Irrigation District (IID) recognized the Imperial Valley could repay their share of the construction loans if they were given the right to utilize the power possibilities of the canal. The Secretary of the Interior and the IID signed such an agreement in 1932, and construction of the All-American Canal began in 1934. Just two years later, in 1936, the IID entered into the electrical power business. Launched in conjunction with the construction of the All-American Canal, IID was able to harness hydroelectric power generated from falling water drops on the All-American Canal. IID's first power customers were served electricity from a diesel generation plant in Brawley. With the purchase of the Nevada-California Electric Company in 1943, IID expanded its power system to include the Coachella Valley. Today, IID serves electricity to more than 150,000 customers in Imperial County and parts of Riverside and San Diego counties (Imperial Irrigation District 2017).

As a property type, overhead transmission lines were erected as early as 1873 when European experiments were conducted to transmit electrical current from one machine working as a generator to a second machine working as a motor drive pump. In 1891, the San Bernardino Light & Power Company constructed a 5 kilovolt (kV) (5,000 volts) transmission line that spanned 28 mi from its powerhouse in Pomona to San Bernardino. In Riverside, the first commercial three-phase alternating current (AC) transmission line was installed in 1892 along a 23-mi-long span from Riverside to Mill Creek at an operating capacity of 10 kV (10,000 volts). By 1904, the common voltage capacity of transmission lines was 66 kV or 66,000 volts, which was considered the minimum voltage necessary for lighting plants in major United States cities (Southern California Edison 2014).

Significant technological advancements occurred in the carrying capacity of transmission lines at voltages above 60,000 (60 kV) in 1908 with the introduction of high-tension transmission lines and development of suspension type insulators that allowed for higher voltage currents to flow through the lines (Southern California Edison 2014). Most transmission line operators in California were not installing facilities at high-voltages until the early decades of the twentieth century. In 1898, Edison Electric Company of Los Angeles introduced a new high-voltage electric power conveyance system with its Santa Ana No. 1 Transmission Line that spanned 82 mi over wooden poles at a capacity of 33 kV to the company's Los Angeles 2nd Street Substation (Southern California Edison 2014).

Since the mid-to-late-nineteenth century, iron and then steel lattice construction was utilized for electrical transmission and distribution lines. Prior to the use of iron and steel structures, early electrical transmission lines built in the United States conveyed low voltages and were supported by wooden poles. As voltage capacity increased and transmission spans were lengthened, utility providers recognized the need to install stronger support structures to carry the increased weight load from heavier or more wires, larger insulators, and associated structure bracing components. Wooden poles continued to be used for local distribution of power and many remain in used into the present (Southern California Edison 2014).

The recorded segment of transmission line is part of the Devers-Coachella Valley 220 kV Transmission Line that runs from Devers Station to the Coachella Valley Substation along Tyler Street in Coachella and is maintained by the IID. The transmission line was constructed between 1959 and 1960; however the poles in current use were replaced in 1993, based on inspection tags on the poles themselves.

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI # / Trinomial

33 - 28167

☒ Continuation ☐ Update

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Resource Name or # Devers-Coachella Valley 220 kV Transmission Line (Map Reference No. 10)

Recorded by: Applied Earthworks Date June 2017

NRHP/CRHR

NRHP Criterion A / CRHR Criterion 1: The property does not meet NRHP Criterion A or CRHR Criterion 1 for association with events that have made a significant contribution to the broad patterns of the history of the United States or California. The transmission line was constructed between 1959 and 1960; however the current poles were replaced in 1993. This transmission line is one of many utility lines constructed throughout the Coachella Valley, California, and the United States during the mid-twentieth century. Research has yielded no information to suggest that this utility line is the first or among the earliest constructed in the region or that it was important to the development of the region of the power industry. While the general expansion of electrical service was a historical trend during the mid-twentieth century, utility lines such as this are an extremely common property type.. Therefore, this resource is not eligible for the NRHP under Criterion A or CRHR under Criterion 1.

NRHP Criterion B / CRHR Criterion 2: The property does not appear to meet NRHP Criterion B or CRHR Criterion 2 for any direct associations with the productive lives of persons important in local, state, or national history. Research has yielded no information to suggest that this transmission line is specifically associated with the lives of significant persons in our past. This resource does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

NRHP Criterion C / CRHR Criterion 3: The property does not meet NRHP Criterion C or CRHR Criterion 3 for embodying the distinctive characteristics of a type, period, or method of construction, or as the work of an important creative individual, or as having high artistic value. The transmission line is an extremely common property type that does not represent a departure from standard transmission line construction or are unique in any way. Therefore, this resource does not appear eligible for the NRHP Criterion C or CRHR under Criterion 3 or City Register Criterion 3.

NRHP Criterion D / CRHR Criterion 4: The property does not appear to meet NRHP Criterion D or CRHR Criterion 4 since it is unlikely to yield information important in prehistory or history. Therefore, this resource does not appear eligible for the NRHP under Criterion D or the CRHR under Criterion 4.

B11. Additional Resource Attributes: None

B12. References:

City of Coachella

2016 History. Found at: <http://www.coachella.org/about-us/history#Founder>.

Dighera, L.

2015 Desert Training Center Sky Trail: Camps. Found at: <http://skytrail.info/new/camps.htm>.

Imperial Irrigation District

2017 "IID History." <http://www.iid.com/about-iid/an-overview/iid-history>. Accessed 9.19.17

Nordland, Ole J.

1978 *Coachella Valley's Golden Years*. Revised edition. Desert Printing Co., Inc., Indio, California.

Southern California Edison Company

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI # / Trinomial

33 - 28167

☒ Continuation ☐ Update

Page 6 of 9 Resource Name or # Devers-Coachella Valley 220 kV Transmission Line (Map Reference No. 10)
Recorded by: Applied Earthworks Date June 2017

B12. References (continued):

2014 Historic-Era Electrical Infrastructure Management Program. Southern California Edison, 2014

von Till Warren, E., R. H. Crabtree, C. N. Warren, M. Knack, and R. McCarty

1981 *A Cultural Resources Overview of the Colorado Desert Planning Units*. U.S. Department of the Interior, Bureau of Land Management, California Desert District, Riverside.

B13. Remarks:

B14. Evaluator: n Ca e App e Earthworks **Date of Evaluation:** June 2017

(Sketch Map with north arrow required.) SEE ACCOMPANYING SKETCH MAP

(This space reserved for official comments.)

☒ Continuation ☐ Update

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Resource Name or # Devers-Coachella Valley 220 kV Transmission Line (Map Reference No. 10)

Recorded by: Applied Earthworks

Date June 2017



Figure 1. Transmission Line (view to the northwest).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary #
HRI#
Trinomial

33-28167

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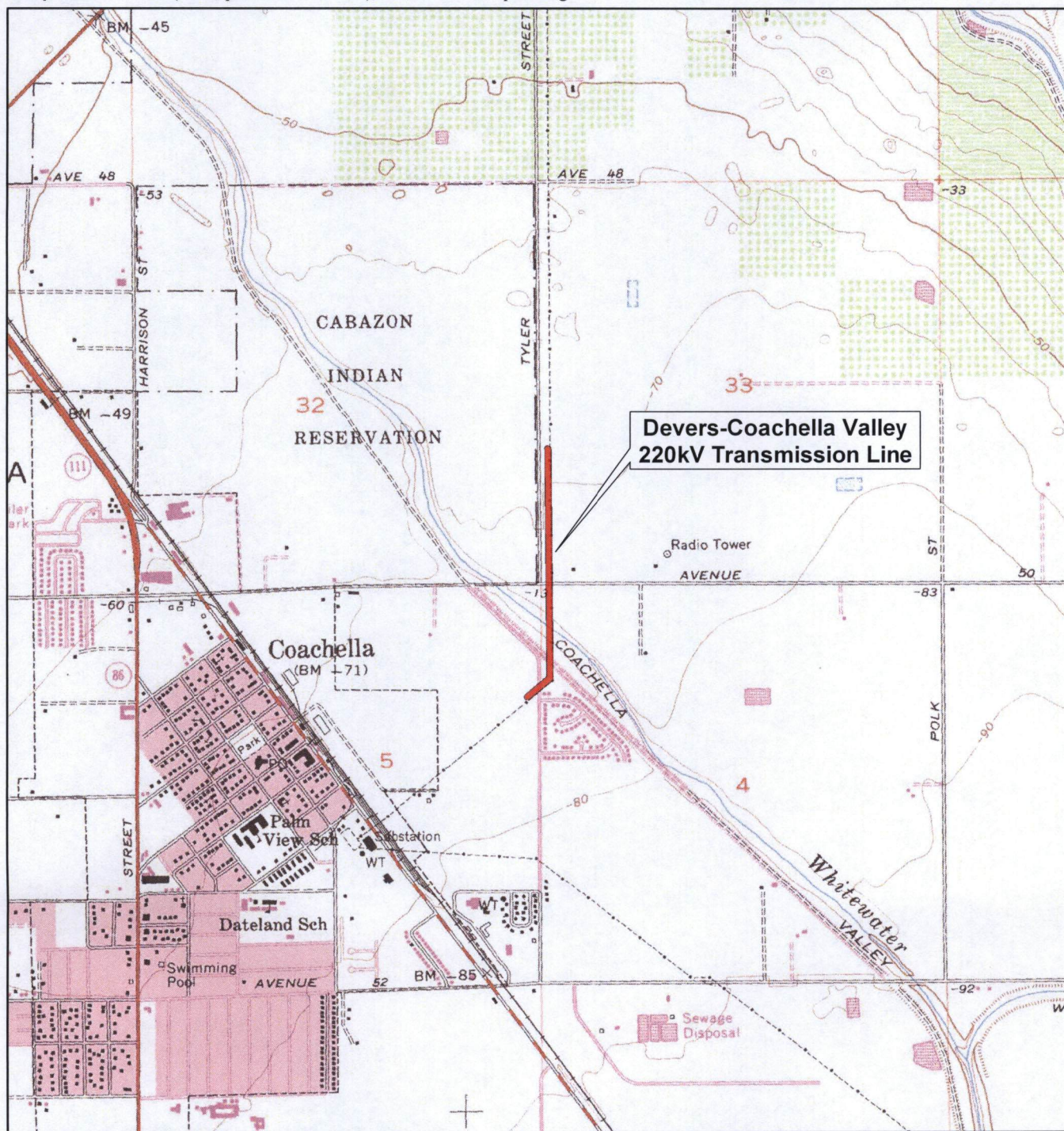
*Resource Name or #: Devers-Coachella Valley 220kV Transmission Line (Map Reference No. 10)

*Drawn by: J. Castells

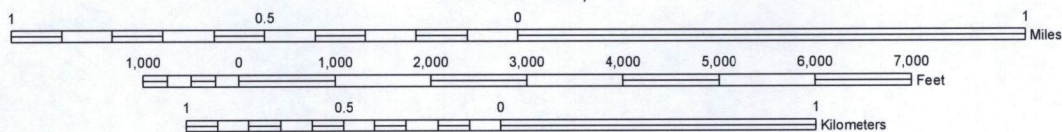
*Scale: 1 inch equals 400 feet

*Date of map: June 2017





SCALE 1:24,000



TRUE NORTH

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #

33 - 28168

Trinomial
NRHP Status Code

Other Listings
Review Code

Reviewer

Date

Page 1 of 9

Resource Name or # APN 763-030-010 (Map Reference No. 8)

P1. Other Identifier: 86275 Avenue 50

P2. Location: a. County: Riverside

☐ Not for Publication ☒ Unrestricted

b. USGS 7.5' Quad Indio, CA Date: 1972 T 6 S; R 8 E; Section 4; S.B.B.M.

c. Address: 86275 Avenue 50, Coachella, CA 92236

d. UTM: NAD: 83; Zone: 11S; 577897 mE / 3727345 mN

e. Other Locational Data:

P3a. Description:

APN 763-030-010 (86275 Avenue 50) is a 9.85-acre parcel that contains three buildings arranged in a row from north to south. The northern most building on the parcel was constructed in 1950. It is a one-story single-family residence that has subsequently been converted into a multiple-family residence. The building features a mansard roof that extends into a patio cover on the west and north elevations. The building is clad in stucco. The west elevation features two non-historic entrance doors and a vinyl sliding window. The covered porch is supported by wood poles. The north elevation features a vinyl sliding window; the roof extends over the north elevation and is supported by a wooden pole.

The central building is a storage building or detached garage constructed in 1950. It features a flat roof and a rectangular plan. The building is clad in stucco. The north elevation features two vinyl sliding windows and an entrance door located off center on the façade. The west elevation features two non-historic entrance doors and a small sliding vinyl window. The building has an addition to the south elevation that features two sliding vinyl windows.

The southernmost building is a one-story single-family residence constructed between 2005 and 2009 (NETROnline 2017). The parcel also includes paved areas, fenced storage yards, and landscaping.

P3b. Resource Attributes: HP3. Multiple family property

P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other:

P5a. Photograph or Drawing: See attached Continuation sheets for photographs.

P5b. Description of Photo: All photographs were taken June 13, 2017

P6. Date Constructed/Age of Sources: ☐ Prehistoric ☒ Historic ☐ Both

P7. Owner and Address: Unknown

P8. Recorded by: en Mo e an n Ca e App e EarthWorks, Inc., 3550 E. Florida Avenue, Suite A, Hemet, CA 92544

Ken Mostak and Justin Castells

P9. Date Recorded: June 2017

P10. Type of Survey: ☐ Intensive ☒ Reconnaissance ☐ Other

Describe: Survey for Section 106 and CEQA compliance purposes

P11. Report Citation: Justin Castells and Josh Smallwood (2017): *Historical Resources Evaluation Report for the Avenue 50 Bridge over Coachella Valley Stormwater Channel Project, City of Coachella, Riverside County, California*. Prepared by Applied EarthWorks

Attachments: ☐ None ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record Other:

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APR 30 2018
EIC

BUILDING, STRUCTURE, OBJECT RECORD

NRHP Status Code

Page 2 of 9

Resource Name or # APN 763-030-010 (Map Reference No. 8)

- B1. **Historic Name:** APN 763-030-010
B2. **Common Name:** APN 763-030-010
B3. **Original Use:** Single-family residence
B4. **Present Use:** Multiple-family residence
B5. **Architectural Style:** Minimal Traditional
B6. **Construction History:** Both buildings were constructed in 1950, replacement doors and windows on both buildings have been added (dates unknown, based on field observations); an addition to the central building was added at an unknown date (based on field observations)
B7. **Moved?** ☒ No ☐ Yes ☐ Unknown **Date:** **Original Location:**
B8. **Related Features:** None
B9a. **Architect:** unknown **b. Builder:** unknown
B10. **Significance:**
Theme: Residential Development of Coachella Valley
Area: Coachella Valley, CA
Period of Significance: 1950
Property Type: Multiple-family residence
Applicable Criteria: N/A

Very little is known about the historical developments in the Coachella Valley prior to 1820. However, in 1821, a party of Cocomaricopa Indians arrived at the San Gabriel Mission, announcing they had traveled from the Colorado River in only 6 days using the Cocomaricopa trail (von Till Warren et al. 1981:85). This Indian trail began east of Blythe and approximated the present route of I-100 across the Chuckwalla Valley, traversing the Mecca-Indio area and Coachella Valley to the San Geronio Pass (northwest of the Project area).

In the early 1850s, the Maricopa-Bradshaw route, paralleling the old Cocomaricopa trail, was established to serve the mining camps developing near La Paz, Arizona (von Till Warren et al. 1981:85). Also in the 1850s, the U.S. government strongly promoted the establishment of a railroad route to connect the east and west coasts. Because of competing economic and political considerations, however, it was not until 1877 that the Southern Pacific Railroad traversed the western Colorado Desert (von Till Warren et al. 1981:89). This route connected the San Geronio Pass to the town of Yuma via the eastern shore of the Salton Sea.

The process of surveying and mapping the Colorado Desert began in 1852, when Henry Washington and a small party of surveyors ascended the San Bernardino Mountains and established the San Bernardino Baseline and Meridian. From 1854 to 1857, Washington extended this line to the Colorado River, working his way through uncharted territory (von Till Warren et al. 1981:94).

Also in the 1850s, the U.S. government sent Indian Commissioners into the deserts of Southern California. Although not authorized to make any commitments to the Native Americans, the Commissioners set aside large tracts of land for reservations (von Till Warren et al. 1981:94). Most of these areas were never fully developed as reservations, although the Torres Martinez and Agua Caliente (Palm Springs) reservations were eventually set aside from the larger reserves delineated by the Indian Commission. Once the Indian population was confined to the reservations, the remaining land was made available for mining, ranching, and other uses through the homestead acts.

Management of the desert lands was largely the responsibility of the GLO, and later the Department of Agriculture Grazing Administration. Until the passage of the Taylor Grazing Act of 1934, however, no control was exercised over the California desert lands. Because of the extremely arid nature of the California deserts, this act had virtually no impact on the region. It was not until the responsibility for managing the desert came under control of the Bureau of Land Management (BLM) in 1946 were the first attempts made at range management. Since that time, the BLM also has been engaged in evaluating lands for their "uses," and classifying them for different types of management uses (von Till Warren et al. 1981:95).

CONTINUATION SHEET

☒ Continuation ☐ Update

Page 3 of 9

Resource Name or # APN 763-030-010 (Map Reference No. 8)

Recorded by: Applied Earthworks

Date June 2017

The paucity of water in many areas of the Colorado Desert discouraged farming, and agricultural development only flourished when water could be imported in significant quantities. Because of the relatively high water table in the Coachella Valley, the agricultural industry began to develop prior to the importation of water by means of drilling artesian wells. Beginning in the first decade of the twentieth century, Coachella Valley farmers planted extensive date, fig, and grape acreage. Towns that developed with the agricultural growth include Thermal, Mecca, Indio, and Coachella. Because of the extensive farming efforts, the water table in the Coachella Valley was seriously depleted, instigating the formation of the Coachella Valley Water District (CVWD) to promote conservation and replenish the groundwater basin. Following passage of the Boulder Canyon Project Act of 1928, the waters of the Colorado River were harnessed for the development of agriculture in Imperial and Coachella Valleys. The CVWD cooperated with the Imperial Irrigation District to develop the All-American Canal and the Coachella Valley extension. Branching off from the All-American Canal, the Old Coachella Canal extends 123.5 miles north to the northern Coachella Valley, bringing the first imported irrigation water to the valley in 1949 (Nordland 1978).

The history of the town of Coachella dates back to 1877 with the construction of the Southern Pacific Railroad across the "Coahuila" Valley, as it was then known, from Los Angeles to Yuma (Nordland 1978:112). A siding along the railroad three miles southeast from Indian Wells (Indio) became known as Wood Spur, or Woodspur, as early as 1880. It was so named because the local Indians cut and sold mesquite wood at this siding to fuel the trains' locomotives. By 1898, a business entrepreneur by the name of Jason L. Rector arrived in the Coachella Valley. He was originally from Iowa and had settled in San Diego during the previous decade. Rector took control of the mesquite wood business at Woodspur and operated a thriving business for a couple of years (City of Coachella 2016). Rector then drilled a water well and laid out the town of Woodspur. After 8 months of drilling, Rector and his brother Lon B. Rector, tapped a good flow of artesian water at a depth of 550 feet. The Rector brothers completed the well in November, 1900, and a town site was laid out by January, 1901 (City of Coachella 2016).

Rector originally planned to name the town "Conchilla" for the little shells that littered the area, but half the townspeople preferred the name "Coahuilla" for the Native Americans living in the area (Nordland 1978:68). The dispute was settled by combining the names into "Coachella." The USGS Indio 30-minute map of 1904, surveyed in 1901, depicts the town as "Coachella," while the desert valley is labeled as "Conchilla Desert" and "Conchilla Valley" (USGS 1904). The Euro-American occupants of the valley apparently preferred the name Coachella Valley, as various industries are known to have used this name in the 1900s and 1910s. Soon, Coachella Valley became the namesake for the entire valley, and by the time of their next map series in 1941, USGS used this name for the region (USGS 1941).

In order to promote land sales, Rector formed the Coachella Land & Water Company. He built an adobe house along Front Street where he conducted business locating available lots for settlers at a cost of \$10 per filing. In 1902, he established and became president and manager of the Coachella Valley Produce Association and began shipping produce from the valley to Los Angeles by train. In 1904, he organized the Coachella Valley Refrigerating Company, built a pre-cooling plant and started manufacturing ice (City of Coachella 2016). A weekly newspaper called the Coachella Valley Submarine was started by Randolph R. Freeman on November 27, 1901 (Nordland 1978:114). That year, the Valley's population claimed to total 250 whites and about 600 Indians. A post office was established in Coachella on November 30, 1901, with George C. Huntington was named postmaster.

Rector maintained an active interest in the town as its unofficial mayor and held properties throughout the valley until his death at his Los Angeles home on September 24, 1919. The town of Coachella remained a small farming community through the 1920s and 1930s and was eventually incorporated as a city on December 13, 1946. The City Hall and City Hall Park were dedicated on October 29, 1949 (City of Coachella 2016).

At the beginning of World War II, General George S. Patton established a Desert Training Center in the desert of eastern Riverside and San Bernardino counties. There were 11 divisional camps located in the California and Arizona deserts, and Patton made use of the towns in the region that were situated alongside a railroad siding. These were temporary campsites used for staging activities or for transporting men by train to the divisional camps. A

☒ Continuation ☐ Update

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Resource Name or # APN 763-030-010 (Map Reference No. 8)

Recorded by: Applied Earthworks Date June 2017

temporary camp is known to have existed in Coachella, however, its precise location is currently unknown (Dighera 2011).

The city of Coachella, positioned along the Southern Pacific Railroad, State Route 111, and U.S. Highway 99, with quick access to U.S. 60/70, expanded outward from its traditional core during the post-war boom period (USGS 1956a, 1956b). The I-10 freeway was constructed to replace U.S. 60/70 in the 1960s (USGS 1972). The 86S Expressway through this area was completed in the 1990s–2000s, replacing the previous U.S. 99 / SR 86 designation that traversed along Harrison Street through rural farm communities. The new, divided highway facilitates a great deal of truck traffic to and from Mexico. It also provides a farm-to-market trucking highway between Mexicali and the I-10 via the Imperial Valley and Coachella Valley.

APN 763-030-010 is part of a 120.99-acre land patent granted to Jason L. Rector by the BLM in 1903 (BLM 1903). As discussed in further detail in the historic context, Rector is considered the founder of Coachella and purchased many land patents during the early twentieth century (City of Coachella 2016). A review of historic arials and USGS maps suggest that while this is part of tracts purchased by Rector, the land was not developed until the construction of the extant buildings on the property in 1950. Research using sources including available County of Riverside and City of Coachella records have yielded little information regarding the occupants of the property.

NRHP/CRHR

NRHP Criterion A / CRHR Criterion 1: The property does not appear to meet NRHP Criterion A or CRHR Criterion 1 for association with events that have made a significant contribution to the broad patterns of the history of the United States or California. The two buildings were constructed in 1950 as a single-family residence and an associated outbuilding. While the land was initially purchased by Jason L. Rector, considered the founder of Coachella, it does not appear to be associated with the development of the property or any other significant event associated with the founding of the city or the settlement of the region. Research has yielded no information to suggest that these buildings are specifically associated with important historical events. Therefore, this resource does not appear eligible for the NRHP under Criterion A or CRHR under Criterion 1.

NRHP Criterion B / CRHR Criterion 2: The property does not appear to meet NRHP Criterion B or CRHR Criterion 2 for any direct associations with the productive lives of persons important in local, state, or national history. While the property was owned by Jason L. Rector, considered the founder of Coachella, it does not appear to be associated with significant events associated with his activities in the founding of the city or the settlement of the region. Research has yielded no information regarding the builders or owners of this property, suggesting that none are notable in local, state, or national history. This resource does not appear eligible for the NRHP under Criterion B or CRHR under Criterion 2.

NRHP Criterion C / CRHR Criterion 3: The property does not meet NRHP Criterion C or CRHR Criterion 3 for embodying the distinctive characteristics of a type, period, or method of construction, or as the work of an important creative individual, or as having high artistic value. The buildings are Minimal Traditional style and have been significantly altered. They are unremarkable and common examples of this type of building style and do not appear to possess high artistic values. The architect and builder of the buildings were not identified; however it is unlikely that these buildings are the work of a master. Therefore, this resource does not appear eligible for the NRHP Criterion C or CRHR under Criterion 3.

NRHP Criterion D / CRHR Criterion 4: The property does not appear to meet NRHP Criterion D or CRHR Criterion 4 since it is unlikely to yield information important in prehistory or history. Therefore, this resource does not appear eligible for the NRHP under Criterion D or the CRHR under Criterion 4.

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI # / Trinomial

33 - 28168

☒ Continuation ☐ Update

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Resource Name or # APN 763-030-010 (Map Reference No. 8)

Recorded by: Applied Earthworks Date June 2017

Integrity Evaluation

Integrity is the ability of a property to convey its historic significance. To be listed in the NRHP and the CRHR, a property must not only be shown to be significant under the NRHP and CRHR criteria, but it also must have integrity and be a good representative example of its type. The seven aspects of integrity are location, design, setting, materials, workmanship, feeling, and association. The buildings retain integrity of location and setting, since they have not been moved and the area has remained relatively unchanged. The buildings also retain integrity of feeling and association because they are still recognizable as a Minimal Traditional residence and associated outbuilding. The buildings, however, no longer retain integrity of design, materials, or workmanship due to significant alterations made over time.

B11. Additional Resource Attributes: None

B12. References:

Bureau of Land Management

1903 Land patent #CACAAA 088945. <https://glorerecords.blm.gov/search/default.aspx>. Accessed 9.15.17.

City of Coachella

2016 History. Found at: <http://www.coachella.org/about-us/history#Founder>.

Dighera, L.

2015 Desert Training Center Sky Trail: Camps. Found at: <http://skytrail.info/new/camps.htm>.

NETROnline

2017 Historic Aerials 1953, 1972, 1996, 2002, 2005, 2009, 2010, 2012. <https://www.historicaerials.com/viewer>. Accessed 9.15.17

Nordland, Ole J.

1978 *Coachella Valley's Golden Years*. Revised edition. Desert Printing Co., Inc., Indio, California.

von Till Warren, E., R. H. Crabtree, C. N. Warren, M. Knack, and R. McCarty

1981 *A Cultural Resources Overview of the Colorado Desert Planning Units*. U.S. Department of the Interior, Bureau of Land Management, California Desert District, Riverside.

B13. Remarks:

B14. Evaluator: n Ca e Applied Earthworks **Date of Evaluation:** June 2017

(This space reserved for official comments.)

(Sketch Map with north arrow required.) – SEE ACCOMPANYING SKETCH MAP

☒ Continuation ☐ Update

Page 6 of 9

ResourceName or # APN 763-030-010 (Map Reference No. 8)

Recorded by: Applied Earthworks

Date June 2017



Figure 1. North building (view to the southeast).

☒ Continuation ☐ Update

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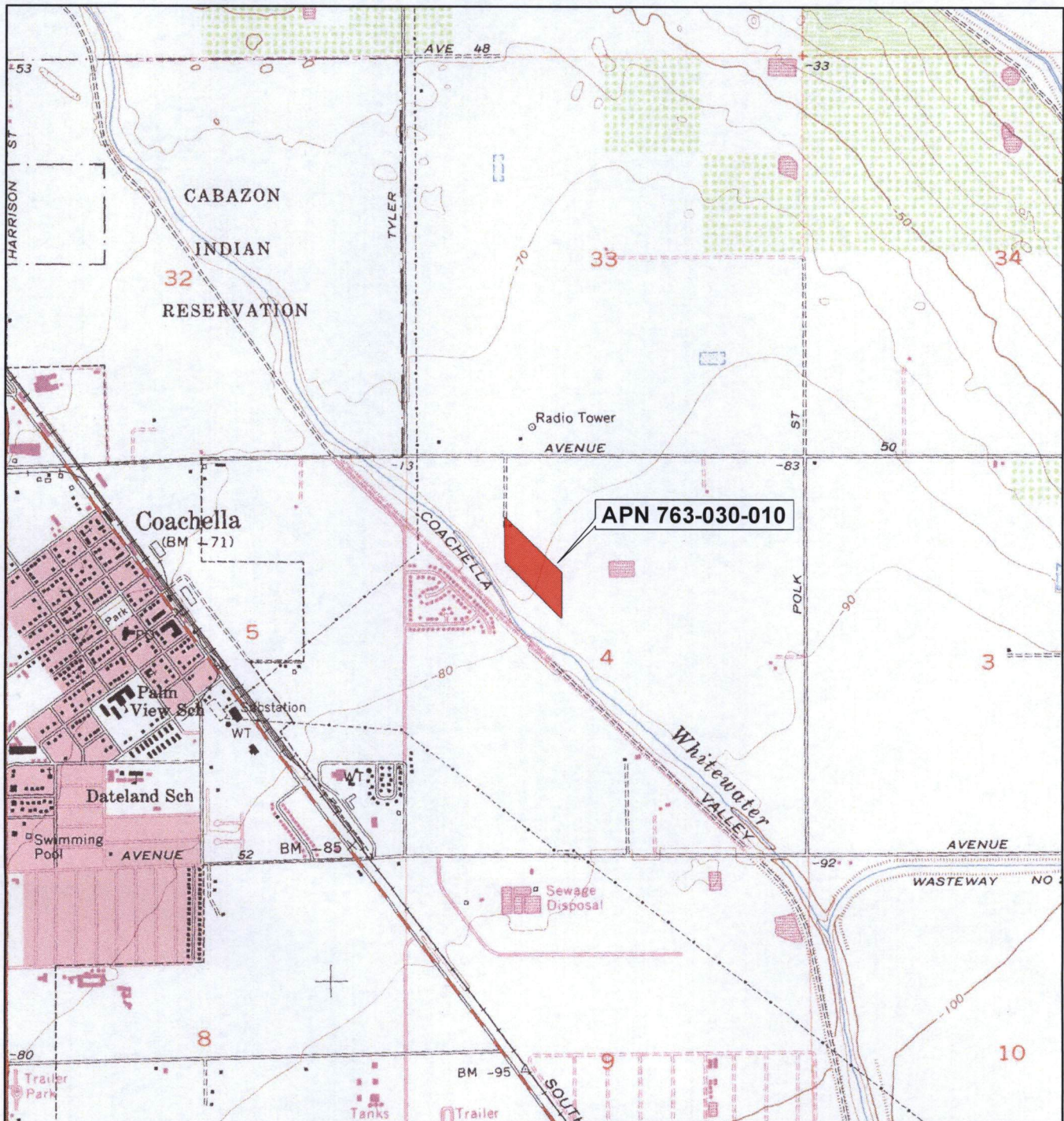
Resource Name or # APN 763-030-010 (Map Reference No. 8)

Recorded by: Applied Earthworks Date June 2017

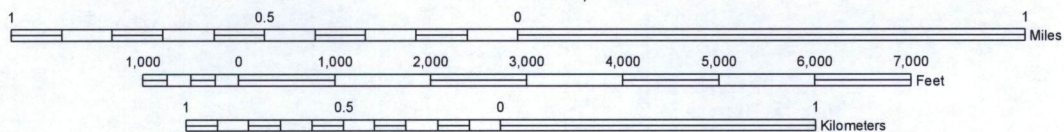


Figure 2. Central building (view to the south).





SCALE 1:24,000



TRUE NORTH

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # **33 - 28170**
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code

Reviewer

Date

Page 1 of 6

Resource Name or #: segment of Tyler Street(Map Reference No. 2)

P1. Other Identifier: AE-3208-9H

P2. Location: a. County Riverside
b. USGS 7.5' Quad Indio, CA

☐ Not for Publication ☒ Unrestricted
Date 1956, photorevised 1972

This resource consists of two discontinuous segments of Tyler Street located along the boundary between Sections 4 and 5 of Township 6 South, Range 8 East, SBBM and Sections 32 and 33, Township 5 South, Range 8 East, SBBM

c. Address: None City Coachella Zip 92236

d. Zone 11, NAD 83 North end of recorded segment at Avenue 48: 577459 mE/ 3729245 mN

South end of recorded segment at Calle Mendoza: 577486 mE/ 3727176 mN

e. Other Locational Data: This portion of Tyler Street runs south from Avenue 48 across State Route 86 and the Coachella Valley Stormwater Channel to Calle Bouganvilla.

P3a. **Description:** The portion of Tyler Street recorded herein includes two segments of different age. The first segment traverses along the west side of the Coachella Valley Stormwater Channel and adjacent to a residential neighborhood south of Avenue 50. This segment of Tyler Street was constructed around 1963 in conjunction with the residential subdivision located adjacent to the east. The road segment measures 2,580 linear feet, extending from Avenue 50 on the north to Calle Bouganvilla on the south. This segment is a two-lane asphalt-concrete paved road that measures 40 feet wide to accommodate two lanes of traffic and street-side parking. The second segment spans from Avenue 50 on the south to Avenue 48 on the north, a distance of 1 mile. This segment appears on USGS maps dated 1956, and developed from an unimproved dirt road that had existed on this alignment at least as early as 1941 (USGS 1941, 1956a, 1956b). This segment of Tyler Street was realigned by construction of SR 86 in the 1990s, but it continues north once it crosses SR 86.

P3b. **Resource Attributes:** HP 37: Highway/trail, road

P4. **Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other:

P5. **Photograph or Drawing:** See attached photographs

P6. **Date Constructed/Age and Source:** ☐ Prehistoric ☒ Historic ☐ Both

P7. **Owner and Address:** Unknown

P8. **Recorded by:** Josh Smallwood, Applied EarthWorks, Inc., 3550 E. Florida Ave., Suite H, Hemet, CA 92544.

P9. **Date Recorded:** February 25, 2016 and June 13, 2017

P10. **Type of Survey:** ☒ Intensive ☐ Reconnaissance ☐ Other
Describe: Intensive-level survey for Section 106 and CEQA compliance purposes

P11. **Report Citation:** Justin Castells and Josh Smallwood (2017): *Historical Resources Evaluation Report for the State Route 86 – Avenue 50 New Interchange and Bridge Project, City of Coachella, Riverside County, California*. Report prepared for Caltrans District 8. Prepared by Applied EarthWorks, Inc., Hemet, California.

Attachments: ☐ None ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record Other:

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BUILDING, STRUCTURE, AND OBJECT RECORD

Page 2 of 6

NRHP Status Code 6Z

Resource Name or # segment of Tyler Street (Map Reference No. 2)

- B1. Historic Name: Tyler Street B2. Common Name: same
- B3. Original Use: Local road
- B4. Present Use: Local road
- B5. **Architectural Style:** 40 ft wide two-lane asphalt-concrete paved road with paved shoulders
- B6. **Construction History:** Historic maps and aerial photographs indicate that this segment of Tyler Street did not exist until around 1963, at which time it was built as a paved road (USGS 1941, 1956a, 1956b, 1972). Riverside County Assessor's data indicates the adjacent residential subdivision was constructed in 1963 (Riverside County 2016).
- B7. **Moved?** ☒ No Yes Unknown **Date:** **Original Location:**
- B8. **Related Features:** None
- B9a. Architect: Riverside County Transportation Department b. Builder: same
- B10. **Significance:** **Theme** Twentieth century automobile roads
Area Coachella Valley **Period of Significance** None
Property Type Automobile road **Applicable Criteria** None
- The subject segment of Tyler Street within the Project APE does not appear to be eligible for inclusion in the NRHP or CRHR. The subject segment is a 40 ft wide two-lane asphalt-concrete paved road with paved shoulders, similar in its materials, design, and construction as the numerous other paved roads found in the region. It is among numerous roads that cross the Coachella Valley to form an enormous grid of travelled routes, and it has never achieved any recognition as an important alignment or thoroughfare. In addition, it does not exhibit any architectural or engineering merits that would set it apart from the many similar roads in the region. There is no evidence that it is directly associated with any persons or events of recognized historical significance (NRHP Criterion A and B/CRHR Criterion 1 and 2); represents the work of a prominent architect, designer, or builder, or qualifies as an important example of its type, period, region, or method of construction (NRHP Criterion C/CRHR Criterion 3); and it does not have the potential to yield any information important to the study of our local, state, or national history (NRHP Criterion D/CRHR Criterion 4).
- B11. Additional Resource Attributes: None
- B12. **References:**
Riverside County
2016 Property Information Center. Found at: <http://pic.asrclrec.com/>.

USGS (United States Geological Survey)
1941 Coachella, Calif. 1:62,500/15-minute scale topographic quadrangle.
1956a Coachella, Calif. 1:62,500/15-minute scale topographic quadrangle.
1956b Indio, Calif. 1:24,000/7.5-minute scale topographic quadrangle.
1972 Indio, Calif. 1:24,000/7.5-minute scale topographic quadrangle.
- B13. Remarks:
- B14. **Evaluator:** Josh Smallwood
Date of Evaluation: February 29, 2016

DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

HRI #

33-28170

Trinomial

Page 3 of 6

Resource Name or # segment of Tyler Street (Map Reference No.22)

Recorded by: Ken Moslak

Date June 13, 2017

☒ Continuation ☐ Update



Segment of Tyler Street north of State Route 86 (view to the south).



Segment of Tyler Street south of Avenue 50 (view to the south).



Segment of Tyler Street north of Avenue 50, with intersection of SR 86 in background (view to the north).

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
SKETCH MAP

Primary #
HRI#
Trinomial

33 - 28170

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*Resource Name or #: (Assigned by recorder) segment of Tyler Street (Æ-3208-9H) (Map Reference

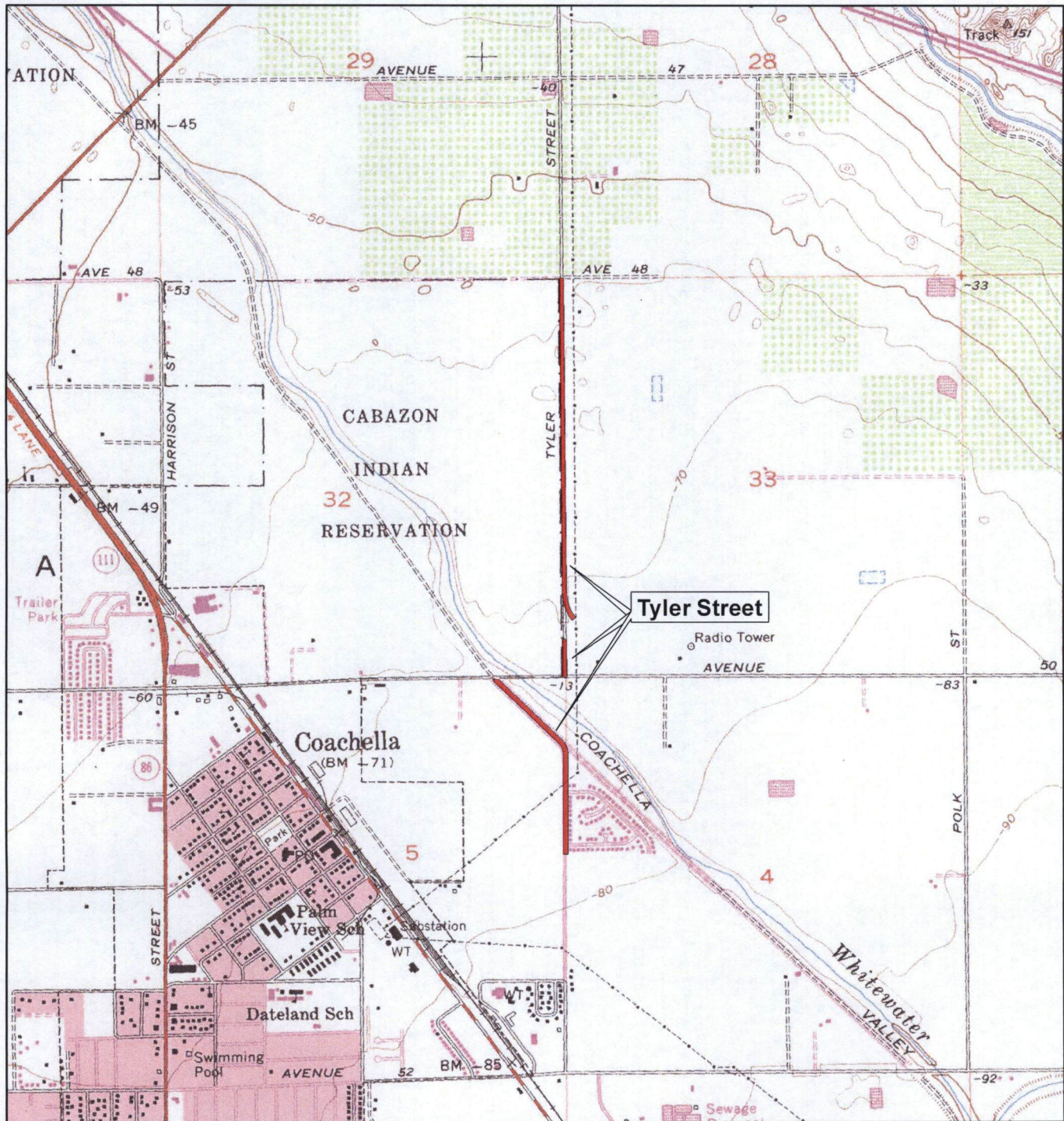
*Drawn by: J. Smallwood

No. 2)

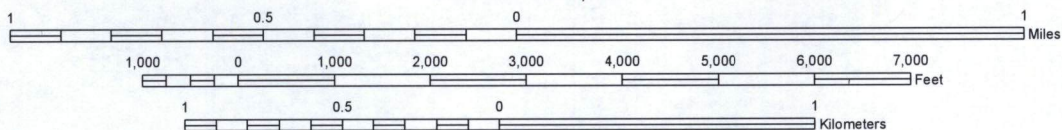
*Scale: 1 inch equals 1,000 feet

*Date of map: February 2016





SCALE 1:24,000



TRUE NORTH

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #

33 - 28173

Trinomial
NRHP Status Code 6Z

Other Listings
Review Code

Reviewer

Date

Page 1 of 5

Resource Name or #: segment of Avenue 50 (Map Reference No. 1)

P1. Other Identifier: AE-3208-4H

P2. Location: a. County Riverside

b. USGS 7.5' Quad Indio, CA

This segment of Avenue 50 traverses along the southern edge of Section 32, Township 5 South, Range 8 East, SBBM; and along the northern edge of Section 5 of Township 6 South, Range 8 East, SBBM.

c. Address: None City Coachella Zip 92236

d. Zone 11, NAD 83 West end of recorded segment at Callaway Road: 576,684 mE/ 3,727,625 mN

East end of recorded segment at SR 86: 577, 621 mE/ 3,727,633 mN

e. Other Locational Data: This segment of Avenue 50 extends from a just west of Callaway Road east to Polk Street in the City of Coachella.

P3a. **Description:** The historic-period segment of Avenue 50 recorded within the Project APE extends from a point to the west of Callaway Road east across the Coachella Valley Stormwater Channel, intersects Tyler Street and State Route 86, and continues until Polk Street. Avenue 50 was severed by construction of State Route 86 in the 1990s. Where Avenue 50 intersects SR 86, it is rerouted along Tyler Street, crosses SR 86 and reconnects to Avenue 50 on the east side of SR86. The subject segment of Avenue 50 is approximately 1.7 miles long and consists of a two-lane asphalt-concrete paved road that measures approximately 30 feet wide flanked by dirt shoulders that measure 10 feet wide. Historic maps indicate that Avenue 50 existed as early as 1941 (USGS 1941). The segment west of the Coachella Valley Stormwater Channel was a light duty road, while the segment east of the channel was an unimproved dirt road. The full length of the road was improved as a light duty road by 1956 (USGS 1956a, 1956b).

P3b. **Resource Attributes:** HP 37: Highway/trail, road

P4. **Resources Present:** ☐ Building ☒ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other:

P5. **Photograph or Drawing:** See attached photographs

P6. **Date Constructed/Age and Source:** ☐ Prehistoric ☒ Historic ☐ Both

P7. **Owner and Address:** Unknown

P8. **Recorded by:** Josh Smallwood, Applied EarthWorks, Inc., 3550 E. Florida Ave., Suite H, Hemet, CA 92544.

P9. **Date Recorded:** February 25, 2016

P10. **Type of Survey:** ☒ Intensive ☐ Reconnaissance ☐ Other

Describe: Intensive-level survey for Section 106 and CEQA compliance purposes

P11. **Report Citation:** Justin Castells and Josh Smallwood (2017): *Historical Resources Evaluation Report for the State Route 86 – Avenue 50 New Interchange and Bridge Project, City of Coachella, Riverside County, California*. Report prepared for Caltrans District 8. Prepared by Applied EarthWorks, Inc., Pasadena, California.

Attachments: ☐ None ☒ Location Map ☐ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record Other:

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BUILDING, STRUCTURE, AND OBJECT RECORD

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NRHP Status Code 6Z

Resource Name or # segment of Avenue 50 (Map Reference No. 11)

- B1. Historic Name: Avenue 50 B2. Common Name: same
- B3. Original Use: Local road
- B4. Present Use: Local road
- B5. **Architectural Style:** 30 ft wide two-lane asphalt-concrete paved road with dirt shoulders
- B6. **Construction History:** Historic maps indicate that Avenue 50 existed as early as 1941 (USGS 1941). The segment west of the Coachella Valley Stormwater Channel was a light duty road, while the segment east of the channel was an unimproved dirt road. The full length of the road was improved as a light duty road by 1956 (USGS 1956a, 1956b). This segment of Avenue 50 was severed by construction of State Route 86 in the 1990s. It is rerouted along Tyler Street, crosses SR 86, and reconnects to Avenue 50 on the east side of SR86.
- B7. **Moved?** ☒ No Yes Unknown **Date:** **Original Location:**
- B8. **Related Features:** None
- B9a. Architect: Riverside County Transportation Department b. Builder: same
- B10. **Significance:** **Theme** Twentieth century automobile roads
Area Coachella Valley **Period of Significance** None
Property Type Automobile road **Applicable Criteria** None
The subject segment of Avenue 50 within the Project APE does not appear to be eligible for inclusion in the NRHP or CRHR. The subject segment is a 30 ft wide two-lane asphalt-concrete paved road with dirt shoulders, similar in its materials, design, and construction as the numerous other paved roads found in the region. It is among numerous roads that cross the Coachella Valley to form an enormous grid of travelled routes, and it has never achieved any recognition as an important alignment or thoroughfare. In addition, it does not exhibit any architectural or engineering merits that would set it apart from the many similar roads in the region. There is no evidence that it is directly associated with any persons or events of recognized historical significance (NRHP Criterion A and B/CRHR Criterion 1 and 2); represents the work of a prominent architect, designer, or builder, or qualifies as an important example of its type, period, region, or method of construction (NRHP Criterion C/CRHR Criterion 3); and it does not have the potential to yield any information important to the study of our local, state, or national history (NRHP Criterion D/CRHR Criterion 4).
- B11. Additional Resource Attributes: None
- B12. **References:**
USGS (United States Geological Survey)
1941 Coachella, Calif. 1:62,500/15-minute scale topographic quadrangle.
1956a Coachella, Calif. 1:62,500/15-minute scale topographic quadrangle.
1956b Indio, Calif. 1:24,000/7.5-minute scale topographic quadrangle.
- B13. Remarks:
- B14. **Evaluator:** Josh Smallwood
Date of Evaluation: February 29, 2016



Avenue 50 as it crosses the Coachella Valley Stormwater Channel (view to the west).



Overview of Avenue 50 from the intersection of Callaway Road (view to the east).

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
CONTINUATION SHEET

Primary #
HRI #
Trinomial

33 - 28173

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Resource Name or # segment of Avenue 50 (Map Reference No. 1)

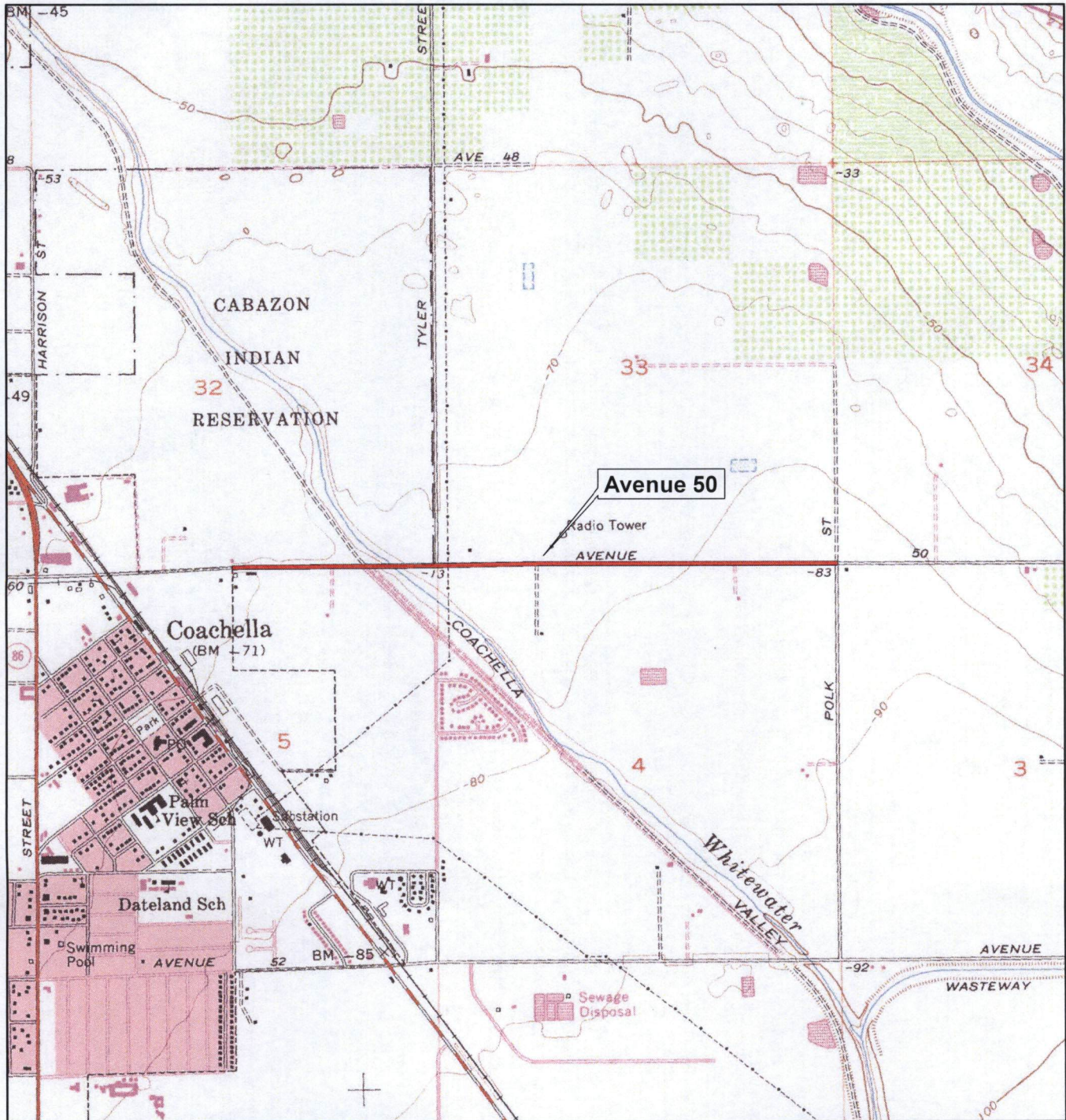
Recorded by: Josh Smallwood

Date February 25, 2016

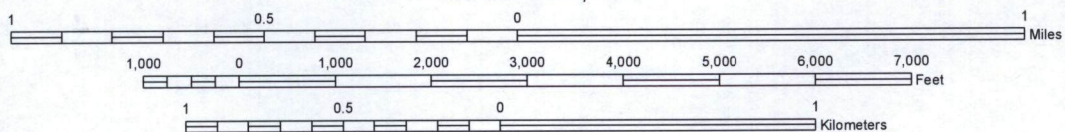
☒ Continuation ☐ Update



Abandoned segment of Avenue 50 where it approaches SR 86 (view to the east).



SCALE 1:24,000



TRUE NORTH

CONTINUATION SHEET

Property Name:

Page 1 of 1

Recorded by Daniel Ballester

Date February 27, 2019

Continuation ☒ Update

Form Prepared by Ben Kerridge

Date March 11, 2019

Affiliation: CRM TECH, Colton

Project No: CRM TECH 3442

A field survey on February 27, 2019, covered an abandoned segment of Avenue 50 between State Route (SR) 86 and the Coachella Valley Stormwater Channel (see below), which is currently blocked off from public access by sand berms on both ends and is no longer maintained. The pavement is now partially buried by blow sand deposits, especially on the eastern end. Sand berms mark either end of the segment. Based on historic aerial photographs and previous cultural resources studies in the vicinity, the abandonment evidently resulted from the construction of SR 86 and the associated realignment of Avenue 50 in the 1990s.

Report Citation:

Bai "Tom" Tang, Ben Kerridge, Daniel Ballester, and Nina Gallardo
2019 Historical/Archaeological Resources Survey Report: Coachella Travel Centre Project, Assessor's Parcel Number 763-020-021, City of Coachella, Riverside County, California.



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

33-28175
CA-RIV-12708

Other Listings
Review Code

Reviewer

Date

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Resource Name or #: AE-3208-3H (Map Reference No. 7)

P1. Other Identifier:

P2. Location: a. County Riverside

☒ Not for Publication ☐ Unrestricted

b. USGS 7.5' Quadrangle Indio, Calif. Date 1956, photorevised 1972

Northwest quarter of the northwest quarter of Section 4, Township 6 South, Range 8 East, SBBM.

c. Address: None City Coachella Zip 92236

d. UTM: NAD 83, Zone 11; Datum (approximate center of site): 577,562 mE / 3,727,545 mN

e. Other Locational Data: This archaeological site is situated within the northwest portion of Assessor's Parcel Number (APN) 763-020-021. This parcel is located to the north and east of the Coachella Valley Stormwater Channel and south of Avenue 50 in Coachella. Follow Avenue 50 east across the Coachella Valley Stormwater Channel (Whitewater River) and turn south onto a private, asphalt-paved road. Park at the gated entrance and the site is located 70 meters (m) to the southeast in an open field.

P3a. Description: The site consists of a small discrete historic-period domestic household refuse deposit dating to the 1910s and 1920s. The site measures approximately 100 ft (NW-SE) by 45 ft (NE-SW) and appears to be the result of opportunistic dumping by local area residents. A total of 13 historic-period artifacts were mapped, although 10+ additional shards of non-diagnostic historic-period glass and ceramic fragments were observed scattered across the site area.

P3b. Resource Attributes: AH 4. Trash Scatter

P4. Resources Present: ☐ Building ☐ Structure ☐ Object ☒ Site ☐ District ☐ Element of District
Other:

P5. Photograph or Drawing: See attached pages for maps and photographs

P6. Date Constructed/Age and Source: ☐ Prehistoric ☒ Historic ☐ Both

P7. Owner and Address: Unknown

P8. Recorded by: Josh Smallwood, Applied EarthWorks, Inc., 3550 E. Florida Avenue, Suite I, Hemet, CA 92544

P9. Date Recorded: February 25, 2016

P10. Type of Survey: ☒ Intensive ☐ Reconnaissance ☐ Other
Describe: Pedestrian survey with 15-meter transects

P11. Report Citation: Justin Castells and Josh Smallwood (2017): *Historical Resources Evaluation Report for the State Route 86 - Avenue 50 New Interchange Project, City of Coachella, Riverside County, California*. Report prepared for Caltrans, District 8. Prepared by Applied EarthWorks, Inc., Hemet, California.

Attachments: ☐ None ☒ Location Map ☒ Sketch Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record ☒ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record Other:

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State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
ARCHAEOLOGICAL SITE RECORD

Primary #
Trinomial

33-28175

CA-RIV-12708

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Resource Name or # AE-3208-3H (Map Reference No. 7)

A1. **Dimensions:** a. Length: 100 ft (NW-SE) x b. Width: 45 ft (NE-SW)
Method of Measurement: ☐ Paced ☐ Taped ☐ Visual estimate ☒ Other Trimble GPS
Method of Determination: ☒ Artifacts ☐ Features ☐ Soil ☐ Vegetation
☐ Topography ☐ Cut bank ☐ Animal burrow ☐ Excavation ☐ Property boundary ☐ Other (explain):
Reliability of Determination: ☒ High ☐ Medium ☐ Low Explain: Excellent ground surface visibility.
Limitations: ☐ Restricted access ☐ Paved/built over ☐ Disturbances
☐ Site limits incompletely defined ☐ Other (Explain): None.

A2. **Depth:** ☐ None ☒ Unknown **Method of Determination:** Surface examination only; however, there appears to be little potential for subsurface cultural deposits exceeding 10 cm in depth. This area is mechanically disturbed and appears to have been graded level.

A3. **Human Remains:** ☐ Present ☒ Absent ☐ Possible ☐ Unknown (Explain): None observed and presence is unlikely.

A4. **Features:** None observed.

A5. **Cultural Constituents:** The site consists of a small discrete historic-period domestic household refuse deposit dating to the 1910s and 1920s. The site measures approximately 100 ft (NW-SE) by 45 ft (NE-SW) and appears to be the result of opportunistic dumping by local area residents. A total of 13 diagnostic historic-period artifacts were mapped, although 10+ additional shards of non-diagnostic historic-period glass and ceramic fragments were observed scattered across the site area.

The deposit contains primarily bottle fragments and ceramic kitchenware sherds generated from one or more households in the area. The artifacts are highly fragmented, and therefore, few are diagnostic pieces. Represented bottle types found at the site include sparkling water, lotion, medicine, and beverage products. Ceramic kitchen wares at the site are limited to a few pieces of highly fragmented earthenware. A manufacturer's mark found on one of the glass bottle bases provided a date range: S in a star, representing Southern Glass Company, used 1917-1931 (Toulouse 1971:457). Some of the bottle bases also exhibited Owens valve-scars, which are attributed to the 1910s and 1920s (University of Utah et al. 1992:472). Solarized manganese glass turned amethyst was also observed. These glass pieces date to the 1910s and 1920s when manganese was used to wash the natural aqua color out of silica glass to make colorless glass bottles (University of Utah et al. 1992:472). All of the bottle fragments were from machine-made bottles. Two cork-top bottle finishes were found that both had machine seams typical of bottles from the 1910s and 1920s.

A6. **Were Specimens Collected?** ☒ No ☐ Yes

A7. **Site Condition:** ☐ Good ☐ Fair ☒ Poor The site appears to have been graded level, and all of the artifacts are highly fragmented.

A8. **Nearest Water:** The Whitewater River once flowed naturally through the area, but its course has since been channelized along the Coachella Valley Stormwater Channel. The town of Coachella, which was founded around 1901, is situated less than one mile to the southwest of the site and was supplied water by its own groundwater well which was drilled in 1900.

A9. **Elevation:** 74 ft below mean sea level

A10. **Environmental Setting:** The site is located on a relatively level desert valley floor vegetated by small desert grasses and brush. Soils consist of grayish-brown silty sand alluvium.

A11. **Historical Information:**
City of Coachella History

The history of the town of Coachella dates back to 1877 with the construction of the Southern Pacific Railroad across the "Coahuila" Valley, as it was then known, from Los Angeles to Yuma (Nordland 1978:112). A siding along the railroad three miles southeast from Indian Wells (Indio) became known as Wood Spur, or Woodspur, as early as 1880. It was so named because the local Indians cut and sold mesquite wood at this siding to fuel the trains'

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locomotives. By 1898, a business entrepreneur by the name of Jason L. Rector arrived in the Coachella Valley. He was originally from Iowa, and had settled in San Diego during the previous decade. Rector took control of the mesquite wood business at Woodspur and operated a thriving business for a couple of years (City of Coachella 2016). Rector then drilled a water-well and laid out a town at Woodspur. After eight months of drilling, Rector and his brother Lon B. Rector, tapped a good flow of artesian water at a depth of 550 feet. The Rector brothers completed the well in November, 1900, and a town site was laid out by January, 1901 (City of Coachella 2016).

Rector originally planned to name the town "Conchilla" for the little shells that littered the area, but half the townspeople preferred the name "Coahuilla" for the Native Americans living in the area (Nordland 1978:68). The dispute was settled by combining the names into "Coachella". The USGS Indio 30-minute map of 1904, surveyed in 1901, depicts the town as "Coachella", while the desert valley is labeled as "Conchilla Desert" and "Conchilla Valley" (USGS 1904). The Euro-American occupants of the valley apparently preferred the name Coachella Valley, as various industries are known to have used this name in the 1900s and 1910s. Soon, Coachella Valley became the namesake for the entire valley, and by the time of their next map series in 1941, USGS used this name for the region (USGS 1941).

In order to promote land sales, Rector formed the Coachella Land & Water Company. He built an adobe house along Front Street where he conducted business locating available lots for settlers at a cost of \$10 per filing. In 1902, he established and became president and manager of the Coachella Valley Produce Association, and began shipping produce from the valley to Los Angeles by train. In 1904, he organized the Coachella Valley Refrigerating Company, built a pre-cooling plant and started manufacturing ice (City of Coachella 2016). A weekly newspaper called the *Coachella Valley Submarine* was started by Randolph R. Freeman on November 27, 1901 (Nordland 1978:114). That year, the Valley's population claimed to total 250 whites and about 600 Indians. A post office was established in Coachella on November 30, 1901, with George C. Huntington, postmaster.

Rector maintained an active interest in the town as its unofficial mayor and held properties throughout the valley until his death at his Los Angeles home on September 24, 1919. The town of Coachella remained a small farming community through the 1920s and 1930s, and was eventually incorporated as a city on December 13, 1946. The City Hall and City Hall Park were dedicated on October 29, 1949 (City of Coachella 2016).

At the beginning of World War II, General George S. Patton established a Desert Training Center in the desert of eastern Riverside and San Bernardino counties. There were 11 divisional camps located in the California and Arizona deserts, and Patton also made use of the towns in the region that were situated alongside a railroad siding. These were temporary campsites used for staging activities or for transporting men by train to the divisional camps. A temporary camp is known to have existed in Coachella, however, its precise location is currently unknown (Dighera 2011).

During World War II, 1.6 million people moved to California to work in war industries, and many of the servicemen trained in the state settled here after the war was over (Starr 2005:237). By 1962, California had the highest population of any state. The region experienced a boom in housing subdivisions, commerce, and industry. The city of Coachella, positioned along the Southern Pacific Railroad, State Route 111, and U.S. Highway 99, with quick access to U.S. 60/70, expanded outward from its traditional core during the post-war boom period (USGS 1956). The Interstate 10 freeway was constructed to replace U.S. 60/70 in the 1960s (USGS 1972). The 86S Expressway through this area was completed in the 1990s–2000s, replacing the previous U.S. 99/ State Route 86 designation that traversed along Harrison Street through rural farm communities. The new, divided highway facilitates a great deal of truck traffic to and from Mexico. It also provides a farm-to-market trucking highway between Mexicali and Interstate 10 via the Imperial Valley and Coachella Valley.

Property-specific history

General Land Office records available through the Bureau of Land Management (BLM 2016) indicate that the west half of the northwest quarter of Section 4, T6S, R8E, containing the subject property, was part of a 120-acre Desert Land Act grant issued to Coachella town founder Jason L. Rector on March 12, 1903. Records also reveal that the exact same aliquot parts of Section 4 were acquired by Rector on March 12, 1903 through the Cash Sale program. Having paid cash for the property, Rector would not have had to make any improvements. Assessor records indicate

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A11. Historical Information (continued):

that the title to the northwest quarter of the northwest quarter of Section 4, containing the subject property, was sold to Eveleth-Nash Company of San Francisco in 1915 (Riverside County Assessor 1913–1919). The Eveleth-Nash Company was a commission merchant and wholesale dealer in fruit and produce (Hackett 1884:151–152). It was established by J.A. Eveleth and W.H. Nash in 1880, and likely purchased the property as an investment in land speculation. The Eveleth-Nash Company held title to the property as an absentee owner from 1913 to 1929, with no improvements to the land throughout that time (Riverside County Assessor 1913–1919, 1920–1926, 1926–1932). It is during this period in which the refuse was deposited on the property. It is likely that local area residents took advantage of the vacant land and absentee ownership to dispose of their refuse. As such, the historic-period artifacts found at the site do not have any known direct association with a particular person or household.

Assessor records indicate that the property was acquired by J.E. Patchett in 1929, excluding the portion of the 40 acre parcel that was situated within the right-of-way of the newly proposed flood control channel. The Coachella Valley Stormwater Channel was constructed across the parcel to the southwest of the subject site in 1928. It was rebuilt in 1938, and it has been routinely maintained and upgraded since that time. Patchett held title to the subject property from 1929 to 1951 with no improvements ever assessed (Riverside County Assessor 1926–1932, 1932–1938, 1938–1944, 1944–1950, 1950–1955). The portion of the property north and east of the stormwater channel comprising 22 acres where the site is located was sold to Robert E. Robinson in September, 1951 (Riverside County Assessor 1950–1955). Robinson held title to the property through at least 1964 with no improvements assessed (Riverside County Assessor 1950–1955, 1954–1959, 1960–1964). Parcel research has revealed that no improvements were assessed on the property throughout the historic period. Therefore, it does not appear that any buildings were ever present on the property, and no persons ever resided on the property.

- A12. Age:** ☐ Prehistoric ☐ Pre-Colonial (1500–1769) ☐ Spanish/Mexican (1769–1848) ☐ Early American (1848–1880) ☐ Turn of century (1880–1914) ☒ Early 20th century (1914–1945) ☐ Post WWII (1945+) ☐ Undetermined
Factual or estimated dates of occupation (explain): Manufacturer's marks on bottle bases suggest the refuse dates to the 1910s and 1920s.

- A13. Interpretations:** This site appears to be the result of opportunistic dumping by local area residents during the 1910s and 1920s when this parcel was vacant and undeveloped. The deposit appears to be concentrated on the surface and contains a sparse array of common artifacts. It is unlikely to contain deeply stratified or substantial historic-period deposits beneath the surface and the information that it could yield about this period in the history of the town of Coachella is limited.

A14. Remarks:

A15. References:

BLM (Bureau of Land Management, General Land Office Records)

2016 Land Patent Search. Found at: <http://www.glorerecords.blm.gov/>. Accessed March 24, 2016.

City of Coachella

2016 History. Found at: <http://www.coachella.org/about-us/history#Founder>.

Dighera, L.

2015 Desert Training Center Sky Trail: Camps. Found at: <http://skytrail.info/new/camps.htm>.

GLO (U.S. General Land Office)

1856a Township 5 South, Range 8 East, SBBM. Surveyed 1855–1856.

1856b Township 6 South, Range 8 East, SBBM. Surveyed 1855–1856.

1909a Township 5 South, Range 8 East, SBBM. Surveyed 1909.

1909b Township 6 South, Range 8 East, SBBM. Surveyed 1909.

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A15. References (continued):

Hackett, Frederick H.

- 1884 *The Industries of San Francisco, Her Rank, Resources, Advantages, Trade, Commerce & Manufacturers, Conditions of the Past, Present and Future, Representative Industrial Institutions, Historical, Descriptive, and Statistical.* Payot, Upham & Company, Publishers, San Francisco, California.

Nordland, Ole J.

- 1978 *Coachella Valley's Golden Years.* Revised edition. Desert Printing Co., Inc., Indio, California.

Riverside County Assessor's Office, 4080 Lemon Street

- 1913–1919, Assessor's Map Book 22, Map 27.
1920–1926, Assessor's Map Book 22, Map 25.
1926–1932, Assessor's Map Book 25, Map 35.
1932–1938, Assessor's Map Book 25, Map 35.
1938–1944, Assessor's Map Book 25, Map 35.
1944–1950, Assessor's Map Book 25, Map 35, Page 00.
1950–1955, Assessor's Map Book 25, Map 35, Page 00.
1954–1959, Assessor's Map Book 25, Map 35, Page 000.
1960–1964, Assessor's Map Book 25, Map 35, Page 000.

Starr, Kevin

- 2005 *California: A History.* The Modern Library, New York.

Toulouse, Julian Harrison

- 1971 *Bottle Makers and Their Marks.* Thomas Nelson Inc, New York.

University of Utah, Bureau of Land Management, and U.S. Forest Service

- 1992 *Intermountain Antiquities Computer System (IMACS) User's Guide*; revised edition. Found at <http://www.anthro.utah.edu/imacs.html>. Accessed February, 2007.

USGS (United States Geological Survey)

- 1904 Indio Special, Calif. 30-minute (1:125,000 scale) topographic quadrangle. Surveyed in 1901.
1941 Coachella, Calif. 15-minute (1:62,500 scale) topographic quadrangle. Aerial photographs taken 1941.
1956a Coachella, Calif. 15-minute (1:62,500 scale) topographic quadrangle. Aerial photographs taken 1952–1953.
1956b Indio, Calif. 7.5-minute (1:24,000 scale) topographic quadrangle. Aerial photographs taken 1953; field-checked 1956.
1972 Indio, Calif. 7.5-minute (1:24,000 scale) topographic quadrangle. Aerial photographs taken 1953; field-checked 1956; photorevised 1972.

A16. Photographs: See attached Continuation Sheets

A17. Form Prepared by: J. Smallwood

Date: March 24, 2016

Affiliation and Address: Applied EarthWorks, Inc., 3550 E. Florida Ave., Suite H, Hemet, CA 92544.



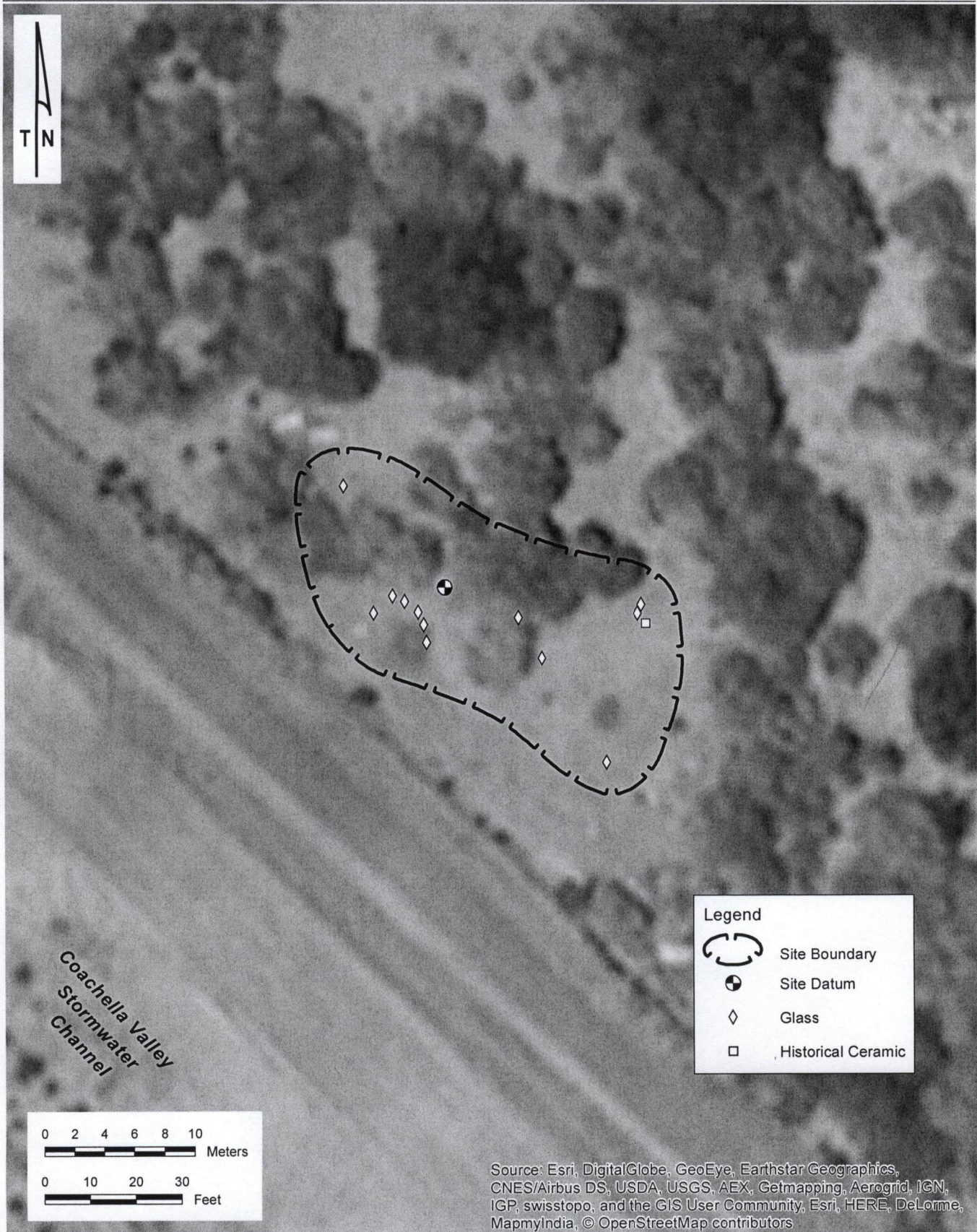
View to the north across AE-3208-3H, from the southern edge of the site.



Two machine-made cork-top bottles found at Æ-3208-3H. The bottle finish on the left is solarized amethyst color; both date to the 1910s–1920s.



Two diagnostic bottle bases found at Æ-3208-3H. *Left:* an amber bottle base with Southern Glass Company mark, dating circa 1917–1931; *right:* an amber bottle base with Owens valve scar, circa 1910s–1920s.



State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
LOCATION MAP

Primary #

HRI#

Trinomial

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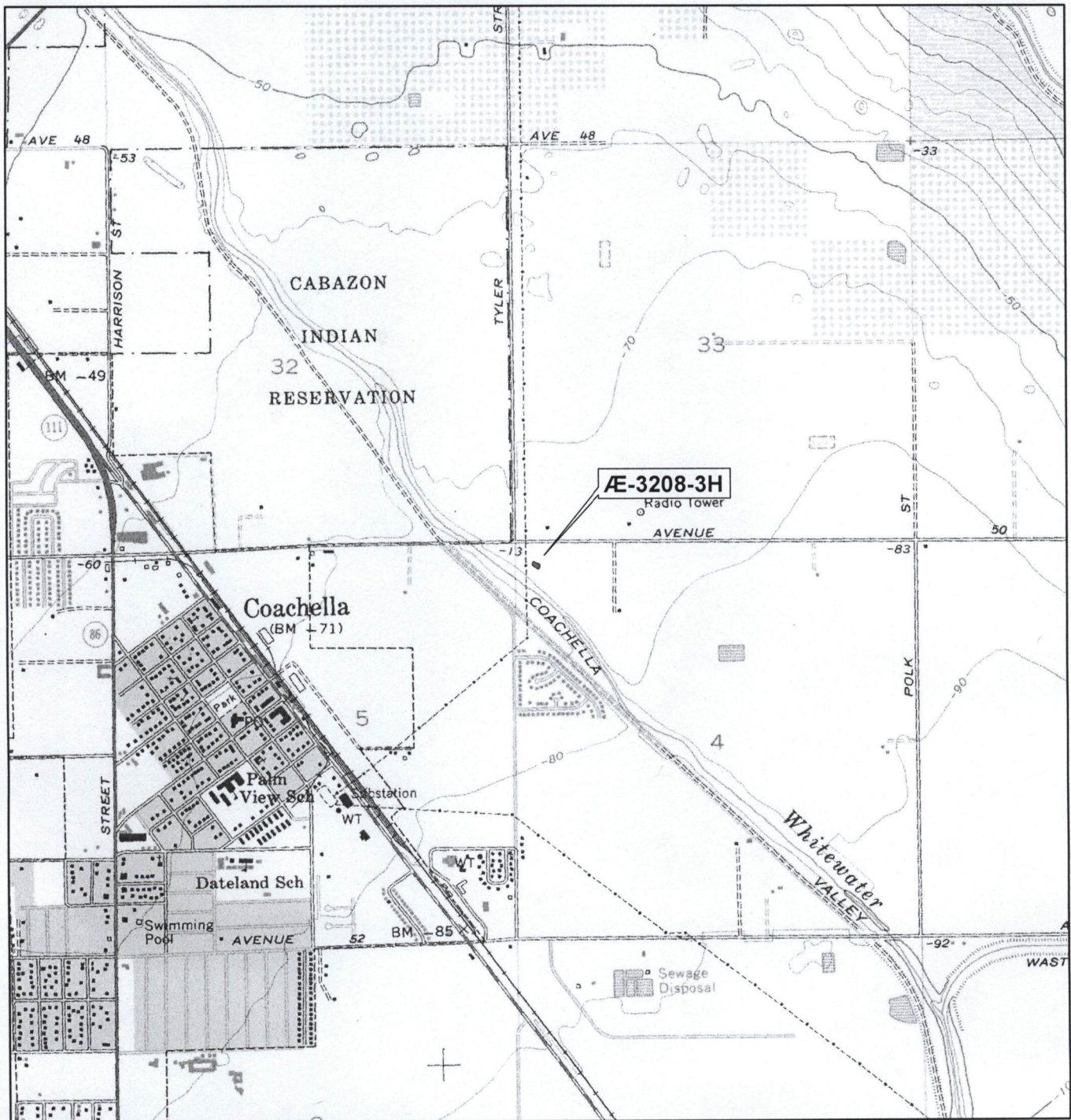
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Resource Name or #: AE-3208-3H

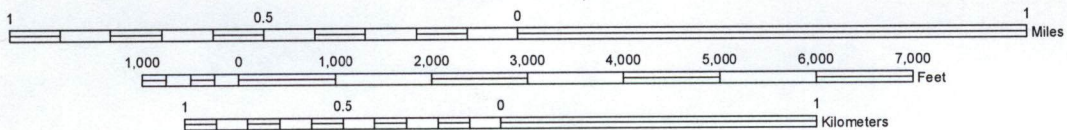
Scale: 1:24,000

Map Name: Indio (1956, photorevised 1972), CA, USGS 7.5' quadrangle

Date: 2016



SCALE 1:24,000



TRUE NORTH

CONTINUATION SHEET

Property Name: _____

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Recorded by Daniel Ballester

Date February 27, 2019

Continuation ☒ Update

Form Prepared by Daniel Ballester

Date February 27, 2019

Affiliation: CRM TECH, Colton

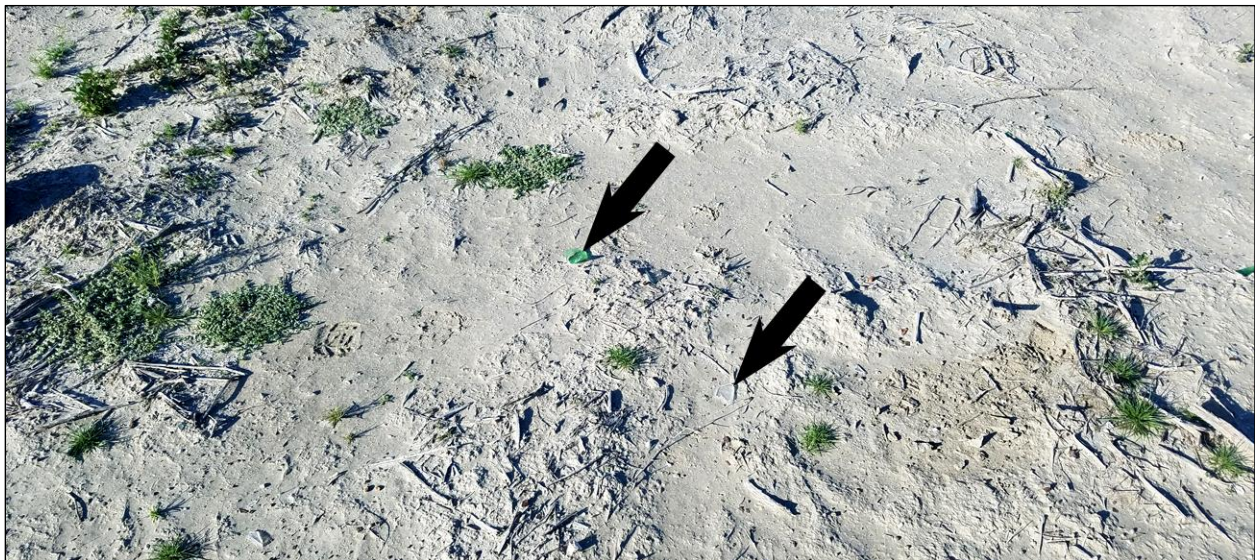
Project No: CRM TECH 3442

During a field inspection of the site on February 27, 2019, it was noted that the site area had evidently undergone further disturbance since 2016, mainly additional trash dumping and off-road vehicle activities. However, a few historic-period glass fragments were found on the surface (see below), representing the remnant of the refuse dump recorded in 2016.

Site 33-028175 consists of a sparse surface scatter of common domestic refuse, which represents the most proliferate type of historic-period archaeological site in the southern California desert region. Such incidental, opportunistic refuse dumps generally do not demonstrate a close association with any persons or events of recognized significance in national, state, or local history, and this site is no exception. In the absence of an exceptional quantity or quality of artifacts, the site does not hold the potential for any important archaeological data, and what little data potential it may have is largely exhausted through its recordation into the California Historical Resources Inventory. Therefore, Site 33-028175 does not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.

Report Citation:

Bai "Tom" Tang, Ben Kerridge, Daniel Ballester, and Nina Gallardo
2019 Historical/Archaeological Resources Survey Report: Coachella Travel Centre Project, Assessor's Parcel Number 763-020-021, City of Coachella, Riverside County, California.



Historic-period glass fragments at Site 33-028175
(Photograph taken on February 27, 2019)

APPENDIX 4



SOILS SOUTHWEST, INC.

SOILS, MATERIALS AND ENVIRONMENTAL ENGINEERING CONSULTANTS

897 VIA LATA, SUITE N • COLTON, CA 92324 • (909) 370-0474 • (909) 370-0481 • FAX (909) 370-3156

Feasibility Study Preliminary Report of Soils and Foundation Evaluations

Proposed Commercial Development
Planned Gas Station/Retail,
Restaurant, Car Wash and Hotel
SWC Avenue 50 & State Route 86
APN 763-0020-021-7

Project No. 19004-F
February 28, 2019

Prepared for:

AHD Limited Partnership
c/o Ed Haddad
422 Wier Road
San Bernardino, CA 92408



SOILS SOUTHWEST, INC.

SOILS, MATERIALS AND ENVIRONMENTAL ENGINEERING CONSULTANTS

897 VIA LATA, SUITE N • COLTON, CA 92324 • (909) 370-0474 • (909) 370-0481 • FAX (909) 370-3156
February 28, 2019

Project No. 19004-F

A.H.D Limited Partnership
422 Wier Road
San Bernardino, CA 92408

Attention: Mr. Ed Haddad

Subject: Feasibility Study
Preliminary Report of Soils and Foundation Evaluations
Proposed Commercial Development
Planned Gas Station, Retails, Restaurant, Car Wash and Hotel
SWC Avenue 50 & State Route 86
APN 763-0020-021-7

Reference: Site Plan by Archimetrics Design Studio

Gentlemen:

Presented herewith are the Feasibility Study Report of Soils and Foundation Evaluations conducted for the site of the proposed commercial development to be located on the southwest corner of Avenue 50 and State Route 86, City of Coachella, Riverside, California. Based on the preliminary project information supplied, it is understood that the subject development, among others, will include a gas station/convenient store, restaurants, hotel and carwash. In absence of detailed development plan the recommendations included should be considered as preliminary and subject to revision following detailed development plan review.

Based on exploratory test boring completed at time, it is our opinion that, in general, the site is underlain by upper dry and loose compressible silty-sand and silty fine sands with minor scattered pebbles to the maximum 51 feet depth explored.

Being beyond scope of services, no geologic evaluation is included. Based on CGS Indio Quadrangle December 4, 2015 Earthquake Fault Zone Map, it is our opinion that there is no apparent active fault that passes through the site, and the site is not situated within an AP Special Studies Zone. However, the site is identified situated in a moderately as encountered in between 20 to 40 feet below grade.

The near grade low-density compressible soils encountered are considered unsuitable for directly supporting structural loadings without excessive differential settlements to load bearing foundations. However, when structural pads are prepared as described herein, along with using the foundation systems as recommended, it is our opinion that the planned development should be considered feasible for the purpose intended.

This report has been substantiated by subsurface explorations and mathematical analysis made in accordance with the generally accepted engineering principles, including those field and laboratory testing as considered necessary in the circumstances.

We offer no warranty, express or implied.

Thank you for the opportunity to be of service on this project. Should you have any questions regarding this report, please call the undersigned at your convenience.

Respectfully submitted,
Soils Southwest, Inc.

Moloy Gupta, RCE 31708

dist/1-addressee (by email)



John Flippin

Project Coordinator

1.0 Introduction

This feasibility study report of soils and foundation evaluations is conducted for the site of the proposed commercial development to be located on the southwest corner of Avenue 50 and State Route 86, City of Coachella, Riverside, California. The purpose of this evaluation is to determine the nature and engineering properties of the near grade and sub-grade soils, and to provide geotechnical recommendations for foundation design, slab-on-grade, paving, parking, site grading, utility trench excavations and backfill, and inspections during construction. It should, however, be noted that the recommendations supplied are based on the site soils as encountered, and may require substantial modifications in event the imported fills are used for structural pads and beyond.

The recommendations contained reflect our best estimate of the soils conditions as encountered in test excavations at the locations as described. It is not to be considered as a warranty of the soils for other areas, or for imported fills when used during grading.

The preliminary recommendations supplied should be considered valid and applicable for the soils as encountered, as well as when the following conditions are fulfilled:

- i. Pre-grade meeting with contractor, public agency and soils engineer,
- ii. Excavated bottom inspections and verifications by soils engineer prior to backfill placement,
- iii. Continuous observations and testing during site preparation and structural fill soils placement,
- iv. Observation and inspection of footing trenching prior to steel and concrete placement,
- v. Plumbing trench backfill placement prior to concrete slab-on-grade placement,
- vi. On and off-site utility trench backfill testing and verifications, and
- vii. Review of the précised grading and construction details prepared by others.

1.1 Proposed Development

No detailed grading and/or development plans are prepared and none such is available for our review. Based on the preliminary development plan supplied, it is understood that, among others, the subject development will include (i) a gas station/convenience store, (ii) carwash, (iii) restaurants, and (iv) one hotel. Conventional wood-frame and stucco construction with rigid mat foundations and spread footings with concrete slab-on-grade are assumed in our geotechnical evaluations. Other associated construction is anticipated to include on-site paving, parking, driveways, curb-gutter, and off-site street improvements. Moderate site clearance and major fill soils placement and grading should be expected with the development planned considering the historical groundwater elevation information supplied.

1.2 Site Description

The irregularly shaped parcel is currently vacant and undeveloped. The subject site of approximately 14 acres is bounded by State Route 86 to the north, by the CVCWD Whitewater River Channel along the southwest, by single family residence to the east, and by the abandoned Avenue 50 to the west and northwest. Overall vertical relief within the parcel is currently unknown, but sheet-flow from incidental rainfall appears to flow towards the northeast and east. Other than scattered debris, organic debris stockpiles, dessert brush, overhead utility lines and water well at the west adjacent to Avenue 50, presence of no other significant features pertinent to the planned development is noted.

2.0 Scope of Services

Being beyond scope of work, no Geologic and/or Environmental Site Assessment is included. Reports on such will be provided on request.

Geotechnical evaluation included subsurface explorations, soil sampling, necessary laboratory testing, engineering analyses and the preparation of this report. The scope of work included the following:

o Field Explorations

Field investigations included fifteen (15) exploratory test borings using a Hollow-Stem Auger (HSA) drill-rig equipped for undisturbed soils sampling and Standard Penetration Testing (SPT). Approximate test excavation locations are shown on Plate 1.

During excavations, the sub-soils encountered were continuously logged, bulk and undisturbed samples were procured and Standard Penetration Test (SPT) blow-counts were recorded at frequent intervals. Collected samples were subsequently transferred to our laboratory for necessary testing. Description of the soils encountered is shown on the Log of Boring in Appendix A.

o Laboratory Testing

Representative samples on selected bulk and undisturbed site soils were tested in our laboratory to aid in the soils classification and to evaluate relevant engineering properties pertaining to the project requirements. Laboratory testing included the following:

- In-situ moisture contents and dry density (ASTM Standard D2937),
- Maximum dry density and optimum moisture content (ASTM Standard D1557),
- Direct Shear (ASTM Standard D3080),
- Soil Consolidation (ASTM Standard D2435),
- Soil Sand Equivalent, SE (ASTM D2419), and
- Grain size Analysis (ASTM D422)

General description of the test results and the test procedures used are provided in Appendix B.

- o Based on the field investigation and laboratory testing, engineering analyses and evaluations were made on which to base our preliminary recommendations for design of foundations, slab-on-grade, paving and parking, site grading, utility trench backfill, soils potential for expansion, site preparations and grading and monitoring during construction.
- o Preparation of this report for initial use by the project design professionals. The recommendations supplied should be considered as 'tentative' and may require revision and/or upgrading following verification of imported fills, along with review of the final grading and development plans, when supplied.

3.0 Observed Site Conditions

3.1 Subsurface Conditions

In general, the site is underlain upper dry and loose compressible silty-sand and silty fine sands with minor scattered pebbles to the maximum 51 feet depth explored. Shallow depth groundwater was encountered in between 20-40 feet below grade.

With the compressible and variable consistency nature, the near surface soils should be considered unsuitable for directly supporting structural loadings or the new imported structural fill soils placement without excessive differential settlements to future developments. It is our opinion, however, that when the upper grade soils are reworked in form of subexcavations and their replacement as engineered fills as described herein, the structural pads thus constructed should be adequate for future structural support.

Laboratory shear tests conducted on the local undisturbed and on upper bulk soils remolded to 90% relative compaction indicate moderate shear strengths under increased moisture conditions. Results of the laboratory shear tests are provided in Plate B-1 of this report.

Consolidation tests conducted on the upper soils remolded to 90% indicate low potential for compressibility under anticipated structural loading. Results of the laboratory determined soils consolidation potential is shown on Plate B-2 in Appendix B.

Silty and sandy in nature, the site soils are considered "very low" in expansion characteristic with Expansion Index, EI, less than 20. It is recommended that during and following mass grading completion, additional laboratory testing should be performed to determine Expansion Index, EI, for the soils in contact with concrete slab-on-grade and load bearing foundations.

When seismically induced soil liquefaction induced potential for ground settlements and their adverse effects on structures *cannot be fully mitigated*, it is our opinion that implementation of the mitigation measures described herein, may minimize the potentials adverse effects to structures to a limit to an "acceptable level of risks"; more specifically to "effectively minimize/reduce" to "acceptable levels" (CCR Title 14, Section 3721). Accordingly, the *geotechnical recommendations included are with an intention to achieve an "acceptable level of risk" to allow sufficient time for occupants to seek safety without total collapse of the structures built*.

The recommendations described are in no way guarantee total structural integrity following severe ground shaking that may require post-earthquake minor to extensive structural repair.

If "total" or "near total" elimination of the ground distress due to soil liquefaction is essential, such may be accomplished following additional site explorations, laboratory analyses and engineering evaluations to include ground improvements, such as:

- (i) Rigid Foundations-Mat or Checkered, or
- (i) Compaction grouting,
- (ii) Dynamic consolidation;
- (iii) Compaction piles;
- (iii) Compaction with vibratory probes
- (vi) Driven pile foundation,
- (vii) Post-tension load bearing concrete.

Supplemental recommendations on such will be supplied on request.

3.2 Excavability

It is our opinion that grading and excavations required for the project may be accomplished using conventional heavy-duty construction equipment.

3.3 Groundwater

Isolated shallow Groundwater was encountered at about 20 feet below grade. It is our opinion that during construction, no special construction requirements including de-watering, etc should be expected. However, provisions should be considered for disposing of surface runoff away from structural pads once constructed.

Fluctuations in groundwater levels can occur due to seasonal variations in the amount of rainfall, runoff, altered natural drainage paths, and other factors not evident at the time of this investigation. The designer and contractor, however, should be aware of possibility of groundwater fluctuations while designing and construction.

The following table describes the historical and the current groundwater level as recorded in the nearest well as listed by the local reporting agency.

GROUNDWATER TABLE	
Reporting Agency	California Department of Water Resources Marcelo Montagna 2008 Maps http://wdl.water.ca.gov/waterdatalibrary/
Well Number	05S/08E-33D001S
Well Name	CWA Well 10"
Well Monitoring Agency	5105
Well Location: Township/Range/Section	T05S/R08E-33
Current Depth to Water (Measured in feet)	23.0
Current Date Water was Measured	October 11, 2018
Depth to Water (Measured in feet) (Shallowest)	-8.0
Date Water was Measured (Shallowest)	October 1, 2012

3.4 Subsurface Variations

Based on the results of subsurface explorations and on past experience, it is our opinion that variations in subsoil continuity and depths of subsoil deposits may be expected. Due to the nature and depositional characteristics of the soils underlying, care should be exercised in interpolating or extrapolating of the subsurface conditions existing in between and beyond the test explorations described. Although not encountered, based on prior historical use of the property, underlying buried utilities may be expected during grading and construction.

3.5 Soil Corrosivity Analyses

Since during mass grading, local surface soil matrix are expected to change considerably, no soil chemical; analysis is included at this time. It is recommended that following mass grading

completion the representative site soils should be laboratory tested to determine pH, sulfate, chloride and resistivity. Results of such will be provided on request.

3.6 Faulting And Seismicity

3.6.1 Direct or Primary Seismic Hazards

Surface ground rupture along with active fault zones and ground shaking represent primary or direct seismic hazards to structures. Based on CGS Indio Quadrangle December 4, 2015 Earthquake Fault Zone Map, it is our opinion that there is no apparent active fault that passes through the site, and the site is not situated within an AP Special Studies Zone. Considering the proximity of the nearby faults, it is considered remote that surface fault rupture will affect the site.

According to the current (2016) CBC, the site is considered to be within Seismic Zone 4. As a result, it is likely that during the life expectancy of the structure, moderate to severe ground shaking may be anticipated.

3.6.2 Induced or Secondary Seismic Hazards

In addition to ground shaking, effects of seismic activity may include surface fault rupture, and differential settlement, ground lurching, and lateral spreading. Results of a site specific evaluation of these secondary effects are as described as below:

3.6.2.1 Surface Fault Rupture

The site is not situated within an AP Special Studies Zone. Based on review of the USGS CGS Indio Quadrangle December 4, 2015 Earthquake Fault Zone Map, it is our opinion that no major fault crosses through or extends towards the site. The potential for surface rupture resulting from nearby fault movement is not known for certainty, but, in our opinion, that such potential should be considered relatively "low" due to the distance 1.68 miles to the nearby (San Andreas-BG+CO Fault).

3.6.2.2 Flooding

Flooding hazards include tsunamis (seismic sea waves), seiches, and failure of manmade reservoirs, tanks and aqueducts. Based on the available California State groundwater monitoring website information of a well just north of the project site at/near the intersection of Avenue 48 and Tyler Street, it is our opinion that the potential for flooding and/or project site submersion hazards maybe considered possible due to the recorded historical groundwater for the area being about 7 to 8 feet above existing ground surface.

3.6.2.3 Land-Sliding

Seismically induced landslides and other slope failures are common occurrences during or soon after an earthquake. With the current near level grade, it is our opinion that the potential for seismically induced landslides may be considered remote.

3.6.2.4 Lateral Spreading

Seismically induced lateral spreading involves lateral movement of existing soils due to ground shaking. Lateral spreading is demonstrated by near vertical cracks with predominantly horizontal movement of the soil mass involved.

With the exception of the adjacent minor embankments, the topography of the subject site and the adjacent properties has a near-zero slope ratio. Accordingly, it is our opinion the potential for lateral spreading of the subject site is considered remote.

3.6.2.5 Potential Soils Liquefaction Susceptibility

Liquefaction is caused by build-up of excess hydrostatic pressures in saturated cohesionless soils due to cyclic stress generated by ground shaking. The significant factors on which liquefaction potential of a soil deposit depends, among others, soil type, relative soil density, intensity of earthquake, duration of ground shaking, and depth of ground water, among others.

Based on available data, along with considering the analyses of the explored subgrades, it is our opinion that potential for site soils liquefaction susceptibility during an earthquake should be considered "moderate".

Considering proximity of the earthquake fault, the historical groundwater table as described, along with the presence of medium to dense subgrades with moderately high SPT blow counts as recorded, structural design should consider the pre-Construction and Post-Construction minor settlement potentials as described as below.

Considering a Factor of Safety, $FS=1.1$, earthquake induced total and differential settlements for the site soils currently existing (pre-construction) are estimated to about 3.120 and 4.118-inch, respectively as described in the following table and in Appendix D of this report.

Liquefaction Induced Soils Settlement Potentials (Pre and Post Construction up to 10ft)

DYNAMIC SETTLEMENT	MEASURED IN INCHES
Settlement of Saturated Soils	5.58
Settlement of Dry Soils	0.66
Total Settlement of Saturated and Dry Soils	6.24
DIFFERENTIAL SETTLEMENT	3.120 and 4.118-inch

In design, vertical accelerations may be assumed to about 1/3 to 2/3 of the estimated horizontal ground acceleration (PGA) as described in the following sections.

3.7 Seismic Design Parameters

Based on the 2016 CBC and using Site Coordinates of 33.684896°N and -116.162056°W the Seismic Design parameters established are presented below.

3.8 Seismic Design Coefficients

Based on USGS's 2008 National Seismic Hazard Maps-Source Parameters computer program, it is understood that the subject site is situated at about 1.68 miles from the San Andreas Fault. For foundation and structural design, the following seismic parameters are suggested based on the current 2016 CBC. Recommended values are based upon the ATCouncil.org Hazard Design Map Parameters and the California Geologic Survey: PSHA Ground Motion Interpolator Supplemental seismic parameters as provided in Appendix C of this report.

The following presents the seismic design parameters based on available publications as currently published by the California Geological Survey and 2016 CBC.

TABLE 3.8A.1 Seismic Design Parameters

CBC Chapter 16	2016 ASCE 7-10 Standard Seismic Design Parameters	Recommended Values
1613A.5.2	Site Class	D
1613.5.1	The mapped spectral accelerations at short period	S_s
1613.5.1	The mapped spectral accelerations at 1.0-second period	S_1
1613A5.3(1)	Site Class B / Seismic Coefficient, S_s	2.261 g
1613A5.3(2)	Site Class B / Seismic Coefficient, S_1	1.110 g
1613A5.3(1)	Site Class D / Seismic Coefficient, F_a	1.000 g
1613A5.3(2)	Site Class D / Seismic Coefficient, F_v	1.500 g
16A-37 Equation	Spectral Response Accelerations, $S_{Ms} = F_a S_s$	2.261 g
16A-38 Equation	Spectral Response Accelerations, $S_{M1} = F_v S_1$	1.665 g
16A-39 Equation	Design Spectral Response Accelerations, $S_{Ds} = 2/3 \times S_{Ms}$	1.507 g
16A-40 Equation	Design Spectral Response Accelerations, $S_{D1} = 2/3 \times S_{Ms}$	1.110 g

TABLE 3.8A.2 Seismic Source Type

Based on California Geological Survey-Probabilistic Seismic Hazard Assessment Peak Horizontal Ground Acceleration (PHGA) having a 10 percent probability of exceedance in a 50 year period is described as below:

Seismic Source Type / Appendix C	
Nearest Maximum Fault Magnitude	$M \geq 7.3$
Peak Horizontal Ground Acceleration (PHGA)	0.650g

In design, vertical acceleration may be assumed to about 1/3 to 2/3 of the estimated horizontal ground accelerations as described.

It should be noted that lateral force requirement in design should be intended to resist total structural collapse due to the described PHGA of 0.650g or greater. However, during life time use of the structure built, it is our opinion that some structural damage may be anticipated requiring structural repairs. Use of flexible lifelines connections is suggested.

4.0 Evaluations and Recommendations

4.1 General Evaluations

Based on the field investigations, laboratory testing and subsequent engineering analysis completed at this time, it is our opinion that from geotechnical viewpoint, the site should be suitable for the development proposed, provided the recommendations presented are incorporated in final design and construction.

With the presence of the upper compressible dry, loose and old fill soils existing as described, it is our opinion that *no new structural fills or load bearing footings should be established bearing directly on the surface soils existing*. For adequate support, subgrade preparations should be considered, including subexcavations of the upper low-density soils, followed by their replacement as engineered fills compacted to 95% or better.

Considering the potential for recorded groundwater elevations to reach 7 to 8 feet above existing ground surface, it is our opinion that the subject site maybe susceptible to flooding, and/or submersion, thereby requiring raising structural pads above historical flood elevation.

Site preparations and grading should be performed in accordance with the current CBC/UBC and as per the general applicable grading recommendations as provided Section 5 of this report.

4.1.1 Preparations for Structural Pad

For adequate structural bearing, site preparations and grading should include, in minimum, subexcavations of the near surface soils measuring *vertically* to either (I) the planned deepest footing embedment + 24-inch, or (II) to minimum 5 feet below the current grade surface, or (III) to the depth of underlying moist and dense natural soils as approved by soils engineer, whichever is greater.

Site grading should also include 6 to 8-inch scarification, moisture conditioning to near Optimum Moisture Content, followed by replacement of the approved local excavated soils in 6 to 8-inch thick vertical lifts compacted to **minimum 95 percent** of the soil's Maximum Dry Density as determined by the ASTM D1557 test method. *Proper selection of construction equipment during grading and construction will be contractor's responsibility*. Such earth work should be in accordance with the applicable grading recommendations as provided in the current CBC and as recommended in Section 5.0 of this report.

The subexcavation depths described should be considered as "approximate". Localized additional subexcavations may be required within areas underlain by undocumented old fills, buried utilities, abandoned sewer, buried septic systems and others.

Prior to grading, the site should be cleared of surface and subsurface obstructions, including vegetation, roots, organic matter, debris, septic tanks, and cesspools, etc. During grading, it should be the responsibility of the grading contractor to clearly mark the future building footprint areas and minimum five feet beyond, along with the final pad grade elevations that will be established. Being beyond our expertise and scope of work, we assume no responsibility for lines and grades as established by others.

Within low-lying areas requiring new fill soils placement currently being underlain by compressible soils as described, it is recommended that no structural footing and/or paving shall be allowed bearing directly on the near surface soils existing. Additionally, considering variable consistency of the underlying soils as encountered, it is our opinion that no structural footings should be established directly bearing on the grade surface constructed following cuts to present grades. In order to minimize potential for excessive differential settlements to footing, no transition conditions should be allowed underneath footings and slabs straddling over cut and fill interface. For adequate structural bearing, the following general recommendations are supplied:

In absence of precise grading/development plan, it is assumed that the subject development will be located either on (A) near existing grade, or (B) on pads constructed by minor fill soils placement over the current grade surface, or (C) by minor cuts to the grades currently existing.

For structural support, it is assumed use of conventional spread footings, measuring approximately 12"x12" and 18"x24' for 1-story and 3-4-story structures, respectively. Actual foundation dimensions should be supplied by the project structural engineer based on static vertical loading and soil bearing capacity, along with the seismically induced ground accelerations as described earlier.

The following alternative grading operations may be considered for the project described:

- A> For the pads planned at near or on the existing grade surface, site preparations should include subexcavations of the near surface loose soils measuring vertically to either (I) the planned footing embedment + 24-inch, or (II) to the depth of underlying moist and dense gravelly sandy natural soils as approved by soils engineer, whichever is greater.
- B> For the planned pads requiring new structural fill soils placement on existing grades, the site preparations prior to new soils placement should include subexcavations of the upper dry and loose soils to (I) a minimum 5 feet below the present grade surface, or (II) to the depth of the underlying moist and dense sandy natural soils, (iii) or to the depth as required to maintain a 24-inch thick compacted fill mat blanket below the planned footing bottoms, whichever is greater.
- C> For the pads requiring "cuts" to the present grades, the site preparations, following such planned cuts, should include further subexcavations of the excavated bottoms to the sufficient depth so as to maintain a minimum 24-inch thick compacted fill mat blanket below the planned footing bottoms, or to the depth as recommended by soils engineer during grading.
- D> For cut/fill transition areas, it is recommended that following cuts to planned grade, the cut portions of the pads should be further subexcavated to sufficient depth so as to maintain an overall minimum 24-inch thick compacted fill mat blanket below footing bottoms.

The subexcavation depths described should be considered "approximate". Actual subexcavation depths should be determined in field by the project soils engineer during grading. The site grading procedures described should, in minimum, encompass the planned building footprint areas and five (5) feet beyond.

Supplemental general mass grading recommendations are provided in Section 5 of this report.

4.1.2 Structural Fill Material Requirements

- (i) Non-expansive in nature, the on-site soils free of organic, debris and rocks larger than 6-inch in diameter, should be considered suitable for re-use as structural backfills.
- (ii) Following mass-grading completion, representative site soils sampled from graded fills expected in contact with footings and utilities should be laboratory tested to verify presence of Sulfate, pH, chloride and Resistivity. Based on the chemical test results, supplemental design recommendations will be supplied prior to concrete pour. Such chemical testing will be programmed, if and when requested by the addressee.

4.1.3 Cut/Fill Transition Pad Preparations (General)

Cut/fill transitions should be avoided to minimize potentials for differential settlements to footings and concrete slab-on-grade where required fill depth exceeds planned footing depth. Within areas of cut-fill transition, it is suggested that following necessary subexcavations within cut areas, the entire structural pad should be established on uniform bearing compacted fills with the grading guidelines as described below.

Table 1.0 Pad Preparation Guideline for Cut/Fill Transition Areas

Fill Depth Required for Finish Grade (within low-lying areas)	Overexcavation Depth below Finish Grade (within cut areas)
Up to 5 feet	Equal Depth
5 to 10 feet	5 feet
Greater than 10 feet	One-half the maximum thickness of fill placed on the "fill" portion (20 feet maximum)

Cut portions should be over-excavated beyond the structural perimeter lines a horizontal distance equal to the depth of over excavation or to a minimum distance of 5 feet, whichever is greater. Actual subexcavation depths, however, should be determined by soils engineer during grading.

4.2 Alternative Foundation Recommendations

The structures planned may be supported by (i) rigid mat type footings, or (ii) by using checkered/grid type rigid foundations using continuous wall and isolated spread footings founded exclusively into engineered fills of local soils or on approved imported fills compacted to minimum 95%, or (iii) post tension construction. Local soils free of debris, roots and organic and other non-structural materials should be considered suitable for re-use as engineered backfill.

Alternative I: Rigid Concrete Mat or Raft Foundations

With the presence of the underlying low-density subsoils and considering the site being moderately susceptible to seismically induced soils liquefaction with potentials for ground settlements as discussed earlier, along with potentials for site flooding and/or submersion, it is our opinion that for adequate structural support, rigid foundations in form of concrete mat bearing directly over engineered local soils may be considered. For estimation purposes, adequately reinforced minimum recommended thickness for such mat foundations is 9 to 12-inch, or as recommended by structural engineer.

Alternative II: Rigid Foundations in form of Exterior Conventional Wall Footings and interior conventional grade beams placed Checkered/Grids.

Under static loading conditions, use of exterior load bearing continuous wall footings and isolated pier may be designed based on allowable soil vertical bearing capacity equations as described below:

Continuous Wall Footing:	$Q_{\text{allowable}} = 550 + 600d + 300b$
Isolated Square:	$Q_{\text{allowable}} = 700 + 600d + 240b$, where

$q_{\text{allowable}}$ = allowable soil vertical bearing capacity, in psf.
 d = footing depth, and b = footing width.

The above soil bearing capacity may be increased for each additional depth in footing and width in excess of the minimum recommended. Total maximum vertical bearing capacity is recommended not to exceed 2200 psf.

If normal code requirements are applied, the above capacities may further be increased by an additional 1/3 for short duration of loading which includes the effect of wind and seismic forces.

Actual foundation dimensions (b & d) and reinforcement requirements should be provided by the project structural engineer based on anticipated structural dead load, soil bearing capacity and Peak Ground Accelerations (PGA) described earlier.

From geotechnical viewpoint, the perimeter wall footings should be sized to minimum 18-inch wide, embedded to minimum 24-inch below the lowest adjacent final grade, reinforced with minimum 2-#4 rebar placed near the top and 2-#4 rebar near bottom of continuous footings, or as required by the project structural engineer. The "checkered" grade beams placed at a maximum spacing of 15 feet, may be sized as desired by the project structural engineer.

Alternative III - Post-Tension Construction- Structural Load Bearing Slabs

As an alternative to spread foundations, post-tension load bearing concrete slab-on-grade may be considered. Presented below are the preliminary design parameters that may be implemented by the project structural engineer when post-tension slab/foundation systems are utilized, based on Section 1816 and Section 1817 of the 2016 CBC.

It will be the responsibility of the post-tension slab designer to select the appropriate design methodology and properly designed foundation system for the soil conditions indicated herein. The slab designer should provide deflection potential to the architect and/or to structural engineer for incorporation into structural design. Assuming $EI < 20$, post-tension systems may be designed with the following tentative parameters subject to verifications following detailed geotechnical evaluations.

Tentative Post-Tension Design Parameters

Thornwaite Index	-20
Depth of Constant suction	7 ft.
Clay Type	Montmorillonite
Clay portion maximum	30%
Soil Suction, pF	3.5
Approx. Moisture Velocity *	0.7 in./month
Avg. Edge Moisture Variation Distance, e_m (ft)	Center Lift = 5.3 Edge Lift = 2.9
Anticipated Swell, y_m (inch)	Center Lift = 1.72 Edge Lift = 0.194
Minimum Slab Thickness (inch)	6
Minimum Footing Depth (inch)	24

Structural design should conform to the 2016 CBC Seismic Design requirements as described in Section 3.6 of this report.

It should be noted that variations in subgrade moisture may significantly affect soil volume change which may directly influence slab-on-grade performance. As stated in the CBC, the Post-Tensioning Institute procedure is applicable "only in those cases where site conditions have been corrected so that soil moisture conditions are controlled by the climate alone". Accordingly, it is suggested that post-construction subsurface moisture conditions within the vicinity of the structure should be controlled by restricting irrigation water and/or any other efficient surface drainage, etc.

Should the project structural engineer determine that more stringent design criteria are required, those criteria should supersede the design parameters supplied. Following are the supplemental recommendations as provided in conjunction with the post-tension construction recommended:

- a. Unless otherwise specified, load bearing perimeter edge beams for both one and three to four-story construction should be founded at a minimum depth of 24-inch below the lowest adjacent final grade.
- b. Recommended minimum slab-on-grade thickness is 6-inch, actual thickness, however, should be determined by the project structural engineer.
- c. Prior to concrete pour, subgrade soils to receive concrete slab-on-grade should be moistened to achieve at least the soil Optimum moisture conditions. Pre-moistening, if used, will promote uniform curing and minimize potential for shrinkage cracks.
- d. Use of vapor barrier, such as commercially available 6-mil thick plastic sheeting or its equivalent or better, is suggested underneath concrete slab-on-grade planned to receive vinyl, tile or marble flooring. It should be noted that use of vapor barrier shall not prevent 'dampness' near the top and bottom of concrete slab-on-grade. Accordingly, supplemental use of 'vapor retarder' should be considered within areas expected to use tiles and/or vinyl flooring.

- e. Large openings, such as garage entrance etc., should be provided with 12-inch wide grade beams founded at the same depth of the adjacent load bearing foundations.
- f. Post-grading supplemental soil expansion testing is recommended in order to provide revised recommendations, if warranted.

4.3 Concrete Slab-on-Grade

No concrete slabs, sidewalks and flatworks should be placed bearing directly on the surface soils existing. The prepared subgrades to receive footings should be adequate for concrete slab-on-grade placement. Considering the close proximity of earthquake fault, use of 4-inch thick concrete slabs reinforced with #3 rebar at 18-inch o/c is suggested, or as designed by the structural engineer based upon structural loading requirements; along with seismic design parameters and horizontal peak ground acceleration (PGA) as provided in this report. Additionally, concrete slabs must maintain positive contact with footings by use of dowels, or similar means as designed by the project structural engineer. For driveways, concrete slabs should be 5-inch thick, placed over local or similar imported sandy soils compacted to at least 95%. Driveway slab reinforcing and construction and expansion joints etc. should be incorporated if required by the project structural engineer.

Within moisture sensitive areas, concrete slabs should be underlain by 2-inch of compacted clean sand, followed by 6-mil thick vapor barrier such as commercially available StegoWrap or its similar. The gravelly sands used should have a Sand Equivalent, SE, of 30 or greater.

Subgrades to receive concrete should be adequately "dampened" (not flooded) as would be expected in any such concrete placement. Use of low-slump concrete is recommended. In addition, it is recommended that utility trenches underlying concrete slabs and driveways should be thoroughly backfilled with sandy soils mechanically compacted to the minimum recommended percent compaction described.

4.3.1 Concrete Curing and Crack Control

The recommendations presented in this report are intended to reduce the potential for cracking of concrete slabs-on-grade due to concrete curing or settlement. However, even when the following recommendations have been implemented; foundations, stucco walls and concrete slabs-on-grade may display some minor cracking due to minor soil movement and/or concrete shrinkage.

To reduce and/or control concrete shrinkage, curling or cracking, concrete slabs shall be "cured" by using water prior to structural load placement. The following general procedures may be conideted:

1. CONCRETE STRENGTH @ 28 DAYS SHOULD BE AS DETERMINED BY STRUCTUAL ENGINEER.
2. WAIT 14 DAYS BEFORE OPERATING VEHICLES AND EQUIPMENT ON SLABS.
3. DO NOT POUR CONCRETE WHEN THE TEMPERATURE EXCEEDS 90° F OR 80° F WHEN THE WIND EXCEEDS 12MPH.
4. START CURING AS SOON AS HARD TROWELING IS DONE. ALL CURING SHALL BE WET CURING BY USING BURLAP FOR A MINIMUM OF 7 DAYS. BURLAP MUST BE PLACED WITHIN 2 HOURS OF POURING.
5. WHEN WIND, TEMPERATURE AND HUMIDITY CONDITIONS CAUSE EARLY DISAPPEARANCE OF BLEED WATER, STEPS SHALL BE TAKEN TO USE A FOG SPRAY. CURING SHALL COMMENCE IMMEDIATELY AFTER FINISHING TROWELING.

The occurrence of concrete cracking may also be reduced and/or controlled by limiting the slump of the concrete used, proper concrete placement and curing, and by placement of crack control joints at reasonable intervals, in particular, where re-entrant slab corners occur. For standard crack control maximum expansion joint spacing of 12 feet should not be exceeded. Shorter distance between joint spacing would provide greater crack control. Joints at curves and angle points are suggested, as recommended by structural engineer.

4.4 Resistance to Lateral Loads

Resistance to lateral loads can be restrained by friction acting at the base of foundation and by passive earth pressure. A coefficient of friction of 0.30 may be assumed with normal dead load forces for footing established on compacted fill.

An allowable passive lateral earth resistance of 200 pounds per square foot per foot of depth may be assumed for the sides of foundations poured against compacted fills. The maximum allowable lateral passive earth pressure is recommended not to exceed 2000 pounds per square foot.

For design, lateral active pressures from local soils or its similar or better imported fills used as level backfill may be estimated from the following equivalent fluid density:

Active:	35 pcf
At Rest:	60 pcf

4.5 Shrinkage and Subsidence

It is our opinion that the local or similar imported fills when used in grading may be subjected to a volume change. Assuming a 95% relative compaction, and assuming an overexcavation and re-compaction depth of about 5 to 8 feet, such volume change for current grades due to shrinkage may be on the order of 15-20 percent. For estimation purpose, site subsoils subsidence may be approximated to about 3.5-inch when conventional construction equipments are used. Lesser shrinkage and subsidence is expected for the soil encountered at about 8 feet and below.

4.6 Construction Consideration

4.6.1 Unsupported Excavation

Temporary construction excavation up to a depth of 5 feet may be made without any lateral support. It is recommended that no surcharge loads such as construction equipments, be allowed within a line drawn upward at 45 degree from the toe of temporary excavations. Use of sloping for deep excavation may be considered where plan excavation dimensions are not constrained by any existing structure.

4.6.2 Supported Excavations

If vertical excavations exceeding 5 feet in depths become warranted, such should be achieved using shoring to support side walls.

4.7 Site Preparations

The site preparation should include subexcavation of the upper loose and disturbed soils, stockpiling, moisturization and/or aeration to 3% to 5% over optimum moisture content. Site preparation should also include re-placement of the excavated soils and other approved imported fills compacted to 95 percent or better. Such earth work should be in accordance with the applicable grading recommendations provided in the current CBC/UBC and as recommended in Section 5.0 of this report.

Considering the sandy gravelly site soils with rocks, minor caving may be expected during deep excavations. Temporary excavations in excess of 5 feet should be made at a slope ratio of 2 to 1 (h:v) or flatter, or as per the construction guidelines as provided by Cal-Osha.

4.8 Structural Pavement Thickness

Flexible Asphalt Paving: Based on estimated Traffic Index (TI) and on an assumed soil R-value of 50 for the local soils, for estimation purpose, the following flexible pavement sections may be expected.

Based on estimated Traffic Index, TI, as shown and on R-value of 44 for the silty sandy soils encountered, the following pavement sections may be considered:

Service Area	Traffic Index, TI	Pavement Type	Paving Thickness (inch)
Auto Parking/Driveway	6.0	a.c. over CL. II base	3 over 5
Truck Loading/Street Widening	7.5	a.c over CL. II base	4 over 8

Within paving areas without base, subgrade soils should be scarified to 12-inch, moisture conditioned from 3% to 5% percent over optimum, and recompacted to at least 95 percent relative soil maximum Dry Density as determined by the method ASTM D1557-91, or other approved test procedures. Where Class II base is used, unless otherwise required by the local governing agency, the subgrade soils may be recompacted to minimum 90%.

The pavement evaluations are based on estimated Traffic Index (TI) as shown and on the soil R-value as described. The paving sections provided should be verified and approved by the local public agency prior to their use.

Rigid Concrete Paving

Concrete used should be of minimum 600 psi Modulus of Rupture. Upper 18-inch of subgrade soils to receive concrete should be compacted to 95%. ACI design and construction procedures should be considered for such use.

If concrete pavements are considered, the following design sections may be considered based on single axle loads of 15 kips, 10 repetitions per day.

Service Area	Soils Subgrade R-value	PCC Thickness, inch
Auto Parking/ Driveway/Delivery Area	44	6.0 (reinforced as required by the project structural engineer/architect)

Actual paving thickness should be evaluated based on the R-value of the determinations of the imported fills.

Within paving areas without base, subgrade soils should be scarified to 12-inch, moisture conditioned from 3% to 5% percent over optimum, and recompact to at least 95 percent relative soil maximum Dry Density as determined by the method ASTM D1557, or other approved test procedures. Where Class II base is used, unless otherwise required by the local governing agency, the subgrade soils may be recompact to minimum 90%.

Actual paving thickness should be supplied by the project structural engineer based on soil Subgrade Reaction, k_{cf} , of 145 pcf.

4.9 Hotel Swimming Pool (If planned)

For adequate support, it is recommended that the swimming pool shell should be founded exclusively on underlying competent natural subgrade. For design, the following criteria may be considered:

1. Swimming pool full, with no passive resistance;
2. Swimming pool empty, with lateral active pressures from surrounding soils;
3. Swimming pool full, with supported soil surrounding.

With soil vertical bearing capacity of 1800 psf, for design, lateral active pressures and passive resistance in form of "equivalent fluid density" from horizontal backfill, may be considered from the table shown in Section 4.12 Retaining Wall below.

4.10 Retaining Wall (if planned)

Although type of wall proposed is currently unknown, for conventional concrete retaining structure, if planned, the following equivalent fluid density may be considered for preliminary design purpose, provided the imported fills are considered similar to the local soils or its equivalent or better.

Slope Surface of Retained Material (horz. to vert.)	Equivalent Fluid Density (pcf)	
	Imported Clean Sand	Local Site Soil
Level	30	40
2:1	35	60

For design, retaining wall foundation bearing capacity may be estimated from the bearing capacity equations described earlier.

The recommended lateral pressures do not include any surface load surcharge. Use of heavy equipment near retaining wall may develop lateral pressure in excess of the parameters described above. Walls adjacent to traffic should be designed to resist a uniform lateral pressure of 100 pounds per square foot, which is a result of an assumed 300 pounds per square foot surcharge behind the walls due to normal traffic. If the traffic is kept back ten feet from the wall, the traffic surcharge may be neglected.

Installation of 'french-drain' behind retaining walls is recommended to minimize water pressure build-up. Use of impervious material is preferred within upper 18 inches of the backfill placed.

Backfill behind retaining wall should be compacted to a minimum 90 percent relative laboratory Maximum Dry Density as determined by the ASTM D1557-91 test method. Flooding and/or jetting behind wall should not be permitted. Local sandy soils or its equivalent or better imported fills may be considered as backfill. Adjacent to existing creek, retaining wall foundations should be deepened so as to maintain a minimum 10 feet lateral setback measuring horizontally in between the outer face of the footings to the creek embankment slope surface.

As an alternative to conventional concrete or block retaining structure, from economical and aesthetic viewpoint, it is our opinion that "keystone" or similar segmented retaining structures may be considered supporting reinforced earth backfills. Detailed recommendations of such will be provided on request. For adequate horizontal setback, crib wall footings may be deepened by using "gabions". Detailed recommendations on such will be supplied on request.

4.11 Gas Holding Tanks

Considering the shallow groundwater table, it is suggested to use anchors to the proposed gasoline storage tank for the planned gas station tank to prevent tanks from becoming buoyant.

4.12 Utility Trench Backfill

Utility trench backfill within the structural pads, gas station and beyond should be placed in accordance with the following recommendations:

- o Trench backfill should be placed in thin lifts compacted to 90 percent or better of the laboratory maximum dry density for the soils used. As an alternative; clean granular sand may be used having a SE value greater than 30. Jetting is not recommended within utility trench backfill.
- o Exterior trenches along a foundation or a toe of a slope and extending below a 1:1 imaginary line projected from the outside bottom edge of the footing or toe of the slope should be compacted to 90 percent of the Maximum Dry Density for the soils used during backfill. All trench excavations should conform to the requirements and safety as specified by the Cal-Osha

4.13 Pre-Construction Meeting

It is recommended that no grading operation should be commenced without the presence of a representative of this office. An on-site pre-grading meeting should be arranged in between soils engineer, grading contractor, project civil engineer, local governing agencies and others prior to any construction.

4.14 Seasonal Limitations

No fill shall be placed, spread or rolled during unfavorable weather conditions. Where the work is interrupted by heavy rains, fill operations shall not be resumed until moisture conditions are considered favorable by the soils engineer.

4.15 Planters

To minimize potential differential settlement to foundations, planters requiring heavy irrigation should be restricted from using adjacent to footings. In event such becomes unavoidable, planter boxes with sealed bottoms, should be considered.

4.16 Landscape Maintenance

Only the amount of irrigation necessary to sustain plant life should be provided. Pad drainage should be directed towards streets and to other approved areas away from foundations. Slope areas should be planted with draught resistant vegetation. Over watering landscape areas could adversely affect the proposed site development during its life-time use.

4.17 Observations and Testing During Construction

Recommendations provided are based on the assumption that structural footings and slab-on-grade be established exclusively into compacted fills. Excavated footings should be inspected, verified and certified by soils engineer prior to steel and concrete placement to ensure their sufficient embedment and proper bearing as recommended. Structural backfills discussed should be placed under direct observations and testing by this facility. Excess soils generated from footing excavations should be removed from pad areas and such should not be allowed on subgrades underlying concrete slab.

4.18 Plan Review

In absence of site-specific detailed development plan and the soils types that will be imported for backfills, the recommendations supplied should be considered as "preliminary". It is recommended that grading and development plans should be reviewed when prepared in order verify adequacy of the geotechnical recommendations supplied. Supplemental recommendations may be warranted following grading plan review.

5.0 Earth Work/General Grading Recommendations

Site preparations and grading should involve overexcavation and replacement of local soils as structural fill compacted to 90% or better.

Structural Backfill:

During grading, excavated site soils or its equivalent or better imported fills, should be considered suitable for reuse as backfill material. Loose soils, formwork and debris should be removed prior to backfilling the walls. On-site sand backfill should be placed and compacted in accordance with the recommended specifications provided below. Where space limitations do not allow conventional backfilling operations, special backfill materials and procedures may be required. Pea gravel or other select backfill can be used in limited space areas. Recommendations for placement and densification of pea gravel or other special backfill can be provided during construction.

Site Drainage:

Adequate positive drainage should be provided away from the structure to prevent water from ponding and to reduce percolation of water into backfill. A desirable slope for surface drainage is 2 percent in landscape areas and 1 percent in paved areas. Planters and landscaped areas adjacent to building perimeter should be designed to minimize water filtration into subsoils. Considerations should be given to the use of closed planter bottoms, concrete slabs and perimeter subdrains where applicable.

Utility Trenches:

Buried utility conduits should be bedded and backfilled around the conduit in accordance with the project specifications. Where conduit underlies concrete slab-on-grade and pavement, the remaining trench backfill above the pipe should be placed and compacted in accordance with the following grading specifications.

General Grading Recommendations:

Recommended general specifications for surface preparation to receive fill and compaction for structural and utility trench backfill and others are presented below.

1. Areas to be graded, backfilled or paved, shall be grubbed, stripped and cleaned of all buried and undetected debris, structures, concrete, vegetation and other deleterious materials prior to grading.
2. Where compacted fill is to provide vertical support for foundations, all loose, soft and other incompetent soils should be removed to full depth as approved by soils engineer, or at least up to the depth as previously described in this report. The areas of such removal should extend at least 5 feet beyond the perimeter of exterior foundation limit or to the extent as approved by soils engineer during grading.
3. The recommended compaction for fill to support foundations and slab-on-grade is 90% of soil's Maximum Dry Density at or near Optimum Moisture Content. To minimize potential differential settlements to foundations and slabs straddling over cut and fill transition, cut portions following cut, should be further over excavated and such be replaced as engineered fill compacted to at least 90% of the soil's Maximum Dry Density as described in this report.

4. Utility trenches within building pad areas and beyond should be backfilled with granular material and such should be compacted to at least 90% of the maximum density for the material used.
5. Compaction for all structural fills shall be determined relative to the maximum dry density as determined by ASTM D1557-91 compaction methods. All in-situ field density of compacted fill shall be determined by the ASTM D1556-82 standard methods or by other approved procedures.
6. All new imported soils if required shall be clean granular, non-expansive material or as approved by the soils engineer.
7. During grading, fill soils shall be placed as thin layers, thickness of which following compaction shall not exceed six inches.
8. No rocks over six inches in diameter shall be permitted to use as a grading material without prior approval of the soils engineer.
9. No jetting and/or water tampering be considered for backfill compaction for utility trenches without prior approval of the soils engineer. For such backfill, hand tampering with fill layers of 8 to 12 inches in thickness or as approved by the soils engineer is recommended.
10. Any and all utility trenches at depth as well as cesspool and abandoned septic tank within building pad area and beyond, should either be completely excavated and removed from the site, or should be backfilled with gravel, slurry or by other material, as approved by soils engineer.
11. Any and all import soils if required during grading should be equivalent to the site soils or better. Such should be approved by the soils engineer prior to their use.
12. Any and all grading required for pavement, side-walk or other facilities to be used by general public, should be constructed under direct observation of soils engineer or as required by the local public agencies.
13. A site meeting should be held between grading contractor and soils engineer prior to actual construction. Two days of prior notice will be required for such meeting.

6.0 Closure

The conclusions and recommendations presented are based on the findings and observations made at the time of subsurface test explorations. The recommendations should be considered 'preliminary' since they are based on soil samples only. Supplemental engineering evaluations may be warranted based on the imported type of soils used.

If during construction, the subsoils exposed, or the imported fills appear to be different from those as used during this evaluations, this office should be notified to consider any possible need for modifications to the design parameters described herein.

Recommendations provided are based on the assumptions that structural footings will be established exclusively into compacted fills of the local soils or its equivalent or better. No footings and/or slabs should be allowed straddling over cut/fill transition interface.

Final grading and foundation plans should be reviewed by this office when they become available. Site grading must be performed under inspection by geotechnical representative of this office. Footing excavations should be inspected prior to steel and concrete placement to ensure that foundations are founded into satisfactory soils and excavations are free of loose and disturbed materials.

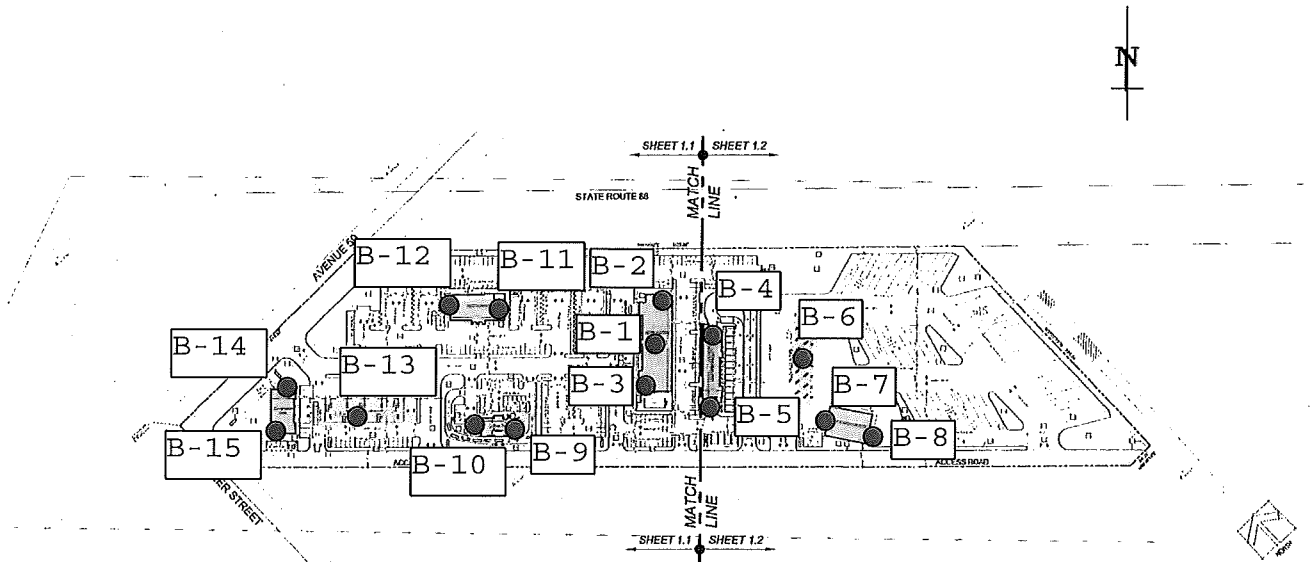
A pregrading meeting between grading contractor and soils engineer is recommended prior to construction preferably at the site, to discuss the grading procedures to be implemented and other requirements described in this report to be fulfilled.

This report has been prepared exclusively for the use of the addressee for the project referenced in the context. It shall not be transferred or be used by other parties without a written consent by Soils Southwest, Inc. We cannot be responsible for use of this report by others without inspection and testing of grading operations by our personnel.

Should the project be delayed beyond one year after the date of this report; the recommendations presented shall be reviewed to consider any possible change in site conditions.

The recommendations presented are based on the assumption that the necessary geotechnical observations and testing during construction will be performed by a representative of this office. The field observations are considered a continuation of the geotechnical investigation performed. If another firm is retained for geotechnical observations and testing during construction, our professional liability and responsibility shall be limited to the extent that Soils Southwest, Inc. would not be the geotechnical engineer of record. In addition, a Letter of Transfer of Responsibility will be required indemnifying Soils Southwest, Inc. from any liability for structural distress that may arise during lifetime use of the development planned.

PLOT PLAN AND TEST LOCATIONS
(Not to Scale)



Legend: ● B-1 Approximate Location of Test Boring

Plate 1

7.0 APPENDIX A

Field Explorations

Field evaluations included site reconnaissance and fifteen (15) test borings using a hollow-stem auger drill-rig. During site reconnaissance, the surface conditions were noted and test exploration locations were determined.

Soils encountered during explorations were logged and such were classified by visual observations in accordance with the generally accepted classification system. The field descriptions were modified, where appropriate, to reflect laboratory test results. Approximate test locations are shown on Plate 1.

Relatively undisturbed soils were sampled using a drive sampler lined with soil sampling rings. The split barrel steel sampler was driven into the bottom of test excavations at various depths. Soil samples were retained in brass rings of 2.5 inches in diameter and 1.00 inch in height. The central portion of each sample was enclosed in a close-fitting waterproof container for shipment to our laboratory. In addition to undisturbed sample, bulk soil samples were procured as described in the logs.

Logs of test explorations are presented in the following summary sheets that include the description of the soils and/or fill materials encountered.

LOG OF TEST EXPLORATIONS



Soils Southwest, Inc.
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 Colton, CA 92324
 (909) 370-0474 Fax (909) 370-3156

LOG OF BORING B-1

Project: AHD Limited Partnership-Coachella Travel

Job No.: 19004-F

Logged By: John F.

Boring Diam.: 8" HSA

Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
7	4.3	84	72	72	SM-SC			scattered weeds and organic debris
					VS		5	SILT -light gray, fine, dry, loose
					SW		10	SAND - traces of silt, fine, scattered pebble, dry
39	5.4	107.2	92	92	SW		15	- color change to greenish gray brown, fine dry to damp
					SM-SC		20	- clayey, silty, fine, loose, moist
							25	
							30	- color change to gray, slightly silty, fine dense, very moist

Groundwater: +/- 36.5 ft.
 Approx. Depth of Bedrock: n/a
 Datum: n/a
 Elevation: n/a

Site Location

proposed commercial development
 Avenue 50 and State Highway 86
 Coachella, California

Plate

Bulk/Grab sample

California sampler

Standard penetration test



Soils Southwest, Inc.
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LOG OF BORING B-1

Project: AHD Limited Partnership-Coachella Travel

Job No.: 19004-F

Logged By: John F.

Boring Diam.: 8" HSA

Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
7					VS			- groundwater encountered @ +/- 36.5 ft. - no bedrock - no groundwater
							40	SILT/SAND mixture- color change to gray to light brown, fine, loose wet
67					SP-SC		45	
							50	SAND - slightly clayey, gravely, medium to medium coarse, pebbles, very dense, wet
								- End of test boring @ 51.0 ft. - no bedrock - no groundwater
							55	
							60	
							65	
							70	



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LOG OF BORING B-2

Project: AHD Limited Partnership-Coachella Travel

Job No.: 19004-F

Logged By: John F.

Boring Diam.: 8" HSA

Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
16	2.1	86.5	74	ML				scattered weeds, brush, and organic debris
								SILT- light gray, fine, dry
	13	101.5	87	SM-ML			5	SAND - color change to light brown, silty, fine, dry, loose
				VS				SILT/SAND mixture-fine, medium dense, dry
				SM-ML			10	- medium dense to dense, damp to moist
								SAND- traces of clay, silty, fine, dense, damp to moist, pebbles
							15	
				VS				SILT/SAND mixture- color change to grayish light brown, fine, very moist
				SW			20	
							25	- groundwater encountered @ +/- 23.0 ft.
							30	
47								SAND - color change to gray-brown, fine
								- End of test boring @ 31.0 ft.
								- no bedrock
								- groundwater @ +/- 23.0 ft.

Groundwater: +/- 23.5 ft.
Approx. Depth of Bedrock: n/a
Datum: n/a
Elevation: n/a

Site Location

proposed commercial development
Avenue 50 and State Highway 86
Coachella, California

Plate



Bulk/Grab sample



California sampler



Standard penetration test



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LOG OF BORING B-3

Project: AHD Limited Partnership-Coachella Travel	Job No.: 19004-F
Logged By: John F.	Boring Diam.: 8" HSA
Date: January 28, 2019	

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
24					ML			SILT - light gray, fine, dry scattered weed, organic debris, and brush
					VS		5	SILT/SAND mixture - light gray-brown, fine, dry, medium dense
	2.1	107.8	92		SW		10	SAND - color change to light brown, fine, dry
							15	- color change to light brown, fine, damp
12					SM-SC			- clayey, silty, fine, low to medium dense, very moist
							20	- End of test boring @ 16 .0 ft. - no bedrock - no groundwater
							25	
							30	

Groundwater: n/a	Site Location	Plate #
Approx. Depth of Bedrock: n/a	proposed commercial development	
Datum: n/a	Avenue 50 and State Highway 86	
Elevation: n/a	Coachella, California	



Bulk/Grab sample



California sampler



Standard penetration test



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LOG OF BORING B-4

Project: AHD Limited Partnership-Coachella Travel	Job No.: 19004-F
Logged By: John F.	Boring Diam.: 8" HSA
	Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
27		3.2	98.4	84	VS			scattered desert brush
					SM-ML		5	SILT to SILT/SAND mixture- light gray, fine loose, dry - color change to light gray-brown, fine, dry
							10	SAND - color change to light brown, silty, fine, dry, dense - (Max Dry Density = 117 pcf @ 13.5%) - traces of silt, fine, scattered pebbles, dry
21					SW		15	
					SM-SC			- color change to light brown, slightly clayey, silty, fine to medium coarse, damp to moist
							20	- End of test boring @ 16 ft. - no bedrock - no groundwater
							25	
							30	

Groundwater: n/a Approx. Depth of Bedrock: n/a Datum: n/a Elevation: n/a	Site Location proposed commercial development Avenue 50 and State Highway 86 Coachella, California	Plate #
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California sampler



Bulk/Grab sample



Standard penetration test



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LOG OF BORING B-5

Project: AHD Limited Partnership-Coachella Travel	Job No.: 19004-F
Logged By: John F.	Boring Diam.: 8" HSA
Date: January 28, 2019	

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
19		2.1	107.8	92	ML		5	scattered weeds and organic debris SILT - light gray, fine, dry, loose
					VS			SILT/SAND mixture - color change to light gray-brown, fine, dry
					SW		10	SAND- color change to light brown, fine, dry
15					SM			- fine to medium coarse, medium dense with pebbles to color change to gray-brown, silty, fine, moist
							15	- End of test boring @ 11.0 ft. - no bedrock - no groundwater
							20	
							25	
							30	

Groundwater: n/a Approx. Depth of Bedrock: n/a Datum: n/a Elevation: n/a	Site Location proposed commercial development Avenue 50 and State Highway 86 Coachella, California	Plate #
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Bulk/Grab sample



California sampler



Standard penetration test



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LOG OF BORING B-6

Project: AHD Limited Partnership-Coachella Travel			Job No.: 19004-F
Logged By: John F.	Boring Diam.: 8" HSA	Date: January 28, 2019	

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
23	▲				ML			scattered weeds and brush
								SILT-light gray, fine, dry
							5	
26	▲				VS			SILT/SAND mixture - fine, medium dense, dry
							10	
					SM-SC			SAND - color change to light brown to gray, slightly clayey, silty, fine to fine to medium with pebbles, dry to damp
								- End of test boring @ 11.0
								- no bedrock
								- no groundwater
							15	
							20	
							25	

Groundwater: n/a Approx. Depth of Bedrock: n/a Datum: n/a Elevation: n/a	<u>Site Location</u> proposed commercial development Avenue 50 and State Highway 86 Coachella, California	<u>Plate #</u>
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Bulk/Grab sample



California sampler



Standard penetration test



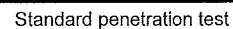
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Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
9					ML		5	scattered weeds and organic debris SILT - light gray, fine, dry - loose
16					SM-ML		10 15 20 25	SAND - color change to grayish light brown, silty, fine, scattered pebbles, damp - medium dense - color change to gray brown, silty, fine, damp to moist - very moist - groundwater encountered at 22.25 ft.
43		23	107.3	92.0	VS		30	-color change to gray, clayey, silty, fine, very moist, very stiff/dense - wet, dense - End of test boring @ 31.0 ft. - no bedrock - no groundwater

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Coachella, California





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LOG OF BORING B-8

Project: AHD Limited Partnership-Coachella Travel

Job No.: 19004-F

Logged By: John F.

Boring Diam.: 8" HSA

Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
21					ML			scattered weeds, organic debris, and brush SILT - light gray, fine, dry, loose
					SW		5	SAND - fine, dry, loose
20					VS		10	SILT/SAND mixture - color change to light gray-brown, fine, scattered pebble, dry, medium dense - scattered pebble and rock fragments
					SM-SC		15	- color change to light brown, fine, dry to damp, scattered pebbles SAND - color change to gray brown, clayey, silty, fine, moist
					SM-SC		20	- color change to light brown, clayey, silty fine, very moist, damp - End of test boring @ 21.0 ft. - no bedrock - no groundwater
		29	96.5	82.5			25	
							30	

Groundwater: n/a

Approx. Depth of Bedrock: n/a

Datum: n/a

Elevation: n/a

Site Location

proposed commercial development
 Avenue 50 and State Highway 86
 Coachella, California

Plate



Bulk/Grab sample



California sampler



Standard penetration test



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LOG OF BORING B-9

Project: AHD Limited Partnership-Coachella Travel

Job No.: 19004-F

Logged By: John F.

Boring Diam.: 8" HSA

Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
18	2.1	107.2	92.0		ML			scattered weeds and organic debris SILT- Lt. Gray, fine, dry
					SW		5	SAND - fine, dry - dense
					VS		10	SILT/SAND mixture-color change to gray-brown to light brown, fine, dry
							15	- light brown, fine, damp
22							20	SAND - color change to gray-brown, silty, fine, very moist
					SM-ML			- End of test boring @ 21.0 ft. - no bedrock - no groundwater
							25	
							30	

Groundwater: n/a

Approx. Depth of Bedrock: n/a

Datum: n/a

Elevation: n/a

Site Location

proposed commercial development
Avenue 50 and State Highway 86
Coachella, California

Plate



Bulk/Grab sample



California sampler



Standard penetration test



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LOG OF BORING B-10

Project: AHD Limited Partnership-Coachella Travel	Job No.: 19004-F
Logged By: John F.	Boring Diam.: 8" HSA
	Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
8					ML			scattered weeds and organic debris, brush SILT - light gray, fine, dry, loose
					VS		5	SILT/SAND mixture-color change to light gray brown, fine, dry, loose
32		8.9	100.8	86.0	SP		10	SAND - color change to gray-brown, fine to medium, pebble, dry, dense - color change to light brown, traces of clay, silty, fine, dense - End of test boring @ 11.0 ft. - no bedrock - no groundwater
							15	
							20	
							25	
							30	

Groundwater: n/a Approx. Depth of Bedrock: n/a Datum: n/a Elevation: n/a	Site Location proposed commercial development Avenue 50 and State Highway 86 Coachella, California	Plate #
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Bulk/Grab sample



California sampler



Standard penetration test



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LOG OF BORING B-11

Project: AHD Limited Partnership-Coachella Travel	Job No.: 19004-F
Logged By: John F.	Boring Diam.: 8" HSA
	Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
26	2.1	97.96	84.0	ML				organic debris
								SILT - light gray, fine, dry
							5	
							10	SAND - color change to light brown, silty, fine, dry
15				SP			15	- color change to light brown, fine to medium, scattered pebbles, dry to damp
							20	- color change to gray-brown, silty, fine, moist
							25	- End of test boring @ 16.0 ft.
							30	- no bedrock
								- no groundwater

Groundwater: n/a	Site Location	Plate #
Approx. Depth of Bedrock: n/a	proposed commercial development	
Datum: n/a	Avenue 50 and State Highway 86	
Elevation: n/a	Coachella, California	



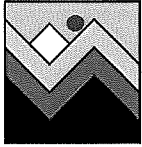
Bulk/Grab sample



California sampler



Standard penetration test



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LOG OF BORING B-12

Project: AHD Limited Partnership-Coachella Travel	Job No.: 19004-F
Logged By: John F.	Boring Diam.: 8" HSA
	Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
					ML			scattered weeds and organic debris SILT-light gray, fine, dry
23					VS		5	SILT TO SILT/SAND mixture - fine, dry, medium dense
							10	
22								- color change to grayish light brown, fine to medium, damp
								- End of test boring @ 11.0 ft.
								- no bedrock
								- no groundwater
							15	
							20	
							25	
							30	

Groundwater: n/a Approx. Depth of Bedrock: n/a Datum: n/a Elevation: n/a	Site Location proposed commercial development Avenue 50 and State Highway 86 Coachella, California	Plate #
---	--	----------------



Bulk/Grab sample



California sampler



Standard penetration test



Soils Southwest, Inc.

897 Via Lata, Suite N
Colton, CA 92324

(909) 370-0474 Fax (909) 370-3156

LOG OF BORING B-13

Project: AHD Limited Partnership-Coachella Travel

Job No.: 19004-F

Logged By: John F.

Boring Diam.: 8" HSA

Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
					ML			scattered weeds and brush
								SILT - light gray, fine, dry
26					VS		5	SILT/SAND mixture - fine, dry
								- medium dense to dense
22					SM-ML		10	SAND - color change to gray-brown, silty, fine, damp, medium dense
								- End of test boring @ 11.0 ft.
								- no bedrock
								- no groundwater
							15	
							20	
							25	
							30	

Groundwater: n/a

Approx. Depth of Bedrock: n/a

Datum: n/a

Elevation: n/a

Site Location

proposed commercial development
Avenue 50 and State Highway 86
Coachella, California

Plate



Bulk/Grab sample



California sampler



Standard penetration test



Soils Southwest, Inc.
 897 Via Lata, Suite N
 Colton, CA 92324
 (909) 370-0474 Fax (909) 370-3156

LOG OF BORING B-14

Project: AHD Limited Partnership-Coachella Travel

Job No.: 19004-F

Logged By: John F.

Boring Diam.: 8" HSA

Date: January 28, 2019

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
12	2.1	94.7	81	ML				scattered organic debris
								SILT - light gray, fine, dry
							5	SAND - color change to light brown, silty, fine, dry, medium dense
							10	
18				SM-ML				- color change to grayish light brown, silty fine, damp to moist
							15	
							20	- groundwater encountered @ 19.0 ft.
							25	SILT/SAND mixture- color change to gray brown, plastic like silts, wet
				VS				- End of test boring @ 21.0 ft.
								- no bedrock
								- groundwater @ +/- 19.0 ft.
							30	

Groundwater: n/a

Approx. Depth of Bedrock: n/a

Datum: n/a

Elevation: n/a

Site Location

proposed commercial development
 Avenue 50 and State Highway 86
 Coachella, California

Plate



Bulk/Grab sample



California sampler



Standard penetration test



Soils Southwest, Inc.
897 Via Lata, Suite N
Colton, CA 92324
(909) 370-0474 Fax (909) 370-3156

LOG OF BORING B-15

Project: AHD Limited Partnership-Coachella Travel			Job No.: 19004-F
Logged By: John F.	Boring Diam.: 8" HSA	Date: January 28, 2019	

Standard Penetration (Blows per Ft.)	Sample Type	Water Content in %	Dry Density in PCF	Percent Compaction	Unified Classification System	Graphic	Depth in Feet	Description and Remarks
26	█	2.1	115.5	99.0	ML		5	scattered weeds SILT - light gray, fine, dry, loose
					SW			SAND - fine, dry, medium dense to dense
					SP			- color change to light gray, fine to medium with pebbles
					SW		10	SAND - color change to light brown, fine, pebbles, dry
21	█				SP			SAND - traces of silt, fine to medium, occasional pebbles, medium dense, damp
							15	- End of test boring @ 11.0 ft. - no bedrock - no groundwater
							20	
							25	
							30	

Groundwater: n/a Approx. Depth of Bedrock: n/a Datum: n/a Elevation: n/a	<u>Site Location</u> proposed commercial development Avenue 50 and State Highway 86 Coachella, California	<u>Plate #</u>
---	--	----------------



Bulk/Grab sample



California sampler



Standard penetration test

KEY TO SYMBOLS

Symbol Description

Strata symbols



Poorly graded clayey
silty sand



Variable sand
and silt mix



Well graded sand



Poorly graded sand



Silt



Poorly graded silty
fine sand



Silty sand

Soil Samplers



Bulk/Grab sample



California sampler

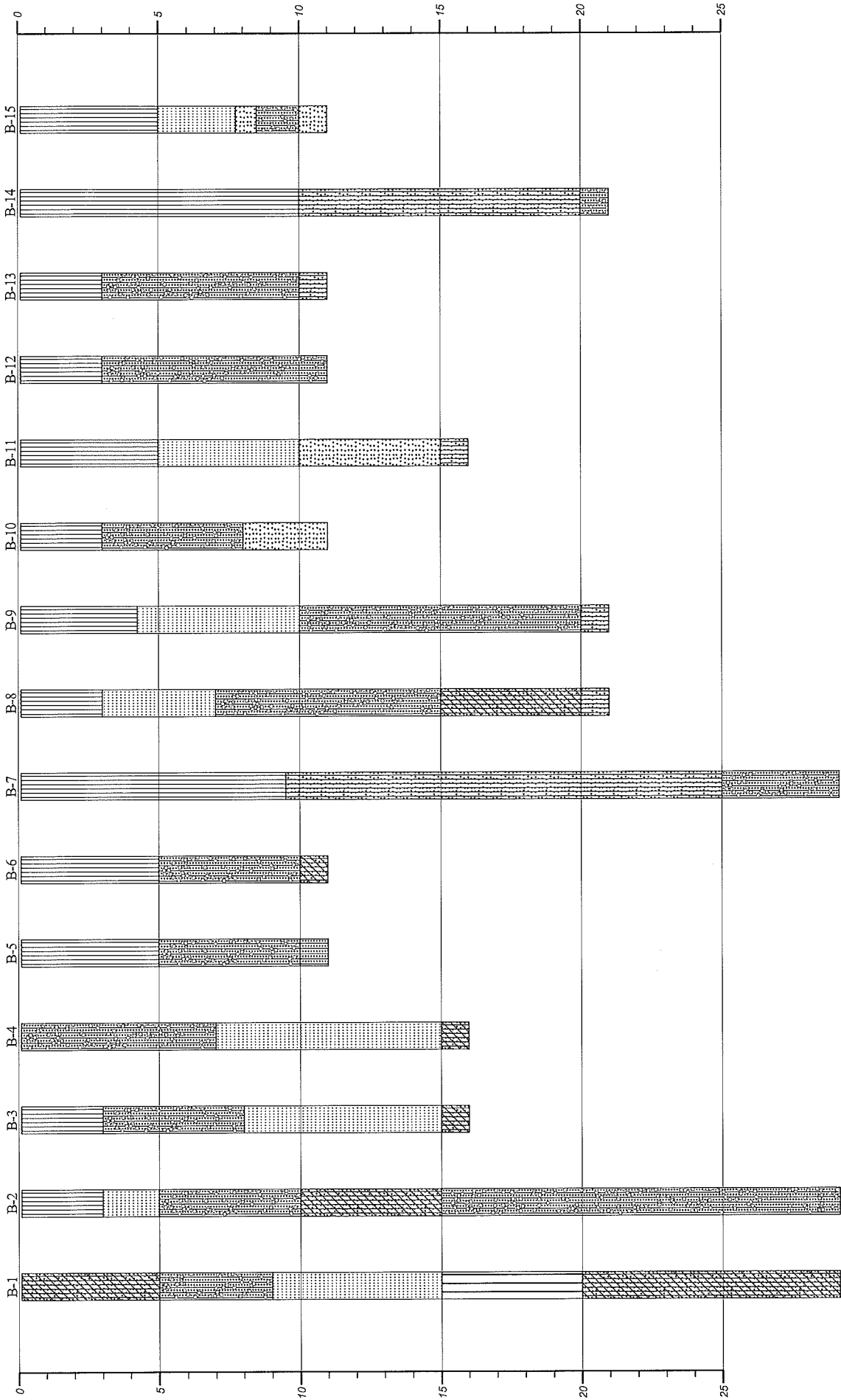


Standard penetration test

Notes:

1. Exploratory borings were drilled on January 28, 2019 using a 4-inch diameter continuous flight power auger.
2. No free water was encountered at the time of drilling or when re-checked the following day.
3. Boring locations were taped from existing features and elevations extrapolated from the final design schematic plan.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.

Depth in Feet



Depth in Feet

Plan View

Strata symbols

- Poorly graded clayey silty sand
- Variable sand and silt mix
- Well graded sand
- Elastic silt
- Silt
- Silty sand
- Poorly graded silty fine sand
- Poorly graded sand

SOILS SOUTHWEST, INC.
GENERALIZED SOIL PROFILE

HORIZONTAL SCALE:
VERTICAL SCALE: 1"=5'

DRAWN BY/APPROVED BY
DATE DRAWN
2/5/2019

AHD Limited Partnership-Coachella Travel Center


PROJECT NO. 19004-F

FIGURE NUMBER

KEY TO SYMBOLS

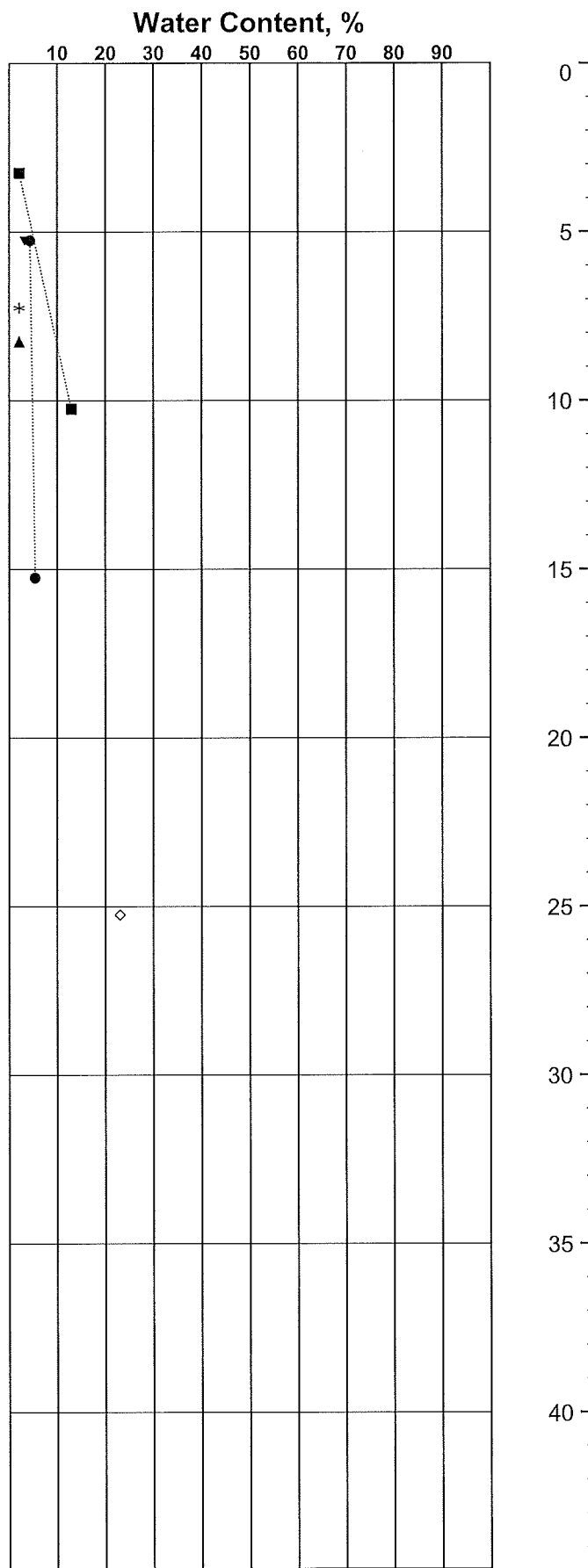
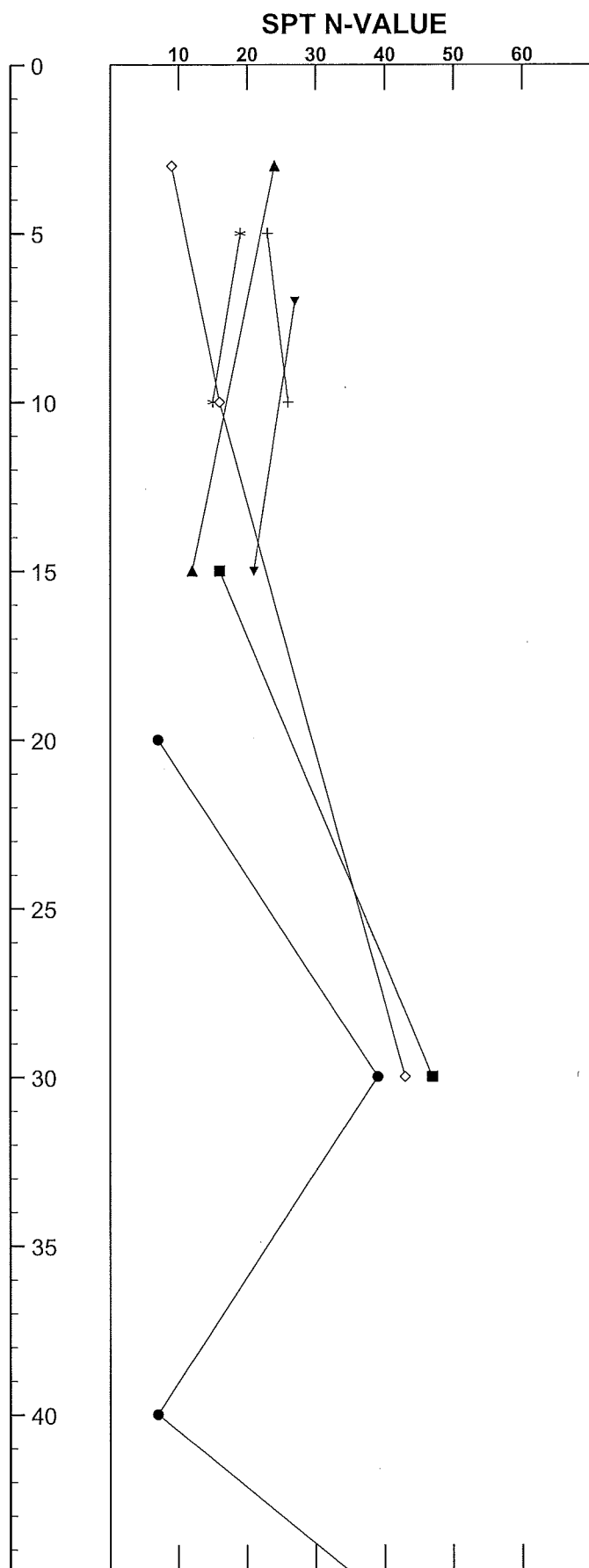
Symbol Description

Strata symbols

	Poorly graded clayey silty sand
	Variable sand and silt mix
	Well graded sand
	Elastic silt
	Silt
	Silty sand
	Poorly graded silty fine sand
	Poorly graded sand

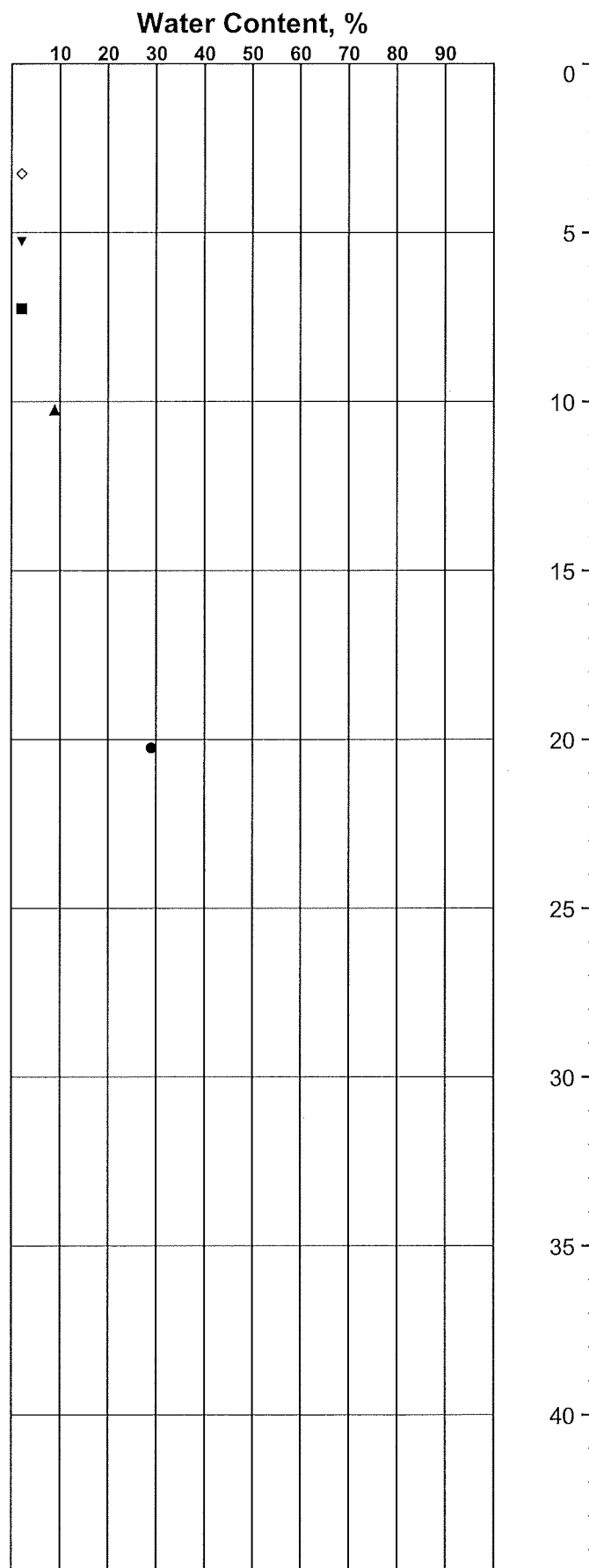
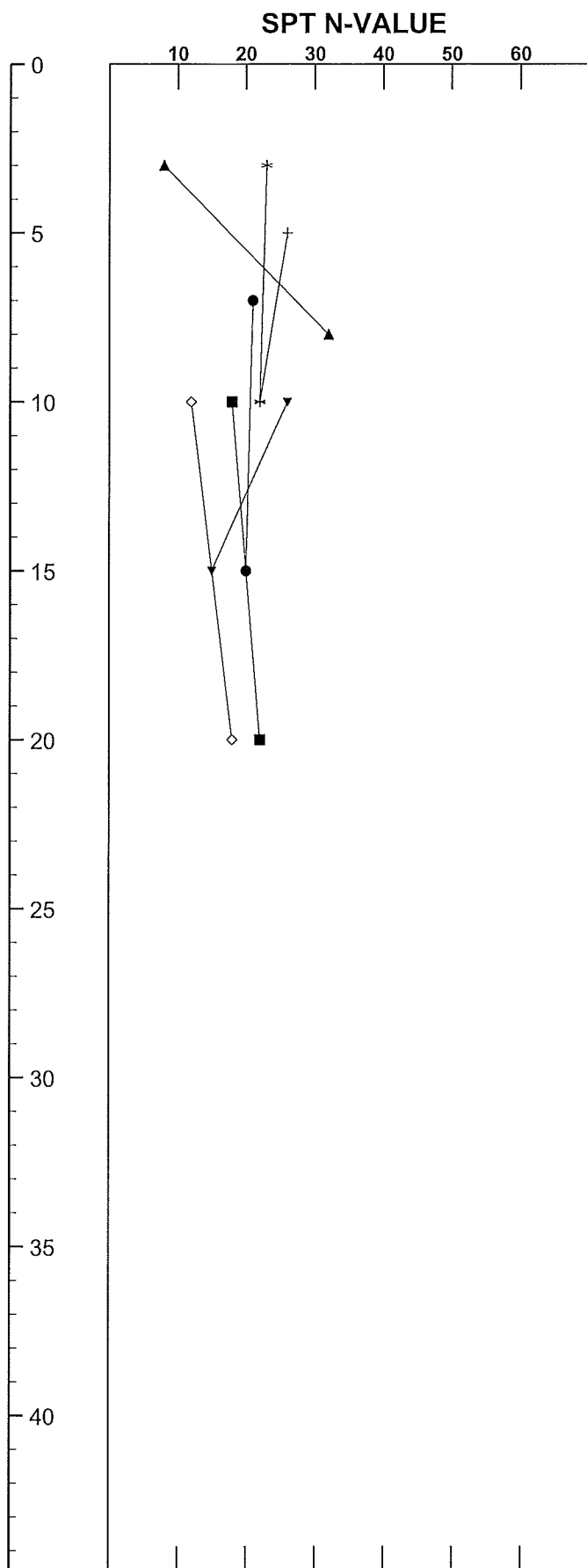
Notes:

1. Exploratory borings were drilled on January 28,2019 using a 4-inch diameter continuous flight power auger.
2. No free water was encountered at the time of drilling or when re-checked the following day.
3. Boring locations were taped from existing features and elevations extrapolated from the final design schematic plan.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.



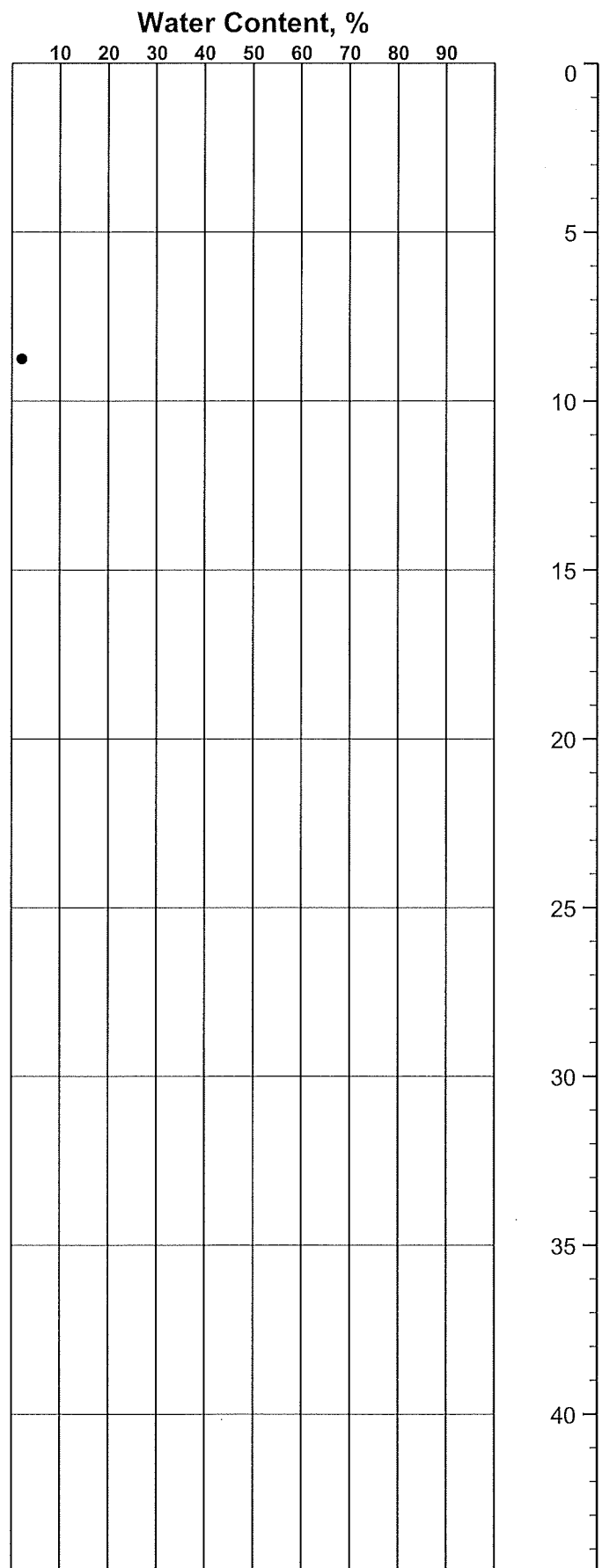
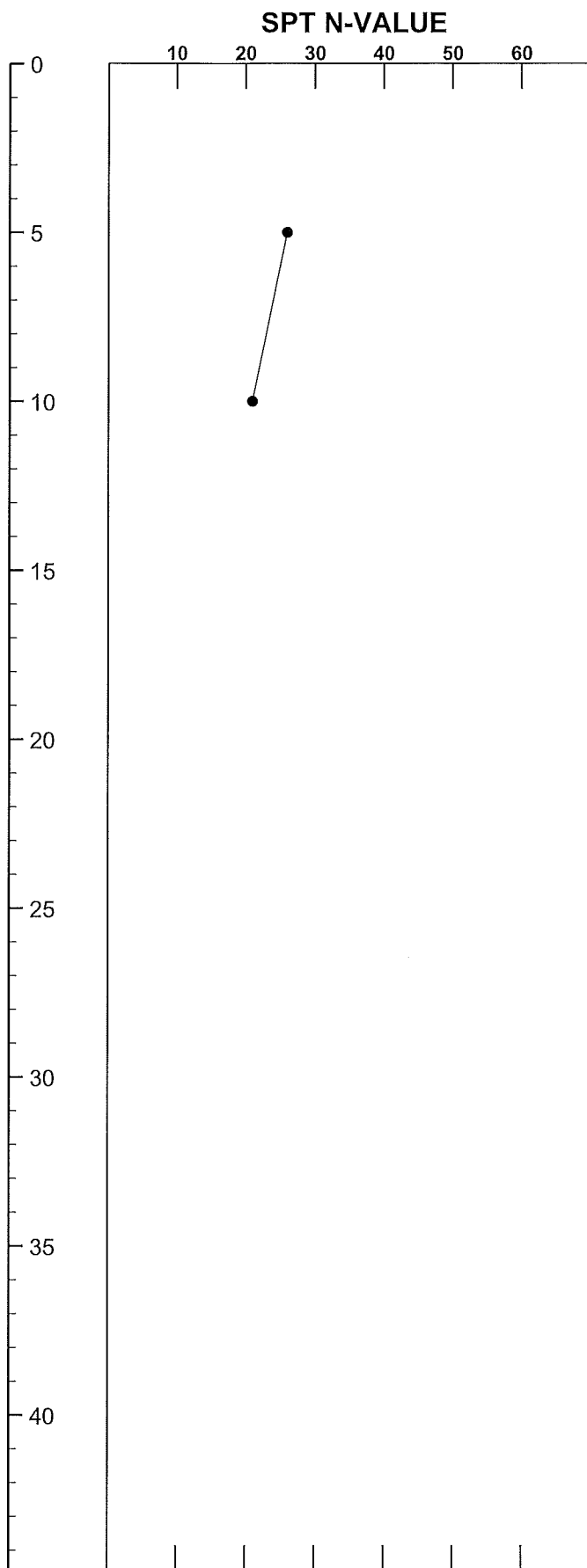
Key to Borings

- | | | | |
|-------|-------|-------|-------|
| ● B-1 | ▲ B-3 | * B-5 | ◇ B-7 |
| ■ B-2 | ▼ B-4 | + B-6 | |



Key to Borings

- | | | | |
|-------|--------|--------|--------|
| ● B-8 | ▲ B-10 | * B-12 | ◇ B-14 |
| ■ B-9 | ▼ B-11 | + B-13 | |



Key to Borings

- B-15

SOILS SOUTHWEST, INC. AHD Limited Partnership-Coachella Travel Center	
Vertical Scale: 1 to 5	Figure:

KEY TO SYMBOLS

Notes:

1. Exploratory borings were drilled on January 28, 2019 using a 4-inch diameter continuous flight power auger.
2. No free water was encountered at the time of drilling or when re-checked the following day.
3. Boring locations were taped from existing features and elevations extrapolated from the final design schematic plan.
4. These logs are subject to the limitations, conclusions, and recommendations in this report.
5. Results of tests conducted on samples recovered are reported on the logs.

8.0 APPENDIX B

Laboratory Test Programs

Laboratory tests were conducted on representative soils for the purpose of classification and for the determination of the physical properties and engineering characteristics. The number and selection of the types of testing for a given study are based on the geotechnical conditions of the site. A summary of the various laboratory tests performed for the project is presented below.

Moisture Content and Dry Density (D2937):

Data obtained from these test, performed on undisturbed samples are used to aid in the classification and correlation of the soils and to provide qualitative information regarding soil strength and compressibility.

Direct Shear (D3080):

Data obtained from this test performed at increased and field moisture conditions on relatively remolded soil sample is used to evaluate soil shear strengths. Samples contained in brass sampler rings, placed directly on test apparatus are sheared at a constant strain rate of 0.002 inch per minute under saturated conditions and under varying loads appropriate to represent anticipated structural loadings. Shearing deformations are recorded to failure. Peak and/or residual shear strengths are obtained from the measured shearing load versus deflection curve. Test results, plotted on graphical form, are presented on Plate B-1 of this section.

Consolidation (D2835):

Drive-tube samples are tested at their field moisture contents and at increased moisture conditions since the soils may become saturated during life-time use of the planned structure.

Data obtained from this test performed on relatively undisturbed and/or remolded samples, were used to evaluate the consolidation characteristics of foundation soils under anticipated foundation loadings. Preparation for this test involved trimming the sample, placing it in one inch high brass ring, and loading it into the test apparatus which contained porous stones to accommodate drainage during testing. Normal axial loads are applied at a load increment ratio, successive loads being generally twice the preceding.

Soil samples are usually under light normal load conditions to accommodate seating of the apparatus. Samples were tested at the field moisture conditions at a predetermined normal load. Potentially moisture sensitive soil typically demonstrated significant volume change with the introduction of free water. The results of the consolidation tests are presented in graphical forms on Plate B-2.

Potential Expansion (ASTM Standard D4829-88)

Silty sandy in nature, the site soils are considered 'very low' in expansion characteristic. Supplemental testing for soil expansion should be performed following mass grading completion.

Laboratory Test Results

A. Table I: In-Situ Moisture-Density (ASTM D2937)

Test Boring No.	Sample Depth, ft.	Dry Density, pcf.	Moisture Content, %
1	5.0	84.0	4.3
1	15.0	107.2	5.4
2	3.0	86.5	2.1
2	10.0	101.5	12.6
3	8.0	107.8	2.1
4	5.0	98.4	3.2
5	7.0	107.8	2.1
7	25.0	107.3	22.5
8	20.0	96.5	28.9
9	7.0	107.2	2.1
10	10.0	100.8	8.9
11	5.0	97.9	2.1
14	3.0	94.7	2.1
15	8.5	115.5	2.1

B. Table II: Max. Density/Optimum Moisture Content (ASTM D1557)

Sample Location	Max. Dry Density, pcf	Opt. Moisture (%)
(A) B-4 @ 5-7 ft. (greenish brown, silty, fine pebbles)	117.0	13.50
(B) B-14 @ 3-5 ft. Yellowish light brown, silty, fine, pebbles	113.0	15.0

C. Table III: Sand Equivalent

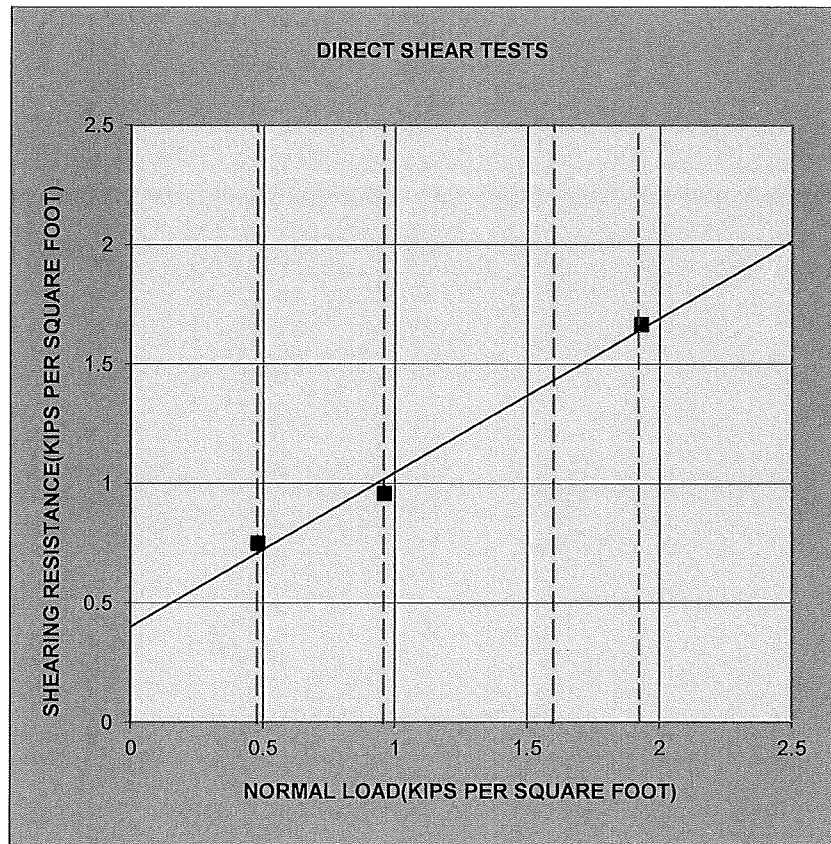
Sample Location @ depth, ft.	Sand Equivalent Average
B-14@ 3-5	2.6

D. Table IV: Consolidation (D2835)

Boring B #	Depth (ft.)	Consolidation prior to saturation (@ 2 kips)	Hydro collapse (%)	Total Consolidation (%@ 8 kips) (saturated)
14 (remolded)	3 - 5	0.9	0.1	2.6
4 (remolded)	5-7	0.9	0.2	2.9
3 (undisturbed)	8.0	1.0	0.6	3.2
10 (undisturbed)	10.0	1.0	0.3	2.9

E. Table V: Direct Shear (ASTM D3080)

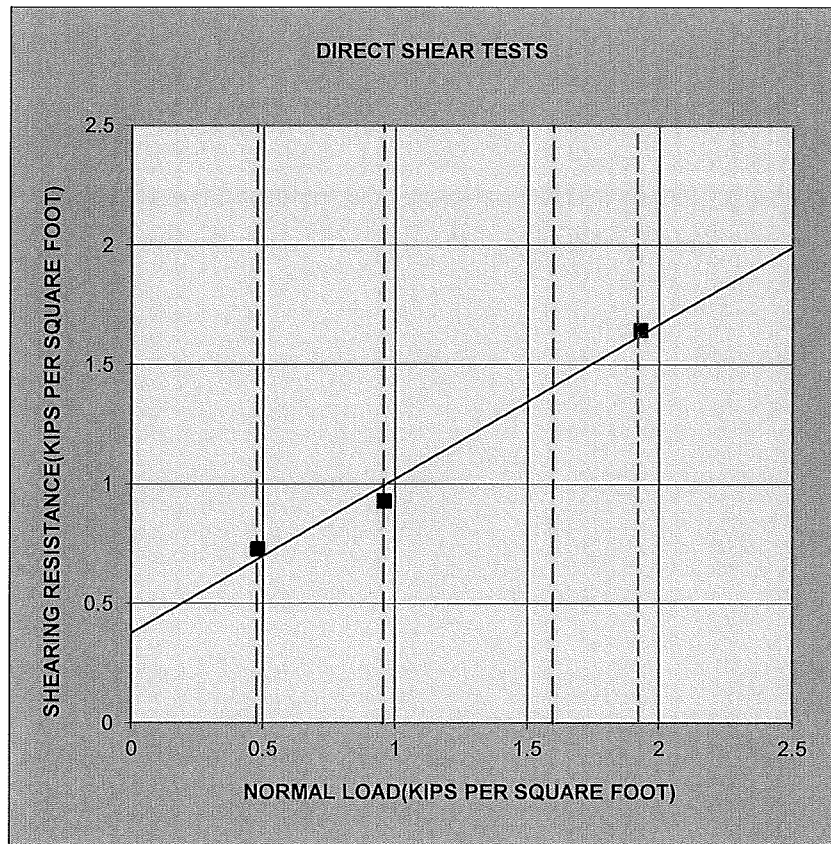
Test Trench & Sample Depth	Test Condition	Cohesion (PSF)	Friction (Degree)
B-4 @ 5-7 ft	Remolded to 95%	400.77	33
B-14 @ 3-5ft	Remolded to 90%	125	41
B-2 @ 10.0ft.	Undisturbed	375.5	33
B-1 @ 5.0 ft.	Undisturbed	49.65	46
B-8 @ 20 ft.	Undisturbed	200.10	26



SYMBOL	LOCATION	DEPTH (FT)	TEST CONDITION	COHESION (psf)	FRICTION (degree)
■	B-4	5 to 7	Remolded to 95%	400.77	32.86
Proposed Coachella Travel Center Avenue 50 and State Route 86 Coachella, California				PROJECT NO.	19004-F
				PLATE	B-1



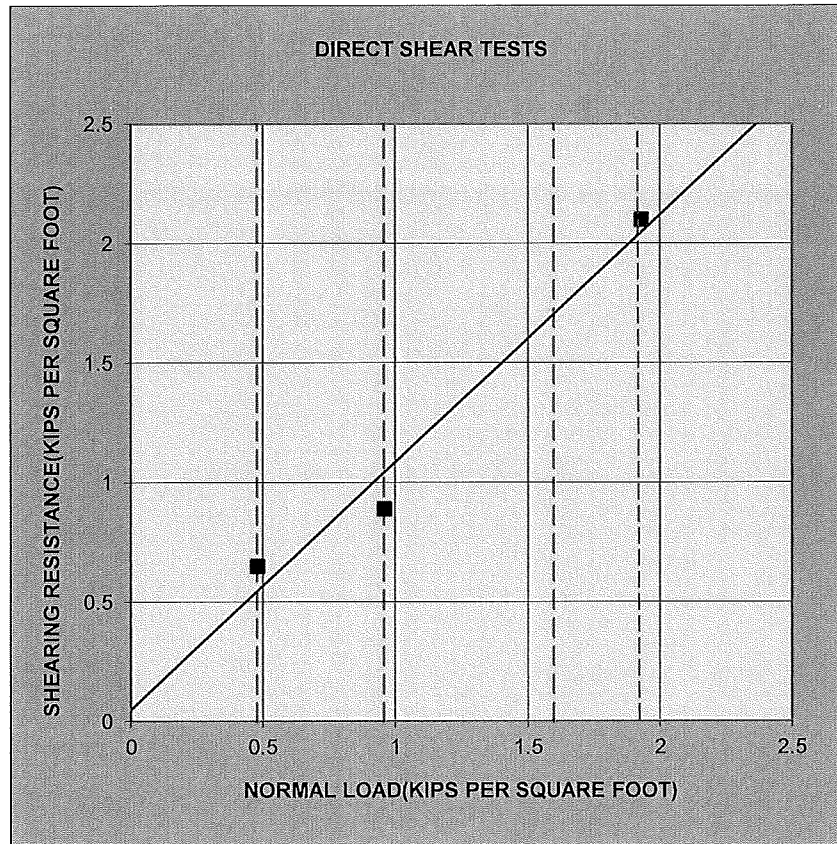
SOILS SOUTHWEST, INC.
Consulting Foundation Engineers



SYMBOL	LOCATION	DEPTH (FT)	TEST CONDITION	COHESION (psf)	FRICTION (degree)
■	B-2	10.0	Undisturbed	375.50	32.88
Proposed Coachella Travel Center Avenue 50 and State Route 86 Coachella, California				PROJECT NO.	19004-F
				PLATE	B-1-1



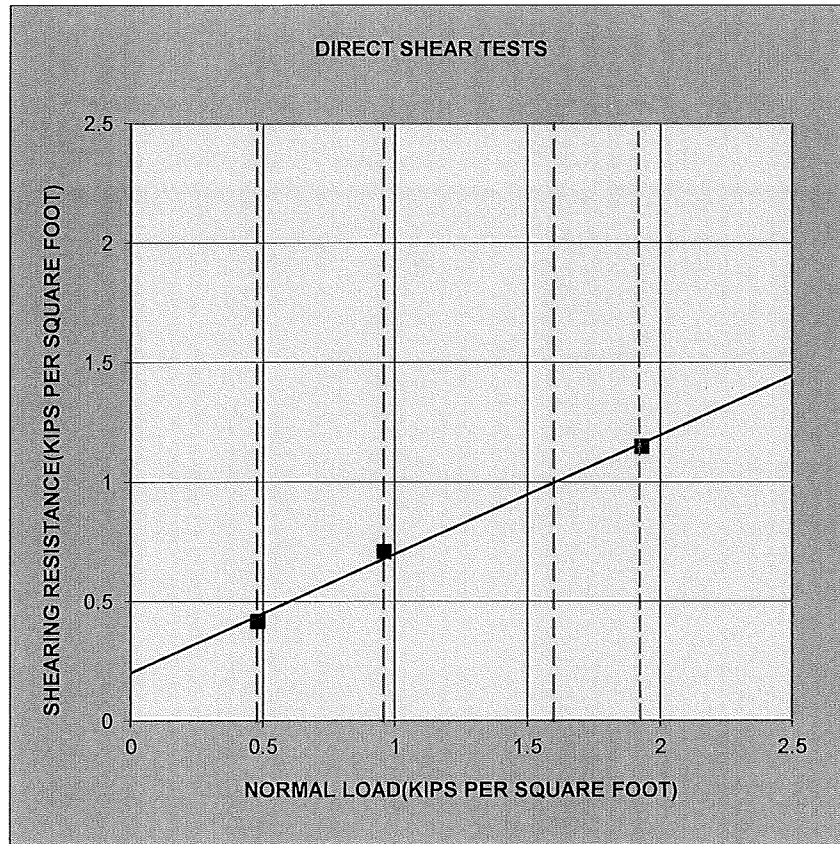
SOILS SOUTHWEST, INC.
Consulting Foundation Engineers



SYMBOL	LOCATION	DEPTH (FT)	TEST CONDITION	COHESION (psf)	FRICTION (degree)
■	B-1	5.0	Undisturbed	49.65	46.01
Proposed Coachella Travel Center Avenue 50 and State Route 86 Coachella, California				PROJECT NO.	19004-F
				PLATE	B-1-2



SOILS SOUTHWEST, INC.
Consulting Foundation Engineers

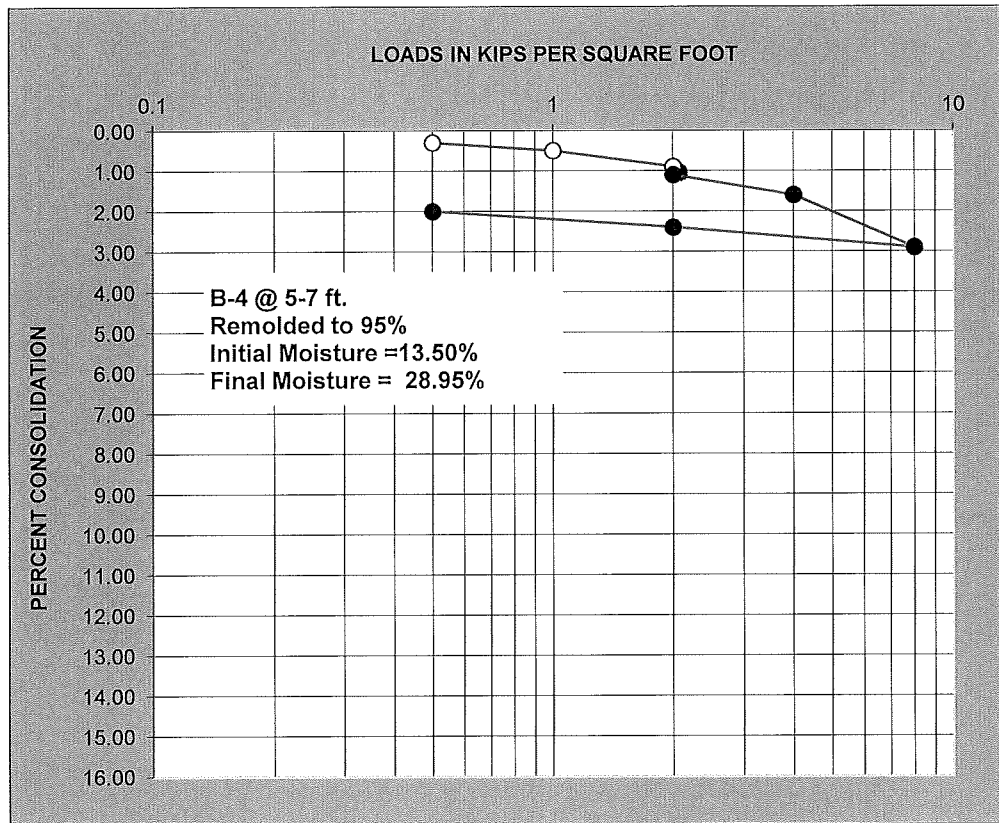


SYMBOL	LOCATION	DEPTH (FT)	TEST CONDITION	COHESION (psf)	FRICTION (degree)
■	B-8	20.0	Undisturbed	200.10	26.46
Proposed Coachella Travel Center Avenue 50 and State Route 86 Coachella, California				PROJECT NO.	19004-F
				PLATE	B-1-3



SOILS SOUTHWEST, INC.
Consulting Foundation Engineers

CONSOLIDATION TESTS



- WATER PERMITTED TO CONTACT SAMPLE



PROJECT

Proposed Coachella Travel Center
 Avenue 50 and State Route 86, Coachella

PROJECT NO.

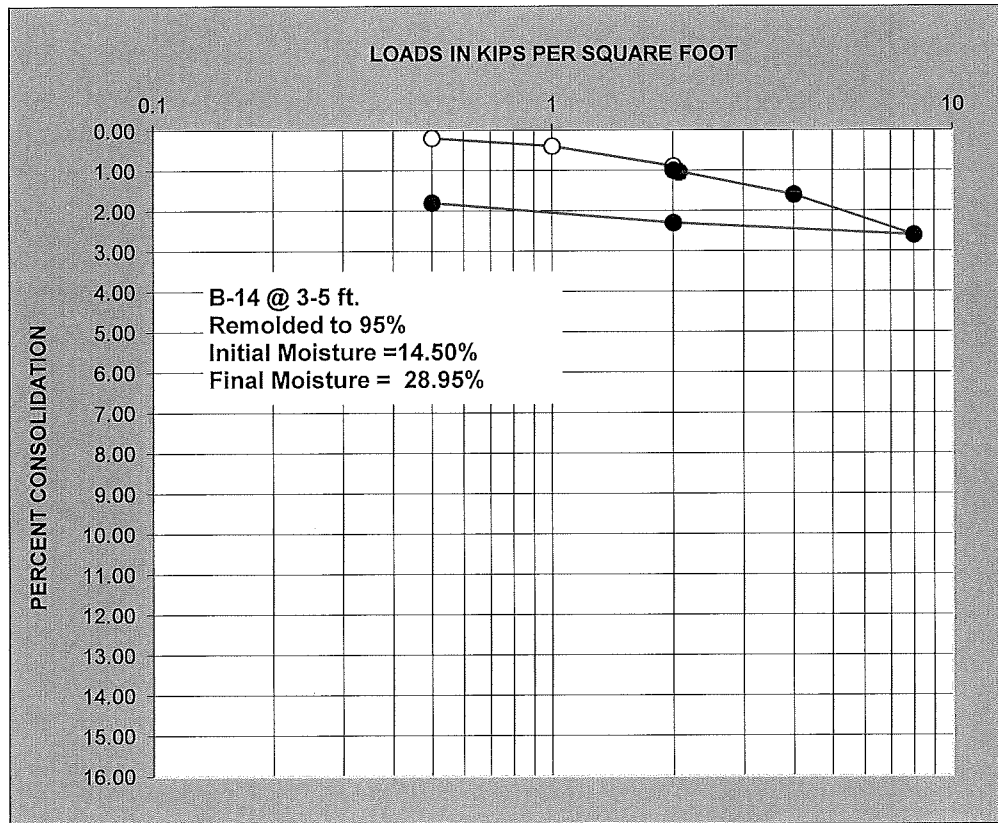
19004-F

PLATE

B-2

SOILS SOUTHWEST INC.
 Consulting Foundation Engineers

CONSOLIDATION TESTS



● WATER PERMITTED TO CONTACT SAMPLE



PROJECT

Proposed Coachella Travel Center

Avenue 50 and State Route 86, Coachella

PROJECT NO.

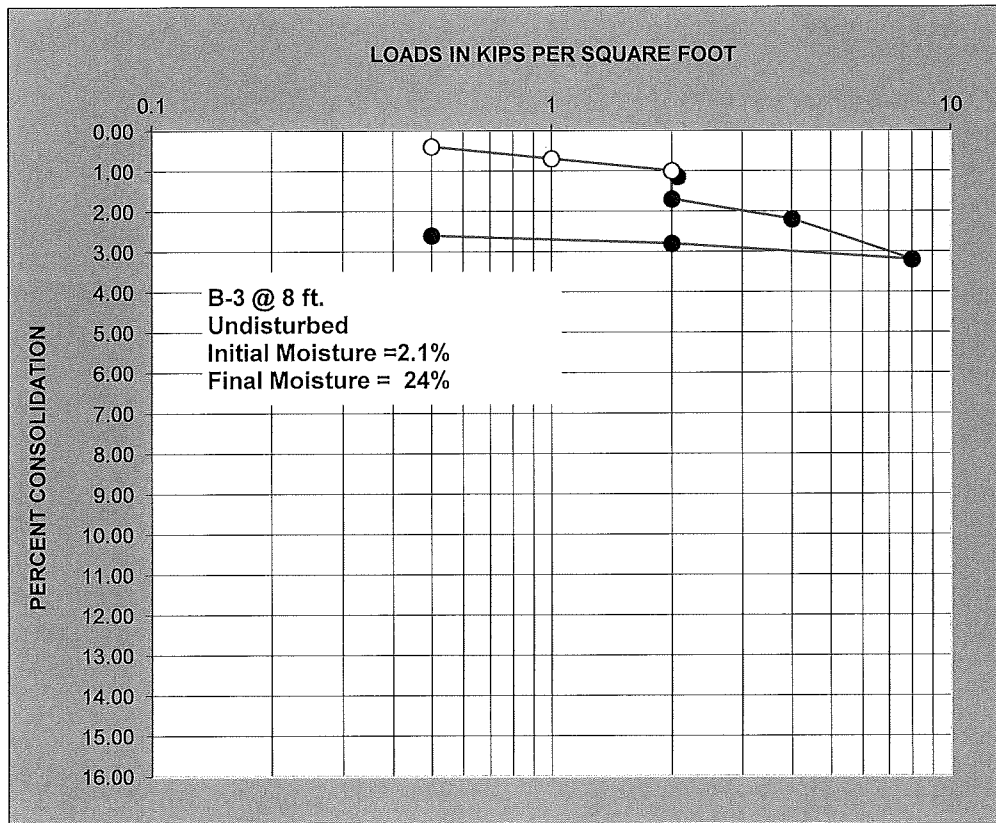
19004-F

PLATE

B-2-1

SOILS SOUTHWEST INC.
 Consulting Foundation Engineers

CONSOLIDATION TESTS



- WATER PERMITTED TO CONTACT SAMPLE



PROJECT

Proposed Coachella Travel Center

Avenue 50 and State Route 86, Coachella

PROJECT NO.

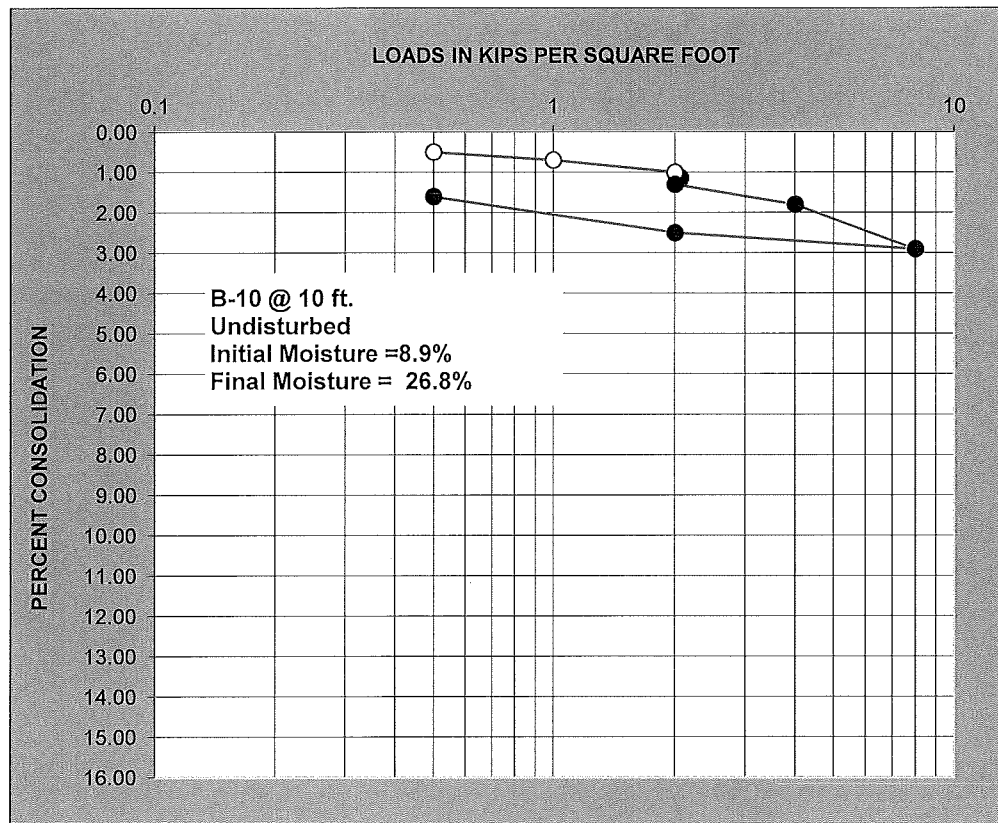
19004-F

PLATE

B-2-2

SOILS SOUTHWEST INC.
 Consulting Foundation Engineers

CONSOLIDATION TESTS



- WATER PERMITTED TO CONTACT SAMPLE



PROJECT

Proposed Coachella Travel Center

Avenue 50 and State Route 86, Coachella

PROJECT NO.

19004-F

PLATE

B-2-3

SOILS SOUTHWEST INC.
Consulting Foundation Engineers

PERCENTAGE FINES ANALYSIS

Job Number: 19004-F

Project Name: AHD LP/Haddad Coachella Travel Center

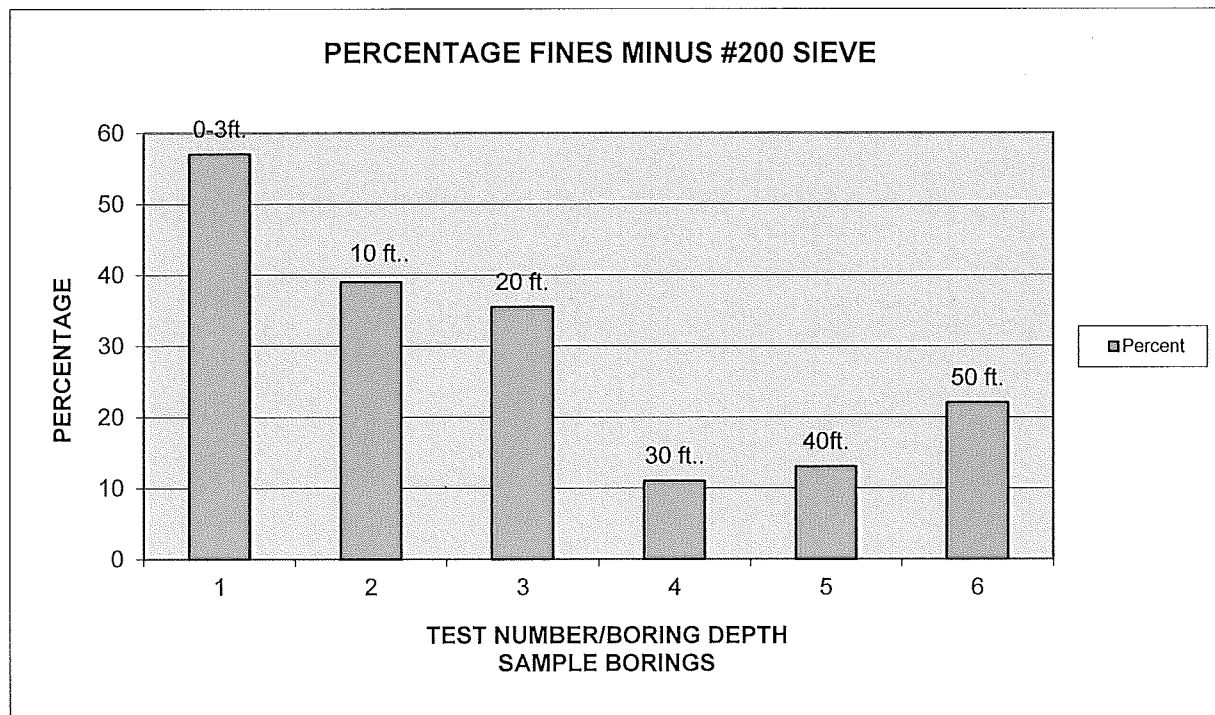
Project Location: Ave. 50 & State Hw 86

Lc Coachella

Sample Location: B-1,2,3

Sample Date: 1-28-2019

Boring Depth (Feet)	Percent Fines Minus #40 Sieve
0-3	57
10	39
20	35.5
30	11
40	13
50	22



PERCENTAGE FINES ANALYSIS

Job Number: 19004-F

Project Name: AHD LP/Haddad Coachella Travel Center

Project Location: Ave. 50 & State Hw 86

Lc Coachella

Sample Location: B-1,2,3

Boring/Depth (ft): _ B-3 @ 0-3
Moisture Content (%) 4.5
(A) Container + Sample (grms) 629.5
(B) Container (grms) 146.3
(C) Sample (A-B) (grms) 483.2

Sample Date: 1-28-2019

Boring/Depth (ft): _ B-1 @ 10'
Moisture Content (%) 7.7
(A) Container + Sample (grms) 305.5
(B) Container (grms) 146.3
(C) Sample (A-B) (grms) 159.2

	A	B
	Weight Retained in Grams	Percent Retained
Sieve Size		
No. 200	205.9	42.61
PAN	277.3	57.39
TOTAL (C)	483.20	

	A	B
	Weight Retained in Grams	Percent Retained
Sieve Size		
No. 200	96.9	60.87
PAN	62.3	39.13
TOTAL (C)	159.2	

Boring/Depth (ft): _ B-1 @ 20'
Moisture Content (%) 39
(A) Container + Sample (grms) 241
(B) Container (grms) 146.3
(C) Sample (A-B) (grms) 94.7

Boring/Depth (ft): _ B-1 @ 30'
Moisture Content (%) 25.6
(A) Container + Sample (grms) 300
(B) Container (grms) 146.3
(C) Sample (A-B) (grms) 153.7

	A	B
	Weight Retained in Grams	Percent Retained
Sieve Size		
No. 200	60.9	64.31
PAN	33.8	35.69
TOTAL (C)	94.7	

	A	B
	Weight Retained in Grams	Percent Retained
Sieve Size		
No. 200	136.4	88.74
PAN	17.3	11.26
TOTAL (C)	153.7	

Boring/Depth (ft): _ B-1 @ 40'
Moisture Content (%) 31.6
(A) Container + Sample (grms) 506
(B) Container (grms) 146.3
(C) Sample (A-B) (grms) 359.7

Boring/Depth (ft): _ B-1 @ 50'
Moisture Content (%) 12.2
(A) Container + Sample (grms) 460
(B) Container (grms) 146.3
(C) Sample (A-B) (grms) 313.7

	A	B
	Weight Retained in Grams	Percent Retained
Sieve Size		
No. 200	311.4	86.57
PAN	48.3	13.43
TOTAL (C)	359.7	

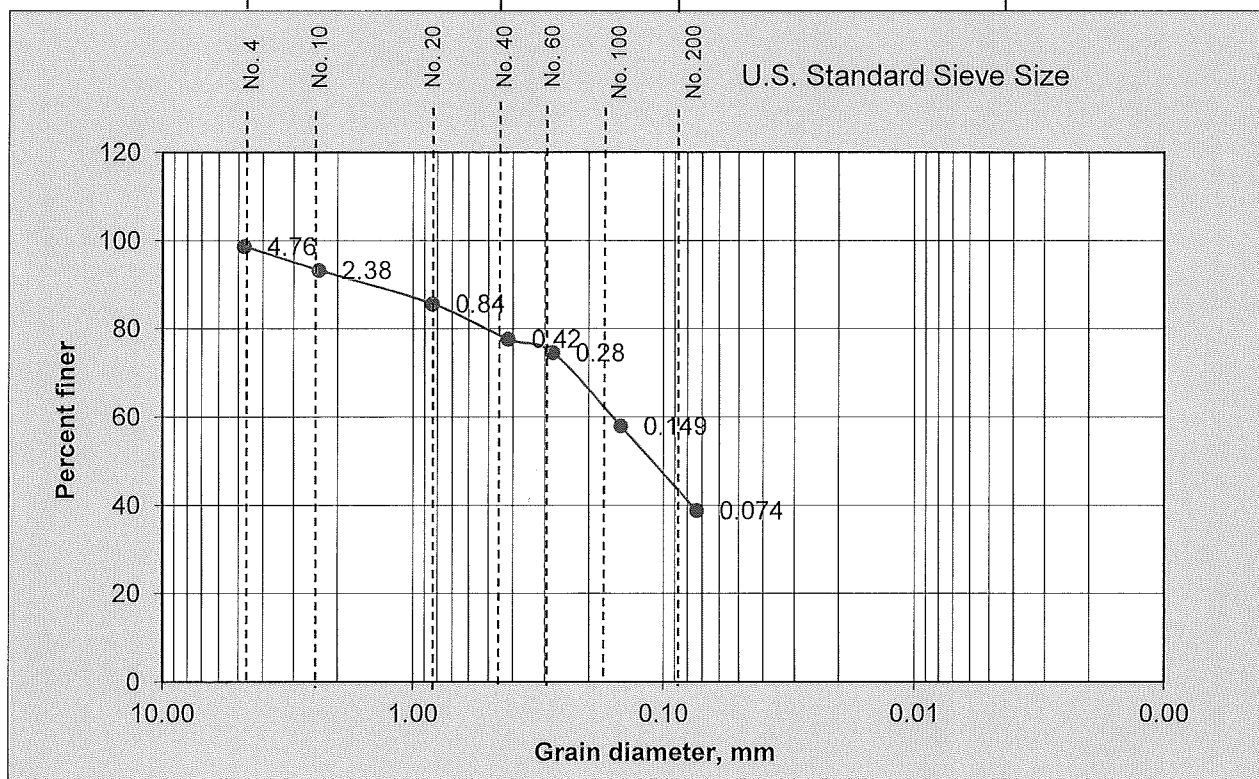
	A	B
	Weight Retained in Grams	Percent Retained
Sieve Size		
No. 200	243.4	77.59
PAN	70.3	22.41
TOTAL (C)	313.7	

GRAIN SIZE DISTRIBUTION ASTM D422

Project: Coachella Travel Center/AHD,LP **Job #** 19004-F
Location: Santa Rosa Road s/o Hw74 **Boring No:** B-1@0-5 **Sample No:** 1
Description of Soil: ML Silt-silty fine flour with trace fine to med. sands
Date of Sample: 1/28/2019
Tested By: RM **Date of Testing:** 2/11/2019

Sieve No.	Sieve Openings in mm	Percent Finer	Grain Size	% Retained
4	4.76	98.80	Gravel	1
10	2.38	93.40	Med. to Crs	21
20	0.84	85.78	Fines	34
40	0.42	77.78	Silts	44
60	0.28	74.70		
100	0.149	58.08		
200	0.074	38.90		

Gravel	Sand		Silt	Clay
	Coarse to Medium	Fine		



Visual Soil Description : SILT-SILTY SAND - fine flour with traces of fine to medim.

Soil Classification: ML

System: USC

SOILS SOUTHWEST INC.
 Consulting Foundation Engineers

APPENDIX C

Supplemental Seismic Design Parameters

2008 National Seismic Hazard Maps - Source Parameters

[New Search](#)

Distance in Miles	Name	State	Pref Slip Rate (mm/yr)	Dip (degrees)	Dip Dir	Slip Sense	Rupture Top (km)	Rupture Bottom (km)	Length (km)
1.68	S. San Andreas;BG+CO	CA	n/a	72		strike slip	0.3	12	125
1.68	S. San Andreas;CH+CC+BB+NM+SM+NSB+SSB+BG+CO	CA	n/a	86		strike slip	0.1	13	512
1.68	S. San Andreas;NSB+SSB+BG+CO	CA	n/a	79		strike slip	0.2	12	206
1.68	S. San Andreas;CO	CA	20	90	V	strike slip	0.6	11	69
1.68	S. San Andreas;BB+NM+SM+NSB+SSB+BG+CO	CA	n/a	85		strike slip	0.1	13	390
1.68	S. San Andreas;SSB+BG+CO	CA	n/a	77		strike slip	0.2	12	170
1.68	S. San Andreas;SM+NSB+SSB+BG+CO	CA	n/a	83		strike slip	0.1	13	303
1.68	S. San Andreas;PK+CH+CC+BB+NM+SM+NSB+SSB+BG+CO	CA	n/a	86		strike slip	0.1	13	548
1.68	S. San Andreas;NM+SM+NSB+SSB+BG+CO	CA	n/a	84		strike slip	0.1	13	340
1.68	S. San Andreas;CC+BB+NM+SM+NSB+SSB+BG+CO	CA	n/a	86		strike slip	0.1	13	449
8.65	S. San Andreas;CC+BB+NM+SM+NSB+SSB+BG	CA	n/a	85		strike slip	0	14	380
8.65	S. San Andreas;NM+SM+NSB+SSB+BG	CA	n/a	83		strike slip	0	14	271
8.65	S. San Andreas;BG	CA	n/a	58		strike slip	0	13	56
8.65	S. San Andreas;SM+NSB+SSB+BG	CA	n/a	81		strike slip	0	13	234
8.65	S. San Andreas;SSB+BG	CA	n/a	71		strike slip	0	13	101
8.65	S. San Andreas;CH+CC+BB+NM+SM+NSB+SSB+BG	CA	n/a	86		strike slip	0	14	442
8.65	S. San Andreas;PK+CH+CC+BB+NM+SM+NSB+SSB+BG	CA	n/a	86		strike slip	0.1	13	479

2008 National Seismic Hazard Maps - Source Parameters

New Search

Fault Name

State

S. San Andreas;BG+CO

California

GEOMETRY

Dip (degrees)

72

Dip direction

Sense of slip

strike slip

Rupture top (km)

0.3

Rupture bottom (km)

12

Rake (degrees)

180

Length (km)

125

MODEL VALUES

Slip Rate

n/a

Probability of activity

1

ELLSWORTH

HANKS

Minimum magnitude


6.5

6.5

Maximum magnitude

7.39

7.32

 This is a beta release of the new ATC Hazards by Location website. Please contact us with feedback.

ATC Hazards by Location

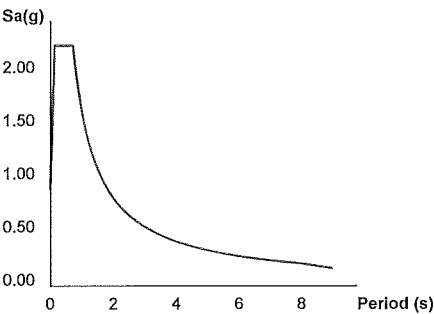
Search Information

Coordinates: 33.884896, -116.162056
Timestamp: 2019-01-11T20:13:25.219Z
Hazard Type: Seismic
Reference Document: ASCE7-10
Risk Category: III
Site Class: D
Report Title: AHD Limited Partnership/Haddad-Coachella

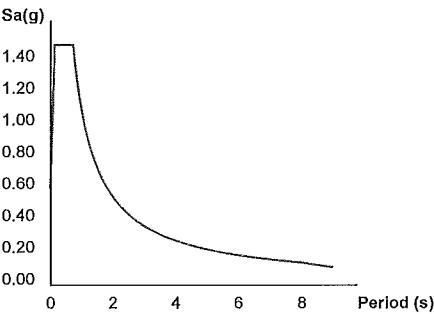
Map Results



MCE_R Horizontal Response Spectrum



Design Horizontal Response Spectrum



Text Results

Basic Parameters

Name	Value	Description
S _s	2.261	MCE _R ground motion (period=0.2s)
S ₁	1.11	MCE _R ground motion (period=1.0s)
S _{MS}	2.261	Site-modified spectral acceleration value
S _{M1}	1.665	Site-modified spectral acceleration value
S _{DS}	1.507	Numeric seismic design value at 0.2s SA
S _{D1}	1.11	Numeric seismic design value at 1.0s SA

Additional Information

Name	Value	Description
SDC	E	Seismic design category
F _a	1	Site amplification factor at 0.2s

Ground Motion Interpolator (2008)

Longitude:

Latitude:

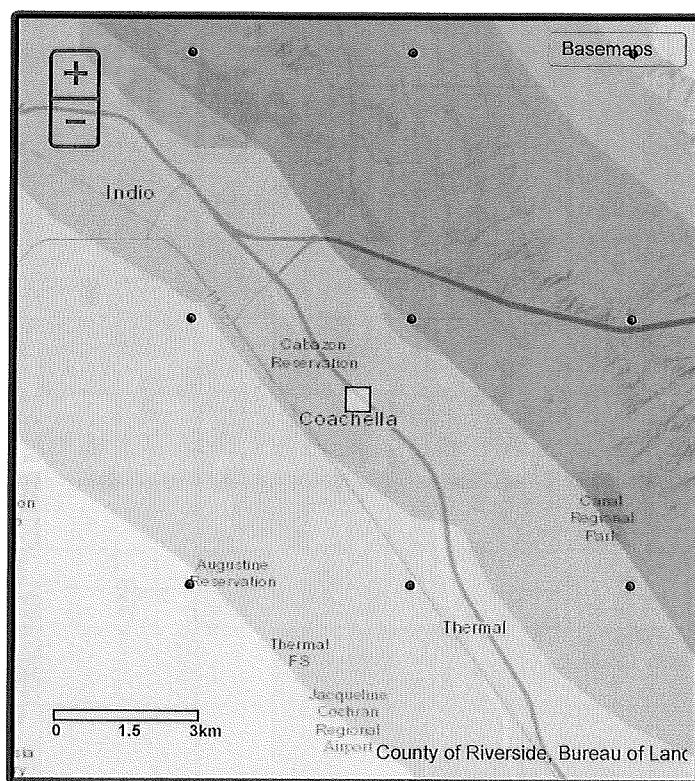
VS30: (180-1050 m/sec)

Return Period:
2% in 50 years 10% in 50 years

Spectral Acceleration:
PGA 0.2 second SA 1.0 second SA

Inputs:	Result:
-116.162056, 33.684896	
vs30: 270 m/sec	
10% in 50 years 0.650 g
PGA	

Information and Disclaimer



APPENDIX D

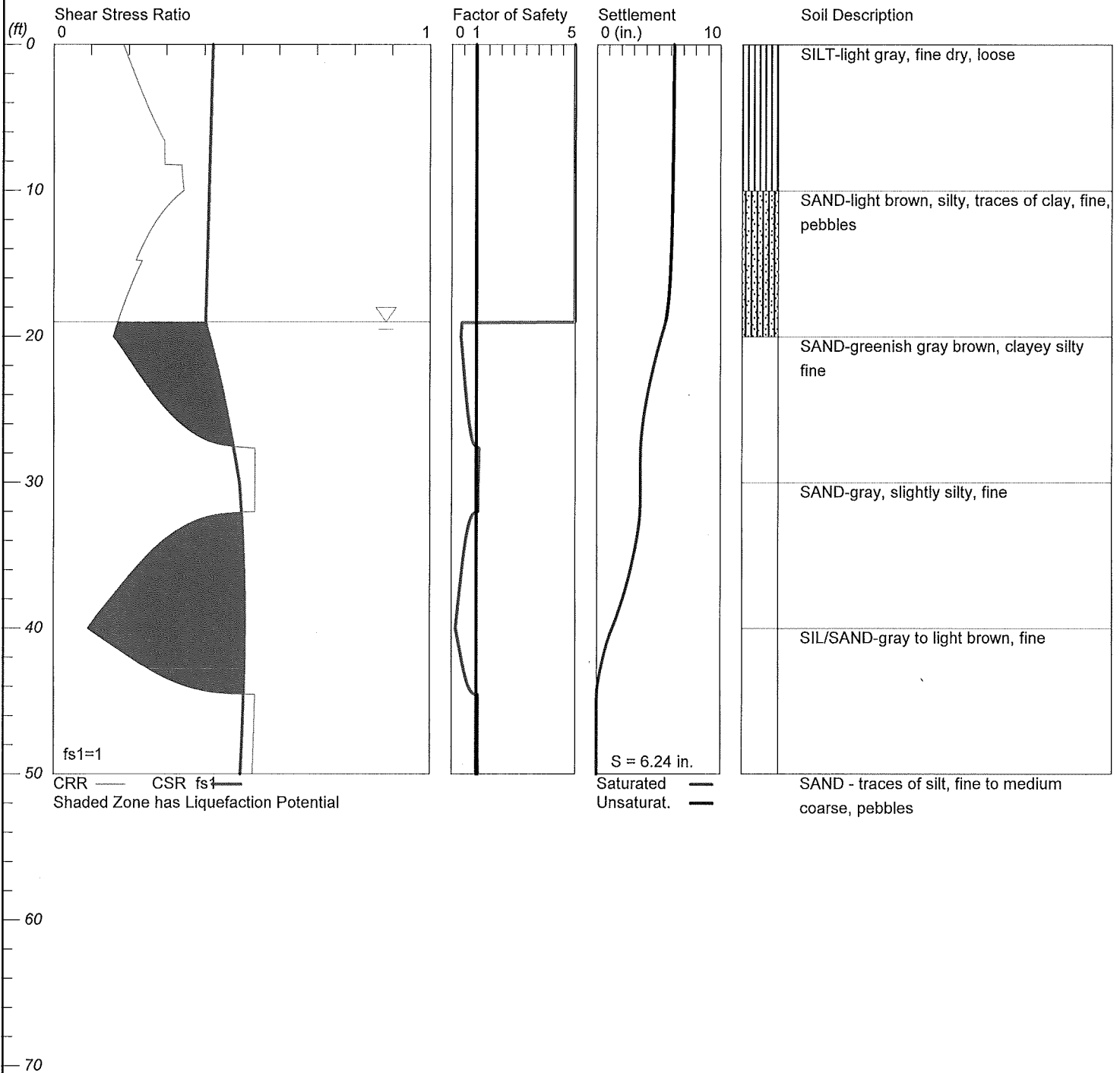
Liquefaction/Settlement Analysis

LIQUEFACTION ANALYSIS

AHD LP/Coachella Travel Center-Pre-Construction

Hole No.=HSA Borings Water Depth=19 ft Surface Elev.=80

**Magnitude=7.3
Acceleration=0.650g**



LIQUEFACTION ANALYSIS SUMMARY

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Input File Name: UNTITLED

Title: AHD LP/Coachella Travel Center-Pre-Construction

Subtitle: 19004-F

Surface Elev.=80

Hole No.=HSA Borings

Depth of Hole= 50.00 ft

Water Table during Earthquake= 19.00 ft

Water Table during In-Situ Testing= 19.00 ft

Max. Acceleration= 0.65 g

Earthquake Magnitude= 7.30

Input Data:

Surface Elev.=80

Hole No.=HSA Borings

Depth of Hole=50.00 ft

Water Table during Earthquake= 19.00 ft

Water Table during In-Situ Testing= 19.00 ft

Max. Acceleration=0.65 g

Earthquake Magnitude=7.30

No-Liquefiable Soils: CL, OL are Non-Liq. Soil

1. SPT or BPT Calculation.
2. Settlement Analysis Method: Ishihara / Yoshimine
3. Fines Correction for Liquefaction: Stark/Olson et al.*
4. Fine Correction for Settlement: During Liquefaction*
5. Settlement Calculation in: All zones*
6. Hammer Energy Ratio, $C_e = 1$
7. Borehole Diameter, $C_b = 1$
8. Sampling Method, $C_s = 1$
9. User request factor of safety (apply to CSR) , $U_{sr} = 1.3$

Plot one CSR curve ($f_{s1}=1$)

10. Use Curve Smoothing: Yes*

* Recommended Options

In-Situ Test Data:

Depth	SPT	gamma	Fines
ft		pcf	%

0.00	7.00	111.00	57.00
10.00	17.00	111.00	39.00
20.00	7.00	111.00	35.50
30.00	39.00	111.00	11.00
40.00	7.00	111.00	13.00
50.00	67.00	111.00	22.00

Output Results:

Settlement of Saturated Sands=5.58 in.

Settlement of Unsaturated Sands=0.66 in.

Total Settlement of Saturated and Unsaturated Sands=6.24 in.

Differential Settlement=3.120 to 4.118 in.

PROFESSIONAL LIMITATIONS

Our investigation was performed using the degree of care and skill ordinarily exercised, under similar circumstances by other reputable Soils Engineers practicing in these general or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

The investigations are based on soil samples only, consequently the recommendations provided shall be considered "preliminary". The samples taken and used for testing and the observations made are believed representative of site conditions; however, soil and geologic conditions can vary significantly between test excavations. If this occurs, the Project Soils Engineer must evaluate the changed conditions, and designs adjusted as required or alternate design recommended.

The report is issued with the understanding that it is the responsibility of the owner, or of his representative, to ensure that the information and recommendations contained herein are brought to the attention of the project architect and engineers. Appropriate recommendations should be incorporated into structural plans. The necessary steps should be taken to see that out such recommendations in field.

The findings of this report are valid as of this present date. However, changes in the conditions of a property can occur with the passage of time, whether they due to natural process or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur from legislation or broadening of knowledge. Accordingly, the findings of this report may be invalidated wholly or partially by change outside of our control. Therefore, this report is subject to review and should be updated after a period of one year.

RECOMMENDED SERVICES

The review of grading plans and specifications, field observations and testing by a geotechnical representative of this office is integral part of the conclusions and recommendations made in this report. If Soils Southwest, Inc. (SSI) is not retained for these services, the Client agrees to assume SSI's responsibility for any potential claims that may arise during and after construction, or during the life-time use of the structure and its appurtenant.

The recommendations supplied should be considered valid and applicable, provided the following conditions, in minimum, are met:

- i. Pre-grade meeting with contractor, public agency and soils engineer,
- ii. Excavated bottom inspections and verification s by soils engineer prior to backfill placement,
- iii. Continuous observations and testing during site preparation and structural fill soils placement,
- iv. Observation and inspection of footing trenching prior to steel and concrete placement,
- v. Subgrade verifications including plumbing trench backfills prior to concrete slab-on-grade placement,
- vi. On and off-site utility trench backfill testing and verifications,
- vii. Precise-grading plan review, and
- viii. Consultations as required during construction, or upon your request.

Soils Southwest, Inc. will assume no responsibility for any structural distresses during its life-time use; in event the above conditions are not strictly fulfilled.