



# LAND USE SERVICES DEPARTMENT PLANNING COMMISSION STAFF REPORT

**HEARING DATE: May 9, 2019**

**AGENDA ITEM #2**

Project Description

Vicinity Map

**APN:** 0491-171-10  
**Applicant:** Kiewit Infrastructure West Company  
**Community:** Kramer Junction/1<sup>st</sup> Supervisorial District  
**Location:** Site located approximately 0.75 miles northwest of the intersection of State Highway 58 and U.S. Highway 395 in Kramer Junction  
**Project No:** AP20180100  
**Staff:** Reuben J. Arceo  
**App Rep:** Frank Amendola, Lilburn Corp  
**Proposal:** Mining Conditional Use Permit and Reclamation Plan to develop the Kramer Junction Borrow Pit # 2 on 8.7 acres for a three (3) year operating period.



Newspaper Publication Date: April 28, 2019  
 8 Hearing Notices Sent On: April 25, 2019

Report Prepared By: Reuben J. Arceo

**SITE INFORMATION**

**Project Size:** 8.73 Acres  
**Terrain:** Disturbed Mojave Desert Alluvial Terrain.  
**Vegetation:** Sparse Saltbush and Alkali Sink Scrub.

**SURROUNDING LAND DESCRIPTION:**

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
Site	Vacant	Rural Living (RL-5)
North	Vacant, Well Site	Rural Living (RL-5)
South	Vacant	Resource Conservation (RC)
East	Vacant, Well Site	Rural Living (RL-5)
West	Vacant	Rural Living (RL-5)

**AGENCY**

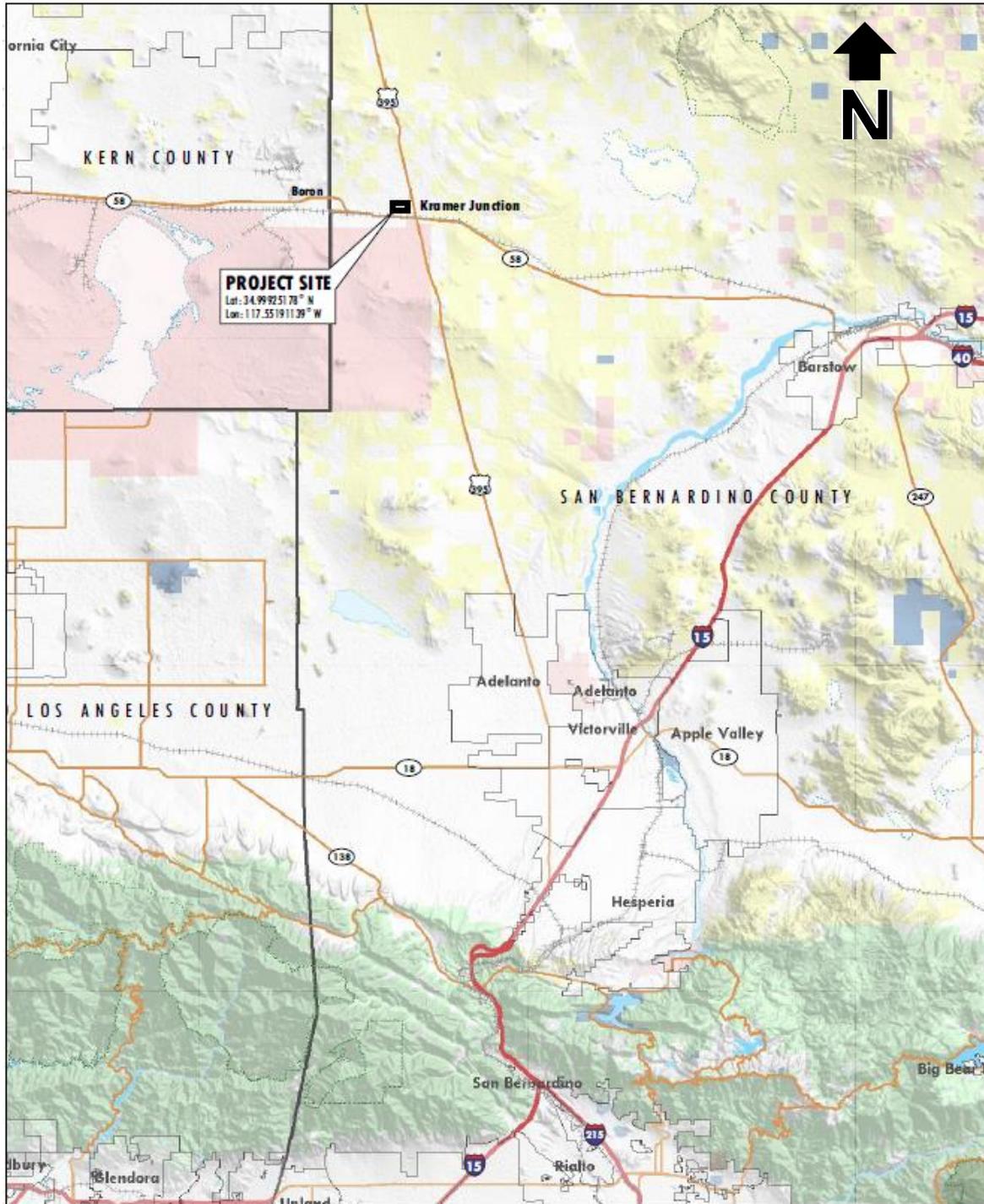
City Sphere of Influence: None  
 Water Service: Well and bottled water for employees  
 Sewer Service: Portable Toilets

**STAFF RECOMMENDATION:** That the Planning Commission **APPROVE** the Addendum to the Caltrans SR-58 Kramer Junction Expressway EIR/EIS, **ADOPT** the Mining Conditional Use Permit and Reclamation Plan 2019M-01 subject to the attached Conditions of Approval and incorporated Mitigation Measures; **ADOPT** the recommended Findings, , and **FILE** the Notice of Determination.

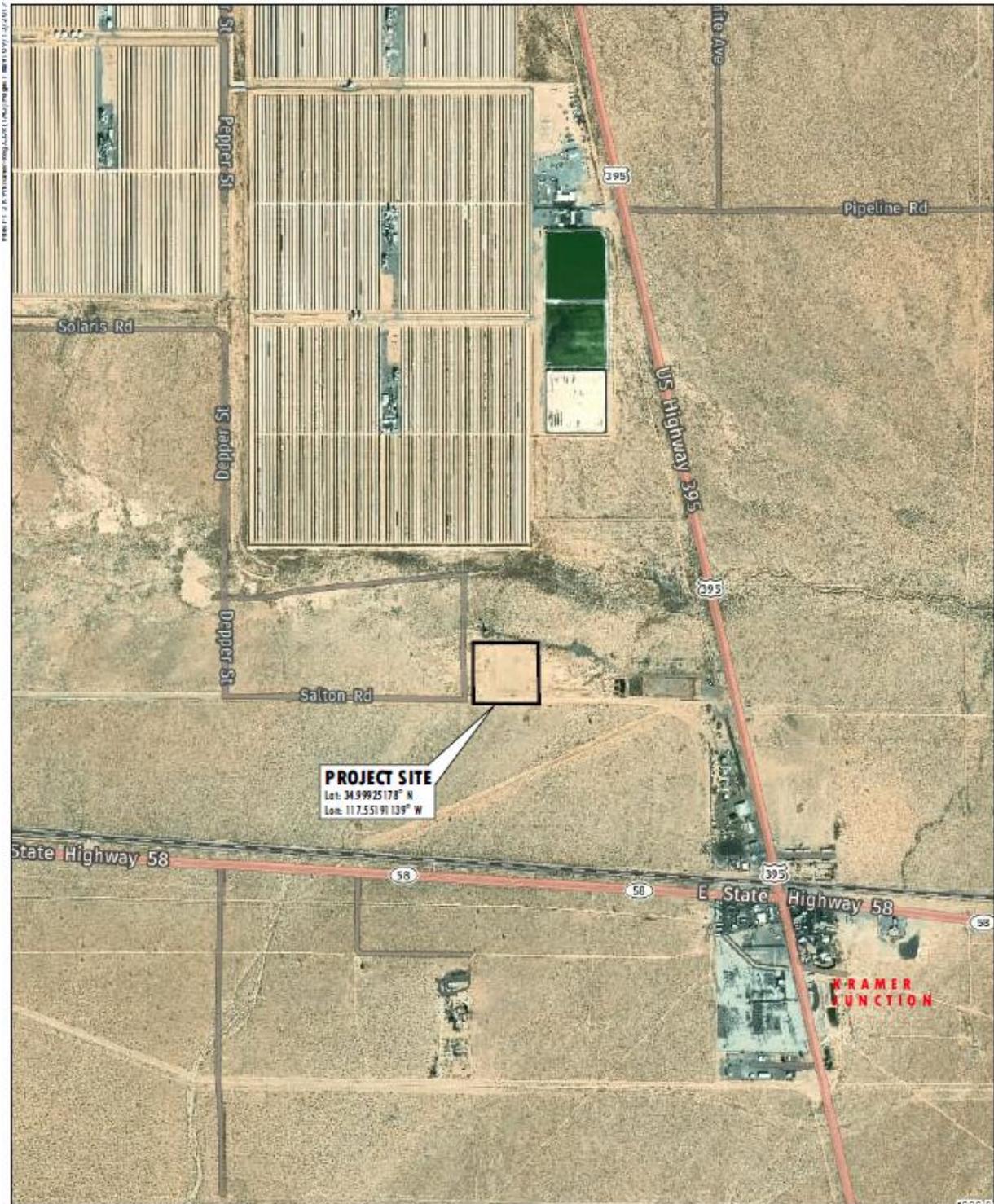
In accordance with Section 86.08.010 of the Development Code, the action taken by the Planning Commission may be appealed to the Board of Supervisors within ten (10) calendar days after the Planning Commission hearing.

**Figure 1**  
**REGIONAL LOCATION**

**Kiewit Infrastructure West Co. – Kramer Junction Borrow Pit**

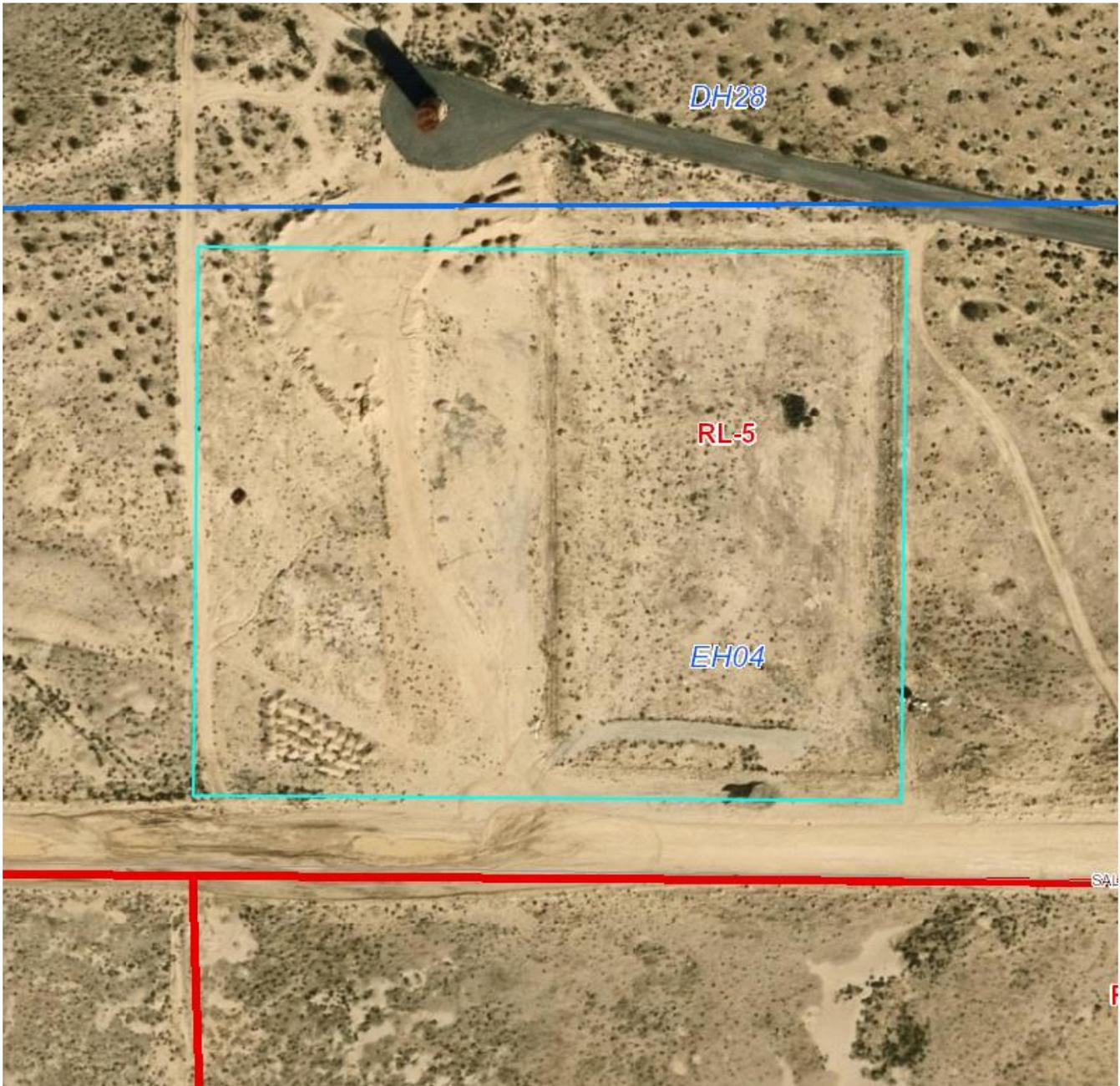


**Figure 2  
VICINITY MAP**

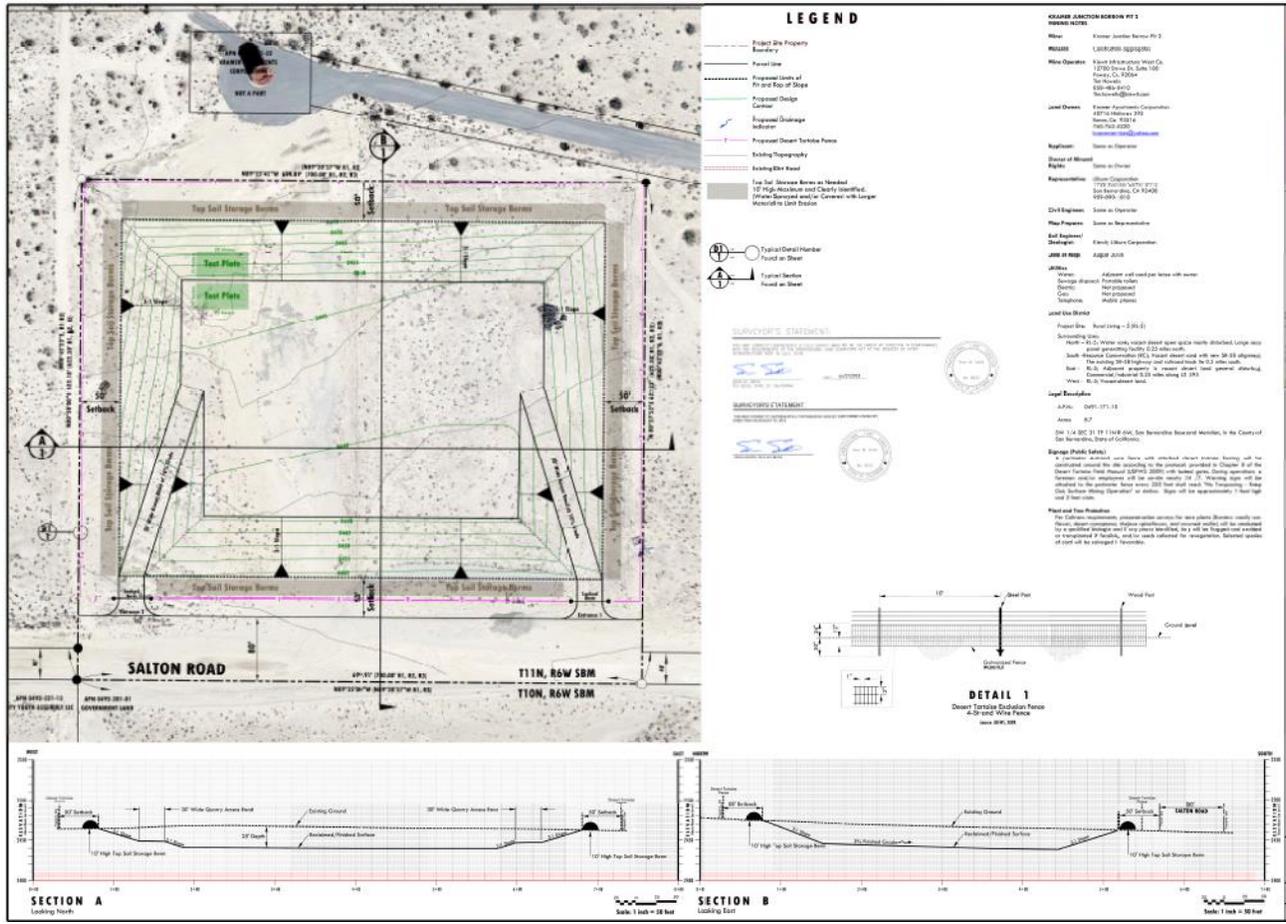


**Figure 3**  
**OFFICIAL LAND USE DISTRICT & VICINITY MAP**

**ZONING DESIGNATION**  
**Rural Living (RL-5)**



## Figure 4 MINING SITE PLAN Kramer Junction Borrow Pit No. 2





**Figure 6**  
**AERIAL SITE VIEW**



**Figure 7**  
**Kramer Junction Borrow Pit No. 2**



Photo 1. Unmaintained access road. Looking west southwest.



Photo 2. Looking East

## **PROJECT DESCRIPTION AND BACKGROUND:**

### **Project Summary**

This application seeks approval of a mining excavation for landscape and general fill material for use in a public highway project.

The California Department of Transportation (Caltrans) and the Federal Highway Administration are jointly undertaking the State Route-58 (SR-58) Kramer Junction Expressway Project, also known as the Kramer Junction Gap Closure Project (Expressway Project). Pursuant to the Expressway Project, SR-58 is being realigned and widened, from two lanes to four lanes, for approximately 13 miles from the Kern County line east to about 7.5 miles east of Kramer Junction. The Expressway Project also includes a partial cloverleaf at the SR-58 and US Highway 395 (US 395) junction and a railroad grade separation intended to alleviate existing traffic congestion issues. The Expressway Project was commenced in 2018 and is scheduled to be completed at the end of 2020. A joint Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) (SCH No. 2007051051) for the Expressway Project was approved by Caltrans acting as Lead Agency for the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) on July 1, 2014.

On April 5, 2018, the Planning Commission approved the Mining Conditional Use Permit (CUP) and Reclamation Plan 2018M-01 of Kiewit Infrastructure West Co. (Kiewit) for a surface mining operation known as Kramer Junction Borrow Pit. The mine was approved on a 63.75-acre portion of a 100-acre privately-owned parcel located north of SR-58 and 3.5 miles west of Kramer Junction and proposed to supply up to three million cubic yards of landscape and fill material for the Expressway Project.

Because additional material is needed beyond that available at the initial borrow pit as well as to improve construction efficiency, Kiewit has submitted a Mining CUP and Reclamation Plan 2019M-01 for Kramer Junction Borrow Pit No.2 (Borrow Pit No. 2 Project), a second borrow pit that will provide up to 200,000 cubic yards of material for the SR-58 Project. This site is approximately three miles east of the first Kramer Junction Borrow Pit. Kiewit is proposing to excavate Borrow Pit No. 2 to a depth of 25 feet with three horizontal to one vertical slopes (3H:1V) or 18°-inclined slopes. Excavation/mining will occur concurrent with the construction of the Expressway Project and reclamation of the site will commence immediately upon termination of mining.

### **Location and Site Description**

The Borrow Pit No. 2 Project site is located approximately 0.75 miles northwest of the SR-58 and US 395 interchange and Kramer Junction (see Figure 1 - Regional Map). The privately-held 8.7-acre parcel (APN 0491-171-10) is within the western part of San Bernardino County in the SE¼ of Section 31, Township 11 North, Range 6 West, SBBM (see Figure 2 - Vicinity Map). The site is being leased by Kiewit from the landowner. Access for workers to the site will be gained by travelling from existing US 395, and then continuing approximately 1/3 of a mile west on Salton Road, a public unimproved road. This site will provide construction material in the immediate vicinity of Kramer Junction to reduce not only transportation costs, but also to reduce greenhouse gas emission impacts and automobile and truck fuel usage, for those vehicles being used in the construction of the Project. The material will be transported to the new adjacent SR-58 alignment/US 395 improvements by way of Salton Road as shown on the Caltrans NEPA/CEQA Re-Validation Form, dated August 8, 2017.

The site is mostly disturbed by past grading and material storage uses (see Figure 3). The proposed borrow pit site is currently vacant. There is a slight increase in elevation from the south to north by about 15 feet. Where vegetation has re-grown, it consists of sparse saltbush scrub. The adjacent properties are mostly vacant. There is a solar generating facility approximately 0.25 miles north of the Borrow Pit No. 2 Project site. A water tank is located just north of the Borrow Pit No. 2 Project site, on a small rise, with an adjacent gravel road, within a water company easement, extending east to a parcel that appears to have been utilized for water ponds. There are no nearby residences. The existing SR-58 Highway and railroad track lie 0.3 miles to the south. The new SR-58 alignment is about 500 feet south of the Borrow Pit No. 2 Project site and a major interchange with US 395 and SR-58 is about 0.4 miles to the east.

## **Mining**

Mining operations will be undertaken for a period of up to three years, beginning in early 2019 and extending until early 2021. The site will be fenced with a combination of desert tortoise fencing and four-strand wire, according to the protocols in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009). Mining of the site will be achieved with one loader, one excavator, and a dozer to break, move, and load material directly into single trailer or double belly truck trailers with a typical daily capacity of approximately 25 to 50 cubic yards. There will be no crushing or screening conducted on-site. There will be no buildings constructed or material weighing scale on-site. On occasion, a grader may be used on-site for mining or haul road development and maintenance. Mining will take place on approximately 6.2 acres of the 8.7-acre parcel with 50-foot setbacks around the perimeter of the parcel. An estimated 200,000 cubic yards would be excavated on an intermittent basis over the course of two to three years. Equipment storage and parking area will be within the east portion of the excavated area.

Access to the borrow pit will be via a 5% decline ramp 40 feet in width located on the east and north sides of the pit to allow direct access to Salton Road and the SR-58 construction alignment. Once off the Borrow Pit No. 2 Project site, the street-legal transport trucks will utilize Salton Road east to the new SR-58 construction area. Off-road trucks would utilize direct access to the new SR 58 right-of-way per Caltrans direction.

Truck traffic is anticipated at a rate of about 50 loads per day based on street-legal 25 cubic yards trucks and adjacent construction demand. Production and material transport will be approximately 1,250 cubic yards/day for 160 days or lower daily volumes on more days of the year. The trucks will travel on Salton Road to the new SR-58 construction alignment along US 395 or to the immediate south on construction roads that may be established by Caltrans. Little, if any, public traffic currently utilizes Salton Road to travel through the immediate area.

## **Reclamation**

The Mine Reclamation Plan 2019M-01 (Exhibit A) details the methods and procedures to be employed to reclaim all mining-related disturbed areas as shown in the Reclamation Plan Map. As with all surface mines subject to California's Surface Mining and Reclamation Act of 1975, Public Resources Code Section [PRC] 2710 et seq. and California Code of Regulations Section 3500 et seq. ("SMARA"), a monitoring program and financial assurances will be required to ensure reclamation is completed in accordance with the approved Reclamation Plan.

Reclamation is designed to diminish environmental impacts from mining operations by reclaiming the site into a beneficial, usable, post-mining condition. End uses include open space/habitat or re-establishing the prior land use. Mining features and all disturbed areas will be reshaped and revegetated to minimize aesthetic and biological impacts and to eliminate hazards to public health and safety.

The finished slope grades will be a moderate 3H:1V (horizontal/vertical) to depths of 25 feet. Should evidence of erosion, such as rills and channels, appear as a result of storm events, slopes will be regraded and backfilled as necessary before the County will certify reclamation. All on-site water run-off resulting from precipitation and Borrow Pit No. 2 Project activities will be directed to, and collected within, the borrow pit for percolation and/or evaporation. There will be no run-off away from the site and water retained within the pit will not impact adjacent properties or local roads. Revegetation will be established for the long-term control of erosion. All rock or gravel placed on the roads to control dust will be removed and may be used as fill in the pit area.

Although the site is currently disturbed with minimal topsoil, and low annual rainfall, all disturbed areas will be revegetated to establish a condition similar to surrounding undisturbed landscape. The method for establishing the reclaimed standard is described in the Revegetation Plan and is based on data collected during a pre-disturbance vegetation survey. Final graded slopes, the pit floor, storage areas, and roads will be revegetated with site-specific, prescribed seed mixes designed to replicate the naturally-occurring vegetation present prior to disturbance. Success standards for density and diversity are also prescribed by SMARA and in the Revegetation Plan to replicate existing conditions.

Reclamation of disturbed areas will commence immediately after mining is completed, and the site will be returned to its prior vacant status consistent with the Rural Living (RL) Land Use District. Final reclamation should be completed approximately four (4) years following termination of mining activities, which is anticipated by 2021. Complete reclamation of the site will include:

- Removal of all equipment.
- Contour- grading of slopes where necessary at a proposed 3H:1V inclination.
- Mitigation of any potential hazards.
- Erosion Control and Revegetation with native plant species.

## **ANALYSIS**

### **Land Use Compatibility**

The Kramer Junction Borrow Pit No. 2 is located within the Rural Living – 5 (RL-5) Land Use District. This zoning district allows for mineral resource development (mining), subject to approval of a CUP by the County Planning Commission, and the project meeting applicable County Development Code requirements and findings. All properties adjacent to and within the vicinity of the Borrow Pit No. 2 Project are also zoned RL and Resource Conservation (RC). Project-specific Conditions of Approval have been included as Exhibit B.

Adjacent Land Uses: There are no residential uses in the site's vicinity (See Figure 2). Protective mitigation measures as described below are included in the Mine Reclamation Plan and the Borrow Pit No. 2 Project Conditions of Approval.

Truck Traffic and Dust Control: Haul trucks will travel on Salton Road to the new SR-58 construction alignment along US 395 or to the immediate south on construction roads established by Caltrans. Little, if any, public traffic utilizes Salton Road. To minimize dust generation, a water truck will be retained for site operations. Approximately 8,000 gallons of water a day may be used for dust suppression activities with a 10-hour workday. The 8,000-gallon water truck will fill up at the adjacent well to the west and spray roads and operational areas as needed.

The mine operator shall moisture-condition working mine areas and access roads on-site and Salton Road on a regular basis and more frequently, as needed, during windy conditions. Water used for dust control shall be obtained by an adjacent well owned by the site landowner (per lease agreement). Unimproved roads may also be dust-controlled with biodegradable dust suppressants or covered with road base material, as needed.

Noise and Vibration: The County has established noise and vibration standards designed to protect adjacent land uses that will apply to the Borrow Pit No. 2 Project.

Aesthetics: The large size of the pit and gradual 3H:1V slope, along with revegetation requirements will have an end result with minimal aesthetic disturbance upon reclamation sign-off. Caltrans expressway construction is also required to meet regulations monitored by the Mojave Desert Air Quality Management District.

Groundwater Consumption: Well water will be utilized to meet the dust control demands of the mining operation, as well as supply water needs for reclamation and revegetation. A water use assessment, prepared by Lilburn Corporation for the Borrow Pit No. 2 Project, describes the groundwater source and expected volume of use.

Biological Resources: Caltrans included the proposed Borrow Pit No. 2 Project site and access routes defined by Caltrans as Area 6 Borrow Area, in the Expressway Project design and environmental review document. Caltrans concluded in its NEPA/CEQA Re-Validation Form (August 8, 2017) that the EIR/EIS for SR-58 Project (July 1, 2014) remains valid with implementation of project design and mitigation measures for the potential impacts of the Borrow Pit No. 2 Project area.

Mitigation measures from the adopted Expressway Project EIR have been incorporated into the Reclamation Plan and Borrow Pit No. 2 Project Conditions of Approval. In addition, mitigation measures from the updated General Biological Assessment, dated December 20, 2018, prepared by Natural Resources Assessment (Exhibit C), have been incorporated into the Borrow Pit No. 2 Project Conditions of Approval.

## **Public Input**

In response to a Borrow Pit No. 2 Project Notice sent to reviewing agencies and adjacent property owners, no letters or phone calls were received.

## **Mine Permitting under SMARA**

Mine permitting and reclamation is regulated by Chapter 88.03 of the County's Development Code, which incorporates SMARA. The County is the identified "lead agency" (PRC Section 2728) with the State Mining and Geology Board, and has been designated as having a state-certified surface mining and reclamation ordinance (PRC Section 2774.3), and has the principal responsibility for administering SMARA. Moreover, in accordance with the Department of Mine Reclamation, (DMR), letter dated March 5, 2019, the Borrow Pit No. 2 Project Reclamation plan will be finalized in accordance with DMR's comments.

## **Findings**

The required Findings (Exhibit D) for approval of a Mining CUP, pursuant to Development Code Section 85.06.040 and Section 88.03.060(k), have been made. The Borrow Pit No. 2 Project is consistent with all applicable land use policies and regulations of the County's General Plan and Development Code with the implementation of the required Conditions of Approval through the Borrow Pit No. 2 Project approval process.

## **Tribal Consultation**

Extensive cultural resource surveys and assessments, along with tribal outreach and consultation, were completed as part of the adoption of the Expressway Project EIR. The process began in 2007, with a second, more detailed, round of surveys completed in 2012, after the Preferred

Alternative alignment for the Expressway Project was selected. Two sites were identified as Environmentally Sensitive Areas (ESAs) requiring further potential protection and delineation for cultural effects in the Expressway Project EIR. As a follow-up, County staff was able to get confirmation from Caltrans that neither of the two cultural sites identified in the EIR were located within the Borrow Pit No. 2 Project area (which was known as Borrow Area #6 within the Expressway Project EIR). Standard County conditions of approval will also serve to protect unanticipated discoveries.

**California Environmental Quality Act (CEQA).**

The Borrow Pit No. 2 Project was assessed under CEQA as Borrow Area #6 in the SR-58 Project EIR. Review of this EIR and its supporting documents led to the preparation of an Addendum to this EIR to ensure compliance with CEQA requirements specific to the Mining CUP. This Addendum reflects the independent judgment of County Planning staff. (See Exhibit E.)

All mitigation measures applicable to the Borrow Pit No. 2 Project contained within the Expressway Project EIR have been incorporated into the Mine Reclamation Plan and Mining CUP Conditions of Approval. As a summary, the table below describes the conclusions discussed in the Addendum.

**Comparison of Environmental for the Original Project and the Proposed Plan**

<b>Environmental Issue</b>	<b>Expressway Project</b>	<b>Proposed Borrow Pit</b>
Land Use	Less than Significant	Less than Significant
Parks and Recreation	No Impact	No Impact
Growth	Less than Significant	Less than Significant
Farmlands and Timberlands	No Impact	No Impact
Community Cohesion/Character	Less than Significant with Mitigation	Less than Significant with Mitigation
Relocations	Less than Significant with Mitigation	Less than Significant with Mitigation
Public Services	Less than Significant	Less than Significant
Utilities and Service Systems	Less than Significant with Mitigation	Less than Significant with Mitigation
Traffic	Less than Significant with Mitigation (for construction impacts only)	Less than Significant with Mitigation (for construction impacts only)
Visual/Aesthetics	Significant and Unavoidable	Significant and Unavoidable
Cultural Resources	Less than Significant with Mitigation	Less than Significant with Mitigation
Hydrology and Floodplains	Less than Significant with Mitigation	Less than Significant with Mitigation
Water Quality	Less than Significant with Mitigation	Less than Significant with Mitigation
Geology/Soils/Seismic/ Topography	Less than Significant with Mitigation	Less than Significant with Mitigation
Paleontology	Less than Significant with Mitigation	Less than Significant with Mitigation
Hazardous Waste/Materials	Less than Significant with Mitigation	Less than Significant with Mitigation
Air Quality	Less than Significant with Mitigation	Less than Significant with Mitigation

<b>Environmental Issue</b>	<b>Expressway Project</b>	<b>Proposed Borrow Pit</b>
Noise and Vibration	Less than Significant with Mitigation	Less than Significant with Mitigation
Energy	Less than Significant	Less than Significant
Natural Communities	Less than Significant with Mitigation	Less than Significant with Mitigation
Wetlands and Other Waters	Less than Significant with Mitigation	Less than Significant with Mitigation
Plant Species	Less than Significant with Mitigation	Less than Significant with Mitigation
Animal Species	Less than Significant with Mitigation	Less than Significant with Mitigation
Threatened and Endangered	Less than Significant with Mitigation	Less than Significant with Mitigation
Invasive Species	Less than Significant with Mitigation	Less than Significant with Mitigation

**RECOMMENDATION:** That the Planning Commission:

- 1) **APPROVE** the Addendum to the Caltrans SR-58 Kramer Junction Expressway EIR/EIS based on a finding that the EIR/EIS included Borrow Pit No. 2 and was completed in compliance with CEQA, that it has been reviewed and considered prior to approval of the Project, and that it and its supporting documents reflect the independent judgment of the County of San Bernardino;
- 2) **APPROVE** the Mining Conditional Use Permit and Reclamation Plan subject to the Conditions of Approval;
- 3) **ADOPT** the Findings per Development Code Sections 85.06.040 and 88.03.060(k); and
- 4) **FILE** the Notice of Determination.

**ATTACHMENTS:**

- Exhibit A: Kiewit Kramer Junction Mine Reclamation Plan Borrow Pit No. 2 - October 2018
- Exhibit B: AP20180100 Conditions of Approval
- Exhibit C: Natural Resources Assessment, Biological Updated, December 20, 2018
- Exhibit D: AP20180100 Findings
- Exhibit E: Addendum to the Caltrans SR-58 Kramer Junction Expressway Final EIR

# **EXHIBIT A**

## **Kiewit Kramer Junction Mine Reclamation Plan Borrow Pit No. 2 - October 2018**

**MINE RECLAMATION PLAN  
FOR THE  
KRAMER JUNCTION BORROW PIT 2**

*Prepared For:*

**Kiewit Infrastructure West Co.**  
12700 Stowe Dr. Suite 180  
Poway, CA 92064

*Submitted To:*

**County of San Bernardino**  
Land Use Services  
385 North Arrowhead Avenue, 1<sup>st</sup> Floor  
San Bernardino, California 92415

*Prepared By:*

**Lilburn Corporation**  
1905 Business Center Drive  
San Bernardino, California 92408

**October 2018**

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## **APPENDICIES**

- 1      Revegetation Plan; Jericho Systems October 2017
- 2      Appendix G - Mitigation Measures from the Final Environmental Impact Report/Environmental Impact Statement State Route 58 Kramer Junction Expressway Project (SCH#2007051051); Volumes I and II. July 2014.

## **MAP SHEETS (attached)**

- 1      Kramer Junction Borrow Pit 2 Mine Plan
- 2      Kramer Junction Borrow Pit 2 Reclamation Plan

## 1.0 MINE PLAN

Kiewit Infrastructure West Co. (Kiewit) is submitting an application for a Mine Reclamation Plan (Plan) for the Kramer Junction Borrow Pit 2. This application is a second borrow pit that will provide up to 200,000 cubic yards (cy) of material for the State Route 58 (SR-58) Kramer Junction Expressway Project. The California Department of Transportation (Caltrans) is realigning and widening to four lanes approximately 13 miles of SR-58 from the Kern County line east about 7.5 miles east of Kramer Junction. The project also includes a partial cloverleaf at the SR-58 and US 395 junction and railroad grade separation alleviating existing traffic issues. This site is approximately 3 miles east of the first Kramer Junction Borrow Pit just east of Boron.

The proposed project site is located approximately 0.75 miles northwest of the SR-58 and US 395 interchange and Kramer Junction (see Figure 1 - Regional Map). The privately-held 8.7-acre parcel (APN 0491-171-10) is within the west part of San Bernardino County in the SE¼ of Section 31, Township 11 North, Range 6 West, SBBM (see Figure 2 - Vicinity Map). The site is being leased by Kiewit from the landowner. Access for workers to the site will be from existing US 395 about 1/3 mile west on Salton Road, a public road. This site will provide construction material in the immediate vicinity of Kramer Junction to reduce transportation costs and fuel usage. The material will be transported to the adjacent new SR-58 alignment and the US 395 improvements along Salton Road as shown on Caltrans National Environmental Policy Act/California Environmental Quality Act (NEPA/CEQA) Re-Validation Form (August 8, 2017). The site is mostly disturbed by past grading and material storage uses.

The purpose of this application is to permit the Kramer Junction Borrow Pit 2 for a 3-year period to provide landscape and fill material for construction of the SR-58 Kramer Junction Expressway Project. This project is also known as the Kramer Junction Gap Closure Project, is being constructed as a joint project by Caltrans and the Federal Highway Administration (FHWA) started in early 2018 and anticipated to be completed by the end of the year 2020. Kiewit is proposing to excavate to a depth of 25 feet with 3 horizontal to 1 vertical slopes (3H:1V) or 18° slope to remove up to 200,000 cubic yards (cy) for a mining period of three years. Reclamation of the site will commence immediately upon termination of mining. Mined products will include landscape and general fill material.

Caltrans included the proposed project site and access routes defined by Caltrans as Area 6 Borrow Area, in their project design and environmental review. Caltrans concluded in their NEPA/CEQA Re-Validation Form (August 8, 2017) that the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for SR-58 Kramer Junction Expressway Project (July 1, 2014) remains valid with implementation of project design and mitigation measures for the potential impacts of the Kramer Junction Borrow Pit 2 area.

The borrow pit site is a vacant, mostly graded site impacted by past grading, material and equipment storage. There is a slight increase in elevation from the south to north by about 15 feet. Where vegetation has re-grown, it consists of scattered saltbush scrub. The adjacent properties are mostly vacant with past disturbances and there is a solar generating project approximately 0.25 miles north. A water tank is located just north on a small rise with a gravel

road in a water company easement extending east to a parcel that appears to have been utilized for water ponds. There are no nearby residences. The existing SR-58 Highway and railroad track lie 0.3 miles to the south. The new SR-58 alignment is about 500 feet south of the project site and a major interchange with US 395 and SR-58 is about 0.4 miles to the east.

**Land Owner:** James S Darr Trust  
40716 Highway 395  
Boron, Ca 93516  
760-762-5220  
[kramerservices@yahoo.com](mailto:kramerservices@yahoo.com)

**Lease Holder/Operator:** Kiewit Infrastructure West Co.  
12700 Stowe Dr. Suite 180  
Poway, CA 92064  
Tim Howells  
858-486-3410  
Tim.howells@kiewit.com

**Representative:** Lilburn Corporation  
1905 Business Center Drive  
San Bernardino, California 92408  
Martin Derus - President  
909-890-1818  
marty@lilburncorp.com

**General Plan Designation:** Rural Living – 5 (RL-5)

**APN:** 0491-171-10; within the SE¼ of Section 31, T11N, R6W

**Parcel Size:** 8.73 acres

**Mine Area:** approx. 6.2 acres, setbacks 2.5 acres

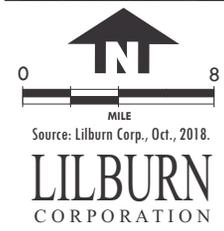
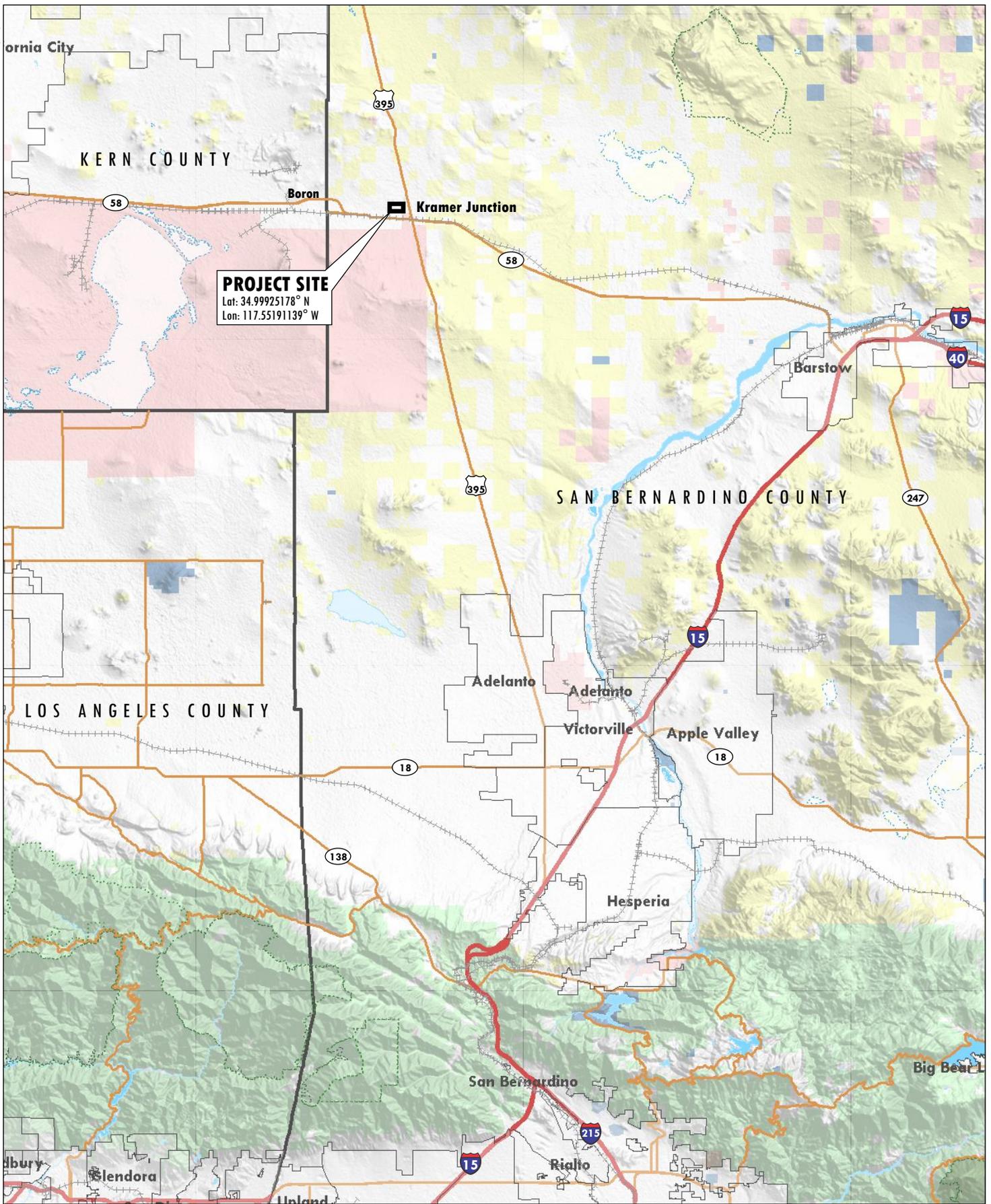
**Estimate Operating Life:** 3 years from County approval

**Estimated Operations Termination Date:** December 2021 (with approval by December 2018)  
or 3 years from date of County approval

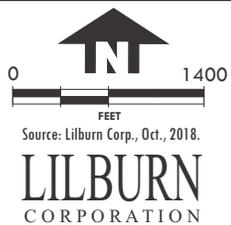
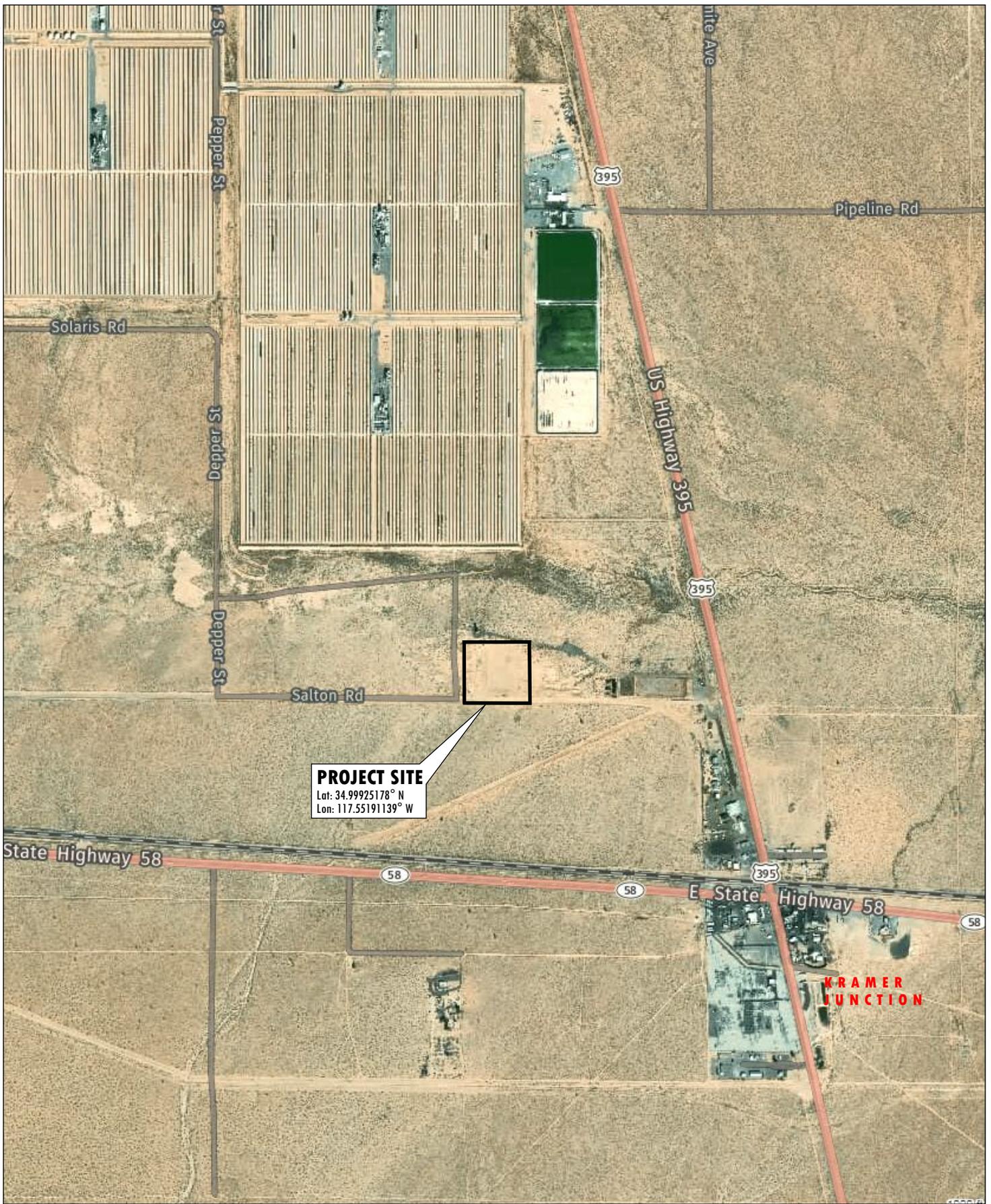
**Area to be Reclaimed:** 8.7 acres

**Estimated Reclamation Completion:** March 2022

**Reclaimed End Use:** Open space



**REGIONAL LOCATION**  
Borrow Pit 2 - Kiewit Infrastructure West, Inc.  
County of San Bernardino, California



**PROJECT VICINITY**  
 Borrow Pit 2 - Kiewit Infrastructure West, Inc.  
 County of San Bernardino, California

## 1.1 MINING OPERATIONS

Please refer to Figure 3 and/or Sheet 1 to review the Mine Plan and cross sections. Mining operations will be undertaken over a period of up to 3 years beginning in early 2019 and extending until early 2022. The site will be fenced with a combination of desert tortoise fencing and 4-strand wire according to the protocols in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009).

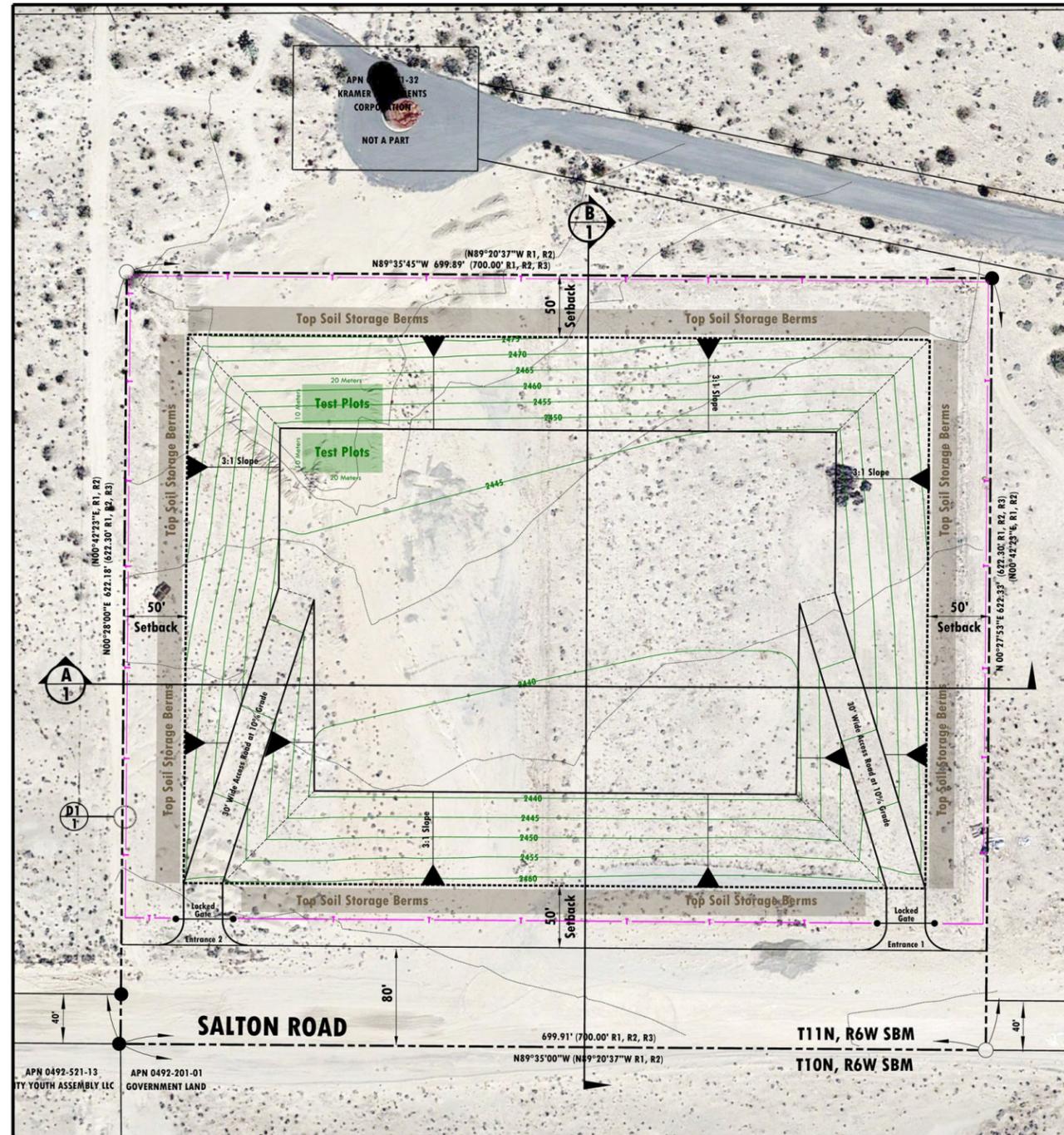
Mining will take place on approximately 6.2 acres of the 8.7-acre parcel with 50-foot setbacks of approximately 2.5 acres. An estimated 200,000 cy would be excavated on an intermittent basis over the course of 2 to 3 years. Equipment storage and parking area will be within the east portion of the excavated area.

Mining of the site is achieved with one loader, one excavator, and a dozer to break, move, and load material directly into single trailer or double belly truck trailers with capacity of up to approximately 25 to 50 cy (typical). A complete list of the typical equipment to be used on-site and for transport to the SR-58 construction alignment is included in Table 1. There will be no crushing, screening, or conveying conducted on-site. There will be no buildings or scale on-site. On occasion, a grader may be used on-site for mining or haul road development and maintenance.

Slopes of 3H:1V to depths of 25 feet will be produced from excavation of the pit. The top of the pit will range from 2,480 feet amsl on the northwest and 2,465 feet amsl on the southeast with a depth elevation ranging from 2,455 feet on the north to 2,440 feet amsl on the south. Setbacks of 50 feet in width will be maintained around the entire excavation area. These setbacks will include desert tortoise and 4-strand wire fencing with warning signs on the outside edge of the property and secured gates. Access into the borrow pit will be via a 5% decline ramp 40 feet in width located on the east and north sides of the pit to allow direct access to Salton Road and the SR-58 construction alignment. Once off the project site, the street-legal transport trucks will utilize Salton Road east to the new SR-58 construction area. Off-road trucks would utilize direct access to the new SR 58 right-of-way per Caltrans direction.

Truck traffic is anticipated at a rate of about 50 loads per day based on street-legal 25 cy trucks and adjacent construction demand. Production and material transport will be approximately 1,250 cy/day for 160 days or lower daily volumes on more days of the year. A total of up to 200,000 cy of fill and landscape material is estimated to be removed.

The trucks will travel on Salton Road to the new SR-58 construction alignment along US 395 or to the immediate south on construction roads to may be established by Caltrans. Little if any public traffic utilizes Salton Road. To minimize dust generation, a water truck will be retained for use during excavations and loading of haul trucks, prior to departing from the site. The mine operator shall water spray working mine areas and access roads onsite and Salton Road on a regular basis and more frequently as needed during windy conditions. Water used for dust control shall be obtained by an adjacent well owned by the site landowner (lease attached to application). Un-surfaced haul roads and access roads may also have dust controlled with biodegradable dust suppressants or covered with road base material as needed.



### LEGEND

- Project Site Property Boundary
- Parcel Line
- Proposed Limits of Pit and Top of Slope
- Proposed Design Contour
- Proposed Drainage Indicator
- Proposed Desert Tortoise Fence
- Existing Topography
- Existing Dirt Road
- Top Soil Storage Berms as Needed 10' High Maximum and Clearly Identified. (Water Sprayed and/or Covered with Larger Material to Limit Erosion)

Typical Detail Number Found on Sheet  
 Typical Section Found on Sheet

**SURVEYOR'S STATEMENT:**

THIS MAP CORRECTLY REPRESENTS A FIELD SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS ACT AT THE REQUEST OF KIEWIT INFRASTRUCTURE WEST IN JULY, 2018.

SEAN M. SMITH  
P.L.S. 8233, STATE OF CALIFORNIA

DATE: 07/27/2018

**SURVEYOR'S STATEMENT**

THIS MAP CORRECTLY REPRESENTS A TOPOGRAPHIC SURVEY PERFORMED UNDER MY DIRECTION ON AUGUST 23, 2018.

SEAN M. SMITH  
P.L.S. NO. 8233

**KRAMER JUNCTION BORROW PIT 2 MINING NOTES**

Mine: Kramer Junction Borrow Pit 2  
 Minerals: Construction aggregates  
 Mine Operator: Kiewit Infrastructure West Co. 12700 Stowe Dr. Suite 180 Poway, CA 92064  
 Tim Howells 858-486-3410 tim.howells@kiewit.com  
 Land Owner: Kramer Apartments Corporation 40716 Highway 395 Baran, Ca 93516  
 760-762-5220 kramerservice@yahoo.com  
 Applicant: Same as Operator  
 Owner of Mineral Rights: Same as Owner  
 Representative: Lilburn Corporation 1905 Business Center Drive San Bernardino, CA 92408 909-890-1818  
 Civil Engineer: Same as Operator  
 Map Preparer: Same as Representative  
 Soil Engineer/Geologist: Kiewit; Lilburn Corporation  
 Date of Map: August 2018

**Utilities**  
 Water: Adjacent well used per lease with owner  
 Sewage disposal: Portable toilets  
 Electric: Not proposed  
 Gas: Not proposed  
 Telephone: Mobile phones

**Land Use District**  
 Project Site: Rural Living - 5 (RL-5)  
 Surrounding Uses:  
 North - RL-5; Water tank; vacant desert open space mostly disturbed. Large solar panel generating facility 0.25 miles north.  
 South - Resource Conservation (RC); Vacant desert land with new SR-58 alignment. The existing SR-58 highway and railroad track lie 0.3 miles south.  
 East - RL-5; Adjacent property is vacant desert land general disturbed. Commercial/Industrial 0.25 miles along US 395  
 West - RL-5; Vacant desert land.

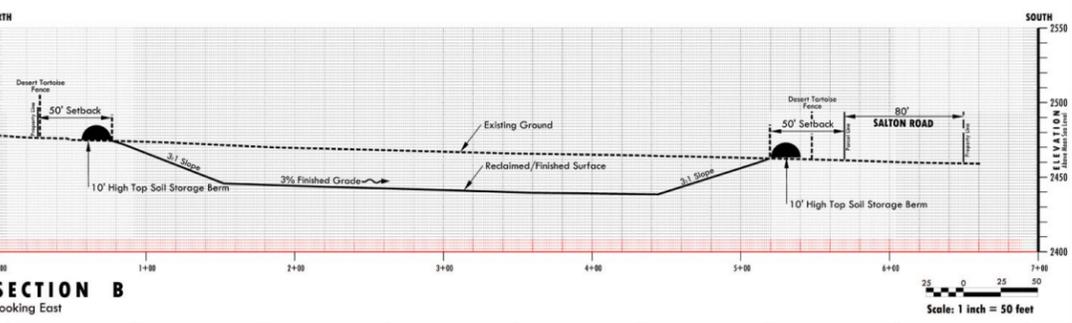
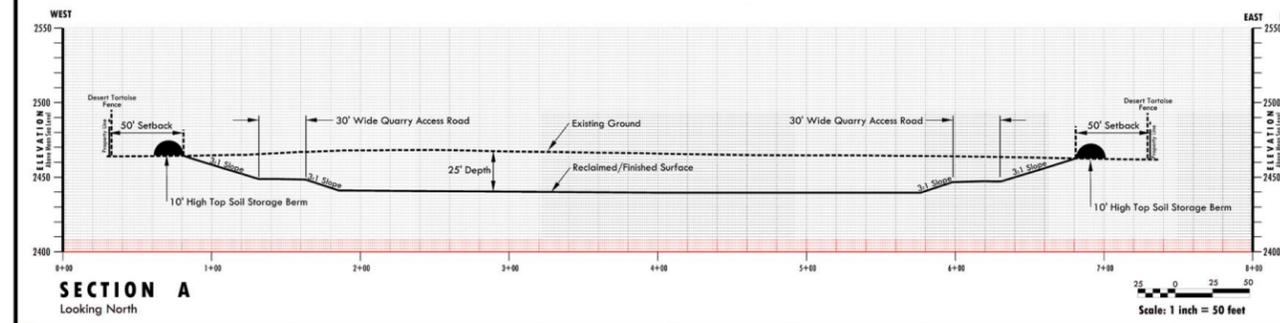
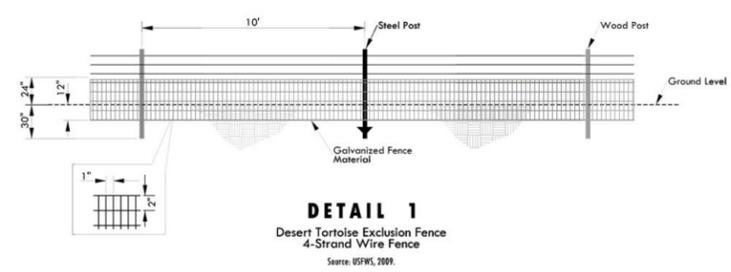
**Legal Description**  
 A.P.N.: 0491-171-10  
 Acres: 8.7  
 SW 1/4 SEC 31 TP 11N R 6W, San Bernardino Base and Meridian, in the County of San Bernardino, State of California.

**Signage (Public Safety)**  
 A perimeter 4-strand wire fence with attached desert tortoise fencing will be constructed around the site according to the protocols provided in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009) with locked gates. During operations, a foreman and/or employees will be on-site nearly 24/7. Warning signs will be attached to the perimeter fence every 250 feet shall read: "No Trespassing - Keep Out; Surface Mining Operation" or similar. Signs will be approximately 1-foot high and 2 feet wide.

**Plant and Tree Protection**  
 Per Caltrans requirements, preconstruction surveys for rare plants (Barstow woolly sunflower, desert cymopterus, Mojave spineflower, and crowned snail) will be conducted by a qualified biologist and if any plants identified, they will be flagged and avoided or transplanted if feasible, and/or seeds collected for revegetation. Selected species of cacti will be salvaged if favorable.

Scale: 1 inch = 50 feet  
 Map Prepared by: Lilburn Corporation (TAG)  
 Projection: CA SPCS, Zone 5, NAD83 Feet  
 Contour Interval: 1 Foot  
 Topography: Qualls Surveying Inc. 01/2018  
 Surveying: Qualls Surveying Inc. 09/2018  
 Aerial Data: 09/2015

**MINE PLAN - BORROW PIT 2**  
 Kiewit Infrastructure West Co.  
 COUNTY OF SAN BERNARDINO, CALIFORNIA



**MINE PLAN - BORROW PIT 2**  
 Kiewit Infrastructure West Co.  
 COUNTY OF SAN BERNARDINO, CALIFORNIA

**SHEET INDEX**

Sheet Description  
 1 - Mine Plan and Cross Sections  
 2 - Reclamation Plan and Cross Sections

Scale: 1"=50'  
 Date: 10/2018 (TAG)  
 DGN: K502-Mine Plan Borrow Pit 2.dgn

Sheet 1 of 2

**Table 1  
Mobile Mine and Transport Equipment (Typical)**

<b>Equipment Make / Model</b>	<b>Typical Number</b>	<b>Hours/day</b>	<b>Tier Level</b>	<b>Purpose</b>
CAT D9 Dozer	1	10	Tier 4 Final	Excavate and loosen material. Road construction and maint.
Peterbilt/Freightliner Trailers	5-10	10	Compliant	Transportation of material to new SR 58 alignment.
CAT 16 Grader	1	4	Tier 3	Maintain roads.
CAT 390 Excavator	1	10	Tier 4 Final	Excavate and load material into trucks.
Cat 980M Loader	1	10	Tier 4	Excavate and load material into trucks.
Cat 740 Water Truck	1	4	Tier 3	Water for dust control on mining areas, haul roads, and stockpiles.
Kentworth T300 Lube Truck (Fuel)	1	4	Compliant	Maintain and fuel on-site equipment.
John Deere 9560	1	4	Tier 4 interim	Haul Road Maintenance

Source: Kiewit June 2018

Note that equipment listed is typical and makes and models may be interchanged with like equipment.

Site operations will be conducted primarily from 5:30 am till 8 pm, up to 6 days per week. Occasionally operations may be conducted 24 hours/day and up to 7 days per week depending on construction needs. All refuse shall be disposed into approved trash bins and removed by a commercial vendor. Portable toilets will be used on-site and serviced by a commercial vendor. Bottled water will be provided to employees.

## **1.2 MINE WASTE**

Although the site has been completely disturbed in the past, those areas with some vegetation will have the top one-foot of surface material pushed into storage berms along the outside of the pit as shown on the mine plan. No overburden or waste material is expected; therefore, no method is required or planned for handling of mine waste.

There will be no imported waste materials or chemicals brought to the project site besides fuel and equipment maintenance fluids. Maintenance and fueling will be conducted by a mobile maintenance truck and Best Management Practices (BMPs) will be implemented. All used fluids will be removed from the equipment and from the site following standard regulations. No used fluids will be stored on-site.

## **1.3 ORE PROCESSING**

The borrow pit material will be loaded directly into trucks for transport to the construction alignment to the east and south. No crushing or screening or any process plant facilities are

utilized on-site. There is no need for on-site diesel-powered electricity or commercial power. No fuel tanks will be placed on-site.

#### **1.4 PRODUCTION WATER**

Water use on-site will be utilized to minimize dust generation. A water truck will be used for wetting-down material and roads during mining activities and for wetting-down haul trucks prior to site departure. Approximately 8,000 gallons of water a day may be used for dust suppression activities with a 10-hour work day. The 8,000-gallon water truck will fill at the adjacent well to the west and spray roads and operation areas as needed. It is not anticipated that there will be any excess water from the wetting-down procedure; therefore, no recycling is required or planned.

The well is owned by the Darr family and Kiewit has an agreement to utilize the water. The well is within the adjudicated Mojave Water Basin managed by the Mojave Water Agency (MWA). The Darr's four wells within the basin have a verified base annual production (BAP) of 408 acre-feet and a Free Production Allowance (FPA) of 327 acre-feet per year. They have recorded a combined annual production of 20 acre-feet over the past five years. The wells combined annual production including the new well servicing the previously approved Kramer Junction Pit to the west are limited to 327 acre-feet per year. If needed for the overall highway project, water production rights may be able to be transferred from other producers within the applicable regulations of the MWA. Production amounts and ground water levels are monitored quarterly and reported to the MWA annually.

#### **1.5 EROSION AND SEDIMENTATION CONTROL**

The Applicant is required per Caltrans contract for complying with Statewide National Pollutant Discharge Elimination System (NPDES) and preparing and implementing a Storm Water Pollution Protection Plan (SWPPP) including applicable BMPs. The control of drainage, erosion, and sedimentation of the mine site will primarily involve the following primary BMPs:

- Limiting surface disturbance to the minimum area required for active operations;
- Monitoring erosion on slopes and implementation of one or more soil stabilization practices as applicable for the site such as: earthen berms or dikes; silt fence; fiber rolls; straw bales; gravel bags; sediment basin(s); and straw mulch.
- Stabilizing disturbed areas through grading slopes to 3H:1V; and
- After project completion - final revegetation by seeding or hydro-seeding with native species.

The project site slopes gently about 2% from the northwest to the south and southeast by about 15 feet. There are no drainage or run-off channels that will be affected by the pit. Principally only direct precipitation may affect the site. The pit is designed with a 2% natural grade towards the southeast to collect any run-off that may collect in the pit and off the slopes in that area that

will act as a sediment or percolation basin. The slopes are designed at very gentle 3H:1V that would reduce possible slope erosion and runoff channeling down the slopes. There will no runoff away from the site. All precipitation will be collected within the borrow pit and allowed to evaporate or percolate.

During the course of mining and the final design of the 3H:1V slope contouring, some erosion may occur during heavy rainfall on the slopes. Erosion caused by rainfall will be retained at the bottom of the pit and rills or channels backfilled. Any water retained within the pit will not impact adjacent properties or local roads due to its containment.

After each major storm event or at least quarterly, any final slopes and the access and haul roads will be visually inspected to determine if any substantial erosion is evident such as sheet, rill or gully erosion. A major storm event is defined as precipitation totals of 0.5 inches per 24-hour period. Any rills or gullies in excess of 8 square inches in cross sectional area and are more than 10 linear feet located on final slopes shall be arrested using methods listed above.

Revegetation will be used for the long-term control of erosion. Access roads and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations.

The following mitigation measures are included in the EIS/EIR and will be implemented by the Applicant as required per contract with Caltrans to protect water quality. Note that the measures below are summarized and that the complete list of mitigation measures relevant to the proposed project is included in Appendix 2.

- **WQ-1:** Contractor will comply with the provisions of the Statewide NPDES permit.
- **WQ-2:** Contractor will be responsible for preparing a SWPPP according to the Department's (Caltran's) standards, incorporating all the BMPs listed in the contract plans.
- **WQ-3:** (Updated reference) Table 2-1 of the Department's Construction Site BMPs Manuel (Caltrans CTSW-RT-17-314.18.1; May 2017) include BMPs; the contractor will implement all the appropriate BMPs.

## **1.6 BLASTING**

There will be no blasting on this project site, therefore, no explosives will be used or stored on site.

## **2.0 RECLAMATION PLAN**

### **2.1 LAND USE**

The Kramer Junction Borrow Pit 2 is vacant land that has been disturbed by various uses in the past including material and equipment storage. Re-growth on-site consists of saltbush and Russian thistle. The adjacent properties are vacant. The new SR-58 alignment is aligned west to east 500 feet to the south and the new SR-58 and US 395 intersection lies about 0.4 miles east.

The site is generally level rising approximately 10 feet to the northwest with elevations ranging from 2,466 to 2,480 feet amsl. The planned depth of the pit will range from 2,445 to 2,455 feet amsl. The General Plan Land Use designation is Rural Living – 5 (one residence per 5 acres) (RL-5). Mining is an allowable use with approval of a conditional use permit and a reclamation plan.

The surrounding land uses are as follows:

- |       |                                                                                                                                             |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------|
| North | RL-5; Water tank; vacant desert open space mostly disturbed. Large solar panel generating facility 0.25 miles north.                        |
| South | Resource Conservation (RC); Vacant desert land with new SR-58 alignment. The existing SR-58 Highway and railroad track lie 0.3 miles south. |
| East  | RL-5; Adjacent property is vacant desert land general disturbed. Commercial and Industrial uses along US 395 0.25 miles east.               |
| West  | RL-5; vacant desert land.                                                                                                                   |

### **2.2 VISIBILITY**

The mine site is located approximately 0.75 miles northwest of Kramer Junction and the existing SR-58 Highway and railroad track lie 0.3 miles south. A large solar panel generating facility lies 0.25 miles north. The borrow pit, after initial excavation, will be below grade and there will be no process plants on-site. As operations reach a depth of 10 feet, mining operations will be screened from the surrounding area. Note that there will over 13 miles of road construction being undertaken in the vicinity.

### **2.3 VEGETATION**

Caltrans included the proposed project site and access roads defined by Caltrans as the Area 6 Potential Borrow and Well Site in their project design and environmental review. Caltrans concluded in their NEPA/CEQA Re-Validation Form (August 8, 2017) that the EIR/EIS for the SR-58 Kramer Junction Expressway Project (July 1, 2014) remains valid with implementation of project design and mitigation measures for the potential impacts of the Kramer Junction Borrow

Pit 2 area. Information, impacts, and mitigation measures discussed below for plants are from the two documents referenced above.

The site is or has been disturbed in the past and natural vegetation has regrown in scattered areas. The vegetation generally consists of atriplex (saltbush or spinescale) scrub. No natural communities of special concern (as listed in the California Natural Diversity Database (CNNDDB)) are present. The site is co-dominated by spinescale saltbush (*Atriplex spinifera*) and white bursage (*Ambrosia dumosa*). Other shrub species include burrobush (*Ambrosia salsola*), winter fat (*Krascheninnikovia lanata*), Mojave cottonthorn (*Tetradymia stenolepis*), and all-scale (*Atriplex polycarpa*).

#### *Threatened and Endangered Plants and Other Special Status Plants*

According to the CNDDDB maintained by the CDFW, no plant species designated as threatened or endangered by the State of California or the Federal Government were identified on the site. During rare plant surveys, a total of four plant species listed as a 1B.2 or 4.2 listed plants on the California Native Plant Society (CNPS) Rare Plant Inventory were present in the vicinity with habitat present on the project site. These include: Barstow woolly sunflower (*Eriophyllum mohavense*) (CNPS List 1B.2); desert cymopterus (*Cymopterus deserticola*) (CNPS List 1B.2); Mojave spineflower (CNPS List 1B.2); and crowned muilla (*Muilla coronate*) (CNPS List 4.2). CNPS Designations are defined as follows:

- 1B.2: Plants rare and endangered in California and throughout their range; Fairly endangered in California (20 – 80% occurrences threatened).
- 4.2: Plants of limited distribution, a watch list; fairly endangered in California (20%–80% occurrences threatened).

The following avoidance, minimization, and mitigation measures are included in the EIS/EIR and will be implemented by the Applicant as required per contract with Caltrans to protect the special-status plants that could be present.

- **BIO-6:** Preconstruction surveys for rare plants will be conducted by a qualified biologist during the appropriate blooming period. Any plants identified will be flagged and avoided, if feasible.
- **BIO-7:** The project design will minimize impacts to special-status plants to the extent feasible.
- **BIO-8:** Temporary Fence (Type ESA). ESA fencing will be established around those populations of special-status plants that are to be protected in place to prohibit all construction activities and access from impacting the rare plant populations within the project area.
- **BIO-9:** Seeds will be collected from all those plant populations deemed appropriate for seed relocation if suitable habitat is available.

- **BIO-10:** Biological Monitor. A qualified biological monitor will monitor construction activities to ensure avoidance of any construction related impacts to special status plant species.
- **BIO-11:** Species Protection Measures will be made to ensure that temporary staging areas, storage areas, and access roads involved with this project will occur in the area of permanent direct impact. Access to the project site will be gained from the existing SR-58. No new access roads will be built as part of this project. Staging areas and equipment storage will take place on existing roads or within the proposed right-of-way of the realigned SR-58.
- **BIO-12:** Joshua trees within the direct impact area with a circumference of 50 inches measured at four feet, measuring 15 feet high, or occurring in a cluster of 10 or more within close proximity to each other will be transplanted or stockpiled for future transplanting to the extent feasible. Joshua trees will be shown on the plans for avoidance or transplanting.
- **BIO-13:** An Environmentally Sensitive Area (ESA) will be established around all Joshua Trees within the project area that are to be protected in place. To prohibit all construction activities and access from impacting the Joshua trees within the project area, temporary ESA fencing would be placed around the Joshua trees. (Note that this is an overall measure and no Joshua trees are on the borrow pit site.)

## 2.4 WILDLIFE

Caltrans included the proposed project site and access roads defined by Caltrans as Area 6 in their project design and environmental review. Caltrans concluded in their NEPA/CEQA Re-Validation Form (August 8, 2017) that the EIR/EIS for the SR-58 Kramer Junction Expressway Project (July 1, 2014) remains valid with implementation of project design and mitigation measures for the potential impacts of the Kramer Junction Borrow Pit 2 area. Information, impacts, and mitigation measures discussed below for wildlife are from the two documents referenced above.

A total of six non-listed special-status animals are known to occur in the general region, and four have the potential to occur within the project area. These four are burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), Le Conte's thrasher (*Toxostoma lecontei*), and America badger (*Taxidea taxus*). Potential habitat for the other two species, prairie falcon (*Falco mexicanus*) and silver-haired bat (*Lasionycteris noctivagans*), is not present in the project area.

The following avoidance, minimization, and mitigation measures are included in the EIS/EIR and will be implemented by the Applicant as required per contract with Caltrans to protect the special-status animals that could be present. Lands acquired to mitigate the effects of the project on the desert tortoise and the Mohave ground squirrel will also mitigate any potential effect to migratory bird species.

- **BIO-14:** A preconstruction survey of the project site for burrowing owl will be conducted; the time lapse between surveys and site disturbance will be as short as possible and will be determined based on consultation with CDFW, but will not exceed 7 days prior to commencing construction activities.
- **BIO-16:** Species Protection. If burrowing owls are found on-site during the preconstruction sweep:
  - Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.
  - A Burrowing Owl Mitigation and Monitoring Plan will be submitted to CDFW for review and approval.
  - All relocation shall be approved by CDFW.
- **BIO-17:** If, during preconstruction surveys, a burrowing owl is encountered, habitat compensation will be assessed and coordinated with CDFW during preparation of the Burrowing Owl Mitigation and Monitoring Plan. Appropriate mitigation lands for burrowing owl will be determined during preparation and CDFW agency approval of the Burrowing Owl Mitigation and Monitoring Plan. CDFW may allow the mitigation lands acquired following the above mitigation ratios to account for more than just burrowing owl, if species-specific habitat criteria are met in the habitat acquisition proposal. As provided in CDFW (2012), the mitigation for permanent habitat loss necessitates replacement with an equal or greater habitat area.
- **BIO-18:** To avoid any impacts to migratory birds (including loggerhead shrike and Le Conte's thrasher), vegetation removal must take place between September 15 and February 15 (outside of the breeding season). If, because of construction schedules, it is necessary to remove vegetation during the breeding season (February 16 through September 14), a biological construction monitor must perform a preconstruction survey of the entire area where vegetation will be removed. All measures shall be taken to minimize impacts on nesting birds. A preconstruction sweep for nesting birds will be conducted prior to construction activities outside of the nesting season as well. The sweep will include areas used for staging, storage, sign placement, or parking. If an active bird nest is detected during surveys, a nest avoidance buffer will be implemented with a radius of 100 feet or as determined by the biological monitor. Depending on the species and nesting stage, it may be prudent to have a biological monitor present during construction to monitor nest activity while still allowing construction to take place.
- **BIO-19:** A preconstruction survey will take place to ensure that no American badgers are located within the project limits.
- **BIO-20:** Biological Monitor. A qualified biological monitor will monitor construction activities to ensure avoidance of any construction-related impacts on American badger.

- **BIO-21:** Species Protection. If a burrow occupied by badgers is found during construction, all construction activities will cease in the vicinity of the burrow, and coordination with CDFW will take place so that appropriate protective measures can be implemented.

### *Threatened and Endangered Animals*

Two animal species listed as threatened under state and federal endangered species laws were found along portions of the new SR-58 alignment and have potential for occurrence in the project area; the desert tortoise (*Gopherus agassizii*) (federally and state Threatened) and the Mohave ground squirrel (*Xerpermophilus mohavensis*) (state Threatened).

The proposed borrow pit which consists of disturbed saltbush scrub and is impacted by past grading and fill and was deemed low quality for desert tortoise in the EIR/EIS. The site was surveyed by Caltrans biologists and no sign were detected. The site is not within critical habitat and will be further isolated by the new SR-58 alignment to the north.

As part of the overall project, Caltrans has been in contact with the U.S. Fish and Wildlife Service (FWS) and the California Department of Fish and Wildlife (CDFW) over the course of the project's environmental review. The original Biological Opinion (BO) (FWS-SB/KRN-12BO2013-14FO423) dated June 30, 2014 was amended with BO (FWS-SBR-12BO230-17A0886) dated June 14, 2017. This amendment assessed several additional impact areas including the 8.7-acre Area 6 Borrow Area (proposed project). The amended BO concluded that as long as the avoidance and mitigation measures are followed from the original BO, the *May Affect But Not Likely To Adversely Affect* determination for desert tortoise and *No Take* determination for Mojave Ground Squirrel will be maintained.

The following avoidance, minimization, and mitigation measures are included in the EIS/EIR and will be implemented by the Applicant as required per contract with Caltrans to protect the special-status animals that could be present. Lands are to be acquired by Caltrans to mitigate the effects of the project on the desert tortoise and the Mohave ground squirrel and will also mitigate any potential effect to migratory bird species. Note that the measures below are summarized and that the complete list of mitigation measures relevant to the proposed project is included in Appendix 2.

- **BIO-22:** Field Contact Representative or Resident Engineer. Caltrans will assign/designate a staff person to act as the Field Contact Representative (FCR) or Resident Engineer (RE) with specific experience in the implementation of environmental compliance programs.
- **BIO-23:** Authorized Biologists and Biological Monitors. Caltrans will review the credentials of all individuals seeking approval as Authorized Biologists prior to being submitted to USFWS to ensure the individuals possess the appropriate experience and training to serve as Authorized Biologists.

- **BIO-24:** Pre-Construction Surveys. Within desert tortoise habitat, Authorized Biologists will conduct pre-construction surveys of the project area including the right-of-way, staging areas, access routes, and all other construction sites.
- **BIO-25:** Biological Resource Information Program. Caltrans will be responsible for ensuring that all workers at the site receive worker environmental awareness training prior to and throughout construction.
- **BIO-26:** Species Protection. Caltrans will ensure that the Authorized Biologist(s) will follow the procedures for handling tortoises in the USFWS field manual (2009). Only the Authorized Biologist(s) will move desert tortoises and then solely for the purpose of moving them from harm's way.
- **BIO-27:** Locating a Dead or Injured Tortoise. The Authorized Biologist will notify USFWS within 24 hours upon locating a dead or injured desert tortoise during construction, operation, and maintenance of the project.
- **BIO-28:** Designated Areas. Caltrans will confine all project activities to the right-of-way, approved access roads, and storage areas.
- **BIO-29:** Permanent Fence. Following preconstruction surveys and the relocation of desert tortoises if determined necessary by the Authorized Biologist but prior to the start of construction, Caltrans will require the contractor to install permanent fencing to exclude desert tortoises from all work areas and rights-of-way under the direction of an Authorized Biologist. Caltrans will construct the fence according to the protocols provided in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009).
- **BIO-30:** Construction Monitoring. An appropriate number of Authorized Biologists and Biological Monitors will be available during construction for the protection of desert tortoise.

In addition to the measures listed above for desert tortoise, the following measures will be implemented to protect MGS and to ensure a Will Not Jeopardize the Continued Existence determination under the California Endangered Species Act (CESA).

- **BIO-31:** Biological Monitor. A qualified biological monitor will monitor construction activities to ensure avoidance of any construction activities related to MGS.
- **BIO-32:** Biological Resource Information Program. MGS Awareness Training will be provided and integrated with WEAP Training prior to construction.
- **BIO-33:** Species Protection. If any MGS are injured or killed during the course of construction, work must stop in the immediate area, the animal must be left in place as is, and the project monitor and the Resident Engineer will be immediately notified.

In Mitigation Measures **BIO-34 through 37** in the EIR/EIS, Caltrans, CDFW, and USFWS have agreed to mitigate affected areas of the overall project area at specific compensation ratios of 5:1 to 3:1 depending on location and habitat for both the desert tortoise and the Mojave Ground Squirrel. The areas of compensation take into account the proposed project area.

## **2.5 RECLAMATION**

The intent of SMARA is to “maintain an effective and comprehensive surface mining and reclamation policy with regulation of surface mining operations so as to assure that: (a) adverse environmental effects are prevented or minimized and that mined lands are reclaimed to a usable condition which is readily adaptable for alternative uses; (b) the production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment; and (c) residual hazards to the public health and safety are eliminated” (Section 2712).

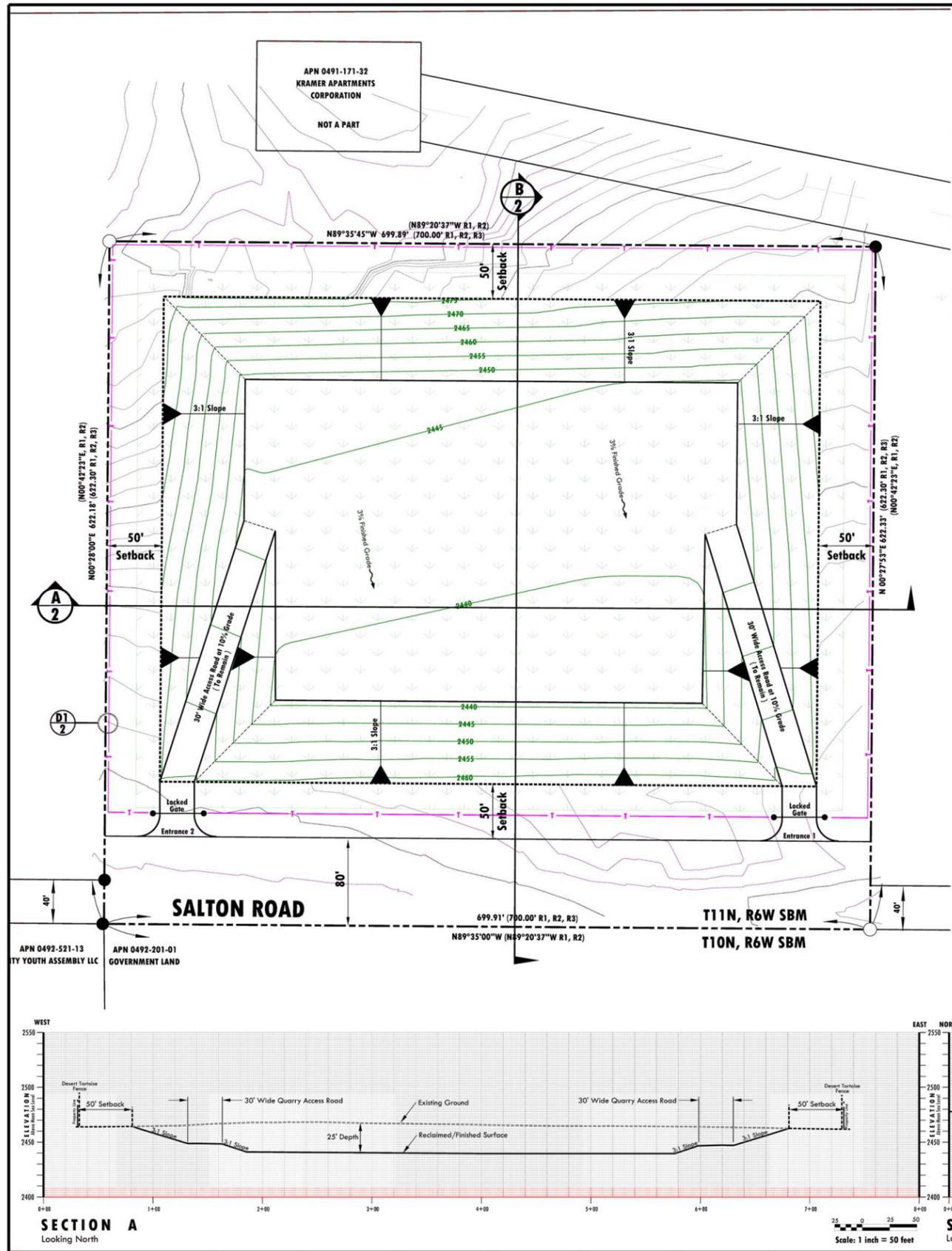
Article 9, Section 3700 of SMARA states the following: “Reclamation of mined lands shall be implemented in conformance with standards in this Article (Reclamation Standards). The standards shall apply to each surface mining operation to the extent that:

- (1) they are consistent with required mitigation identified in conformance with CEQA; and
- (2) they are consistent with the planned or actual subsequent use or uses of the mining site.”

The objectives of this Reclamation Plan are to:

- Eliminate or reduce environmental impacts from mining operations;
- Reclaim in a usable condition for post-mining end uses which will be open space;
- Reshape mining features and revegetate disturbed areas to minimize aesthetic and biological impacts; and
- Reclaim the site as necessary to eliminate hazards to public health and safety.

Please refer to Figure 4 and/or Sheet 1 to review the Reclamation Plan. Reclamation of the mine will be undertaken at the completion of with the mining operations related to the construction of the SR-58 Kramer Junction Expressway. Final reclamation will occur upon termination of excavation activities. Any over-steepened slopes will be backfilled or recontoured to 3H:1V. Fill material will be excess material pushed up onto slopes to create 3H:1V. The fill will be compacted by tracking the dozer over the slope to achieve necessary compaction consistent with final end use of open space. Any rock or gravel on the roads will be removed and used as fill in the pit area. Final graded slopes, the pit floor, storage areas, and roads will be revegetated. Surface material in all compacted working areas and roads will be loosened by mechanical means to a depth of 1-foot. Revegetation activities will generally commence in late fall to correspond with the rainy season of the area. The recontoured slopes and pit floor will be seeded with the recommended seed mix in this Reclamation Plan.



**LEGEND**

- Project Site Property Boundary
  - Parcel Line
  - - - - - Proposed Limits of Pit and Top of Slope
  - Proposed Design Contour
  - ~ Proposed Drainage Indicator
  - Proposed Desert Tortoise Fence
  - Existing Topography
  - - - - - Existing Dirt Road
  - Top Soil Storage Berms as Needed 10' High Maximum and Clearly Identified. (Water Sprayed and/or Covered with Larger Material to Limit Erosion)
  - ~ Revegetation Area
- Typical Detail Number Found on Sheet  
 Typical Section Found on Sheet

**SURVEYOR'S STATEMENT:**

THIS MAP CORRECTLY REPRESENTS A FIELD SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS ACT AT THE REQUEST OF KIEWIT INFRASTRUCTURE WEST IN JULY, 2018.

SEAN M. SMITH  
 PLS 9233, STATE OF CALIFORNIA  
 DATE: 07/27/2018

**SURVEYOR'S STATEMENT**

THIS MAP CORRECTLY REPRESENTS A TOPOGRAPHIC SURVEY PERFORMED UNDER MY DIRECTION ON AUGUST 21, 2018.

SEAN M. SMITH  
 PLS NO. 9233

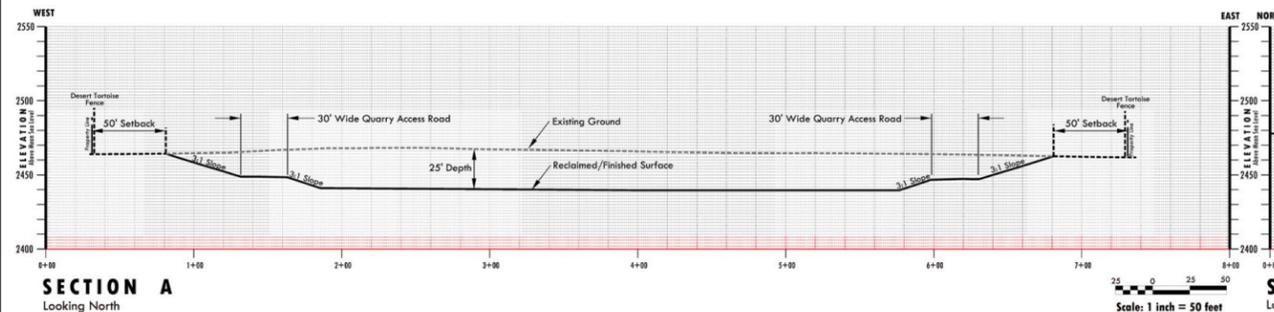
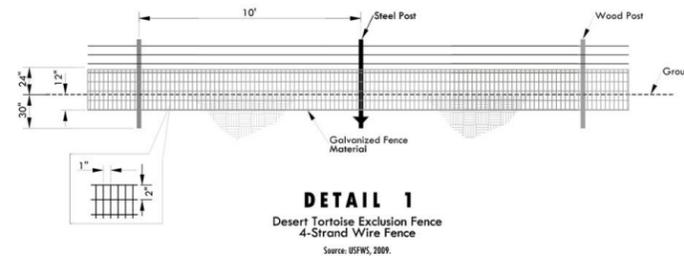
**KRAMER JUNCTION BORROW PIT 2 RECLAMATION NOTES**

**Mine:** Kramer Junction Borrow Pit 2  
**Mineral:** Construction aggregates  
**Mine Operator:** Kiewit Infrastructure West Co.  
 12700 Stowe Dr, Suite 180  
 Poway, CA 92064  
 Tim Howells  
 858-486-3410  
 tim.howells@kiewit.com  
**Land Owner:** Kramer Apartments Corporation  
 40716 Highway 295  
 Boron, CA 93516  
 760-762-5220  
 kramerservices@295boron.com  
**Applicant:** Same as Operator  
**Owner of Mineral Rights:** Same as Owner  
**Representative:** Lilburn Corporation  
 1905 Business Center Drive  
 San Bernardino, CA 92408  
 909-890-1818  
**Civil Engineer:** Same as Operator  
**Map Preparer:** Same as Representative  
**Soil Engineer/Geologist:** Kiewit Infrastructure West Co.  
**Date of Map:** August 2018  
**Utilities:**  
 Water: On-site well used per lease with owner  
 Sewage disposal: Portable toilets  
 Electric: Not proposed  
 Gas: Not proposed  
 Telephone: Mobile phones  
**Land Use District:** Rural Living - 5 (RL-5)  
**Project Site:** Rural Living - 5 (RL-5)  
**Legal Description:**  
 A.P.N.: 0491-171-10  
 Acres: 8.7  
**Area to be reclaimed:** 8.7 acres  
**Reclaimed End Use:** Open space

**Reclamation/Revegetation Plan**  
 At the completion of mining activities, all equipment will be removed from the project site and all debris will be removed and disposed at a permitted facility. All quarry fencing and gates will remain in place to prevent unauthorized access until such time the site is deemed reclaimed.  
 Any over-steepened slopes will be backfilled or recontoured to 3H:1V. Fill material will be excess material pushed up onto slopes to create 3H:1V. The fill will be compacted by tracking the dozer over the slope to achieve necessary compaction consistent with final end use of open space. Final graded slopes, the pit floor, storage areas, and roads will be revegetated. Surface material in all compacted working areas and roads will be loosened by mechanical means to a depth of 1-foot. Revegetation activities will generally commence in late fall to correspond with the rainy season of the area. The recontoured slopes and pit floor will be seeded with the recommended seed mix below.

Species	Seed Amount Pure Live Seed (lbs per acre)
Shadscale, <i>Atriplex confertiflorum</i>	5
Alkali sacaton, <i>Sporobolus airoides</i>	2
Winterfat, <i>Krascheninskia lanata</i>	1
Cheesebush, <i>Ambrosia Salsola</i>	3
Six-weeks fescue, <i>Festuca octiflora</i>	1
California poppy, <i>Erythraea californica</i>	1.5
Grape soda lupine, <i>Lupinus excubitus</i>	2
California goldfields, <i>Lasthenia californica</i>	0.5
Crocodile bush, <i>Larrea tridentata</i>	2
CA joltifir, desert tea, <i>Ephedra californica</i>	1
Blue grass, <i>Poa secunda</i>	4
<b>Total</b>	<b>23</b>

Source: S&S Seeds, Sept. 2017 (typical depending on seed availability)



**RECLAMATION PLAN - BORROW PIT 2**  
 Kiewit Infrastructure West Co.  
 COUNTY OF SAN BERNARDINO, CALIFORNIA

**SHEET INDEX**  
 1. Mine Plan and Cross Sections  
 2. Reclamation Plan and Cross Sections

Scale: 1"=50'  
 Date: 10/2018 (IAD)  
 DDN: KJSP - Plan Borrow Pit 2.dgn  
 Sheet **2** of **2**

**RECLAMATION PLAN**  
 Borrow Pit 2 - Kiewit Infrastructure West, Inc.  
 County of San Bernardino, California

## 2.6 REVEGETATION

The revegetation plan will implement a series of activities to revegetate portions of the site after completion of mining operations. All 8.7 acres if disturbed will be reclaimed and revegetated. The site is a relatively barren environment due to past grading, lack of topsoil and the extreme hot temperatures and very dry conditions. Daytime temperatures average over 100° F. from May through September and annual rainfall is less than 6 inches.

Physical reclamation procedures will include regrading to achieve planned slopes of 3H:1V as needed, ripping compacted surfaces to a depth of about 1-foot to hold moisture, adding stockpiled surface material containing banked seeds in “islands” to a depth up to one-foot deep, seeding with commercial available native seeds, and staking or flagging reclaimed areas to eliminate additional disturbance.

### *Baseline Data*

Jericho Systems prepared a *Revegetation Plan* and collected baseline vegetation data for Kramer Junction Borrow Pit located about 3 miles to the west. This Revegetation Plan is adequate for the this second smaller pit due to similar vegetation and location. The baseline data included detailed plant diversity, density, and richness information for use in the revegetation plan. This report is included in Appendix 1, dated October 2017. The site consists of a disturbed salt bush scrub community.

Jericho established plant plots in undisturbed portions to sample and record existing plant occurrences per SMARA recommendations. Table 3 shows the results of the plant plot data gathered on-site in terms of cover, density and species richness. The revegetation effort will focus on the perennial pioneer shrubs, herbs, and annuals that aid in providing organic material, holding moisture, and breaking up the surface.

The dominant vegetation at the reference site is salt bush scrub. Average shrub cover was measured at 26% co-dominated by spinescale saltbush (15%) and white bursage (10%); average shrub density measured 15 shrubs per 1,000 square foot plot (6 spinescale saltbush and 7 white bursage); and an average of 5 species was observed to occur per 1,000 square foot plot. Complete data tables are included in Appendix 1.

### *Site Preparation*

Prior to mining undisturbed areas, specific rare plants (Barstow woolly sunflower, desert cymopterus, Mojave spineflower, and crowned muilla), seeds from these rare plants if on-site, and soil will be salvaged under the direction of a project botanist per the mitigation measures in Section 2.3 above. Selected species of cacti found on-site favorable for salvage will be marked and salvaged for transplanting to an area on-site ready for reclamation under the direction of the botanist. On-site vegetation will be removed and crushed with the soil salvaged.

Per Sections 88.01.050(f) and 88.01.060(c) of the County of San Bernardino's Development Code, any Joshua trees that are proposed to be removed will be transplanted or stockpiled for future transplanting wherever possible. Salvaged Joshua trees shall be transplanted to the nearest feasible areas, within the leased parcel, following approved transplant methods for this species.

The available surface material will be salvaged to a depth of one-foot and graded into perimeter berms as shown on the Mine Plan, Sheet 1 and Figure 3 for future reclamation. The salvaged material will be stockpiled separately and clearly identified. This surface material will be used as growth media and seed bank for the revegetation effort. If the stockpiles are susceptible to wind erosion, there will be water sprayed to form a surface crest or covered with larger gravel materials.

### *Revegetation*

Upon completion of mining, all disturbed slopes, access roads, and the pit floor will be reclaimed and revegetated within one year. Any rock or gravel on the roads will be removed and used as fill in the pit area. The slope, pit floor, storage areas, and roads will be ripped to a depth of 1.5 feet or greater parallel to the slope to break up compacted areas and aid in holding moisture and seeds. The stored surface material will be spread over the areas to be reclaimed to create islands of material up to 1-foot in depth with ridges and furrows to aid in holding moisture and windblown seeds. The revegetation area will be seeded with a certified weed-free seed mix applied hydraulically (hydro-seeded). No invasive, non-native plant species will be used in the revegetation plan. Only native seeds tolerant to existing soil and rainfall conditions will be used.

Seeding will take place between November and February after the first substantial rains to take advantage of winter precipitation and eliminate the need for irrigation. Reclaimed areas will be clearly staked and flagged to eliminate additional disturbance. The seed mix will be applied by hydroseeding with a hydroseed slurry containing seed, natural fiber mulch, and organic tackifier. Although hydroseed mulch with seed can be carried and moved by flowing water, the mulch will help more of the seed stay in place and germinate compared to hand seeding.

A unique seed mix was developed for the spinescale scrub habitat occurring in the project impact area. The recommended seed mix and seeding rate for spinescale scrub is outlined in Table 2 (below) and may be modified or species re-placed due to availability of the seed that year and seed costs. Quick-growing, shallow-rooted species will be included in the seed mix to provide short-term erosion control. By providing short-term erosion control, more favorable growing conditions will be created for climax species that will provide long-term erosion control.

### *Test Plots*

In addition, the operator shall establish four 50-square meter test plots. The test plots will be located in the western portion of the site, refer to Sheet 1 of the Mine Plan. The plot areas shall be representative of disturbed slope and pit floor areas with the following treatments: (1) ripping to depth of 1-foot with no seeding; and (2) ripping and covering with available topsoil in an

island pattern and hydro-seeding. The test plots will be maintained and monitored and tests conducted to refine revegetation techniques and seeding rates.

### *Irrigation*

The plant palette proposed for the mine site consists of primarily drought-tolerant plants species that should perform well without additional water. The average precipitation in the area should be sufficient for seed germination and root establishment of native species.

**Table 2**  
**Recommended Seed Mix**  
**Kramer Junction Borrow Pit 2**

Species	Life Form	Pure Live Seed Lbs/Acre
<i>Ambrosia dumosa</i> (white bursage)	shrub	1.0
<i>Ambrosia salsola</i> (burrobush)	shrub	0.5
<i>Amsinckia tessellata</i> (bristly fiddleneck)	annual herb	1.0
<i>Atriplex polycarpa</i> (allscale saltbush)	shrub	1.0
<i>Atriplex spinifera</i> (spinescale saltbush)	shrub	2.5
<i>Krascheninnikovia lanta</i> (winterfat)	shrub	0.5
<i>Lasthenia gracilis</i> (needle goldfields)	annual herb	0.5
<i>Stipa hymenoides</i> (Indian rice grass)	perennial grass	8.0
<i>Stipa speciosa</i> (desert needle grass)	perennial grass	1.0

Source: S&S Seeds, Jericho Systems - October 2017 (typical depending on seed availability)

Planting in the fall, prior to the winter rains, will be sufficient for seed germination and root establishment and reduce weed growth that is typically associated with supplemental irrigation. Scarification of the soil and the creation of surface rills and furrows will allow for maximized collection of water from rain events and run-off.

### *Fertilization*

No fertilization of the site is recommended. The native seeds used for revegetation will be tolerant of existing soil conditions. Additionally, the mechanical loosening, and creation of surface rills and furrows, will create conditions favorable for seed germination and root establishment by native species. Widespread use of fertilizers on desert sites appears to benefit non-native weedy species and not the native species sought as the goal of the revegetation plan (Clary, 1987).

### *Weed Control*

The purpose of the non-native invasive species control plan is to reduce or eliminate the occurrence of non-native invasive plant species that may invade the site where active and natural

revegetation is taking place. Non-native invasive species (weeds) can compete with native plant species for available moisture and nutrients and consequently interfere with revegetation of the site.

Several non-native plant species were identified including Saharan mustard (*Brassica tournefortii*), foxtail chess (*Bromus madritensis*), cheatgrass (*B. tectorum*), redstem fillaree (*Erodium cicutarium*), Russian thistle (*Salsola paulsenii*) and Mediterranean grass (*Schismus* ssp.). The latter species is prevalent within the herbaceous layer and comprises approximately 40% of the ground cover within the sampled areas.

The occurrence of non-native invasive species on-site after revegetation shall be monitored by visual inspection quarterly for the first year and then annually thereafter. The goal is to prevent non-native invasive species from becoming established and depositing seeds in revegetated areas.

Non-native vegetation will be removed using the most efficient method as determined by the site conditions. Removal may occur regularly in the first year and may consist of using mechanized equipment, hand tools and/or herbicide spraying. Herbicides may be applied to control an instance where there is an aggressive and extensive weed invasion on site. Cover and density of non-native grass species within the revegetation area shall be no greater than the baseline and in comparable surrounding lands that have not been disturbed by the project. For non-native species other than non-native grasses (i.e. Saharan mustard, Russian thistle, etc.), no areas will be allowed to have more than 10 percent non-native invasive species ground cover. If inspections reveal that non-native invasive species are becoming or have become established on site, then removal will be initiated. Inspections shall be made in conjunction with revegetation monitoring.

Reports of inspections and weed control implementation shall be part of the annual revegetation monitoring and kept on file by the operator.

In addition, the following avoidance, minimization, and mitigation measures are included in the EIS/EIR and will be implemented by the Applicant as required per contract with Caltrans would reduce potential impacts from the introduction of invasive species during construction:

- **BIO-38:** Measures to minimize the introduction or spread of nonnative species would include cleaning all equipment and vehicles with water (or another Caltrans approved method) to remove dirt, seeds, vegetative material, or other debris before entering and upon leaving the project site and the removal and disposal off site of existing nonnative species within the project area.
- **BIO-39:** Landscaping and erosion control measures proposed during this Caltrans project will not contain invasive species in the plant selections or seed mixtures.

### *Monitoring*

The Revegetation Monitoring Plan will be an ongoing effort to assess the results of revegetation on the disturbed areas of the site. The monitoring plan will be followed annually to monitor and

assess completed revegetated areas (and test plots) and areas where revegetation is being planned or just beginning. A Revegetation Monitoring Report submitted by the operator to the County will be part of the overall compliance with conditions. Revegetated areas will be assessed utilizing success criteria with successful methods being implemented for future revegetation.

Revegetation efforts will be monitored annually for five years after seeding or until revegetation meets the success criteria and is self-sustaining. Revegetation observations will be summarized annually as part of the overall-monitoring program. This schedule may be revised depending on the results of the revegetation effort and the meeting of the success criteria. Monitoring and revegetation results will be reported to the County in an annual monitoring report.

*Success Criteria*

The site consists of salt bush scrub with minimal vegetation. Success criteria will be based on the overall quality of the revegetation results compared to the recorded baseline vegetation data. Following completion of the revegetation, the surviving perennial plant species shall be evaluated annually by the consulting botanist for relative growth as determined by cover, diversity and density. Individual specimens or areas shall receive appropriate remedial attention as necessary. Remedial actions include removing invasive weed species or reseeding. The above procedure will be repeated annually for a total of five years or until success criteria achieved. Successful revegetation based on baseline data and DMR standards will be achieved when the reseeded areas have met the following in Table 3 five years after reclamation.

**Table 3  
Kramer Junction Borrow Pit 2  
Recommended Revegetation Success Criteria**

<b>Mixed Desert Scrub</b>	<b>Baseline Mean</b>	<b>Standard Success Percentage</b>	<b>Success Criteria</b>
Shrub Cover (%)	26	40%	11% cover of native perennials
Shrub Density (stems/m <sup>2</sup> )	15	70%	10 native perennials/1,000 sq. ft. or 100 sq. meters
Species Richness or Diversity (species/m <sup>2</sup> )	5	75%	4 native perennials/1,000 sq. ft. or 100 sq. meters

Source: Revegetation Plan – Jericho Systems Inc.; October 2017 (see Appendix 1)

*Revegetation Monitoring*

The ongoing revegetation activities will be monitored throughout the life span of the mining operation and will be summarized annually as part of the overall monitoring plan and report. Data on plant species diversity, cover, density, survival and vigor will be collected on revegetated sites and compared qualitatively to undisturbed sites to evaluate success. The operator will seed with the seed mix listed in Table 2 which includes four perennial species.

The annual monitoring will include random transect sampling within the revegetation area. The number of transects and plots will vary in order to produce the 80% confidence level required under SMARA's Performance Standards for Revegetation. The following data will be collected within transects and plots:

- a. Survivorship: assessed by absolute counts
- b. Plant density
- c. Species richness
- d. Cover per specified area

All data will be recorded and permanent photo documentation stations will also be established for representative transects in order to visually document annual vegetation changes and community development.

If at any time the revegetation efforts are found unsuccessful as compared to surrounding areas, the botanist will reevaluate the revegetation guidelines and recommend procedures to ensure successful plant propagation. Remedial activities may include but not limited to additional seeding, change of seed mix, removal of invasive non-native species, and additional protection from human and animal impacts as deemed necessary. Monitoring of the revegetation will continue for five years after cessation of mining or until the site is deemed successfully revegetated by the County. These results will be reported to the County of San Bernardino annually.

## **2.7 CLEANUP**

At the completion of mining activities, all equipment will be removed from the project site. All debris will be removed and disposed at a permitted facility. All quarry fencing and gates will remain in place to prevent unauthorized access.

## **2.8 POST RECLAMATION AND FUTURE MINING**

The reclaimed site will not preclude or necessitate any future mining activities with depth or surface modification. Upon completion of mining activities, the site will be open space and could be used for other uses at the discretion of the landowner. The site will be 25 feet below the adjacent properties with contoured and revegetated 3H:1V slopes.

## **2.9 SLOPE AND SLOPE TREATMENT**

Stabilization of the mine slopes will be accomplished during the final excavations per area and phase and may include some backfilling of slopes if over-steepened. Slope stabilization will improve the aesthetics of the site; reduce slope erosion; eliminate slope sliding; and eliminate hazards such as un-safe drop-offs.

Final slopes will be excavated at 3H:1V so no backfilling will be required. If some minor fill is required to create final 3H:1V slopes, the fill will be compacted by tracking the dozer over the

slope to achieve appropriate compaction consistent with the final end use of open space. Overly compacted final-graded slopes and/or the pit floor may require being loosened by mechanical means to aid the reseeding effort.

Preserved topsoil (as described in Section 2.11 Soils) will be placed over this prepared compacted/loosened surface, with final treatment and subsequent revegetation to follow pursuant to Section 2.6 Revegetation. Revegetation activities will generally commence in late fall to correspond with the rainy season of the area.

## **2.10 PONDS, WASTES**

No ponds are proposed and chemicals are not used on-site; no processing occurs on-site. There will be no chemical waste or pollution from the mining operations.

## **2.11 SOILS**

Stantec drilled six boreholes on-site for Caltrans (*Soil Survey Investigation Report*, December 2, 2016). The samples indicated that the surface and to depths of 25 feet consisted of silty to clayey sand, light brown to brown; with some fines and clays. No chemical odors or evidence of staining were noted at any of the soil samples collected. Groundwater was not encountered in any of the boreholes and not expected to be present in shallow soils.

The mine site is generally underlain by recent age alluvium, lake, playa, and terrace deposits made up of weathered rock and sand; unconsolidated and semi-consolidated. All identified topsoil, or at minimum the top 6 inches of surface soils and material, will be graded into stockpiles to preserve as much of the organic material and seeds as practicable. Locations for temporary and more long-term surface material stockpiles are identified on Sheet 1 of the Mine Plan. For 6 acres at 0.5 feet, approximately 4,840 cubic yards would be salvaged.

## **2.12 DRAINAGE AND EROSION CONTROLS**

Post-reclamation drainage on-site will be contained by the resulting shallow basin. Only minor sheet flow may drain into the pit. No defined drainages will be interested by the project site. Refer to Section 1.5 for a description of drainage and erosion controls that will be maintained after termination of mining.

## **2.13 PUBLIC SAFETY**

All equipment and debris will be removed from the site upon project completion. Public access to the site will be restricted by the site perimeter 4-strand wire fence with attached desert tortoise fencing per USFWS protocol and locked access gates during operations and until revegetation is deemed successful. Warning signs with contrasting background lettering will be installed every 250 feet along the approved surface mine boundary shall be installed and shall read “No Trespassing - Keep Out; Surface Mining Operation” or similar during mining. Signs will be approximately 1-foot high and 2 feet wide.

The reclaimed 3H:1V slopes will be of sufficient low gradient as not to cause a hazard to public safety if the public illegally trespasses onto the site.

## **2.14 MONITORING AND MAINTENANCE**

The County as lead agency to implement SMARA requires annual reporting of Mining and Reclamation activities. The reports are filed with the State Division of Mine Reclamation and the County. Revegetated areas will be monitored over a five-year period or until success criteria achieved following initial planting. Data on plant species diversity, cover, survival and vigor will be collected on revegetated sites and compared to baseline data from undisturbed sites to evaluate project success.

Monitoring and maintenance of reclamation is an ongoing responsibility of the applicant and if accepted, by the land owner.

Ongoing operations and reclamation activities require monitoring and maintenance as applicable. The operator will provide onsite review of the following among others:

- a. Storm Water Pollution Prevention per the NPDES plan and SWPPP required by State and Federal rules and per Caltrans contract as discussed under Section 1.5 above. Erosion control will be reviewed and addressed within the SWPPP.
- b. Implementation and effectiveness of dust control measures;
- c. Maintenance and managing idling for trucking operations;
- d. Inspection of fencing and signs; and
- e. Test revegetation plots.

## **2.15 RECLAMATION ASSURANCE**

The applicant through a lease with the property owner shall post or cause to be posted reclamation assurance in an amount sufficient to pay for the cost of reclamation as outlined in Section 2. The reclamation assurance shall be reviewed by the Lead Agency annually as required by the Surface Mining and Reclamation Act (SMARA). San Bernardino County is the lead agency for SMARA compliance and will review the Reclamation Assurance and inspect the mine site annually.

In addition to the monitoring through inspections and reporting, the operator is required to assure reclamation of the site in accordance to the approved Reclamation Plan in compliance with Section 2773.1 of SMARA. The operator shall continue to post reclamation assurance mechanisms in an amount sufficient to pay for the cost of reclamation as outlined in Section 2. The financial assurances must be approved by and payable to the County and the California Department of Conservation.

### 3.0 GEOLOGY

Kramer Junction area is located approximately 30 miles north of the city of Adelanto in the Mojave Desert. The Mojave Desert province is characterized by an interior region of isolated mountain ranges separated by expanses of desert plains. In general, the province has an interior enclosed drainage and many playas. Two important fault trends control topography in the Mojave province, one being a prominent northwest/southeast trend and the other a secondary east-west trend. The Study Area is generally underlain by recent age alluvium, lake, playa, and terrace deposits made up of weathered rock and sand; unconsolidated and semi-consolidated.

The Study Area, as is most of Southern California, is located in a seismically active area. According to the DMG Preliminary Fault Activity Map of San Bernardino, the nearest recently active faults include the Kramer Junction Area Faults and South Lockhart Fault (CDMG, 1994). The Study Area is not located within an Alquist Priolo Special Studies Zone (A-P Zone). The nearest A-P Zone is for the South Lockhart Fault which intersects SR-58 approximately 7 miles east of the Kramer Junction intersection (CDMG, 2000). These and other faults are capable of generating significant seismic events (greater than 5.0 magnitude).

The project site does not fall within a Geological Hazard Zone, as identified on the San Bernardino County General Plan Map Atlas, overlay map, CHDHC. There are no geologic conditions that could adversely affect this project.

## 4.0 HYDROLOGY

### Surface Hydrology

The project area is within the Mojave hydrologic basin of the Antelope-Fremont Valleys and Coyote-Cuddeback Lakes watersheds. The overall Mojave hydrologic basin, which has a surface area of approximately 4,500 square miles, is located entirely within the County of San Bernardino. The Mojave River, located approximately 13 miles southeast of the project site, is the nearest major watercourse. Most of the Mojave River is subterranean, but flows breach the surface between the cities of Barstow and Victorville.

The site is relatively flat with a slight gradient to the south. No drainages are intersected by the proposed excavation area.

### Groundwater

Groundwater is anticipated to flow northwest and west generally mimicking surface topography. The EIR/EIS reports groundwater at depths greater than 150 feet below ground surface (bgs). The Antelope Valley and Harper Valley groundwater basins underlie the project area.

According to the GeoTracker website (Stantec report), depth to groundwater is reported to be approximately 70 feet below the ground surface (bgs) in wells located near the area of Kramer Junction (DWR, 2016a) with a historical high groundwater elevation reported at 64.5 feet bgs in 2012 (DWR, 2016b). The proposed project site is to be excavated to an average depth of 25 to 40 feet, which is not anticipated to impact the water table.

Water use on-site will be utilized to minimize dust generation. A water truck will be used for wetting-down material and roads during mining activities and for wetting-down haul trucks prior to site departure. Approximately 8,000 gallons of water a day may be used for dust suppression activities with a 10-hour work day. The 8,000-gallon water truck will fill at the adjacent well to and spray roads and operation areas as needed. It is not anticipated that there will be any excess water from the wetting-down procedure; therefore, no recycling is required or planned.

The well is owned by the Darr family and Kiewit has an agreement to utilize the water. The well is within the adjudicated Mojave Water Basin managed by the Mojave Water Agency (MWA). The Darr's four wells within the basin have a verified base annual production (BAP) of 408 acre-feet and a Free Production Allowance (FPA) of 327 acre-feet per year. They have recorded a combined annual production of 20 acre-feet over the past five years. The wells combined annual production including the new well servicing the previously approved Kramer Junction Pit to the west are limited to 327 acre-feet per year. If needed for the overall highway project, water production rights may be able to be transferred from other producers within the applicable regulations of the MWA. Production amounts and ground water levels are monitored quarterly and reported to the MWA annually.

## REFERENCES

California Department of Conservation, Division of Mine Reclamation. *Surface Mining and Reclamation Act of 1975* (SMARA, Public Resources Code, Sections 2710-2796). May 2017.

California Department of Transportation. *Final Environmental Impact Report/Environmental Impact Statement State Route 58 Kramer Junction Expressway Project* (SCH#2007051051); Volumes I and II. July 2014.

California Department of Transportation. *Appendix G – Mitigation Measures*; Final Environmental Impact Report/Environmental Impact Statement State Route 58 Kramer Junction Expressway Project (SCH#2007051051). July 2014.

California Department of Transportation. *NEPA/CEQA Re-Validation Form for Final Environmental Impact Report/Environmental Impact Statement State Route 58 Kramer Junction Expressway Project*. August 2017.

California Department of Transportation, District 8; Stantec. *Soil Survey Investigation Report, Task Order No. 34; Soil Survey for 4 Parcels*. Location: 08-SBD-58-PM R0.0/R12.9 San Bernardino County, California. December 2, 2016

California State Water Resources Control Board - GeoTracker website. <https://geotracker.waterboards.ca.gov/>

County of San Bernardino 2007 Development Code, amended September 23, 2016. Chapter 88.03 Surface Mining and Land Reclamation.

County of San Bernardino 2007 General Plan, amended April 24, 2014. <http://www.sbcounty.gov/Uploads/lus/GeneralPlan/FINALGP.pdf>.

Jericho Systems, INC. *Revegetation Plan for the Kramer Junction Borrow Pit*. October 2017.

U.S. Fish and Wildlife Service. *Biological Opinion for State Route 58 Kramer Junction Expressway Project, Kern and San Bernardino Counties, California* (FWS-SB/KRN-12B0203-14F0423). June 30, 2014.

U.S. Fish and Wildlife Service. *Amendment to the Biological Opinion (FWS-SBR-12B0203-17TA0886) for the Kramer Junction Expressway Project* (FWS-SB/KRN-12B0203-14F0423). June 14, 2017.

## CROSS REFERENCE MATRIX

### Kramer Junction Borrow Pit #2 Mine Reclamation Plan Surface Mining and Reclamation Act of 1975 (SMARA) & California Code of Regulations (CCR Title 14)

**Prepared by Lilburn Corporation – October 2018**

Including reference to:

ARTICLE 1. GENERAL PROVISIONS. SECTION 2710 et seq.

ARTICLE 2. DEFINITIONS. SECTION 2725 et seq.

ARTICLE 3. DISTRICT COMMITTEES. SECTION 2740 – 2741

ARTICLE 4. STATE POLICY FOR THE RECLAMATION OF MINED LANDS. SECTION 2755 et seq.

ARTICLE 5. RECLAMATION PLANS AND THE CONDUCT OF SURFACE MINING OPERATIONS.

SECTION 2770 et seq., as amended

CCR TITLE 14 (REGISTER 85, No. 18-5-4-83)

CHAPTER 8. MINING AND GEOLOGY

SUBCHAPTER 1. STATE MINING AND GEOLOGY BOARD

ARTICLE 1. SURFACE MINING AND RECLAMATION PRACTICE. SECTION 3500 et seq.

ARTICLE 9. RECLAMATION STANDARDS. SECTION 3700 et seq.

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
<b>MINING OPERATIONS AND CLOSURE</b>				
SMARA 2770.5	100-year flood, Caltrans contact	X		
SMARA 2772 (c) (1)	Name and Address of operator/agent.		2	1.0
SMARA 2772 (c) (2)	Quantity & type of minerals to be mined.		1, 7	1.0, 1.1
SMARA 2772 (c) (3)	Initiation and termination date.		2	1.0
SMARA 2772 (c) (4)	Maximum anticipated depth of mining.		5, 23	1.1, 2.8, 2.9
SMARA 2772 (c) (5)	Description, including map with boundaries, topographic details, geology, streams, roads, utilities.		1 – 9 Sheets 1 & 2	1.0 - 1.6
SMARA 2772 (c) (6)	Mining plan and time schedule for reclamation (concurrent or phased reclamation).		1- 7, 16	1.0, 1.1, 2.5
SMARA 2772 (c) (7)	Proposed subsequent use.		23	2.8
SMARA 2772 (c) (8)	Description of reclamation measures adequate for		16 -23	2.5 -2.7

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
<b>MINING OPERATIONS AND CLOSURE</b>				
	proposed end use.			
SMARA 2772 (c) (8) (a)	Description of containment control and mine waste disposal.		8	1.2
SMARA 2772 (c) (8) (b)	Rehabilitation of stream banks/beds to minimize erosion	X	---	
SMARA 2772 (c) (9)	Impact of reclamation on future mining.		23	2.8
SMARA 2772 (c) (10)	Applicant statement accepting responsibility for reclamation per the reclamation plan.		Attached to application	
SMARA 2773 (a)	Water quality monitoring plan specific to property.		8, 24 SWPPP to be prepared upon approval	1.5, 2.12
SMARA 2773 (a)	Sediment and erosion control monitoring plan specific to property.		8, 24 SWPPP to be prepared upon approval	1.5, 2.12
SMARA 2773 (a)	Revegetation plan specific to property. Monitoring Plan.		18-23	2.6
SMARA 2773.1	Performance (financial) assurances.		Draft attached to application	
SMARA 2777	Amended reclamation plans required prior to substantial deviations to approved plans.	X	INFORMATIONAL	
CCR 3502 (b) (1)	Environmental setting and impact of reclamation on surrounding land uses. (Identify sensitive species, wildlife habitat, sensitive natural communities, e.g., wetlands, riparian zones, etc.).		10-16	2.1 – 2.5
CCR 3502 (b) (2)	Public health and safety (exposure).		24	2.13
CCR 3502 (b) (3)	Slopes: critical gradient, consider physical properties and landscaping.		5, 23	1.1, 2.9

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
<b>MINING OPERATIONS AND CLOSURE</b>				
CCR 3502 (b) (4)	Fill materials in conformance with current engineering practice.	X	---	
CCR 3502 (b) (5)	Disposition of old equipment		23	2.7
CCR 3502 (b) (6)	Temporary stream and water diversions shown.	X	---	
CCR 3503 (a) (1)	Removal of vegetation and overburden preceding mining kept to a minimum.		16 -22	2.5, 2.6
CCR 3503 (a) (2)	Overburden stockpiles managed to minimize water and wind erosion.	X	---	
CCR 3503 (a) (3)	Erosion control facilities (dikes, ditches, etc.) as necessary.		8, 24	1.5, 2.12
CCR 3503 (b) (1)	Settling ponds (sedimentation and water quality).	X		
CCR 3503 (b) (2)	Prevent siltation of groundwater recharge areas.	X		
CCR 3503 (c)	Protection of fish and wildlife habitat (all reasonable measures).		10- 15	2.3, 2.4
CCR 3503 (d)	Disposal of mine waste and overburden (stable-no natural drainage restrictions without suitable provisions for diversion).	X	---	
CCR 3503 (e)	Erosion and drainage (grading to drain to natural courses or interior basins).		8, 24	1.5, 2.12
CCR 3503 (f)	Resoiling (fine material on top plus mulches).		18-19, 24	2.6, 2.11
CCR 3503 (g)	Revegetation and plant survival (use available research).		18-22	2.6
CCR 3703 (a)	Sensitive species conserved or mitigated		10-12	2.3
CCR 3703 (b)	Wildlife habitat at least as good as pre-project, if approved end use is habitat.		18-22	2.6

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
<b>MINING OPERATIONS AND CLOSURE</b>				
CCR 3703 (c)	Wetlands avoided or mitigated at 1:1 minimum	X		
CCR 3704 (a)	For urban use, fill compacted in accordance with UBC or local grading ordinance.	X		
CCR 3704 (b)	For resource conservation, compare to standard for that end use	X		
CCR 3704 (c)	Mine waste stockpiled to facilitate phased reclamation and separate from growth media.	X		
CCR 3704 (d)	Final reclamation fill slopes not exceed 2:1, except when engineering and revegetation analysis allow.	X		
CCR 3704 (e)	Final landforms or fills conform with surrounding topography or end use.		16, 23	2.5, 2.9
CCR 3704 (f)	Cut slopes have minimum factor of safety for end use and conform with surrounding topography.		16, 23	2.5, 2.9
CCR 3704 (g)	Piles or dumps not placed in wetlands without mitigation.	X		
CCR 3705 (a)	Vegetative cover, suitable to end use, self-sustaining. Baseline studies documenting cover, density and species richness.		18-22; Table 4	2.6; Appendix 1
CCR 3705 (b)	Test plots if success has not been proven previously		20	2.6
CCR 3705 (c)	Decompaction of site.		16, 18	2.5, 2.6
CCR 3705 (d)	Roads stripped of road base materials, resoiled and revegetated, unless exempted.		16, 19	2.5, 2.6
CCR 3705 (e)	Soil altered or other than native topsoil, required soil analysis. Amend if necessary.	X		

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
<b>MINING OPERATIONS AND CLOSURE</b>				
CCR 3705 (f)	Temporary access not bladed. Barriers installed.	X		
CCR 3705 (g)	Use native plant species, unless exotic species meet end use.		18-19	2.6
CCR 3705 (h)	Plant during correct season.		16, 19	2.5, 2.6
CCR 3705 (i)	Erosion control and irrigation, when necessary.		8, 24	1.5, 2.12
CCR 3705 (j)	If irrigated, demonstrate self-sustaining without for two-year minimum.	X		
CCR 3705 (k)	Weeds managed.		20-21	2.6
CCR 3705 (l)	Plant protection measures, fencing, caging.	X		
CCR 3705 (m)	Success quantified by cover, density and species-richness. Standards proposed in plan. Sample method set forth in plan and sample size provides 80 percent confidence level, as minimum.		21-22; Table 4	2.6
CCR 3706 (a)	Mining and reclamation to protect downstream beneficial uses.	X		
CCR 3706 (b)	Water quality, recharge, and groundwater storage shall not be diminished, except as allowed by plan.	X		
CCR 3706 (c)	Erosion and sedimentation controlled during all phases as per RWQCB/SWRCB.		8, 24	1.5, 2.12
CCR 3706 (d)	Surface runoff and drainage controlled and methods designed for not less than 20 year/1 hour intensity storm event.		8, 24	1.5, 2.12
CCR 3706 (e)	Altered drainages shall not cause increased erosion or sedimentation.	X	---	

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
<b>MINING OPERATIONS AND CLOSURE</b>				
CCR 3706 (f)	Stream diversions constructed in accordance with DFG 1603, EPA 404, Sec. 10 Rivers and Harbors.	X	---	
CCR 3706 (g)	All temporary diversions eventually removed.	X	---	
CCR 3707 (a)	Return prime ag to prime ag, unless exempted.	X	---	
CCR 3707 (b)	Segregate and replace topsoil by horizon.	X	---	
CCR 3707 (c)	Productivity rates equal pre-project or similar site for two consecutive years. Rates set forth in plan.	X	---	
CCR 3707 (d)	Fertilizers and amendments not contaminate water.	X	---	
CCR 3708	Other ag capable of sustaining crops of area.	X	---	
CCR 3709 (a)	Equipment stored in designated area and waste disposed of according to ordinance.		8	1.2
CCR 3709 (b)	Structures and equipment dismantled and removed.		23	2.7
CCR 3710 (a)	Surface and groundwater protected.		8, 24	1.5, 2.12
CCR 3710 (a)	Surface and groundwater protected in accordance with Porter Cologne and Clean Water Acts (RWQCB/SWRCB).		8, 24	1.5, 2.12
CCR 3710 (b)	In-stream in accordance with CFG 1600, EPA 404, and Sec. 10 Rivers and Harbors.	X		
CCR 3710 (c)	In-stream channel elevations and bank erosion evaluated annually using extraction quantities, cross-sections, and aerial photos.	X		

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
<b>MINING OPERATIONS AND CLOSURE</b>				
CCR 3710 (d)	In-stream mining activities shall not cause fish to become entrapped in pools or in off-channel pits. California Fish and Game Code section 1600.	X		
CCR 3711(a)	All salvageable topsoil removed. Topsoil and vegetation removal not proceed mining by more than one year.		24	2.11
CCR 3711 (b)	Topsoil resources mapped prior to stripping, location of stockpiles on map. Topsoil and growth media in separate stockpiles.		24	2.11
CCR 3711 (c)	Soil salvage and phases set forth in plan, minimize disturbance, designed to achieve revegetation success.		24	2.11
CCR 3711 (d)	Topsoiling phased ASAP. Stockpiles not to be disturbed until needed. Stockpiles clearly identified and planted with vegetation or otherwise protected.		24	2.11
CCR 3711 (e)	Topsoil redistributed in stable site and consistent thickness.		16, 18, 24	2.5, 2.6, 2.11
CCR 3712	Waste and tailings, and waste disposal governed by SWRCB (Article 7, Chapter 15, Title 23, CCR).		8	1.2
CCR 3713 (a)	Drill holes, water wells, monitoring wells abandoned in accordance with laws.	X	---	
CCR 3713 (b)	All portals, shafts, tunnels, or openings, gated or protected from public entry, but preserve access for wildlife.	X	---	

# **APPENDIX 1**

## **REVEGETATION PLAN JERICHO SYSTEMS OCTOBER 2017 (REVISED PER DMR COMMENTS FEBRUARY 2018)**

Revegetation Plan  
For the SR-58 Kramer Junction Expressway Project  
Kramer Junction Borrow Pit

Unincorporated Area East of Boron and West of Kramer Junction  
San Bernardino County, California

---

Prepared for:

Lilburn Corporation  
Attn: Martin Derus  
1905 Business Center Drive  
San Bernardino, CA 92408

*Prepared October 2017 (revised per DMR Comments February 2018)*

Prepared by:



Jericho Systems, Inc.  
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# Certification

Jericho Systems, Inc.  
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(909) 915-5900



Contact: Shay Lawrey, President and Ecologist/Regulatory Specialist

Certification: I hereby certify that the statements furnished herein, and in the attached exhibits present data and information required for this Biological Resources Report to the best of my ability, and the facts, statements, and information presented are true and correct to the best of my knowledge and belief. This report was prepared in accordance with professional requirements and standards. Fieldwork conducted for this assessment was performed by me. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project proponent and that I have no financial interest in the project.

A handwritten signature in black ink, appearing to read "Shay Lawrey", is positioned below the certification text.

---

Shay Lawrey, Ecologist/Regulatory Specialist

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# 1 Introduction

This Revegetation Plan is designed to meet the Surface Mining and Reclamation Act (SMARA) performance guidelines for revegetation (Article 9, Section 3709) and soil salvage (Article 9, Section 3711) for the proposed Kramer Junction Borrow Pit Project (project). The borrow pit will be the source for up to 3 million cubic yards (cy) of material for the State Route 58 (SR-58) Kramer Junction Expressway Project. Reclamation of the site will commence immediately upon termination of mining. The proposed project area is approximately 63.75 acres of which 6.75 acres are currently disturbed and 57 acres are undisturbed. The 63.75-acre site is situated on an approximately 100-acre parcel (APN #: 0498-323-47) owned by Kramer Services and leased by Kiewit Infrastructure West Co. The goal of the revegetation program is to establish the guidelines to monitor, maintain, and assess the results of the completed revegetation program through comparison to the established baseline data and recommended success criteria.

## 1.1 Project Location

The proposed project site is located approximately 2 miles east of the SR-58 and Boron interchange and 1 mile east of the Kern County border. The privately-held 100-acre parcel (APN #: 0498-23-47) is within the west part of San Bernardino County and depicted on the SW<sup>1</sup>/<sub>4</sub> of the U. S. Geological Survey's (USGS) *Saddleback Mountain* 7.5-minute Quadrangle Map in the SW<sup>1</sup>/<sub>4</sub> of Section 34, Township 11 North, Range 7 West, San Bernardino Base Meridian (Figures 1&2). Access to the site will be from the existing SR-58 highway about 1/3 mile north on Castle Road. The mined material will be transported to the new SR-58 alignment approximately 630 feet north of the project site via a Caltrans right-of-way. The site has three 60-foot wide private landing strips that run diagonally across the site which is known as the Boron Air Field. The remainder of the project site is vacant open desert land.

## 1.2 Project Description

The California Department of Transportation (Caltrans) is realigning and widening to four lanes approximately 13 miles of SR-58 from the Kern County line east to about 7.5 miles east of Kramer Junction. The SR-58 Kramer Junction Expressway Project also includes a partial cloverleaf at the SR-58 and US-395 junction and railroad grade separation alleviating existing traffic issues. This project, also known as the Kramer Junction Gap Closure Project, is being constructed as a joint project by Caltrans and the Federal Highway Administration (FHWA) tentatively starting in late 2017 and completed by the end of the year 2020. Kiewit Infrastructure West Co. is proposing to utilize approximately 63.75 acres of the 100-acre parcel for the removal of up to 3 million cy for a mining period of three years. Mined products will include landscape and general fill material for the SR-58 Kramer Junction Expressway Project.

Caltrans included the proposed project site defined by Caltrans as Area 2 Borrow Area, in their project design and environmental review. Caltrans concluded in their National Environmental Policy Act/Californian Environmental Quality Act (NEPA/CEQA) Re-Validation Form (August 8, 2017) that the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for SR-58 Kramer Junction Expressway Project (July 1, 2014) remains valid with implementation of project design and mitigation measures for the potential impacts of the Kramer Junction Borrow Pit area.

The borrow pit site is currently vacant with the three unpaved air strips and consists of *Atriplex spinifera* Shrubland Alliance (spinescale scrub) habitat. The adjacent properties are vacant to the west, north, and east. The owner's residence lies to the southwest and two other residences are located 600 to 1,000 feet to the south. The existing SR-58 Highway lies to the west and south and the new alignment is aligned west to east to the north.

## 2 Environmental Setting

The general project vicinity consists primarily of open space and scattered private residences. The project site is in the Boron area of the western Mojave Desert, situated between the Transverse Mountain Ranges and the southern end of the Sierra Nevada Mountains, south of the Rand and Lava Mountain ranges and northwest of the Mojave River in San Bernardino County, California. The Boron area is subject to both seasonal and annual variations in temperature and precipitation. Average annual maximum temperatures typically peak at 98 degrees Fahrenheit (° F) in July, and fall to an average annual minimum temperature of 36° F in January. Average annual precipitation is greatest from November through March and reaches a peak in February (1.32 inches). Precipitation is lowest in the month of June (0.03 inches). Annual precipitation averages 6.41 inches. The topography of the project area is very flat and the elevation within the project site ranges from approximately 2,484 feet above mean sea level (amsl) at the northwest corner of the site to 2,500 feet amsl along the southern boundary of the site.

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service's (NRCS) Web Soil Survey was accessed to determine what soil type(s) occur within the proposed project area. The project site is within an area for which no digital data is available. However, per the NRCS Web Soil Survey report, the surrounding mapped areas are dominated by the following four soil types:

- Cajon-Norob complex, 2 to 9 percent slopes – Cajon Family (2 to 9 percent slope) soils are comprised of loamy sand, from aeolian deposits derived from granite. This soil type is typical of sand sheets, is somewhat excessively-drained with a high to very high runoff class and is not considered a hydric soil. Norob Family (2 to 9 percent slope) soils are comprised of sandy loam, loam, clay loam, sandy clay loam and stratified gravelly loamy sand to sandy clay loam, from aeolian deposits derived from granite. This soil type is typical of alluvial flats, is moderately well-drained with a moderately low to moderately high runoff class and is not considered a hydric soil.
- Cajon loamy sand, 0 to 5 percent slopes – Cajon loamy sand (0 to 5 percent slope) soils are comprised of loamy sand to gravelly loamy sand, from alluvium derived from granite. This soil type is typical of alluvial fans and flood plains, is somewhat excessively-drained with a high to very high runoff class and is not considered a hydric soil.
- Norob-Neuralia complex, 0 to 5 percent slopes – Norob Family (0 to 5 percent slope) soils are comprised of sand, sandy clay loam, sandy clay loam and gravelly sandy loam, from alluvium derived from mixed sources. This soil type is typical of alluvial fans and flood plains, is moderately well-drained with a moderately low to moderately high runoff class and is not considered a hydric soil. Neuralia Family (0 to 5 percent slope) soils are comprised of sandy loam, sandy clay loam and stratified gravelly loamy sand to gravelly sandy clay loam, from alluvium derived from granite. This soil type is typical of alluvial fans and flood plains, is well-drained with a moderately high runoff class and is not considered a hydric soil.
- Neuralia sandy loam, 2 to 5 percent slopes – Neuralia sandy loam (2 to 5 percent slope) soils are comprised of sandy loam, sandy clay loam and stratified gravelly loamy sand to gravelly sandy clay loam, from alluvium derived from granite. This soil type is typical of alluvial fans and flood plains, is well-drained with a moderately high runoff class and is not considered a hydric soil.

Based on aerial imagery and field observations, the soils within the project area appear similar to those identified by the NRCS Web Soil Survey in the surrounding area. Therefore, the soils within the project area likely consist of some combination of these four soil types.

## 2.1 Existing Vegetation

The baseline inventory of flora was conducted on September 15, 2017 by Jericho Systems, Inc. The survey was conducted to provide data upon which to base the revegetation plan of the proposed Borrow Pit site, and the success criteria for the site.

One homogeneous vegetation community was identified on site: *Atriplex spinifera* Shrubland Alliance (spinescale scrub). This habitat type occurs throughout the proposed project impact area and is typical of desert alluvial fans and old lake beds perched above current drainages (Sawyer et al., 2009). This habitat type is associated with soils that are moderately sandy clay loams to fine, silty clays that may be carbonate rich (Sawyer et al., 2009). The spinescale scrub habitat on site is co-dominated by spinescale saltbush (*Atriplex spinifera*) and white bursage (*Ambrosia dumosa*) in the shrub canopy. Please refer to the attached Site Photographs for a representation of conditions on site. A complete list of observed plant species is included as Appendix A. Field data sheets are included as Appendix B.

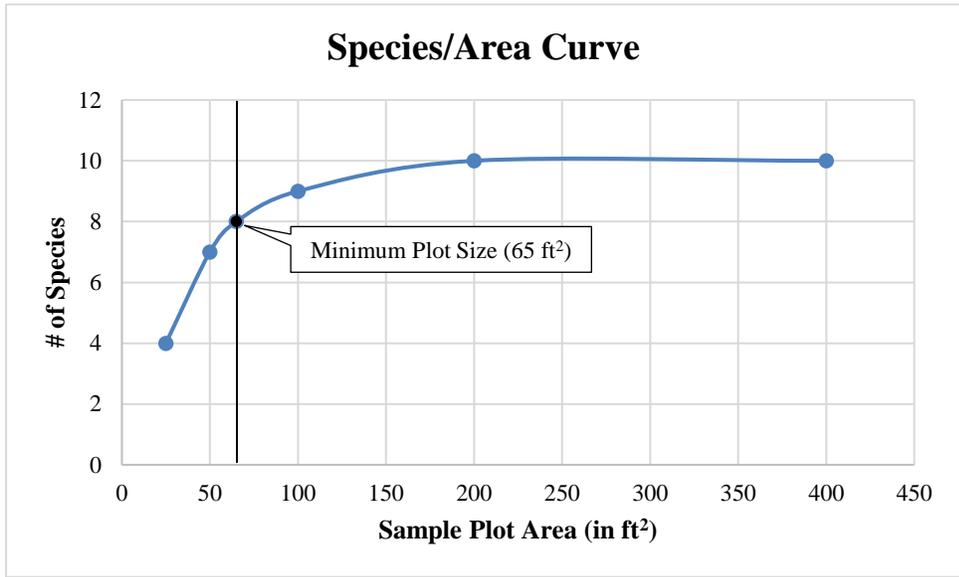
## 2.2 Method for Collecting Baseline Vegetation

To collect data needed to establish revegetation criteria, two sampling plot sites were randomly chosen (Sample Plot 1 and Sample Plot 2). Sample point locations were recorded on a handheld GPS. To evaluate vegetative cover, a series of nested plots were established, beginning with a 25-square foot (sq ft) area. All species were recorded within this area, then the sample area was enlarged to twice the size (50 sq ft), then to four and eight times the size, etc. All additionally occurring species were recorded separately for each increased subplot. The sample size was increased, doubling in size, until no new species were recorded in the subplot. The total area of Sample Plot 1 was 20 feet by 20 feet (400 sq ft) and the total area of Sample Plot 2 was 40 feet by 80 feet (3,200 sq ft). The overall coverage, density and species diversity were then recorded for each sample plot.

Although the herbaceous layer was sampled and all identified species will be included in the list of species observed on site (Appendix A), the percent (%) cover, density, and species diversity within this layer could not accurately be assessed. Given that the site was sampled in September, many of the annual species were dead and/or absent (i.e blown away) at the time of survey.

SMARA requires that sample sizes be sufficient to produce at least an 80% confidence level. In accordance with the recommendations for standard statistical methods for determining an 80% confidence level, provided in Section 3705 (*Performance Standards for Revegetation*) of the SMARA requirements, the methods described for determining the minimum area of the nested plot sample in D. Mueller-Dombois and H. Ellenberg, 1974, "Aims and Methods of Vegetation Ecology" were used. Per D. Mueller-Dombois and H. Ellenberg, the number of species per area (Species/Area in sq ft) was plotted on a graph (see example below) and the area on the curve containing 80% of the species observed was determined to be the minimum sample size. However, since the sample size was increased, doubling in size, until no new species were recorded in the subplot(s), the actual areas sampled were greater than what was determined to be the minimum sample area.

**Example of Method for Determining 80% Confidence Level (Sample Plot 1)**



**2.2.1 Baseline Survey Results**

As previously mentioned, the plant community identified within the sample areas is spinescale scrub, which is co-dominated by spinescale saltbush (*Atriplex spinifera*) and white bursage (*Ambrosia dumosa*) in the shrub canopy. Other shrub species identified within the sample areas include burrobush (*Ambrosia salsola*), winterfat (*Krascheninnikovia lanata*) and Mojave cottonthorn (*Tetradymia stenolepis*). Additionally, several scattered individuals of allscale saltbush (*Atriplex polycarpa*), Cooper's box thorn (*Lycium cooperi*), Joshua tree (*Yucca brevifolia*) and one individual silver cholla (*Cylindropuntia echinocarpa*) were observed within the proposed Borrow Pit site, but outside the sample areas.

Absolute shrub cover within the sample areas measured approximately 26% (see Table 1 below).

**Table 1. % Cover within the Shrub Layer**

Species	%Cover
<i>Atriplex spinifera</i>	15
<i>Ambrosia dumosa</i>	10
<i>Tetradymia stenolepis</i>	< 1
<i>Ambrosia salsola</i>	< 1
<i>Krascheninnikovia lanata</i>	< 1
<b>Total</b>	<b>≈ 26</b>

Total shrub density measured 15 shrubs per 1,000 sq ft, or 653.4 shrubs per acre (see Table 2 below); and a total of five (5) shrub species were observed to occur within the sample areas.

**Table 2. Shrub Density per 1,000 sq. ft., /acre, and 50 m<sup>2</sup>**

Species	Density/1,000 sq ft	Density/acre	Density/50 m <sup>2</sup>
<i>Atriplex spinifera</i>	5.83	254.1	3.13
<i>Ambrosia dumosa</i>	7.22	314.6	3.89
<i>Tetradymia stenolepis</i>	0.28	12.1	0.15
<i>Ambrosia salsola</i>	0.56	24.2	0.30
<i>Krascheninnikovia lanata</i>	1.11	48.4	0.60
<b>Total</b>	<b>15</b>	<b>653.4</b>	<b>8.07</b>

Much of the site appears to have been impacted by historic grazing and there are currently three private airstrips that cross the site, as well as several dirt access roads. Additionally, several non-native plant species were identified on site, including Saharan mustard (*Brassica tournefortii*), foxtail chess (*Bromus madritensis*), cheatgrass (*B. tectorum*), redstem fillaree (*Erodium cicutarium*), Russian thistle (*Salsola paulsenii*) and Mediterranean grass (*Schismus* ssp.). The latter species is prevalent within the herbaceous layer and comprises approximately 40% of the ground cover within the sampled areas.

### 3 Revegetation

Revegetation of the site upon termination of mining would follow a series of steps. These steps may be modified or changed should new information or techniques that would improve the results of the revegetation activities become available. The proposed borrow pit site would be reclaimed to approximately 63.75 acres of spinescale scrub vegetation (Figure 4). Success criteria and revegetation strategies were designed specifically to meet the needs of the vegetative community and environmental conditions at the site.

#### 3.1 Joshua Tree Relocation

Per Sections 88.01.050(f) and 88.01.060(c) of the County of San Bernardino's Development Code, all Joshua trees that are proposed to be removed will be transplanted or stockpiled for future transplanting wherever possible. As previously discussed, there are several scattered Joshua trees and silver cholla within the 63.75-acre site. Salvaged Joshua trees and cholla shall be transplanted to the nearest feasible areas, within the leased 100-acre parcel, following approved transplant methods for this species as required per contract with Caltrans designated biologists, guidelines and mitigation measure BIO-12 in the EIS/EIR.

#### 3.2 Soil Salvage

The top 12 inches of topsoil shall be salvaged, stockpiled for restoration. Soil salvage activities will occur over approximately 63.75 acres, of which 6.75 acres are currently disturbed (bare ground) and 57 acres are undisturbed (spinescale scrub). Prior to topsoil salvage, any available vegetated soils onsite will be stockpiled in separate identified stockpiles for use as a seed bank during revegetation. The topsoil salvage stockpiles will be kept on site, within the leased 100-acre parcel. Exact locations of the soil stockpiles will be determined prior to clearing/grubbing activities and will be dependent upon grading plans and available space. The soil stockpiles will be clearly marked and stabilized with a breathable erosion control method such as jute netting. If the native seed bank within the removed topsoil is desired for revegetation, then the topsoil should be piled in wide rows that are a maximum of 3 feet high to prevent sterilization of the seed bank during soil storage. If the desired goal is only to retain the developed soil and chemical composition to provide additional soil richness for reseeding, then creating taller, more condensed stockpiles would be appropriate.

### **3.3 Seed Collection**

The goal of seed collection is to preserve the local genetic diversity of the existing plant community while providing seed that is well suited for growth at the site. Seed collection must be undertaken and monitored by a professional seed collecting firm or a qualified botanist. When seed collection is not possible, a certified weed free seed mix may be used in lieu of seed collected at the site. Certified weed free seed mixes are available and may be purchased from professional nurseries.

### **3.4 Site Preparation**

The proposed operation would involve the removal of up to 3 million cy of material. Upon termination of mining activities, the surfaces to be revegetated would be returned to their original land contours, except for the borrow pit slopes. Where possible, revegetation surfaces would be ripped to about 18 to 36 inches in depth to break up compacted areas and would be left in a textured or rough condition with shallow rills and furrows to create optimal conditions for revegetation with a native seed mix. Any available soils will be deposited in a stable, uniform thickness and seeded.

Quick-growing, shallow-rooted species will be included in the seed mix to provide short-term erosion control. By providing short-term erosion control, more favorable growing conditions will be created for climax species that will provide long-term erosion control.

### **3.5 Irrigation**

The plant palette proposed for the mine site consists of primarily drought-tolerant plants species that should perform well without additional water. The average precipitation in the area should be sufficient for seed germination and root establishment of native species.

Planting in the fall, prior to the winter rains, will be sufficient for seed germination and root establishment and reduce weed growth that is typically associated with supplemental irrigation. Scarification of the soil and the creation of surface rills and furrows will allow for maximized collection of water from rain events and run-off.

### **3.6 Fertilization**

No fertilization of the site is recommended. The native seeds used for revegetation will be tolerant of existing soil conditions. Additionally, the mechanical loosening, and creation of surface rills and furrows, will create conditions favorable for seed germination and root establishment by native species. Widespread use of fertilizers on desert sites appears to benefit non-native weedy species and not the native species sought as the goal of the revegetation plan (Clary, 1987).

### **3.7 Weed Control**

The purpose of the non-native invasive species control plan is to reduce or eliminate the occurrence of non-native invasive plant species that may invade the site where active and natural revegetation is taking place. Non-native invasive species (weeds) can compete with native plant species for available moisture and nutrients and consequently interfere with revegetation of the site.

The occurrence of non-native invasive species on-site shall be monitored by visual inspection quarterly for the first year and then annually thereafter. The goal is to prevent non-native invasive species from becoming established and depositing seeds in revegetated areas.

Non-native vegetation will be removed using the most efficient method as determined by the site conditions. Removal may occur regularly in the first year and may consist of using mechanized equipment, hand tools

and/or herbicide spraying. Herbicides may be applied to control an instance where there is an aggressive and extensive weed invasion on site. All non-native, invasive weeds will be removed before they produce seed or reach a height of 8 inches, whichever comes first. Once the weed growth is under control, weeding will take on a more selective approach and be completed with hand tools and such as hoes, shovels and rakes and spraying, if essential to meet success criteria.

As previously discussed, Mediterranean grass (*Schismus* spp.) is prevalent within the herbaceous layer on site, as well as the surrounding areas, and comprised approximately 40% of the ground cover within the sampled areas. Cover and density of non-native grass species within the revegetation area shall be no greater than the baseline and in comparable surrounding lands that have not been disturbed by the project. For non-native species other than non-native grasses (i.e. Saharan mustard, Russian thistle, etc.), no areas will be allowed to have more than 10 percent non-native invasive species ground cover. If inspections reveal that non-native invasive species are becoming or have become established on site, then removal will be initiated. Inspections shall be made in conjunction with revegetation monitoring. Weed control application of herbicides would also reduce non-native grasses.

Reports of inspections and weed control implementation shall be part of the annual revegetation monitoring and kept on file by the operator.

### 3.8 Seeding Methods and Rates

The revegetation area will be seeded with a certified weed-free seed mix applied hydraulically (hydro-seeded). Seed will be delivered to the site in sealed and labeled packaging, along with a California State Agricultural Code seed certification that includes the supplier’s name, geographic location, and collection date, and the tested purity and germination percentage rates. The seed mix will be applied by hydroseeding with a hydroseed slurry containing seed, natural fiber mulch, and organic tackifier. Although hydroseed mulch with seed can be carried and moved by flowing water, the mulch will help more of the seed stay in place and germinate compared to hand seeding.

A unique seed mix was developed for the spinescale scrub habitat occurring in the project impact area. The recommended seed mix and seeding rate for spinescale scrub is outlined in Table 3 (below) and may be modified or species re-placed due to availability of the seed that year and seed costs.

**Table 3. Kramer Junction Borrow Pit Recommended Seed Mix and Rates**

Species	Life Form	Pure Live Seed Lbs/Acre
<i>Ambrosia dumosa</i> (white bursage)	shrub	1.0
<i>Ambrosia salsola</i> (burrobush)	shrub	0.5
<i>Amsinckia tessellata</i> (bristly fiddleneck)	annual herb	1.0
<i>Atriplex polycarpa</i> (allscale saltbush)	shrub	1.0
<i>Atriplex spinifera</i> (spinescale saltbush)	shrub	2.5
<i>Krascheninnikovia lanta</i> (winterfat)	shrub	0.5
<i>Lasthenia gracilis</i> (needle goldfields)	annual herb	0.5
<i>Sphaeraicea ambigua</i> ( <i>Desert mallow</i> )	perennial herb	0.5
<i>Stipa hymenoides</i> (Indian rice grass)	perennial grass	8.0
<i>Stipa speciosa</i> (desert needle grass)	perennial grass	1.0

### 3.9 Schedule of Revegetation

Seeding of the revegetation area shall occur at the appropriate time of the year and at an application rate for optimum seed sprouting and growth. The ideal window for seeding native plants in Southern California, is in winter generally, between November and February. The contractor will need to coordinate installation efforts with any rain events to ensure that work is not being conducted on the site during periods of inundation.

Following the initial seeding, revegetation areas will be monitored quarterly for the first year and then annually thereafter. Appropriate remediation action such as reseeding and weed removal will be determined at the time of monitoring.

### 3.10 Test Plots

Per Section 3705 (b) of the SMARA requirements:

“Test plots conducted simultaneously with mining shall be required to determine the most appropriate planting procedures to be followed to ensure successful implementation of the proposed revegetation plan. The lead agency may waive the requirement to conduct test plots when the success of the proposed revegetation plan can be documented from experience with similar species and conditions or by relying on competent professional advice based on experience with the species to be planted.”

The operator shall establish at a minimum, four test plots representative of the slope aspect and floor elevation that will result from the burrow area. Test plots will include surface ripping/no seeding (control plot); surface ripping and seeding as described above with the recommended seed mixture. Additional tests will be conducted if the initial tests and any active revegetation are not successful and may include various types and amounts of seeds and different surface/soil preparation.

## 4 Revegetation Monitoring

### 4.1 Success Criteria

Successful revegetation will be achieved when a self-sustaining native plant cover is established in the disturbed area of the proposed project. The revegetated site must resemble and blend into the natural surrounding environment. The success of the revegetation effort will be determined through statistical comparison of the revegetated areas to the baseline inventory.

Acceptable performance standards for mine reclamation are based on a percentage of cover, density, and species diversity when compared with the baseline. An acceptable standard at the Kramer Junction Borrow Pit would measure success at 40% of the baseline cover, 70% of the baseline density, and 75% of the baseline species diversity within the shrub canopy, five years after reclamation. See table below.

**Table 4. Kramer Junction Borrow Pit Recommended Revegetation Success Criteria (Per DMR)**

Mixed Desert Scrub	Baseline Mean	Standard Success Percentage	Success Criteria
Cover (%)	26	40%	11% cover of native perennials
Density	15	70%	10 native perennials/1,000 sq. ft. or 6 native perennials per 50-m x 1-m

Species Richness or Diversity	5	75%	4 native perennials/1,000 sq. ft. or 50 m <sup>2</sup>
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## 4.2 Technical Assessment

The permanence and sustainability of the revegetated plant community will be determined annually after the initial seeding. Annual assessments of the reclamation area will be conducted by a qualified botanist to determine the success of the revegetation effort. Interim success standards may be used as thresholds for annual monitoring and to ensure the success of revegetation. Although quarterly monitoring will be conducted during the first year the first and annually thereafter, sustainability will be assessment once a year.

The plant species will be evaluated for relative success as determined by the cover, density, and species diversity success criteria. Remedial actions include removing non-native invasive species and reseeding based on annual assessment results. An evaluation of the surviving species will be repeated annually following initial seeding for five years or until the success criteria are achieved.

Per DMR comment, “Data for cover, density, and species richness will be collected along 14 randomly placed 50-meter by 1-meter transects. Cover will be evaluated using the line-intercept method along the 50-meter tape. Density and species richness will be recorded by counting all native perennials rooted within the belt transect. All values will then be averaged and compared to the performance standards for each criterion.”

All data will be recorded on a standard form and copies will be submitted as an appendix to each Annual Report. Photo documentation will also be included for representative transects in order to visually document annual vegetation changes and community development.

## 4.3 Reporting

The Operator will document the progress of the revegetation effort and submit Annual Maintenance and Monitoring reports to the County of San Bernardino.

## 5 Conclusion

Upon termination of mining activities, the surfaces to be revegetated would be returned to their original land contours, except for the borrow pit slopes, and revegetation surfaces will be scarified to create conditions optimal for seeding. The revegetation areas will be covered with available surface materials in a stable, uniform thickness and hydro-seeded. Seeding would occur following the first rain of the fall season and before the winter rains.

An acceptable performance standard at the Kramer Junction Borrow Pit would measure success at 40% of the baseline cover, 70% of the baseline density, and 75% of the baseline species diversity, five years after reclamation. The baseline shrub cover within the sample areas measured approximately 26%, the density was approximately 653.4 shrubs per acre and the diversity showed five shrub species. Accordingly, successful revegetation in the spinescale scrub habitat revegetation area would be achieved at 11% cover by native shrub species, an approximate density of 457 shrubs per acre and a species diversity of four shrub species per acre.

An acceptable performance standard relative to the cover and density of non-native grass species within the revegetation area shall be no greater than the baseline (40%) and in comparable surrounding lands that have not been disturbed by the project. For non-native species other than non-native grasses (i.e. Saharan

mustard, Russian thistle, etc.), no areas will be allowed to have more than 10 percent non-native invasive species ground cover.

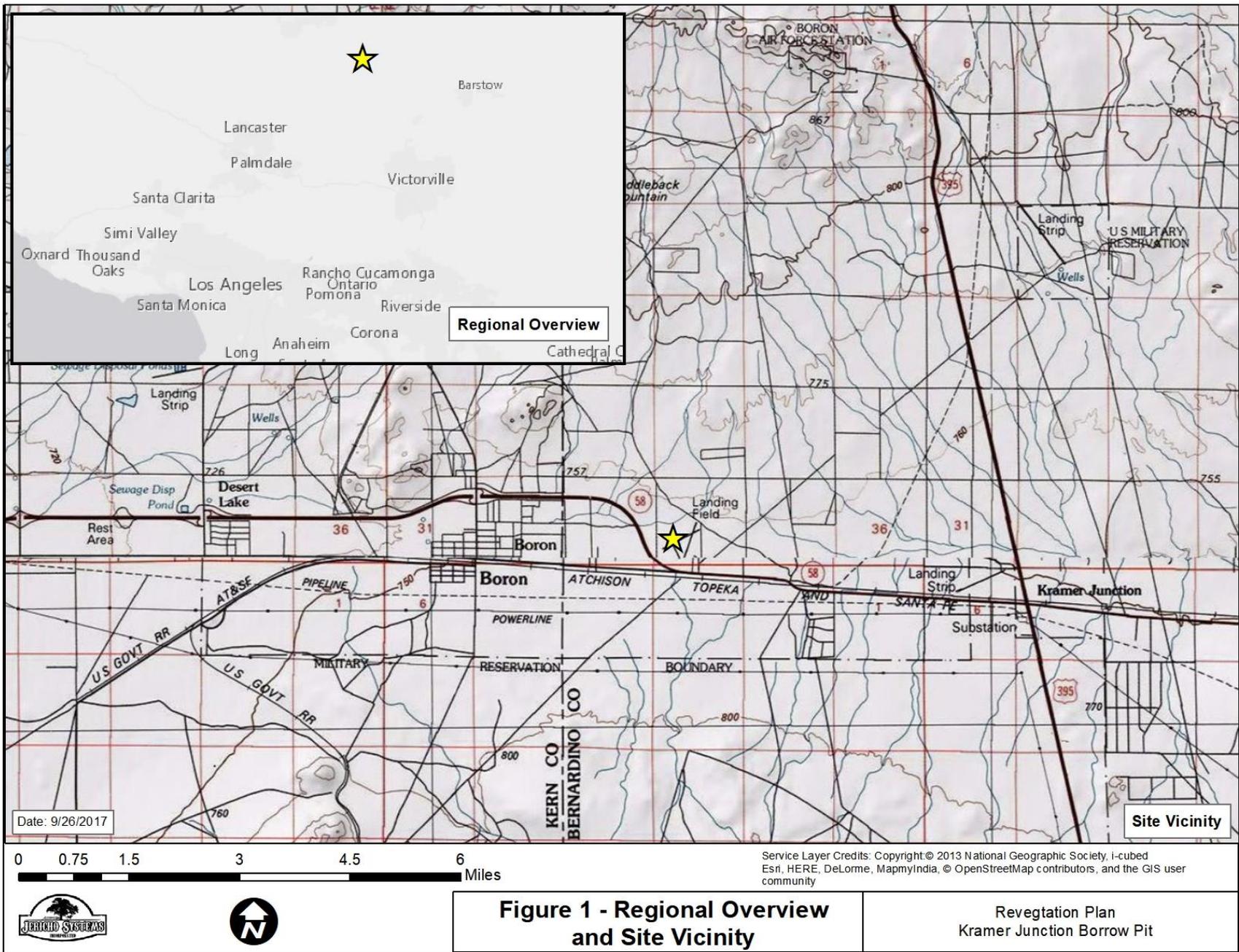
All Joshua trees that cannot be avoided shall be transplanted or stockpiled for future transplanting wherever possible. Salvaged Joshua trees and cholla shall be transplanted to the nearest feasible areas, within the leased 100-acre parcel, following approved transplant methods for this species.

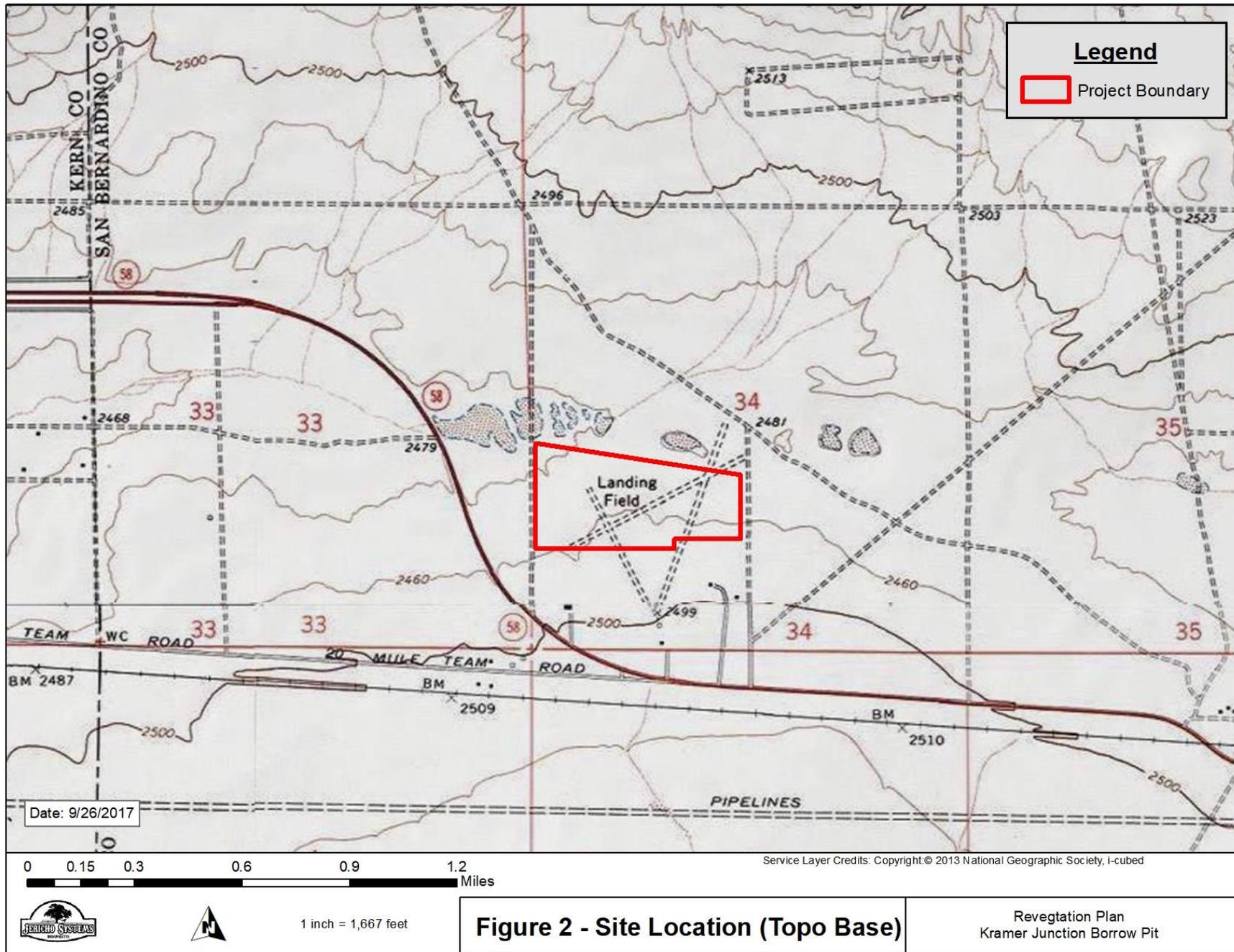
Annual assessments of the reclamation area will be conducted by a revegetation specialist to determine the success of the revegetation effort until said criteria are achieved. Remedial action would occur per the recommendation of the revegetation specialist.

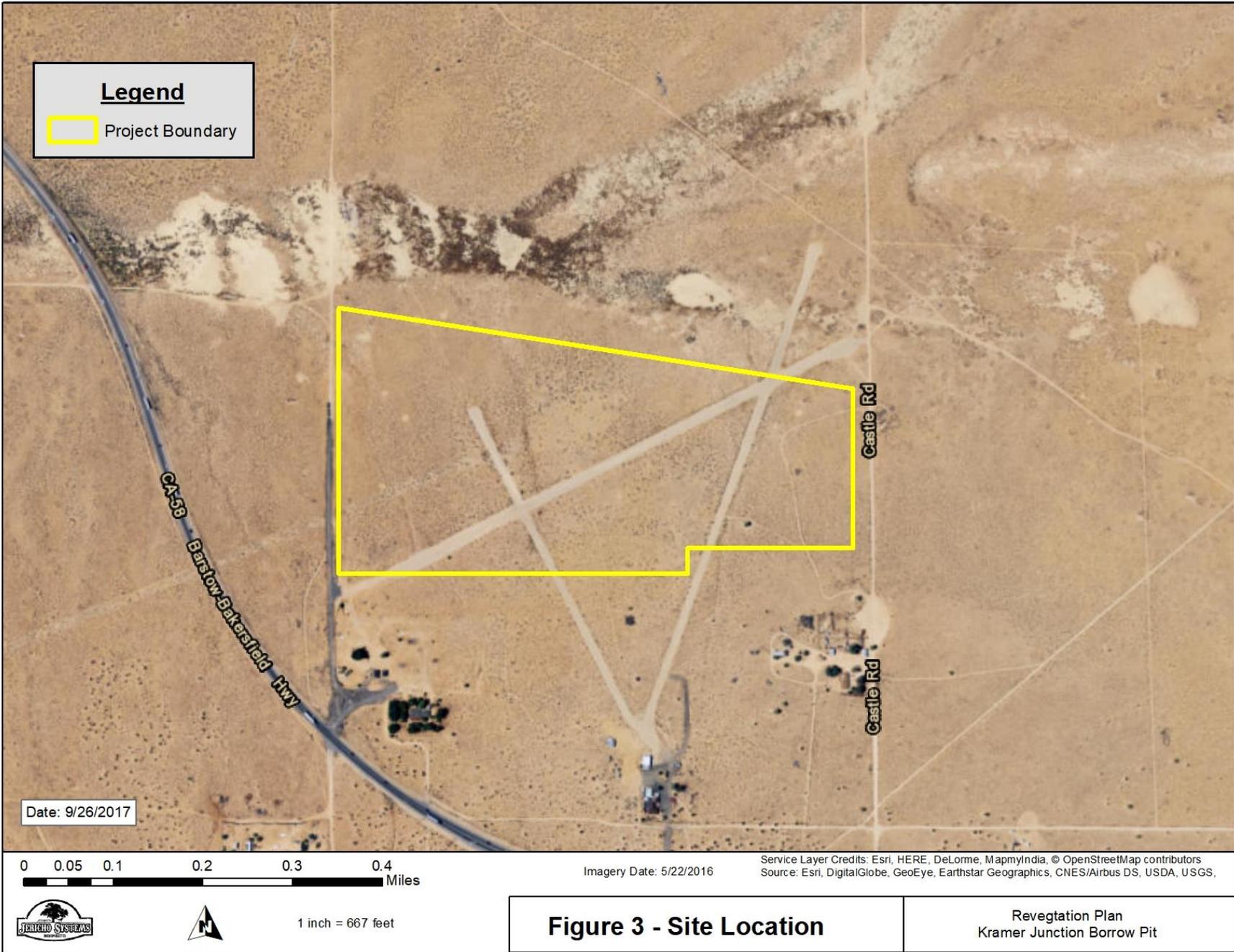
## 6 References

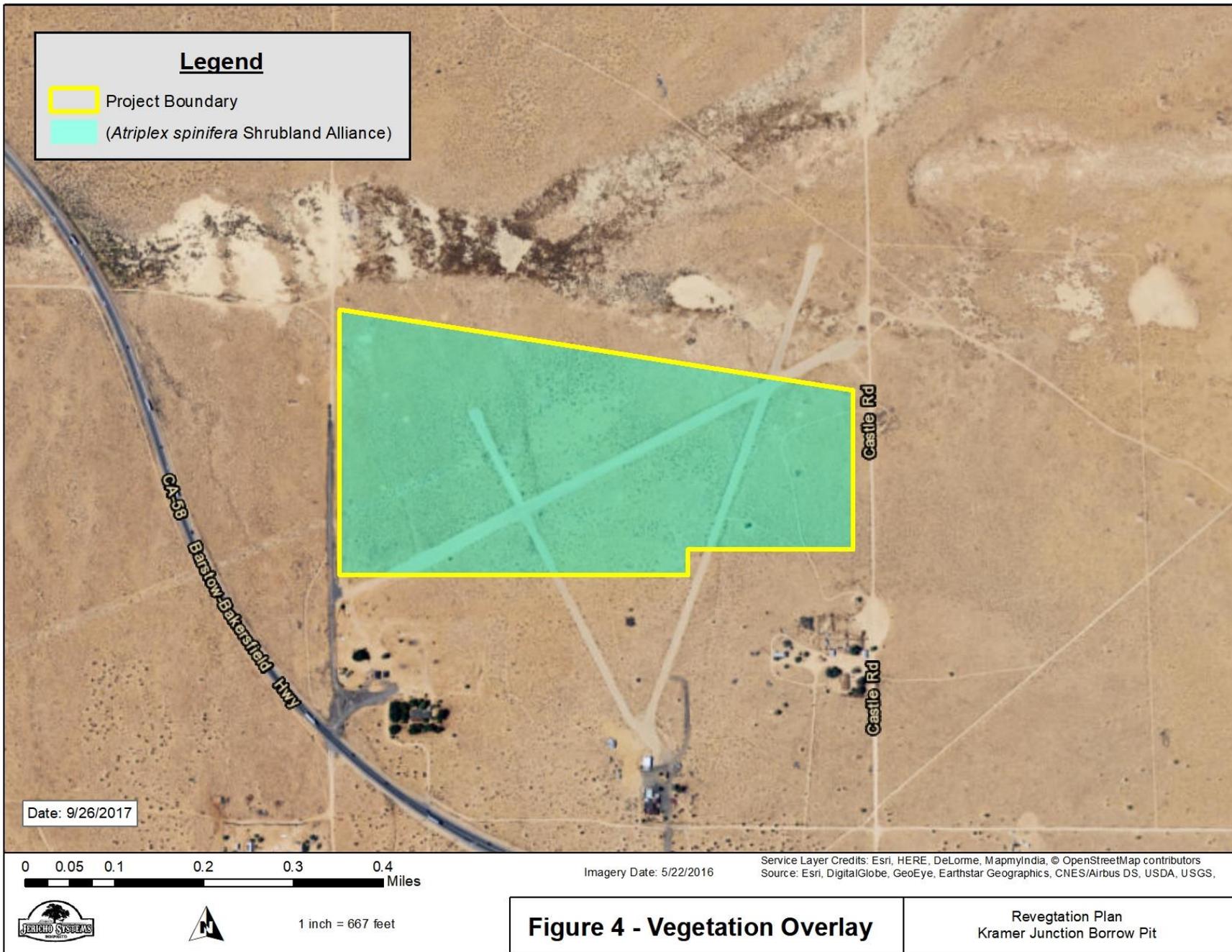
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## **FIGURES**









**SITE  
PHOTOGRAPHS**



Photo 1.  
Representative photo of eastern portion of the proposed Borrow Pit site; looking northeast from vicinity of Sample Plot 1.



Photo 2.  
Representative photo of eastern portion of the proposed Borrow Pit site; looking west from vicinity of Sample Plot 1.



Photo 3.  
Representative photo of middle portion of the proposed Borrow Pit site; looking north from vicinity of Sample Plot 2.



Photo 4.  
Representative photo of middle portion of the proposed Borrow Pit site; looking west from vicinity of Sample Plot 2.

**Appendix A**  
**Floral Species Observed**

**List of Plant Species Observed within the Kramer Junction Borrow Pit Site**

Scientific Name	Common Name	Life Form
<b>Agavaceae</b>	<b>Century-plant Family</b>	
<i>Yucca brevifolia</i>	Joshua tree	Tree
<b>Asteraceae</b>	<b>Composite Family</b>	
<i>Ambrosia dumosa</i>	White bursage	Shrub
<i>Ambrosia salsola</i>	Burrobush	Shrub
<i>Lasthenia gracilis</i>	Needle goldfields	Annual herb
<i>Tetradymia stenolepis</i>	Mojave cottonthorn	Shrub
<b>Boraginaceae</b>	<b>Borage Family</b>	
<i>Amsinckia tessellata</i> var. <i>tessellata</i>	Bristly fiddleneck	Annual herb
<b>Brassicaceae</b>	<b>Mustard Family</b>	
<i>Brassica tournefortii</i> **	Saharan mustard**	Annual herb
<i>Lepidium flavum</i>	Yellow pepper grass	Annual herb
<i>Lepidium lasiocarpum</i> ssp. <i>lasiocarpum</i>	Shaggyfruit pepperweed	Annual herb
<b>Cactaceae</b>	<b>Cactus Family</b>	
<i>Cylindropuntia echinocarpa</i>	Silver cholla	Shrub (stem succulent)
<b>Chenopodiaceae</b>	<b>Goosefoot Family</b>	
<i>Atriplex polycarpa</i>	allscale saltbush	Shrub
<i>Atriplex spinifera</i>	spinescale saltbush	Shrub
<i>Krascheninnikovia lanata</i>	winter fat	Shrub
<i>Salsola paulsenii</i> **	barbwire russian thistle**	Annual, perennial herb
<b>Geraniaceae</b>	<b>Geranium Family</b>	
<i>Erodium cicutarium</i> **	redstem filaree**	Annual herb
<b>Poaceae</b>	<b>Grass family</b>	
<i>Bromus madritensis</i> *	foxtail chess*	Annual grass

<b>Scientific Name</b>	<b>Common Name</b>	<b>Life Form</b>
<i>Bromus tectorum</i> **	cheatgrass**	Annual grass
<i>Schismus</i> ssp. ( <i>arabicus</i> , <i>barbatus</i> )**	Mediterranean grass**	Annual grass
<i>Stipa hymenoides</i>	Indian rice grass	Perennial grass
<i>Stipa speciosa</i>	desert needle grass	Perennial grass
<b>Polemoniaceae</b>	<b>Phlox Family</b>	
<i>Linanthus</i> sp. ( <i>bigelovii</i> or <i>dichotomus</i> )	linanthus	Annual herb
<b>Polygonaceae</b>	<b>Buchwheat Family</b>	
<i>Eriogonum gracillimum</i>	rose and white buckwheat	Annual herb
<b>Solanaceae</b>	<b>Potato Family</b>	
<i>Lycium cooperi</i>	Cooper's box thorn	Shrub

\*non-native

\*\*invasive

**Appendix B**  
**Data Sheets**

## Nested Plot Vegetative Sampling Data Sheet

Project Name: Kramer Borrow PitSurveyors: Daniel Smith, Bailey Bingham, Gene Jennings, Shannon DyeProject Location: NW of Kramer Junction, West of Castle  
Road, N of SR-58; San Bernardino Co., California  
N 35 0 12.05, W 117 36 24.68Plant Community(ies): *Atriplex spinifora* Shrubland Alliance; (spinescale scrub)Final Plot Size/Description: 20 x 20 feet (Sample Plot #1)Stratification Information: Shrub Layer < 3 feet; Herb Layer < 20 inchesComments/Site Description: Flat; spinescale scrub. Individual Joshua tree (*Yucca brevifolia*) and silver cholla (*Cylindropuntia echinocarpa*)  
observed outside of sample plot area.

Subplot #	Subplot Dimensions/Area (ft)	Total Species	% New Species $\left[ \frac{\text{new species}}{\text{total species}} \right]$	% Area Increased $\left[ \frac{\text{Area of } n}{\text{Area of } n-1} \right]$
1	5 x 5	4	100	N/A
2	5 x 10	7	43	200
3	10 x 10	9	22	400
4	10 x 20	10	10	800
5	20 x 20	10	0	1600

## Nested Plot Vegetative Sampling Species List (Sample Plot 1)

Subplot #	Species Name	Abundance/ Vitality	Strata	Overall Abundance
1	<i>Atriplex spinifera</i>	2/ ●	S <sub>2</sub>	3
1	<i>Shismus</i> sp.	3/ ●	H <sub>3</sub>	3
1	<i>Lepidium lasiocarpum</i>	1	H <sub>3</sub>	1
1	<i>Lasthenia gracilis</i>	1	H <sub>3</sub>	2
2	<i>Erodium cicutarium</i>	2/ ●	H <sub>3</sub>	2
2	<i>Brassica tournefortii</i>	+	H <sub>2</sub>	+
2	<i>Eriogonum gracillimum</i>	+	H <sub>2</sub>	+
3	<i>Linanthus</i> sp.	r	H <sub>3</sub>	r
3	<i>Lepidium flavum</i>	1	H <sub>3</sub>	1
4	Unidentified Asteraceae	+	H <sub>3</sub>	+
5	No new species	-	-	-

Abundance Scale: **5**—covers more than ¾ of the plot    **4**—covers ½ to ¾ of the plot    **3**—¼ to ½ the plot    **2**— ½<sub>20</sub> to ¼ the plot    **1**—Numerous, but less than ½<sub>20</sub> cover, or scattered with cover up to ½<sub>20</sub>    +—Few, with little cover    r—Solitary

Vitality Scale: ●—Exceptionally vigorous    ○—Feeble    ○○—Very feeble; never fruiting

Strata Scale: T— >5m    S<sub>1</sub>— 2-5m    S<sub>2</sub>—2m-50cm    H<sub>1</sub>—50cm-30cm    H<sub>2</sub>—30cm-10 cm    H<sub>3</sub>— <10cm

## Nested Plot Vegetative Sampling Data Sheet

Project Name: Kramer Borrow PitSurveyors: Daniel Smith, Bailey Bingham, Gene Jennings, Shannon DyeProject Location: NW of Kramer Junction, West of Castle  
Road, N of SR-58; San Bernardino Co., California  
N 35 0 8.75, W 117 36 34.13Plant Community(ies): *Atriplex spinifora* Shrubland Alliance; (spinescale scrub)Final Plot Size/Description: 40 x 80 feet (Sample Plot #2)Stratification Information: Shrub Layer < 3 feet; Herb Layer < 20 inchesComments/Site Description: Flat; spinescale scrub. Individual Joshua tree (*Yucca brevifolia*) observed outside of sample plot area.

Subplot #	Subplot Dimensions/Area (ft)	Total Species	% New Species $\left[ \frac{\text{new species}}{\text{total species}} \right]$	% Area Increased $\left[ \frac{\text{Area of } n}{\text{Area of } n-1} \right]$
1	5 x 5	6	100	N/A
2	5 x 10	8	25	200
3	10 x 10	9	11	400
4	10 x 20	10	10	800
5	20 x 20	11	9	1600
6	20 x 40	11	0	3200
7	40 x 40	16	31	6400
8	40 x 80	16	0	12800

## Nested Plot Vegetative Sampling Species List (Sample Plot 2)

Subplot #	Species Name	Abundance/ Vitality	Strata	Overall Abundance
1	<i>Shismus</i> sp.	3/ ●	H <sub>3</sub>	3
1	<i>Atriplex spinifera</i>	3/ ●	S <sub>2</sub>	2
1	<i>Amsinckia tessellata</i>	+	H <sub>2</sub>	2
1	<i>Erodium cicutarium</i>	3/ ●	H <sub>3</sub>	2
1	<i>Brassica tournefortii</i>	r	H <sub>2</sub>	2
1	<i>Lepidium lasiocarpum</i>	r	H <sub>3</sub>	1
2	<i>Eriogonum gracillimum</i>	1	H <sub>2</sub>	+
3	<i>Linanthus</i> sp.	+	H <sub>3</sub>	+
3	<i>Lasthenia gracilis</i>	+	H <sub>3</sub>	+
4	<i>Ambrosia dumosa</i>	3/ ●	S <sub>2</sub>	2
5	<i>Tetradymia stenolepis</i>	r/ ●	S <sub>2</sub>	r
6	No new species	-	-	-
7	<i>Ambrosia salsola</i>	1/ ●	S <sub>2</sub>	+
7	<i>Krascheninnikovia lanata</i>	r	S <sub>2</sub>	+
7	<i>Salsola paulsenii</i>	r/ ●	S <sub>2</sub>	r
7	<i>Bromus tectorum</i>	+	H <sub>2</sub>	+
7	<i>Bromus madritensis</i>	+	H <sub>2</sub>	+
8	No new species	-	-	-

**Abundance Scale:** 5—covers more than ¾ of the plot 4—covers ½ to ¾ of the plot 3—¼ to ½ the plot 2— ½<sub>20</sub> to ¼ the plot 1—Numerous, but less than ½<sub>20</sub> cover, or scattered with cover up to ½<sub>20</sub> +—Few, with little cover r—Solitary

**Vitality Scale:** ●—Exceptionally vigorous °—Feeble °°—Very feeble; never fruiting

**Strata Scale:** T— >5m S<sub>1</sub>— 2-5m S<sub>2</sub>—2m-50cm H<sub>1</sub>—50cm-30cm H<sub>2</sub>—30cm-10 cm H<sub>3</sub>— <10cm

## **APPENDIX 2**

### **APPENDIX G**

**MITIGATION MEASURES FROM THE  
FINAL ENVIRONMENTAL IMPACT  
REPORT/ENVIRONMENTAL IMPACT  
STATEMENT STATE ROUTE 58 KRAMER  
JUNCTION EXPRESSWAY PROJECT  
(SCH#2007051051)  
VOLUMES I AND II  
JULY 2014**

# State Route 58 (SR-58) Kramer Junction Expressway Project

SAN BERNARDINO COUNTY, CALIFORNIA  
KERN COUNTY, CALIFORNIA  
06-KER-58 (PM R143.5/R143.9)  
08 – SBD – SR-58 (PM 0.0/12.9)  
EA 08-347700  
PN 0800000616

## Final Environmental Impact Report/ Environmental Impact Statement *Volume I*

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### Appendix G Avoidance, Minimization, and/or Mitigation Summary

**Prepared by the  
California Department of Transportation**

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.



JULY 2014

**APPENDIX G: Environmental Commitments Record (ECR)**

State Route 58 (SR-58)  
 Kramer Junction Expressway Project  
 PN: 0800000616  
 EA 08-347700

No.	Task and Brief Description	Responsible Party	Timing/Phase	Action Taken to Comply with Task	Date
<b>Section 3.4 Community Impacts</b>					
CI-1	Caltrans will ensure that direct vehicle access to all businesses and residences from both northbound and southbound directions of US-395 is achieved following construction.	District Design/District Right of Way/Resident Engineer/Contractor	Final Design/Construction		
CI-2	A Construction Management Plan and a Transportation Management Plan (see <b>TR-1</b> ) will be prepared for the project and include coordination efforts that will inform the community about project activities, maintain access to and from the project area during construction, minimize construction-period traffic, and control glare, dust, and noise. Measures to minimize construction impacts in these sections also apply to minimizing permanent community cohesion/character impacts.	Resident Engineer/Contractor	Final Design		
CI-3	To address bypass impacts, Caltrans will coordinate with the community and County regarding the possibility of placing a Welcome sign at both ends of the proposed expressway with brief information encouraging visitors to visit services offered at Kramer Junction.	Project Engineer/Design/Resident Engineer/	Design Phase		
CI-4	During Final Design and Construction, every effort will be made to further minimize the amount of right-of-way needed for the facility and to further minimize community and environmental impacts.	Project Engineer/Design/Resident Engineer	Design/Construction		
ECON-1	Sufficient relocation resources will be made available to displaced businesses in accordance with the Uniform Relocation Assistance and Property Acquisition Act to 1970 as amended (42 USC Secs. 4601-4655).	Resident Engineer	Project Approval/Environmental Document		
ECON-2	Businesses displaced by the project alternatives will be relocated in an area that is comparable to the existing location in terms of accessibility and traffic volume.	Resident Engineer/CT Right of Way Agent	Final Design/PS&E		
ECON-3	Signage provisions will be made available to businesses whose temporary or permanent visibility and vehicular access change as a result of the project.	Resident Engineer	Final Design/Construction		

**APPENDIX G: Environmental Commitments Record (ECR)**

State Route 58 (SR-58)  
 Kramer Junction Expressway Project  
 PN: 0800000616  
 EA 08-347700

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ECON-4	For APN# 049219104, the permanent replacement site or a reconfiguration on the current site will accommodate the hangars and runway.	Resident Engineer	Final Design/Construction		
<b>Section 3.5 Utilities/Emergency Services</b>					
UT-1	Caltrans will coordinate all utility relocation work with the affected utility companies to ensure minimum disruption to customers in the service areas during construction. If Alternative 2 is selected as the preferred alternative, a coordination plan shall be established with SCE. The coordination plan shall include specific measures to minimize electrical service disruption that would occur with relocation of the existing SCE substation. This coordination plan will be in place and agreed upon by Caltrans and SCE before any relocation activities occur as a result of the proposed project.	Resident Engineer	Final Design/PS&E		
TR-1	Preparation of a Traffic Management Plan (TMP) to ensure that local and regional traffic moves efficiently during construction. The information provided will include access and traffic management plans that describe any projected temporary street closures or expected traffic delays due to construction vehicles on the roadways.	Resident Engineer	Final Design		
TR-2	The TMP and the construction plans will be provided to the community business and local agencies as the fire department, prior to project commencement.	Resident Engineer	Final Design		

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<b>Section 3.6. Traffic and Transportation/Pedestrian and Bicycle Facilities</b>					
TR-1	<p>Caltrans will prepare a TMP to ensure that local and regional traffic moves efficiently during construction. The TMP and the construction plans will be provided to community agencies, such as the fire department, prior to project commencement. The information provided will include access and traffic management plans that describe any projected temporary street closures or expected traffic delays due to construction vehicles on the roadways.</p> <p>The following elements will be major components of the project TMP:</p> <ul style="list-style-type: none"> <li>• A public awareness campaign related to the scheduling of work;</li> <li>• A construction zone enforcement enhancement program (COZEEP);</li> <li>• Use of portable changeable message signs (PCMS);</li> <li>• Advance information signing that will communicate the date, time, and duration of ramp closures;</li> <li>• Plan road closures to minimize impacts on local circulation to the maximum extent feasible; and</li> <li>• Preparation of temporary detour plans, if needed, during the plans, specifications, and estimates (PS&amp;E) phase of the project. (Note: No detours are anticipated at this time.)</li> </ul>	District Design/Resident Engineer/Contractor	Final Design/Construction		
<b>Section 3.7 Visual/Aesthetics</b>					
AES-1	All lighting used for the project will be directional, directing light to the highway facility and away from homes and habitats to minimize glare impacts to the night sky, and to avoid affecting background sky views. Glare shields will be used.	District Design/District Landscape Architect/District Biological Studies/Resident Engineer/Contractor	Final Design/Construction		
AES-2	Detention basins and bioswales will be designed and addressed as visually integrated elements of the landscape planting. Contour grading of basins will minimize the visual impact by blending with the surrounding natural landscape features.	District Design/District Landscape Architect/Resident Engineer/Contractor	Final Design/Construction		

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AES-3	Bridge structures will be pigmented an earth tone that is compatible with the native soil color within the project limits. Bridge structures, signs, and other highway appurtenances will be selected for their form, scale, color, aesthetic treatment, spacing, and configuration to enhance compatibility with the rural community and desert landscape design contexts.	District Design/District Landscape Architect/ Resident Engineer/Contractor	Final Design/Construction		
AES-4	Native plantings will be used to minimize the visual impact of the highway and associated detention basins. Drought-tolerant native trees and shrubs will be planted at appropriate locations, especially near the drainages and drainage basins, and at the two proposed interchanges and railroad overcrossing to soften the structures. These interchanges will become the gateways into the community and will be landscaped. Inert materials will also be considered where appropriate to beautify these areas and reduce erosion. The restoration of desert scrub vegetation will include replanting of native vegetation and Joshua trees on disturbed sites, including staging areas, borrow pits, and other areas of surface disturbance. Any portion of existing SR-58 roadway pavement which is no longer needed will be removed, leaving an earthen surface that will be seeded with native seeds.	District Design/District Landscape Architect/District Biological Studies/Resident Engineer/Contractor	Final Design/Construction		
AES-5	Where possible, concrete drainage ditches will be avoided in favor of soft-bottom ditches to reduce urbanizing elements, and to encourage infiltration and vegetation growth. Where required, concrete ditches will be pigmented to blend with adjacent soil.	District Design/District Landscape Architect/ Resident Engineer/Contractor	Final Design/Construction		
AES-6	All disturbed soil areas will be treated with erosion control measures, including seeding with native plant/native grass seeds. For further detail see Measure GEO-2.	District Design/District Landscape Architect/District Biological Studies/Resident Engineer/Contractor	Final Design/Construction		
AES-7	During construction, existing vegetation will be retained to the maximum extent feasible by minimizing the amount of clearing and earthwork. During construction, Environmentally Sensitive Area (ESA) fencing will be provided around trees and vegetation to ensure its preservation.	District Design/District Landscape Architect/District Biological Studies/Resident Engineer/Contractor	Final Design/Construction		

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AES-8	Joshua trees that would be removed will be replanted away from the proposed pavement areas. If onsite relocation is not feasible, Caltrans will contact the San Bernardino County Building and Safety Office for a list of residents willing to adopt and care for the relocated trees. Transportation standards will follow best nursery practices.	District Design/District Landscape Architect/District Biological Studies/Resident Engineer/Contractor	Final Design/Construction		
AES-9	Slopes will be landscaped with native vegetation to reflect vegetation in the surrounding area and to mask the hard lines created by engineered cuts and embankments.	District Design/District Landscape Architect/Resident Engineer/Contractor	Final Design/Construction		
<b>Section 3.8 Cultural Resources</b>					
CR-1	If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.	Qualified Archaeologist/Resident Engineer/Contractor	Construction		
CR-2	If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the county coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC, which will then notify the MLD. At this time, the person who discovered the remains will contact Gary Jones, District 8 Native American Coordinator at (909) 383-7505 so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable.	Resident Engineer/Contractor	Construction		
CR-3	An Osteologically Trained Archaeological Monitor(s) and Native American Monitor(s) shall be present during all ground disturbing construction activities in sensitive areas, which will be defined after the buried site testing and before completion of final design. In the event that additional cultural deposits are uncovered during construction operations, the archaeological monitor shall be empowered to halt or divert work in the vicinity of the find until the archaeologist is able to determine the nature and the significance of the discovery.	Qualified Archaeologist/Resident Engineer/Contractor	Construction		

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<b>CR-3a</b>	Prior to construction, buried site testing will be performed to further define the boundaries of the “sensitive areas.” The buried site testing will include a geo-archaeological analysis of the potential for the presence of buried subsurface deposits. If the results of the buried sites testing indicate that the presence of buried subsurface deposits are “likely,” a Discovery Plan will be prepared and implemented in the event of inadvertent discoveries.	Qualified Archaeologist/ Resident Engineer/Contractor	Construction		
<b>CR-4</b>	An Environmentally Sensitive Area (ESA) will be delineated around the prehistoric component of CA-SBR-15073/H as described in the ESA Action Plan in the Finding of Effect.	Resident Engineer/Contractor	Construction		
<b>CR-5</b>	An Environmentally Sensitive Area (ESA) will be delineated around a portion of site CA-SBR-15085 as described in the ESA Action Plan in the Finding of Effect.	Resident Engineer/Contractor	Construction		
<b>Section 3.9 Hydrology and Floodplains</b>					
<b>HF-1</b>	The project will be designed so that stormwater flows do not overtop the roadway section.	Project Engineer/Resident Engineer	Final Design/PS&E		
<b>HF-2</b>	Culverts in the part of the project area where it is very flat and no flow lines approach the new alignment may require training dikes to concentrate flows into the inlets. The exact size and location will be determined during the project’s final design phase.	Resident Engineer	Final Design		
<b>HF-3</b>	All culverts will be constructed with their inverts on natural ground that approximates the gradient flow line they serve. Placement in such a manner helps prevent bedload deposition in the culvert.	Resident Engineer	Final Design/Construction		
<b>HF-4</b>	As the project area is entirely within a desert area, all culverts will be designed for the 100-year AMC II storm.	Resident Engineer	Final Design		

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HF-5	<p>The following preliminary design features and recommendations will be incorporated during the final design phase of the project in accordance with Caltrans' standard design practice:</p> <ul style="list-style-type: none"> <li>• Stormwater flows will not be allowed to overtop the road section,</li> <li>• Channels and ditches will be used to collect and convey flows into one main flow before crossing the road,</li> <li>• A bulking factor between 25 and 50 percent will be considered,</li> <li>• Box culverts will be as wide in span as economically feasible,</li> <li>• Training dikes will be considered for culverts to concentrate flows into the inlets,</li> <li>• Box culverts will be constructed with their inverts on natural ground that approximates the gradient of the flow line they serve,</li> <li>• All culverts will be designed for the 100-year AMC II storm, and</li> <li>• Water velocity at the culvert will be limited to 10 feet per second to prevent excessive scour.</li> </ul>	Resident Engineer	Final Design		
<b>Section 3.10 Water Quality and Stormwater Runoff</b>					
WQ-1	<p>The project will comply with the provisions of the Statewide NPDES permit. Treatment BMPs, as described in Section 3 of the Department's Statewide SWMP (Department 2003b) and the Project Planning and Design Guide (PPDG) (Department 2010), will be evaluated prior to completion of the Project Approval and Environmental Document phase and incorporated into the project's engineering plans and specifications during final design. Design pollution prevention BMPs are selected to reduce post-construction discharges. If greater than 90 percent of the Water Quality Volume cannot be infiltrated within State right of way, approved Treatment BMPs will be included to remove general pollutants; for example, infiltration devices or detention basins. Construction site BMPs, as described in WQ-3, will be itemized in the final contract documents, incorporated into the SWPPP, and implemented during the construction period.</p>	Resident Engineer/Contractor	Final Design/Construction		
WQ-2	<p>The contractor will be responsible for preparing a SWPPP according to the Department's standards, incorporating all the BMPs listed in the contract plans, and amending the SWPPP during the course of construction as necessary. The Resident Engineer will review and</p>	Resident Engineer/Contractor	Final Design/Construction		

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	approve the SWPPP. The general contractor will also implement, inspect, and maintain all measures with oversight by the Resident Engineer.				
WQ-3	<p>Table 1-1 of the Department’s Construction Site Best Management Practices Manual (Department 2003c) and/or the Department’s Storm Water Quality Handbooks, Project Planning and Design Guide (Department 2010) include the following BMPs:</p> <ul style="list-style-type: none"> <li>• Temporary soil stabilization</li> <li>• Temporary sediment control</li> <li>• Tracking control</li> <li>• Non-stormwater management</li> <li>• Waste management</li> <li>• Materials storage and handling controls</li> </ul> <p>At a minimum, the contractor will implement all of the appropriate BMPs under the minimum requirement column of Table 1-1 of the Department’s Construction Site Best Management Practices Manual (Department 2003c) and/or the Department’s Storm Water Quality Handbooks, Project Planning and Design Guide (Department 2010). During completion of the final engineering and design plans, specific BMPs will be specified in the contract documents to protect water quality. Specified BMPs would be implemented by the contractor through the SWPPP. The plan will also include post-construction erosion control measures such as stabilization of all disturbed soil areas.</p>	Resident Engineer/Contractor	Final Design/Construction		
WQ-4	Coordination with the LRWQCB and SCE will be required should Alternative 2 be selected to avoid water quality impacts from relocation of the utility substation and the waste water impoundments.	Resident Engineer/Contractor	Final Design/Construction		
WQ-5	Coordination with the USACE, CDFW, and LRWQCB is ongoing and required to minimize water quality impacts to the 13 natural drainages that cross the project alternatives. It is necessary to obtain a WDR from the LRWQCB. The project will require an Approved Jurisdictional Determination from the USACE, a 1602 Lake and Streambed Alteration Agreement from the CDFW, and a 401 Water Quality Certification from LRWQCB.	Resident Engineer/Contractor	Final Design/Construction		

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WQ-6	Construction staging areas are to be sited in upland areas outside stream channels and other surface waters on or around the project site.	Resident Engineer/Contractor	Final Design/Construction		
WQ-7	Buffer areas should be identified and exclusion fencing is to be used to protect the water resources and prevent unauthorized vehicles or equipment from entering or otherwise disturbing the stream channels.	Resident Engineer/Contractor	Final Design/Construction		
WQ-8	Construction equipment will use existing roads.	Resident Engineer/Contractor	Final Design/Construction		
<b>Section 3.11 Geology/Soils/Seismic/Topography</b>					
GEO-1	Earthwork in the project area shall be performed in accordance with the latest edition of the Caltrans Standard Specifications.	Resident Engineer/Contractor	Construction		
GEO-2	<p>During grading and site preparation, all onsite earthwork would be performed in accordance with the following:</p> <ol style="list-style-type: none"> <li>1. Cut slope. Cut slope for this project shall be 1:1.5 (V:H) or flatter. For planning purposes, the earthwork factor is 1.3 for rock cuts, and 1.05 for cut in alluvium.</li> <li>2. Grading Factor. A value of 1.3 for earthwork factor in the rock cuts and a value of 1.05 for cuts in alluvium are recommended. These values may be adjusted based on further field exploration and laboratory testing.</li> <li>3. Embankment. Embankment slope shall be 1:2 (V:H) or flatter. Where the future embankment will be constructed across natural drainage courses, 0.5 feet of alluvium shall be sub-excavated (over-excavated) from the embankment culvert foundation area and replaced as compacted fill. Embankment foundations shall be prepared in accordance with Section 19 of the Standard Specifications. Where embankment foundations cross existing cultivated land, the embankment foundation shall be sub-excavated 2.6 feet and restored to grade with compacted fill. The recommendation may be modified or deleted based on supplemental exploration and testing for the Geotechnical Design Report. Embankment foundations areas disturbed by building demolition or basement backfilling operations should be over-excavated and restored with compacted fill.</li> <li>4. Structure Foundations.                         <ol style="list-style-type: none"> <li>a. Retaining wall. The wall foundation soils should be sub-</li> </ol> </li> </ol>	Resident Engineer/District Landscape Architect/Contractor	Construction		

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	<p>excavated and restored as compacted fill; either a Type 1 or Type 2 Standard Plan retaining wall can be used. Alternatively, a Mechanically Stabilized Embankment (MSE) wall could be used. The MSE walls are more tolerable to settlement and sub-excavation, and recompaction of the foundation soils would be significantly reduced or eliminated. For planning purposes, assume no sub-excavation for an MSE wall.</p> <p>b. During preparation of the Geotechnical Design Report, bulk samples will be taken from the proposed sub-excavated area for laboratory compaction, remolded, direct shear, sieve analysis, and sand equivalent testing. This data will be used to analyze the bearing capacity, external stability, and suitability of on-site soils as structure backfill.</p> <p>5. Erosion.</p> <p>a. Vegetate and mulch the slope surface and include the use of erosion protection coverings. Specifications would require the embankment construction to be done in phases, with completed slopes covered following each phase of grading. The Preliminary Geotechnical Report defers to the District Landscape Architect for techniques, specifications, and materials in vegetating slopes.</p> <p>b. Time the embankment construction to minimize soil exposure. Precipitation is a key factor in slope erosion. If possible, it would be best not to perform embankment construction during the relatively wet season. The embankment could be constructed during late spring to early summer months and vegetated/mulched prior to the rainy season.</p> <p>c. Divert runoff away from slope surface. Use a combination of pavement cross-slope and AC dikes to prevent flow over the toe of the slope.</p> <p>d. Roughen the slope surface by applying salvaged topsoil (with vegetation) from the clearing and grubbing operation. This would reduce the runoff velocity and enhance the growth of native vegetation.</p> <p>e. Armor the slope using rock fragments derived from blasting/cutting the cut slopes section on the west side of the proposed alignment.</p> <p>f. Build “zoned” embankments such that the sides of the</p>				

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	embankments are equipment width “shells” of rock fill derived from cutting the hard rock segments of the projects. 6. Excavation Techniques. Excavations can be accomplished by conventional techniques for this project. 7. Settlement. Consolidation tests to further review the primary consolidation estimates for the higher embankment as well as the potential for collapsible soils will be needed.				
<b>Section 3.12 Paleontology</b>					
<b>PA-1</b>	Grading, excavation, and other surface and subsurface excavation in defined areas of the proposed project have the potential to affect nonrenewable fossil resources. A Paleontological Mitigation Plan (PMP) shall be prepared during final project design by a qualified paleontologist. The PMP will detail monitoring and the measures to be implemented in the event of paleontological discoveries. The PMP will include, at a minimum, the following elements.	Qualified Paleontologist/Resident Engineer/Contractor	Pre-Construction/ Construction		
<b>PA-2</b>	Required 1-hour preconstruction paleontological awareness training for earthmoving personnel, including documentation of training, such as sign-in sheets, and hardhat stickers, to establish communications protocols between construction personnel and the Principal Paleontologist.	Qualified Paleontologist/Resident Engineer/Contractor	Pre-Construction		
<b>PA-3</b>	There will be a signed repository agreement with an appropriate repository that meets Caltrans requirements and is approved by Caltrans.	Environmental Liaison/Resident Engineer/Contractor	Final Design/ Pre-Construction		
<b>PA-4</b>	Monitoring, by a Principal Paleontologist, of Pleistocene older alluvium during excavation.	Qualified Paleontologist/Resident Engineer/Contractor	Construction		
<b>PA-5</b>	Field and laboratory methods that meet the curation requirements of the appropriate repository will be implemented for monitoring, reporting, collection, and curation of collected specimens. Curation requirements are available for public review at the appropriate repository.	Resident Engineer/Contractor	Construction		
<b>PA-6</b>	All elements of the PMP will follow the PMP Format published in the Caltrans Standard Environmental Reference (Caltrans 2003).	Resident Engineer/Contractor	Construction		

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PA-7	A Paleontological Mitigation Report discussing findings and analysis will be prepared by a Principal Paleontologist upon completion of project earthmoving. The report will be included in the environmental project file and also submitted to the curation facility.	Qualified Paleontologist/ Resident Engineer/Contractor	Final Design/Construction		
<b>Section 3.13 Hazardous Waste/Materials</b>					
HAZ-2	A geophysical survey and exploratory potholing will be performed to confirm the location of the abandoned oil well and determine whether it is located within the construction zones of Alternative 1 and Alternative 1A. A Preliminary Site Investigation was performed; no evidence of an oil well was observed.	Resident Engineer/Contractor	Design/PS&E/ Construction	Site investigation	February 2014
HAZ-3	Shallow soil sampling for petroleum, VOCs, metals, and PCBs will be conducted near identified drum storage areas, USTs, ASTs, sumps/clarifiers, wastewater trenches, and debris-covered areas within the environmental footprint of all alternatives to determine if special handling and soil disposal is needed. A Preliminary Site Investigation was performed, including soil sampling; no hazardous waste was detected.	Resident Engineer/Contractor	Design/PS&E/Right of Way	Site investigation	February 2014
HAZ-4	Soil sampling for petroleum hydrocarbons, VOCs, metals, and PCBs will be conducted in the wastewater treatment pond where it encroaches onto the selected alternative's right-of-way. The preferred alternative (Alternative 1A) does not encroach in this area. No site investigations were performed.	Resident Engineer/Contractor	Design/PS&E/Right of Way		
HAZ-5	Shallow soil sampling for petroleum hydrocarbons, VOCs, metals, asbestos, pesticides, semi-VOCs, and PCBs will be performed at areas around the railroad tracks that may be disturbed during construction activities. A Preliminary Site Investigation was performed, including soil sampling. No hazardous waste was detected.	Resident Engineer/Contractor	Design/PS&E/ Construction		
HAZ-6	All soil excavation conducted on-site will be monitored by the construction contractor for visible soil staining, odor, and the possible presence of unknown hazardous-material sources. Contaminated soils will be segregated and profiled for disposal.	Resident Engineer/Contractor	Design/PS&E/ Construction		
HAZ-7	Septic tanks and leach fields that fall within the construction zone will be removed and disposed of.	Resident Engineer/Contractor	Design/PS&E/ Construction		

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HAZ-8	For structures within the proposed right-of-way of the selected alternative that require demolition, an asbestos pre-demolition survey will be completed prior to the disturbance of building materials to determine the asbestos content. A certified asbestos contractor will be retained to abate any identified ACM issues in accordance with all applicable laws, including OSHA guidelines.	Resident Engineer/Contractor	Design/PS&E/ Construction		
HAZ-9	In the event that ACMs that were not identified in the asbestos study are uncovered during demolition/renovation activities, the contractor must stop work and have the materials tested for asbestos content. Any demolition or renovation of a structure will require the Mojave Desert Air Quality Management District (MDAQMD) to be notified and fees to be submitted at least 10 days prior to proceeding with demolition work; failure to do so may result in being fined for regulatory non-compliance.	Resident Engineer/Contractor	Design/PS&E/ Construction		
HAZ-10	In the event that alteration or demolition of the painted roadway is required, a LBP survey shall be conducted prior to disturbing highway structural materials to evaluate the lead content of the painted surface.	Resident Engineer	Design/PS&E/ Pre-Construction		
HAZ-11	Because of the possible presence of elevated lead concentrations in the yellow thermoplastic and yellow painted traffic stripes along the existing highway, it is recommended that special provisions be included that require the contractor to manage removed striping and pavement markings properly (i.e., as a hazardous waste) and have and implement a lead compliance plan prepared by a Certified Industrial Hygienist (CIH).	Resident Engineer	Design/PS&E/ Pre-Construction		
HAZ-12	Caltrans Waste Management and Materials Pollution Control BMPs, Material Delivery and Storage and Material Use: Thermoplastic waste will be disposed of in accordance with Standard Specification 14-11.07. Environmental rules and requirements, as outlined in the Caltrans Construction Manual, 7-103D (1), Caltrans- and Contractor- Designated Disposal, Staging, and Borrow Sites, will be followed and/or implemented.	Resident Engineer/Contractor	Final Design/ PS&E/Construction		

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<b>HAZ-13</b>	A site safety plan that addresses issues related to the management of potential health and safety hazards to workers and the public will be prepared and implemented prior to initiation of the proposed construction activities. Instructions, guidelines, and requirements for handling hazardous materials will be included in the site safety plan to ensure employee safety, as provided in Chapter 16, Hazardous Materials Communication Program, of the Caltrans Safety Manual.	Resident Engineer/Contractor	Final Design PS&E		
<b>HAZ-14</b>	Wastes and petroleum products used during construction will be collected, transported, and removed from the project site in accordance with RCRA regulations and federal OSHA standards, including Waste Management and Materials Pollution Control BMPs, Spill Prevention and Control, and Materials and Waste Management BMPs, Hazardous Waste Management. All hazardous waste will be stored, transported, and disposed of as required in Title 22, CCR, Divisions 4.5 and 49; CFR 261-263; and Caltrans requirements, as stated in Section 7-109, Solid Waste Disposal and Recycling Reporting, of the Caltrans Construction Manual.	Resident Engineer/Contractor	Final Design PS&E/ Pre-Construction		
<b>HAZ-15</b>	Additional ADL studies will be performed at locations where the selected right-of-way crosses or includes the existing right-of-way and previous ADL studies were not performed. An ADL survey was completed in December 2013. ADL is non-hazardous in the project area.	Resident Engineer/Contractor	Final Design PS&E/ Pre-Construction		
<b>HAZ-16</b>	A lead compliance plan will be prepared under Section 7-1.02K(6)(j)(ii) of the Caltrans Standard Specifications. The lead compliance plan will include provisions regarding the use of earth material. If earth material will be relinquished to the contractor, the level of lead concentration and the depth of the earth material in which the lead was detected will be disclosed. If earth material will not be relinquished to the contractor, all excavated earth material with lead, which is typically found within the top two feet of material in unpaved areas of the highway, will be reused within the project limits.	Resident Engineer/Contractor	Final Design PS&E/ Pre-Construction		
<b>HAZ-17</b>	Earth material containing lead will be handled according to all applicable laws, rules, and regulations, including those of the following agencies: (1) Cal/OSHA, (2) the California Regional Water Quality Control Board, Region 6 – Lahontan, and (3) the California Department of Toxic Substances Control.	Resident Engineer/Contractor	Final Design PS&E/ Pre-Construction		

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<b>HAZ-18</b>	As recommended in the BNSF railroad investigation conducted as part of the Preliminary Site Investigation, the contractor will ensure that excess soils not used on site are disposed of as non-hazardous waste at a Class II facility. Excess soils may be reused within the construction zone, but off-site reuse is not permitted. In the event that stained or odorous soils are encountered during excavation, soils will be segregated, stockpiled, and characterized for disposition in accordance with local, state, and federal regulations and requirements. All work will be conducted under the guidance of a soil management plan (SMP) prepared by a Professional Engineer or Professional Geologist. The purpose of the SMP is to identify measures that would be implemented during construction activities to minimize dust and potential exposure to workers.	Resident Engineer/Contractor	Final Design PS&E/ Pre-Construction		
<b>HAZ-19</b>	If a commercial landfill will be used to dispose of earth material, (1) the earth material will be transported to a Class II or Class III landfill that is appropriately permitted to receive the material and (2) the contractor will be responsible for identifying the appropriately permitted landfill that will receive the earth material and paying all associated trucking and disposal costs, including costs for any additional sampling and analysis required by the receiving landfill. If hazardous waste material is discovered during construction, such material must be transported under manifest to a permitted Class I disposal facility.	Resident Engineer/Contractor	Final Design PS&E/ Pre-Construction		
<b>HAZ-20</b>	Coordination with the San Bernardino County Department of Airports and impacted airstrip and Boron Airport owners will be conducted to establish the appropriate construction or closure notification and safety procedures. The airstrip and Boron Airport do not appear to meet the requirements of CFR Title 14 Part 77.9; however, if during the coordination process it is determined that the FAA should be notified, then all notification requirements in accordance with CFR Title 14 Part 77.9 will be followed.	Resident Engineer/Contractor	Final Design PS&E/ Pre-Construction		

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<b>Section 3.14 Air Quality</b>					
AQ-1	<p>The Department will require implementation of effective and comprehensive avoidance and minimization measures, as detailed in the Department’s Standard Specifications, Section 7-1.01F (Air Pollution Control), and MDAQMD Rule 403.2 (Fugitive Dust Control).</p> <p>Measures to reduce exhaust emissions specified in Section 7-1.01F (Air Pollution Control) may include the following:</p> <ul style="list-style-type: none"> <li>• Maintain and operate construction equipment to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would have their engines turned off when not in use to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.</li> <li>• Properly tune and maintain all equipment in accordance with the manufacturer’s specifications.</li> <li>• Use electricity from power poles rather than temporary diesel- or gasoline-powered generators if and/or where feasible.</li> <li>• Use on-site mobile equipment powered by alternative fuel sources (i.e., methanol, natural gas, propane, butane) as feasible.</li> <li>• Develop a construction traffic management plan that includes: (1) consolidating truck deliveries; (2) providing a rideshare or shuttle service for construction workers; and (3) providing dedicated turn lanes for construction trucks and equipment on- and off-site.</li> <li>• Use solar-powered changeable message signs.</li> </ul>	Resident Engineer/Contractor	Construction		

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AQ-2	<p>Measures to reduce particle emissions specified in MDAQMD Rule 403.2 (Fugitive Dust Control) include the following:</p> <p>The owner or operator of any construction/demolition source shall:</p> <ul style="list-style-type: none"> <li>• Use periodic watering for short-term stabilization of disturbed surface areas to minimize visible fugitive dust emissions. For purposes of this rule, use of a water truck to moisten disturbed surfaces and actively spread water during visible dusting episodes shall be considered adequate to maintain compliance.</li> <li>• Take actions to prevent project-related trackout onto paved surfaces.</li> <li>• Cover loaded haul vehicles while operating on publicly maintained paved surfaces.</li> <li>• Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than 30 days, except when such a delay is due to precipitation that dampens the disturbed surface enough to eliminate visible fugitive dust emissions.</li> <li>• Clean up project-related trackout or spills on publicly maintained paved surfaces within 24 hours.</li> <li>• Reduce nonessential earthmoving activity under high wind conditions. For purposes of this rule, a reduction in earthmoving activity when visible dusting occurs shall be considered enough to maintain compliance.</li> </ul>	Resident Engineer/Contractor	Construction		

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<b>Section 3.15 Noise and Vibration</b>					
NOI-1	<p>To reduce noise levels from construction to the extent that is technically feasible and avoid unnecessary annoyance from construction noise, the construction noise control measures listed below will be implemented.</p> <ul style="list-style-type: none"> <li>• To the extent practicable, avoid using construction equipment or any other activity that could generate high noise levels near homes. If nighttime construction is required, the community will be advised.</li> <li>• Place maintenance yards, batch plants, haul roads, and other construction-oriented operations in locations that would be the least disruptive to the community.</li> <li>• Hold community meetings to explain to area residents the construction work, time involved, and control measures to be taken to reduce the impact of construction work, as appropriate.</li> <li>• Schedule the timing and duration of construction activities to minimize noise impacts at noise-sensitive locations.</li> <li>• As practicable, use noise-attenuating “jackets” or portable noise screens to provide shielding for pavement breaking, jack hammering, or other similar activities when work is close to noise-sensitive areas.</li> <li>• Comply with Caltrans’ Standard Specification 14-8.02A (2010):                         <ul style="list-style-type: none"> <li>○ Do not exceed 86 dBA Lmax at 50 feet from the job site activities from 9 p.m. to 6 a.m.</li> <li>○ Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.</li> </ul> </li> </ul>	Resident Engineer/Contractor	Construction		

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<b>Section 3.17 Natural Communities</b>					
<b>BIO-1</b>	In coordination with USFWS and CDFW two oversized culverts, east and west of US-395, will be installed as part of the project. These culverts will be a minimum of six feet tall and 10 feet wide. These will be box culverts, which are a specific requirement for desert tortoise and Mohave ground squirrel and have been designed as such. They will also accommodate small to medium sized animals. Desert tortoise fencing will be used to direct wildlife to them.	Environmental Coordinator/District Biological Studies/Project Engineer/Resident Engineer/Contractor	Final Design/PS&E/ Construction		
<b>Section 3.18 Wetlands and Other Waters</b>					
<b>BIO-2</b>	Water Pollution Control: Avoidance and minimization measures to be utilized in order to protect aquatic resources during the course of the project will include the implementation of BMPs (Department 2003a) and the Storm Water Pollution Prevention Plan (SWPPP) (Department 2003b) during all phases of construction.	Environmental Coordinator/District Biological Studies/Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		
<b>BIO-3</b>	Temporary Environmentally Sensitive Area (ESA) fencing: An ESA fence will be installed around all washes within the right of way that will not be impacted by the project.	Qualified Biologist District Biological Studies/Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Pre-Construction		
<b>BIO-4</b>	Biological Monitor. A qualified construction monitor will assure that construction activities will not impact the washes delimited by the ESA fencing.	Qualified Biologist District Biological Studies/Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		
<b>BIO-5</b>	The proposed project will require the acquisition of mitigation for federal and state listed species. Mitigation ratios varied from 3:1 to 5:1. This land is expected to include desert washes that should offset the impact for the project. There is no aquatic/riparian vegetation that will require any other additional mitigation. If the mitigation land acquired for the project does not include sufficient desert washes, supplementary mitigation may be required by the agencies with jurisdiction over the waters.	Qualified Biologist District Biological Studies/Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		

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<b>Section 3.19 Plant Species</b>					
<b>BIO-6</b>	Preconstruction surveys for rare plants will be conducted by a qualified biologist during the appropriate blooming period. Any plants identified will be flagged and avoided, if feasible.	Environmental Liaison/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/ Pre-Construction		
<b>BIO-7</b>	The project design will avoid impacts to special-status plants to the extent feasible.	District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/ Construction		
<b>BIO-8</b>	Temporary Fence (Type ESA). ESA fencing will be established around those populations of special-status plants that are to be protected in place to prohibit all construction activities and access from impacting the rare plant populations within the project area.	Environmental Liaison/ District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Pre-Construction		
<b>BIO-9</b>	Seeds will be collected from all those plant populations deemed appropriate for seed relocation if suitable habitat is available.	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/ Construction		
<b>BIO-10</b>	Biological Monitor. A qualified biological monitor will monitor construction activities to ensure avoidance of any construction-related impacts to special status plant species.	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/ Construction		
<b>BIO-11</b>	Species Protection Measures will be made to ensure that temporary staging areas, storage areas, and access roads involved with this project will occur in the area of permanent direct impact. Access to the project site will be gained from the existing SR-58. No new access roads will be built as part of this project. Staging areas and equipment storage will take place on existing roads or within the proposed right-of-way of the realigned SR-58.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		

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BIO-12	Joshua trees within the direct impact area with a circumference of 50 inches measured at four feet, measuring 15 feet high, or occurring in a cluster of 10 or more within close proximity to each other will be transplanted or stockpiled for future transplanting to the extent feasible. Joshua trees will be shown on the plans for avoidance or transplanting.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		
BIO-13	An Environmentally Sensitive Area (ESA) will be established around all Joshua trees within the project area that are to be protected in place, as shown on plans. To prohibit all construction activities and access from impacting the Joshua trees within the project area, temporary ESA fencing would be placed around the Joshua trees.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Pre-Construction		
<b>Section 3.20 Animal Species</b>					
BIO-14	A preconstruction survey of the project site for burrowing owl will be conducted; the time lapse between surveys and site disturbance will be as short as possible and will be determined based on consultation with CDFW, but will not exceed 7 days prior to commencing construction activities.	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/ Construction Liaison	Final Design/PS&E/ Pre-Construction		
BIO-15	Species Protection. Measures will be implemented to ensure that temporary staging areas, storage areas, and access roads for this project will occur in the area of permanent direct impact. Access to the project site will be gained from the existing SR-58. No new access roads will be built as part of this project. Staging areas and equipment storage will take place on existing roads or within the proposed right-of-way of the realigned SR-58.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Pre-Construction		
BIO-16	<p>Species Protection: If burrowing owls are found on-site during the preconstruction sweep:</p> <ul style="list-style-type: none"> <li>• Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.</li> <li>• A Burrowing Owl Mitigation and Monitoring Plan will be submitted to CDFW for review and approval.</li> <li>• All relocation shall be approved by CDFW.</li> </ul>	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		

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<b>BIO-17</b>	<p>If, during preconstruction surveys, a burrowing owl is encountered, habitat compensation will be assessed and coordinated with CDFW during preparation of the Burrowing Owl Mitigation and Monitoring Plan.</p> <p>Appropriate mitigation lands for burrowing owl will be determined during preparation and CDFW agency approval of the Burrowing Owl Mitigation and Monitoring Plan. CDFW may allow the mitigation lands acquired following the above mitigation ratios to account for more than just burrowing owl, if species-specific habitat criteria are met in the habitat acquisition proposal. As provided in CDFW (2012) the mitigation for permanent habitat loss necessitates replacement with an equal or greater habitat area.</p>	<p>Qualified Biologist District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison</p>	<p>Final Design/PS&amp;E/Pre-Construction</p>		
<b>BIO-18</b>	<p>To avoid any impacts to migratory birds (including loggerhead shrike and Le Conte’s thrasher), vegetation removal must take place between September 15 and February 15 (outside of the breeding season). If, because of construction schedules, it is necessary to remove vegetation, including trees, during the breeding season (February 16 through September 14), a biological construction monitor must perform a preconstruction survey of each individual tree and/or the entire area where vegetation will be removed. All measures shall be taken to minimize impacts on nesting birds. A preconstruction sweep for nesting birds will be conducted prior to construction activities outside of the nesting season as well. The sweep will include areas used for staging, storage, sign placement, or parking. If an active bird nest is detected during surveys, a nest avoidance buffer will be implemented with a radius of 100 feet or as determined by the biological monitor. Depending on the species and nesting stage, it may be prudent to have a biological monitor present during construction to monitor nest activity while still allowing construction to take place.</p>	<p>Qualified Biologist District Biological Studies/Project Engineer/Resident Engineer/Construction Liaison</p>	<p>Final Design/PS&amp;E/Pre-Construction</p>		
<b>BIO-19</b>	<p>A preconstruction survey will take place to ensure that no American badgers are located within the project limits.</p>	<p>Qualified Biologist District Biological Studies/Project Engineer/Resident Engineer/Construction Liaison</p>	<p>Final Design/PS&amp;E/Pre-Construction</p>		
<b>BIO-20</b>	<p>Biological Monitor: A qualified biological monitor will monitor construction activities to ensure avoidance of any construction-related impacts on American badger.</p>	<p>Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Construction Liaison</p>	<p>Final Design/PS&amp;E/Pre-Construction</p>		

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<b>BIO-21</b>	Species Protection: If a burrow occupied by badgers is found during construction, all construction activities will cease in the vicinity of the burrow, and coordination with CDFW will take place so that appropriate protective measures can be implemented.	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/Construction		
<b>Section 3.21 Threatened and Endangered Species</b>					
<b>BIO-22</b>	<p>Field Contact Representative or Resident Engineer. Caltrans will assign/designate a staff person to act as the Field Contact Representative (FCR) or Resident Engineer (RE) with specific experience in the implementation of environmental compliance programs. The FCR/RE will serve as the environmental compliance monitor for the project. They will be present throughout construction period. This individual will be the liaison among the wildlife agencies, FHWA, Authorized Biologist(s), and Biological Monitor(s). The FCR/RE and Authorized Biologist will work closely together to ensure compliance with the various conditions and requirements of project permits and approvals set forth in the biological opinion and supporting plans appended to the biological assessment.</p> <p>Caltrans’s FCR/RE will act on the advice of the Authorized Biologist(s) and Biological Monitor(s) to ensure conformance with the protective measures set forth in the biological opinion. The Authorized Biologist(s) will have the authority to immediately stop any activity that is not in compliance with these conditions and/or order any reasonable measure to avoid take of an individual of a listed species. If required by an Authorized Biologist and Biological Monitor(s), Caltrans’s FCR/RE will halt all construction-related ground disturbance and other activities in areas specified by the Authorized Biologist(s).</p>	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/Construction		

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<b>BIO-23</b>	<p>Authorized Biologists and Biological Monitors. Caltrans will review the credentials of all individuals seeking approval as Authorized Biologists prior to being submitted to USFWS to ensure the individuals possess the appropriate experience and training to serve as Authorized Biologists. Caltrans will then submit the credentials of appropriate individuals to USFWS and CDFW for approval at least 30 days prior to the time they must be in the field.</p> <p>The Authorized Biologist will be responsible for all aspects of clearance surveys, monitoring, developing and implementing the worker environmental awareness program, contacts with agency personnel, reporting, and long-term monitoring and reporting and be present, along with approved Biological Monitors, during construction, operation, and maintenance that could affect desert tortoises. Biological Monitors will be approved and supervised by the Authorized Biologist.</p>	<p>District Biological Studies/                      Project Engineer/Resident Engineer/Contractor/                      Construction Liaison</p>	<p>Final Design/PS&amp;E/                      Pre-Construction</p>		
<b>BIO-24</b>	<p>Pre-Construction Surveys. Within desert tortoise habitat, Authorized Biologists will conduct pre-construction surveys of the project area including the right-of-way, staging areas, access routes, and all other construction sites. The surveys will also cover the adjacent undeveloped lands located between the existing and new alignment. Authorized Biologists will survey the right-of-way for desert tortoises using techniques providing 100-percent coverage of the area proposed for disturbance. Additional transects will be conducted on each side of the right-of-way to locate tortoises and their burrows within 50 feet of the right-of-way. Transects will be no greater than 10 meters (30 feet) apart. If construction occurs during the desert tortoise active season (March 1 through October 31), or when temperatures and environmental conditions are conducive to tortoise activity as determined by an Authorized Biologist, the survey will occur within 48 hours of surface disturbance. During the inactive season (November 1 through February 28, except as noted above), when conditions are not conducive to tortoise activity as determined by an Authorized Biologist, one survey must occur within 72 hours of surface disturbance or up to five days in advance of disturbance.</p> <p>The Authorized Biologist will flag all desert tortoise burrows, and will only excavate burrows and move desert tortoises if project activities are likely to affect them. If a desert tortoise is moved, the Authorized Biologist will move it into appropriate habitat adjacent to the project site, but will not move it more than 1,000 feet if it is an adult or 300 feet if it is a juvenile or hatchling. Following the</p>	<p>Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/                      Construction Liaison</p>	<p>Final Design/PS&amp;E/                      Construction</p>		

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	preconstruction survey and the relocation of desert tortoises if determined necessary by the Authorized Biologist, the contractor will install permanent fencing to exclude desert tortoises from all work areas and rights-of-way, as specified in Measure BIO-29.				
BIO-25	<p>Biological Resource Information Program. Caltrans will be responsible for ensuring that all workers at the site receive worker environmental awareness training (Worker Environmental Awareness Program [WEAP]) prior to and throughout construction. The training will be administered to all on-site personnel including surveyors, construction engineers, employees, contractors, contractor’s employees, supervisors, inspectors, subcontractors, and delivery personnel. Caltrans will implement the WEAP to ensure that project construction and operation are both conducted within a framework of safeguarding environmentally sensitive resources. The WEAP will be available in English and Spanish. The Applicant will present the WEAP to all workers on site throughout the life of the project. Multiple sessions of the presentation may be given to accommodate training all workers. The WEAP will include but will not be limited to the following:</p> <ul style="list-style-type: none"> <li>a. Be developed by or in consultation with the Authorized Biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species, are made available to all participants;</li> <li>b. Provide an explanation of the purpose and function of the desert tortoise minimization measures and the possible penalties for not adhering to them;</li> <li>c. Inform workers that the FCR/RE, Authorized Biologist(s), and Biological Monitor(s) have the authority to halt work in any area where there would be an unauthorized adverse impact to biological resources if the activities continued;</li> <li>d. Discuss general safety protocols such as hazardous substance spill prevention and containment measures and fire prevention and protection measures;</li> <li>e. Provide an explanation of the sensitivity and locations of the vegetation, biological resources, and habitat within and adjacent to work areas, and proper identification of these resources;</li> <li>f. Place special emphasis on desert tortoise and southwestern willow flycatcher, including information on physical</li> </ul>	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/Construction		

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	<p>characteristics, photos, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and conservation measures required for the project;</p> <p>g. Provide contact information for the Authorized Biologist(s) and Biological Monitor(s) for WEAP trainees to submit late comments and questions about the material discussed in the program, as well as to report any dead or injured wildlife species encountered during project-related activities;</p> <p>h. Direct all WEAP trainees to report all observations of listed species and their sign to an Authorized Biologist for inclusion in the monthly compliance report;</p> <p>i. Include a training acknowledgment form to be signed by each worker indicating that they received training and will abide by the guidelines; and</p> <p>j. Provide an explanation regarding the protective measures to reduce the adverse effects associated with predation of desert tortoises by common ravens (<i>Corvus corax</i>) and other known predators of desert tortoise.</p> <p>Only workers who have successfully completed the education program will be allowed to work on the project site.</p>				
<p><b>BIO-26</b></p>	<p>Species Protection. Caltrans will ensure that the Authorized Biologist(s) will follow the procedures for handling tortoises in the USFWS field manual (2009). Only the Authorized Biologist(s) will move desert tortoises and then solely for the purpose of moving them from harm’s way. The Authorized Biologist(s) will document each desert tortoise encounter/handling with the following information, at a minimum: a narrative describing circumstances; vegetation type; date; conditions and health; any apparent injuries and state of healing; if moved, the location from which it was captured and the location in which it was released; maps; whether animals voided their bladders; and diagnostic markings (that is, identification numbers marked on lateral scutes).</p> <p>Tortoises found in the project area will be handled and relocated by an Authorized Biologist in accordance with the most current USFWS protocol in the Desert Tortoise Field Manual. Tortoises excavated from burrows must be relocated to unoccupied natural or artificially constructed burrows immediately following excavation. The artificial or unoccupied natural burrows must occur 150 to 300 feet from the original burrow. Relocated tortoises will not be placed in existing</p>	<p>Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison</p>	<p>Final Design/PS&amp;E/Pre-Construction</p>		

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	<p>occupied burrows. If an existing burrow that is similar in size, shape, and orientation to the original burrow is unavailable, the Authorized Biologist(s) would construct one. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in new burrows to ensure their safety. The Authorized Biologist(s) would be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely. The relocated tortoise will be monitored during construction activities to ensure that it shelters and does not return to the right-of-way and be in harm's way.</p> <p>Desert tortoises that are found aboveground and need to be moved from harm's way will be placed at unoccupied shelter sites including unoccupied soil burrows, spaces within rock outcrops, caliche caves, and the shade of shrubs at 150 to 300 feet from the point of encounter. During periods of the year when desert tortoises are generally active, a Biological Monitor will monitor these individuals to ensure that they do not move back into harm's way or exhibit signs of physiological stress (e.g., gaping, foaming at the mouth). If a desert tortoise exhibits any signs of physiological stress, the Authorized Biologist(s) will immediately undertake actions to stabilize it (e.g., place it in a climate-controlled facility, shade it, lightly mist it with water); the desert tortoise will be released only after it is exhibiting normal behavior and temperatures are appropriate.</p> <p>Whenever a vehicle or construction equipment is parked longer than two minutes within desert tortoise habitat, workers will inspect the ground around and underneath the vehicle for desert tortoises prior to moving the vehicle. If the worker observes a desert tortoise, he or she will contact an Authorized Biologist or Biological Monitor. If possible, the desert tortoise will be left to move out of harm's way on its own. If the desert tortoise does not move out of harm's way within 15 minutes, an Authorized Biologist will move it out of harm's way in accordance with the handling procedures.</p> <p>Caltrans will ensure that no project personnel will exceed a vehicle speed limit of 20 miles per hour during project activities on unpaved access roads within desert tortoise habitat.</p> <p>To prevent entry by common ravens (<i>Corvus corax</i>) and other predators such as the coyote (<i>Canis latrans</i>), trash will be placed in a sealed container and emptied at the close of business each day. The project area will be kept as clean of debris as possible. Each water</p>				

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	<p>source will be caged or netted to prevent use by ravens.</p> <p>Caltrans will ensure that workers do not bring firearms and pets into the project area. This measure does not apply to law enforcement personnel and working dogs.</p>				
<b>BIO-27</b>	<p>Locating a Dead or Injured Tortoise. The Authorized Biologist will notify USFWS within 24 hours upon locating a dead or injured desert tortoise during construction, operation, and maintenance of the project. The notification will be made by telephone and in writing or by electronic mail to BLM and USFWS. The report will include the date and time of the finding or incident (if known), location of the carcass, a photograph, cause of death (if known), and other pertinent information. Caltrans will submit desert tortoises that are fatally injured during project-related activities for necropsy, at its expense, as outlined in Berry (2001).</p>	<p>Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison</p>	<p>Final Design/PS&amp;E/Construction</p>		
<b>BIO-28</b>	<p>Designated Areas. Caltrans will confine all project activities to the right-of-way, approved access roads, and storage areas. All storage areas and vehicle turn-around locations will use previously disturbed habitat as much as possible and will require USFWS approval prior to the initiation of project activities. Caltrans will restrict project vehicles to the right-of-way, designated areas, or existing roads and will prohibit off-road or cross-country travel except in emergencies. <b>Caltrans will not create any new dirt or paved roads.</b> The project construction boundaries will be clearly delineated with fencing, stakes, or flagging. If unforeseen circumstances require disturbance beyond the project right-of-way, Caltrans will notify USFWS immediately.</p> <p>Caltrans will ensure that the Authorized Biologist or Biological Monitor will inspect any open trenches or excavations within project work sites at least three times daily and prior to backfilling. If a desert tortoise is located within an open trench, a USFWS-authorized biologist will remove it. Project personnel will cover open trenches or excavations with metal plates if they are left open overnight or on the weekend to prevent desert tortoises from entering them.</p>	<p>Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison</p>	<p>Final Design/PS&amp;E/Construction</p>		

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No.	Task and Brief Description	Responsible Party	Timing/Phase	Action Taken to Comply with Task	Date
<p><b>BIO-29</b></p>	<p>Permanent Fence. Following preconstruction surveys and the relocation of desert tortoises if determined necessary by the Authorized Biologist but prior to the start of construction, Caltrans will require the contractor to install permanent fencing to exclude desert tortoises from all work areas and rights-of-way under the direction of an Authorized Biologist. Caltrans will construct the fence according to the protocols provided in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009). If desert tortoises are encountered during installation of the fence, the Authorized Biologist will move the individual the shortest distance possible to an area outside the fence where it will be safe. The Authorized Biologist will use his or her judgment regarding the best measures to use to ensure the desert tortoise does not immediately return to the area inside of the fence. The Authorized Biologist may contact USFWS or CDFW to discuss specific situations if the need arises.</p> <p>After the fencing is installed and before the onset of ground-disturbing activities, the Authorized Biologist will survey the area and remove all desert tortoises. The Authorized Biologist will survey the area as much as is needed to ensure that all desert tortoises have been found; generally, all desert tortoises will be considered to have been removed once a complete survey of the work area is conducted without finding any additional animals. Desert tortoises that are found inside the fenced area will be placed on the other side of the desert tortoise exclusion fence. The Authorized Biologist will use his or her best judgment to determine the optimal location for placement of desert tortoises. In general, desert tortoises will be moved to the nearest safe area south of the road realignment.</p> <p>Caltrans will maintain the integrity of the fence to ensure that desert tortoises are excluded from the work area during construction and from the roadway thereafter. The fence will be inspected regularly; initially, it will be inspected on a monthly basis, but Caltrans may adopt a different schedule, based on experience. Caltrans will inspect and, if necessary, repair the fence immediately after any rainstorm that occurs during times of the year or at temperatures when desert tortoises are likely to be active.</p>	<p>Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison</p>	<p>Final Design/PS&amp;E/Construction</p>		

**APPENDIX G: Environmental Commitments Record (ECR)**

State Route 58 (SR-58)  
 Kramer Junction Expressway Project  
 PN: 0800000616  
 EA 08-347700

No.	Task and Brief Description	Responsible Party	Timing/Phase	Action Taken to Comply with Task	Date
<b>BIO-30</b>	<p>Construction Monitoring. An appropriate number of Authorized Biologists and Biological Monitors will be available during construction for the protection of desert tortoise. Authorized Biologists will be assigned to monitor each area of activity where conditions exist that may result in <i>take</i> of desert tortoise (e.g., clearing, grading, re-contouring, restoration activities).</p> <p>The Biological Monitor will survey ahead of the project activities and halt construction if he or she finds a desert tortoise in the path of construction equipment. Project activities will not resume until the desert tortoise moves out of harm's way or the Authorized Biologist has relocated it.</p> <p>An Authorized Biologist or Biological Monitor will inspect all excavations that are not within desert tortoise exclusion fencing on a regular basis (several times per day) and immediately prior to filling of the excavation. If project personnel discover a desert tortoise in an open trench, an Authorized Biologist will move it to a safe location in accordance with the Desert Tortoise Field Manual (2009).</p>	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/Construction		
<b>BIO-31</b>	<p>Biological Monitor. A qualified biological monitor will monitor construction activities to ensure avoidance of any construction activities related to MGS.</p>	Qualified Biologist/District Biological Studies/ Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/Construction		
<b>BIO-32</b>	<p>Biological Resource Information Program. MGS Awareness Training will be provided and integrated with WEAP Training prior to construction.</p>	Qualified Biologist/District Biological Studies/ Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/Construction		
<b>BIO-33</b>	<p>Species Protection. If any MGS are injured or killed during the course of construction, work must stop in the immediate area, the animal must be left in place as is, and the project monitor and the Resident Engineer will be immediately notified. Only the authorized biologist will handle and transport the animal to a qualified veterinarian.</p>	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/Construction Liaison	Final Design/PS&E/Construction		

**APPENDIX G: Environmental Commitments Record (ECR)**

State Route 58 (SR-58)  
 Kramer Junction Expressway Project  
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 EA 08-347700

No.	Task and Brief Description	Responsible Party	Timing/Phase	Action Taken to Comply with Task	Date
<b>BIO-34</b>	Caltrans, CDFW, and USFWS agreed to mitigate affected areas east of Fornessa Road with a mitigation ratio of 5:1, including the critical habitat areas east of US-395. Due to habitat quality, all areas west of Fornessa Road will be mitigated at a ratio of 3:1. The total impact area to be mitigated is shown in Table 3.21-2 in Section 3.21.3.1. Alternative 3 is the alternative that would require more mitigation for desert tortoise, followed by Alternative 1 and Alternative 1A. Since Alternative 2 is located within more previously disturbed areas, and areas already mitigated by previous projects, it is the alternative that would require less mitigation for this project. These mitigation ratios are combined with the mitigation ratios for the MGS.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		
<b>BIO-35</b>	In coordination with CDFW and USFWS, two oversized culverts, east and west of US-395, will be installed as part of the project. These culverts will be a minimum of 6 feet tall and 10 feet wide.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		
<b>BIO-36</b>	Similar to compensatory mitigation for desert tortoise, Caltrans and CDFW have agreed to mitigate affected areas east of Fornessa Road with a mitigation ratio of 5:1. Due to habitat quality all areas west of Fornessa Road will be mitigated at a ratio of 3:1. The total impact area to be mitigated is disclosed on Table 3.21-2 in Section 3.21.3.1. Alternative 3 is the alternative that would require more mitigation for MGS, followed by Alternative 1 and Alternative 1A. Since Alternative 2 is located within more previously disturbed areas, and areas already mitigated by previous projects, it is the alternative that would require less mitigation for this project. These mitigation ratios are combined with the mitigation ratios for desert tortoise.	Qualified Biologist/District Biological Studies/Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		
<b>BIO-37</b>	In coordination with CDFW two oversized culverts, east and west of US-395 will be installed as part of the project. These culverts will be a minimum of 6 feet tall and 10 feet wide.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		
<b>Section 3.22 Invasive Species</b>					
<b>BIO-38</b>	Measures to minimize the introduction or spread of nonnative species would include cleaning all equipment and vehicles with water (or another Caltrans approved method) to remove dirt, seeds, vegetative material, or other debris before entering and upon leaving the project site and the removal and disposal off site of existing nonnative species within the project area.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		

**APPENDIX G: Environmental Commitments Record (ECR)**

State Route 58 (SR-58)  
 Kramer Junction Expressway Project  
 PN: 0800000616  
 EA 08-347700

No.	Task and Brief Description	Responsible Party	Timing/Phase	Action Taken to Comply with Task	Date
<b>BIO-39</b>	Landscaping and erosion control measures proposed during this Department project will not contain invasive species in the plant selections or seed mixtures.	District Biological Studies/ Project Engineer/Resident Engineer/Contractor/ Construction Liaison	Final Design/PS&E/ Construction		

## **EXHIBIT B**

### **AP20180100 Conditions of Approval**

## **CONDITIONS OF APPROVAL**

### **KRAMER JUNCTION BORROW PIT 2**

Mining Conditional Use Permit Action and Reclamation Plan 2019M-01  
Kiewit Infrastructure West, Company

### **GENERAL REQUIREMENTS**

Conditions of Operation and Procedures

#### **LAND USE SERVICES DEPARTMENT – Planning Division (909) 387-8311**

1. Project Description: Mining Conditional Use Permit (Mining CUP) and Reclamation Plan 2019M-01 for the Kramer Junction Borrow Pit 2, an 8.7-acre surface mining operation on privately-owned land for a 3-year period to provide landscape and fill material for construction of the SR-58 Kramer Junction Expressway Project.
2. Project Location: The site is located approximately 0.75 miles northwest of the intersection of State Highway 58 and U.S. Highway 395 in Kramer Junction. The Land Use Zoning District is Rural Living (RL-5), which allows for mining with an approved Mining CUP and Reclamation Plan. APN: 0491-171-10.
3. Effective Dates: The Mining CUP approval (Project Number AP20180100) for Mining and Reclamation Plan 2019M-01 shall be effective from May 21, 2019 through May 21, 2022, for active mining and four (4) years following termination of mining to complete reclamation. The approval shall be considered exercised on the effective date. At the conclusion of all mining activities, the site will be reclaimed to vacant open space and support wildlife habitat.
4. Reclamation Plan Recordation: Pursuant to Public Resources Code Section 2772.7, Planning will prepare a "Notice of Reclamation Plan Approval" on a form to be approved by the County Recorder's Office. The operator shall be responsible for review costs and recording fees.
5. Revisions/Amendments: Any alteration or expansion of these facilities or increase in the developed area of the site from that shown on the final approved Mine and Reclamation Plan will require submission of an additional application for review and approval. If mining reclamation procedures change from those outlined in the Kramer Junction Borrow Pit 2 Mine Reclamation Plan prepared by Lilburn Corporation, dated October 2018, the applicant/operator shall file an amendment and secure approval before such changes can be made effective.
6. Continuous Effect/Revocation: All conditions of the Kramer Junction Borrow Pit 2 Mining CUP and Reclamation Plan 2019M-01 are continuing conditions. Failure of the applicant/operator to comply with any or all of said conditions at any time could result in the notice of a public hearing before the Planning Commission to consider revoking the Mining CUP. If revocation is confirmed, the Planning Commission may provide for a reasonable

period of time to amortize any lawful existing uses and require the commencement of reclamation in accordance with approved Reclamation Plan 2019M-01.

7. Written Notification: The Land Use Services Department shall be notified in writing, within 30 days, regarding any:
  - A. Change in operating procedures, or inactive periods of operation for one (1) year or more.
  - B. Changes of Company ownership, address, or telephone number during the life of the Mining CUP and Reclamation Plan.
  - C. Changes to provisions in lease agreements or real property having any effect on the approved Mining and Reclamation Plan.
8. Mining and Reclamation Plan: The approved Kramer Junction Borrow Pit 2 Mine Reclamation Plan 2019M-01 and these corresponding Conditions of Approval shall be kept at the site at all times during active operations and be presented to the inspector upon request.
9. CA Mine ID: The applicant/operator shall obtain a California Mine Identification number from the California Department of Conservation pursuant to Public Resources Code, Section 2207 and pay all associated fees to the State.
10. Interim Management Plan: The applicant shall implement measures to stabilize and secure the site during periods of inactivity as per the approved Mining and Reclamation Plan. An Interim Management Plan (IMP) as required by SMARA, Public Resources Code Section 2770(h)(1) shall be submitted to Planning for review and approval within 90 days of the mining operation becoming idle.
11. Additional Permits: The applicant/operator shall ascertain and comply with requirements of all County, State, and Federal agencies as may be applicable to the Project. These include, but are not limited to the following: San Bernardino County Departments of Land Use Services, Public Health - Environmental Health Services, and Public Works; Mojave Desert Air Quality Management District; Lahontan Regional Water Quality Control Board; Mojave Desert Resource Conservation District, State Fire Marshal, Mojave Water Agency, Caltrans District 8, California Department of Fish and Wildlife Region 6, State Mining and Geology Board, California Department of Conservation Division of Mine Reclamation, California Occupational Safety and Health Administration, California Highway Patrol, Bureau of Land Management, and the Mine Safety and Health Administration.
12. Indemnification: In compliance with San Bernardino County Code (SBCC) Section 81.01.070, the applicant shall agree, to defend, indemnify, and hold harmless the County or its "indemnitees" (herein collectively the County's elected officials, appointed officials (including Planning Commissioners), Zoning Administrator, agents, officers, employees, volunteers, advisory agencies or committees, appeal boards or legislative body) from any claim, action,

or proceeding against the County or its indemnitees to attack, set aside, void, or annul an approval of the County by an indemnitee concerning a map or permit or any other action relating to or arising out of County approval, including the acts, errors or omissions of any person and for any costs or expenses incurred by the indemnitees on account of any claim, except where such indemnification is prohibited by law. In the alternative, the applicant may agree to relinquish such approval.

Any Condition of Approval imposed in compliance with the County Development Code or County General Plan shall include a requirement that the County acts reasonably to promptly notify the applicant of any claim, action, or proceeding and that the County cooperates fully in the defense. The applicant shall reimburse the County and its indemnitees for all expenses resulting from such actions, including any court costs and attorney fees, which the County or its indemnitees may be required by a court to pay as a result of such action. The County may, at its sole discretion, participate at its own expense in the defense of any such action, but such participation shall not relieve the applicant of their obligations under this condition to reimburse the County or its indemnitees for all such expenses.

This indemnification provision shall apply regardless of the existence or degree of fault of indemnitees. The applicant's indemnification obligation applies to the indemnitees' "passive" negligence but does not apply to the indemnitees' "sole" or "active" negligence or "willful misconduct" within the meaning of Civil Code Section 2782.

13. Financial Assurances: The applicant/operator shall maintain an acceptable form of Financial Assurance for Mine Reclamation Plan 2019M-01 and for the Mining CUP. The Financial Assurance shall identify the County of San Bernardino and the California Department of Conservation as the beneficiaries. Any withdrawals made by the County for reclamation shall be re-deposited by the applicant/operator within 30 days of notification.

The Financial Assurance shall be calculated based on a cost estimate submitted by the applicant/operator and approved by the County and the California Department of Conservation, Division of Mine Reclamation for the approved reclamation procedures. Within 30 days following the mine site inspection, a Financial Assurance Cost Estimate shall be provided to the Land Use Services Department. The assurance amount shall be reviewed and, if necessary, adjusted to account for new lands disturbed by surface mining operations, inflation and reclamation of lands accomplished in accordance with the approved Mine Reclamation Plan 2019M-01.

The Financial Assurance is not established to replace the applicant's/operator's responsibility for reclamation, but to assure adequate funding to complete reclamation per the Mine Reclamation Plan 2019M-01 and Conditions of Approval. Should the applicant/operator fail to perform or operate within all of the requirements of the approved Mine Reclamation Plan, the County or Department of Conservation will follow the procedures outlined in Sections 2773.1 and 2774.1 of SMARA regarding the encashment of the assurance and applicable administrative penalties, to bring the applicant/operator into compliance. The requirements for the assurance will terminate when reclamation of the site has been completed in

compliance with the approved Mine Reclamation Plan and accepted by the County and the California Department of Conservation, Division of Mine Reclamation pursuant to California Code of Regulations (CCR), Section 3805.5.

14. SMARA and State Regulations: The provisions of the California Surface Mining and Reclamation Act of 1975 ("SMARA", Public Resources Code Section 2710 et seq.), Public Resources Code Section 2207, and the regulations implementing SMARA ("State Regulations", California Code of Regulations Section 3500 et seq.) are made a part of the CUP. In the event that the State amends SMARA to the extent it adds to or conflicts with the Conditions of Approval, State law shall prevail.
15. Annual Reporting and Inspection: The applicant/operator shall provide a Mining Operation Annual Report to the California Department of Conservation and to Land Use Services Department on a date established by the California Department of Conservation, using forms furnished by the State Mining and Geology Board. The County is required to conduct an inspection of the surface mining operation by a qualified person not less than once each calendar year to determine if the operation is in compliance with the approved Conditions of Approval, Reclamation Plan, and SMARA statutes and regulations. The County is required to notify the California Department of Conservation upon completion of the inspection that the inspection has been conducted and provide a statement regarding the status of compliance of the operation within 90 days after completion of the inspection. The operator of the mining operation is responsible for filing an application with the County to request an inspection and shall be responsible for paying the County's costs in conducting the mine site inspection.
16. "Applicant/Operator": Requirements extend to the property owner and any person, lessee, tenant or sub-tenant, operator, individual, firm, association, corporation, organization, Limited Liability Company or partnership, or any city, county, district, or the state or any department or agency thereof for any disturbance or improvements to the mined lands. The applicant/operator may include an agent or other interested party, and any heir or successor in interest in the project land use by sale or by lease of all or of a portion of the mine site including land use within any or all of the mine structures or areas on the mine site.
17. Project Account: As determined necessary on a case-by-case basis, the applicant/operator shall deposit funds with the County necessary to compensate staff time and expenses for review of compliance monitoring reports and site inspections. The project account number for this Mining CUP is AP20180100. This is an actual cost project with a deposit account to which hourly charges are assessed by various county agency staff, including but not limited to: Land Use Services, Public Works, and County Counsel.

Upon notice, the applicant shall deposit additional funds to maintain or return the account to a positive balance. The applicant/operator is responsible for all expenses charged to this account.

## Definitions

18. Minerals: Include any naturally occurring chemical element or compound, or groups of elements and compounds, formed from organic and inorganic processes. Clay, sand, gravel, rock, decomposed granite, salts, alumina, silica, alkali, topsoil or growth medium, organic humus and gems represent the aggregate of different minerals.
19. Produced Minerals: Produced Minerals as defined in CCR §3501 includes all minerals sold, given or otherwise moved off the site of the operation, as defined in the approved reclamation plan. Recycled products (e.g. broken concrete, bricks, asphaltic concrete, etc.) or stockpiles of mineral products that remain on the site are not produced minerals for purposes of CCR §3695(b).
20. Construction and Demolition (C&D): Materials left onsite shall be deemed as waste material produced in the process of site clearing activities, construction, renovation, or demolition of structures of all types to include roads and bridges. Waste materials include, but is not limited to concrete, asphalt, wood, metals, gypsum wallboard and brick. The Financial Assurance Cost Estimate shall include costs to remove C&D materials to an approved offsite facility that is permitted to receive such materials.
21. Exploration or Prospecting: Includes the activities in search for minerals by geological, geophysical, geochemical or other techniques, including, but not limited to, sampling, assaying, drilling, or any surface or underground works needed to determine the type, extent, or quantity of minerals present.
22. Surface Mining Operations: Surface mining operations include all, or any part of, the process involved in the mining of minerals on mined lands, borrow pitting, segregation and stockpiling of mined materials (and recovery of the same).
23. Ownership: The person(s) involved in the ownership of the property include all persons having interest in the ownership of the surface and subsurface property, including mineral rights. If the applicant/operator is not the recorded owner(s) of the property must submit a signed statement by the property and mineral rights owner(s) authorizing the Applicant to act on their behalf.
24. Operator: The Operator includes the Applicant and any person who is engaged in surface mining operations, and others contracted to conduct operations on his or her behalf, except a person who is engaged in surface mining operations as an employee with wages as his or her sole involvement and compensation.
25. Operations: Surface mining operations include all, or any part of, the process involved in the mining of minerals on mined lands, borrow pitting, segregation and stockpiling of mined materials (and recovery of same).

26. “Mined Lands”: Include the surface, subsurface, and groundwater of an area in which surface mining operations will be, are being, or have been conducted, including private ways and roads appurtenant to any such area, land excavations, workings, mining waste, and areas in which structures, facilities, equipment, machines, tools, or other materials or property which result from, or are used in, surface mining operations are located.
27. Aggregate Removal: The applicant shall not sell or otherwise move off the mine site any sand, gravel, or other produced minerals to a public agency unless the operator certifies, under penalty of perjury, that the mining operation is identified in the AB 3098 List published pursuant to PRC Section 2717(b).

### **Ongoing Requirements**

28. Human Remains/Funeral Objects: If human remains or funeral objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code Section 7050.5 and that code enforced for the duration of the project.

*If the remains are thought to be Native American, the coroner will notify the NAHC, which will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will also contact Gary Jones, Caltrans District 8 Native American Coordinator at (909) 383-7505 so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable.*

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

### **LAND USE SERVICES DEPARTMENT – Land Development Division – Drainage (909) 387-8311**

30. Tributary Drainage: Adequate provisions should be made to intercept and conduct the tributary offsite – on site drainage flows around and through the site in a manner, which will not adversely affect adjacent or downstream properties at the time the site is developed.
31. Natural Drainage: The natural drainage courses traversing the site shall not be occupied or obstructed.

**COUNTY FIRE DEPARTMENT – Community Safety Division (760) 995-8190**

32. **Jurisdiction:** The above referenced project is under the jurisdiction of the San Bernardino County Fire Department herein (“Fire Department”). Prior to any construction occurring on any parcel, the developer shall contact the Fire Department for verification of current fire protection requirements. All new construction shall comply with the current Uniform Fire Code requirements and all applicable statutes, codes, ordinances and standards of the Fire Department.
33. **Access:** The development shall have a minimum of one point of vehicular access for fire/emergency equipment access and for evacuation routes. The primary access route shall comply with the minimum requirements for fire protection and/or emergency response with applicable local ordinances, codes, and/or fire protection standards.
34. **Fire Extinguishers:** Hand portable fire extinguishers are required. The location, type, and cabinet design shall be approved by the Fire Department.

**PRIOR TO NEW LAND DISTURBANCE AND THROUGHOUT THE PROJECT  
THE FOLLOWING SHALL BE COMPLETED**

**LAND USE SERVICES DEPARTMENT – Planning Division (909) 387-8311**

35. *Special-status Plant Protection BIO-6, BIO-7, BIO-8, BIO-9, BIO-10, BIO-11, BIO-12, BIO-13: Special-status plants (as listed in County SBCC Section 88.01.060 (et al.), Desert Native Plant Protection, and those species identified/listed in Mitigation Measure BIO-6) and growing within the disturbed areas will be salvaged and/or propagules will be relocated to an appropriate location within the mine site that will not be disturbed by future mine activities. Prospective transplanting sites will be inspected and approved by a qualified botanist prior to removal of vegetation for the project. Plant protection efforts shall be performed as described in the Mine Reclamation Plan Appendix 2, “SR-58 Kramer Junction Expressway FEIR Appendix G, Environmental Commitments Record”. Transplanting efforts shall be consistent with the Kramer Junction Borrow Pit Revegetation Plan dated October 2017 (revised per DMR Comments February 2018).*
36. *Vegetation Removal - BIO-18: Vegetation removal should occur between September 15 and February 15, outside of migratory bird breeding season. Vegetation removal outside of this time frame can occur following preconstruction surveys as prescribed in the Mine Reclamation Plan Appendix 2, “SR-58 Kramer Junction Expressway FEIR Appendix G, Environmental Commitments Record”.*
37. **Transplanting:** Transplanted or propagated plants will be maintained for a minimum of three years, or until a qualified biologist(s) determine that the plants have been successfully established (e.g., plants are vigorous, flower, and produce seed). Successful re-

establishment of the plants will be based on the replanted areas achieving density and diversity standards in accordance with the approved Revegetation Plan.

38. *CDFW Lake and Streambed Alteration Agreement (LSAA): Temporary Environmentally Sensitive Area (ESA) fencing shall be installed around washes that have not been identified as impacted by the Expressway project in the California Department of Fish and Wildlife (CDFW) LSAA No. 1600-2016-0072-R6.*
39. *Tortoise Fencing and Maintenance ITP No. 2081-2016-004-R6: Temporary desert tortoise fencing shall be placed around all borrow sites, ponding sites and haul roads. This fence shall be inspected daily during fence installation and during and immediately after heavy rainfalls per CDFW Incidental Take Permit (ITP) No. 2081-2016-004-R6 for the SR-58 Kramer Junction Expressway (aka Kramer Realignment) Project.*
40. *Field Contact Representative or Resident Engineer – BIO-22: Operator will work in conjunction with and under the authority of the Caltrans Field Contact Representative or Resident Engineer who will serve as the environmental compliance monitor for the project and who will act on the advice of the Authorized Biologist(s) and Biological Monitor(s) to ensure conformance with the protective measures set forth in the biological opinion as described in the Mine Reclamation Plan Appendix 2, “SR-58 Kramer Junction Expressway FEIR Appendix G, Environmental Commitments Record”.*
41. *Biological Resource Information Program – BIO-23, BIO-25, BIO-32: Prior to jobsite activity at the borrow pit, Kiewit employees shall receive training in Caltrans Worker Environmental Awareness Program (WEAP) as described in the Mine Reclamation Plan Appendix 2, “SR-58 Kramer Junction Expressway FEIR Appendix G, Environmental Commitments Record”.*
42. *Preconstruction Surveys – BIO-14, BIO-19, BIO-24: Pre-construction surveys shall take place as described in the Mine Reclamation Plan Appendix 2, “SR-58 Kramer Junction Expressway FEIR Appendix G, Environmental Commitments Record”.*
43. *Authorized Biologists and Biological Monitors – BIO-20, BIO-27, BIO-28, BIO-29, BIO-30, BIO-31: Biological monitors meeting Caltrans’ standards shall be present and perform preconstruction surveys and ongoing duties as required in the manner described in the Mine Reclamation Plan Appendix 2, “SR-58 Kramer Junction Expressway FEIR Appendix G, Environmental Commitments Record”.*
44. *Species Protection – BIO-15, BIO-16, BIO-17, BIO-21, BIO-22, BIO-26, BIO-27, BIO-28, BIO-32, BIO-33: Operator shall work directly with Caltrans’ Field Contact Representative/Resident Engineer, Authorized Biologists, and Biological Monitors to ensure all species protection mitigation is adhered to as described in the Mine Reclamation Plan Appendix 2, “SR-58 Kramer Junction Expressway FEIR Appendix G, Environmental Commitments Record”. Should any protected species be injured or killed during the course of construction, the project monitor and Caltrans Resident Engineer shall be immediately notified and the authorized biologist will handle the incident in the manner prescribed.*

45. *Invasive Species BIO-38: Measures to minimize the introduction or spread of nonnative species shall include cleaning all equipment and vehicles with water (or another Caltrans approved method) to remove dirt, seeds, vegetative material, or other debris before entering and upon leaving the project site and the removal and disposal offsite of existing nonnative species.*
46. *Paleontological Protection - PA-2: Prior to jobsite activity at the borrow pit, operator earthmoving personnel shall receive a one-hour required preconstruction paleontological awareness training prior to onsite excavation. Operator shall submit to the County documentation of this training, such as sign-in sheets and hardhat stickers to establish communications protocols between construction personnel and the Principal Paleontologist, as described in PA-2 of the Mine Reclamation Plan Appendix 2, "SR-58 Kramer Junction Expressway FEIR Appendix G, Environmental Commitments Record".*
47. Dust Control Plan: The applicant/operator is responsible for meeting all air quality requirements, including, securing an approved Dust Control Plan pursuant to SBCC Chapter 88.02 and Section 88.02.040 and approved by the Mojave Desert Air Quality Management District (MDAQMD). Once approved, the Plan shall be submitted to and kept on file with the Land Use Services Department. The Plan shall, at minimum, include the following aspects:
- a. Truck traffic will be limited to 20 MPH on all site roads;
  - b. All clearing, grading, earth moving, and excavation activities will cease during period of winds greater than 25 miles per hour (averaged over one hour), or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property, and in conformance with Mojave Desert Air Quality Management District (MDAQMD) regulations;
  - c. All roads, driveways, and mining areas not covered with gravel or treated with protective soil amendments, shall be kept wetted while being used; and,
  - d. The applicant/operator shall ensure that any portion of the site to be disturbed shall be moisture conditioned prior to the onset of earth-moving activities.
  - e. The Dust Control Plan should identify an individual responsible for dust mitigation and this individual's name and contact telephone number shall be clearly posted on a project boundary sign visible to the public for feedback purposes.
48. Archaeological Resources: The developer/property owner shall submit a letter to the County Land Use Services Department - Planning Division (County) agreeing to adhere to the following requirements:

- In the event archaeological resources are uncovered during earthmoving activities, all work in that area shall cease immediately and the County shall be notified. A qualified archeologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded, excavated, and/or recovered as necessary. Earthmoving shall be allowed to proceed on the site when the archaeologist, in consultation with the appropriate Native American Tribe(s), the County, and the qualified archaeologist determines the resources are recovered to their satisfaction.
49. Paleontological Resources: The developer/property owner shall submit a letter to County Land Use Services Department- Planning Division (County) agreeing to adhere to the following requirements:
- In the event paleontological resources are uncovered during earthmoving activities, all work in that area shall cease immediately and the County shall be notified. A qualified paleontologist shall be retained to access the findings, and if necessary provide appropriate disposition of the resources. Earthmoving shall be diverted temporarily around the deposits until they have been evaluated, recorded, excavated, and/or recovered as necessary. In consultation with the Project proponent, the County, and a qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

**LAND USE SERVICES DEPARTMENT – Land Development Division – Drainage (909) 387-8311**

50. FEMA Flood Zone: The project is located within Flood Zone D according to FEMA Pane Number 06071C3825H dated 08/28/2008.
51. Topo Map: A topographic map shall be provided to facilitate the design and review of necessary drainage facilities.

**PUBLIC HEALTH – Environmental Health Services (DEHS) (800) 442-2283**

52. Onsite Well Operation: Prior to the commencement of mining activities evidence shall be submitted to the DEHS/Water Section for approval that a well utilized as a source for water is constructed to public water supply standards, , meets quality standards for domestic and industrial use, and the well is properly permitted with the County. For information, call DEHS/Water Section at (800) 442-2283.
- a) After mining operations have concluded, any well, exploratory hole or test hole which is abandoned, out of service, or otherwise left unattended shall have a temporary cover over the well or opening which prevents the introduction of undesirable material into the

well or hole, and ensures public and wildlife safety pursuant to Section 115700 of the California Health & Safety Code.

- b) Upon final reclamation, evidence shall be provided to the DEHS/Water Section that all wells, exploration holes or test holes, as defined by DWR are properly sealed.

### **DEPARTMENT OF PUBLIC WORKS – Surveyor (909) 387-8149**

53. Survey Monumentation: If any activity on this project will disturb **any** land survey monumentation, including but not limited to vertical control points (benchmarks), said monumentation shall be located and referenced by or under the direction of a licensed land surveyor or registered civil engineer authorized to practice land surveying **prior** to commencement of any activity with the potential to disturb said monumentation, and a corner record or record of survey of the references shall be filed with the County Surveyor (Section 8771(b) Business and Professions Code).

54. Record of Survey: Pursuant to Sections 8762(b) and/or 8773 of the Business and Professions Code, a Record of Survey or Corner Record shall be filed under any of the following circumstances:

- a. Monuments set to mark property lines or corners;
- b. Performance of a field survey to establish property boundary lines for the purposes of construction staking, establishing setback lines, writing legal descriptions, or for boundary establishment/mapping of the subject parcel;
- c. Any other applicable circumstances pursuant to the Business and Professions Code that would necessitate filing of a Record of Survey.

### **ONGOING MINING OPERATIONAL CONDITIONS**

### **LAND USE SERVICES – Planning Division (909) 387- 8311**

#### **General Operations**

55. Best Management Practices (BMP's): The operator shall implement the BMP's procedures. BMP provisions shall include the following:

- Good House Keeping – Dust minimization, waste spills, discharges.
- Preventive Maintenance – Minimize spills, and onsite leaks, prompt maintenance.
- Spill and Leak Preventive Response – In place spill procedures and controls.

- Material Handling and Waste Mgmt. – Waste covering, storm water diversion practices, waste clean ups.
  - Implement Erosion and Sediment Controls – Sediment and Erosion Stabilization.
  - Employee Training Program- BMP Training.
  - Exposure Minimization – Storm resistant shelters to prevent contact of storm water with mining materials.
  - Storm Water Containment & Discharge Reduction – BMP's that divert, reuse, contain or reduce volume of storm water runoff.
56. Operations: Extraction and processing operations shall proceed in accordance with the Kramer Junction Borrow Pit 2 Mining CUP and Reclamation Plan 2019M-01 Conditions of Approval. Soil extraction, stockpiling and transport will adhere to the mining operations outlined in the Mine Reclamation Plan. No crushing or sorting has been authorized under this plan.
57. Noise Level: Should an acoustical study be required, and the results of such study indicate operations do not comply with the County Standards under SBCC Section 83.01.080; the Planning Director may require modification of such operations. Mitigation measures may include:
- a. Restriction of activities to certain times of the day.
  - b. Restriction on the location of activities to certain times of the day.
  - c. Mitigation agreed to by aggrieved party(ies).
58. Blasting: Blasting is not a part of this permit approval. No blasting shall occur, and no explosives shall be stored onsite.
59. Ore Processing: The borrow pit material will be loaded directly into trucks for transport to the construction alignment to the north. No crushing or screening or any process plant facilities shall be utilized onsite.
60. Designated Haul Roads: Haul roads shall be limited to those designated on the Mine Plan. No hauling of borrow pit material shall occur on public roadways.
61. Slopes: In accordance with the Mine Reclamation Plan 2019M-01 prepared by Lilburn Corporation dated October 2018, the operator shall insure the following mitigation for slope stability and benching to minimize failure.

- Visual monitoring during excavation activities during mining should be included in the operational plan.
- Overall final cut slopes in the rock material should be no steeper than design angles up to the maximum proposed height.
- Slopes should be protected with berms and/or levees as necessary to prevent slope erosion in the areas where natural slopes drain onto the reclaimed slopes.
- Final reclaimed fill slopes composed of overburden shall be no steeper than 3(h):1(v) to the maximum proposed heights.

62. Test Plots: The operator shall establish a minimum of four (2) test plots representative of the slope aspect and floor elevation that will result from the borrow area.

- Test plots will include surface ripping/no seeding of a control plot, and surface ripping and seeding per the recommended seed mixture.
- Additional test plots will be conducted if the initial tests and any active revegetation areas are not successful and may include various types of seeds and different surface/soil preparation.
- Additional tests will be conducted if the initial tests and any active revegetation are not successful and may include various types and amounts of seeds and different surface/soil preparation.
- Successful revegetation will be achieved when a self-sustaining native plant cover is established in the disturbed area of the project. The revegetated site must resemble and blend into the natural surrounding environment.
- The operator will document the progress of the revegetation effort and submit Annual Maintenance and Monitoring reports to the County of San Bernardino.

63. Sign Maintenance: The applicant/operator shall regularly review the adequacy of directional signs, safety signs, and/or other onsite signs. Care should be taken to ensure that signs do not become blocked by vegetation or become illegible from dirt or deterioration. As new phases are developed, additional signs may be needed. In evaluating the adequacy of signs, they should be considered from the viewpoint of a first-time visitor on the property, such as a vendor or a contractor.

64. Company Identification: The applicant shall ensure that haul truck contractors provide Company identification signs on all company owned and operated haulage trucks used on

public roads. The signs shall be located on both sides and the rear of each truck. The information contained on the sign shall include:

On the rear of the truck:

- A. How am I driving?
- B. Truck number
- C. Company phone number

On the side of the truck:

- A. Company name
- B. Truck number
- C. Company phone number

The signing shall be printed in a minimum of 3" high lettering. The applicant shall have a person or an answering machine available during operating hours to answer the phone that corresponds to the phone number on the truck. The persons answering the phone number shall be instructed as to how to take the calls, how to affect a solution, and be responsible for returning a call to the complainant with results of investigation. The applicant shall keep a log of all calls received and shall include documentation of response and/or resolution of complaints. The log shall be made available to the County upon request.

- 65. Onsite Lighting: The area of illumination from any onsite lighting shall comply with SBCC Section 83.07.040 Glare and Outdoor Lighting. Light pollution shall be minimized and confined within the site boundaries to limit impacts to surrounding properties. The glare from any luminous source, including onsite lighting shall not exceed one-half (0.5) foot-candle at property line. Onsite lighting shall be fully shielded, diffused, or directed in a manner to avoid glare directed at adjacent properties, roadways or any light spill into any wildland areas surrounding the site that might affect nocturnal animals. No light shall project onto adjacent roadways in a manner that interferes with on-coming traffic. All lighting shall be limited to that necessary for maintenance activities, security and safety purposes. All signs proposed by this project shall only be lit by steady, stationary, shielded light directed at the sign.
- 66. Site Maintenance: The applicant/operator shall maintain the premises in a neat and orderly manner at all times. All refuse generated at the premises shall at all times be stored in approved containers and shall be placed in a manner so that visual or other impacts and environmental public health nuisances are minimized. All refuse not containing garbage shall be removed from the premises at least one time per week, or as often as necessary to minimize public health nuisances. Refuse containing garbage shall be removed from the premises at least two times per week, or as often as necessary to minimize public health nuisances, by a permitted hauler to an approved solid waste facility. For information, call DEHS/LEA at (800) 442-2283.

## Environmental Protection

- 67. Chemical Spills/Leakage: All chemical spills or leakage of petroleum products during mining or reclamation activities shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste shall be collected and disposed of at an appropriately licensed disposal or treatment facility.

In the event of any soil contamination onsite, the applicant/operator shall remove any soils that become chemically contaminated to a County approved disposal site so as to preclude any chemical leaching into the local ground water supply over time.

68. Equipment Emission Reduction and Idling: The mine operator shall maintain and operate construction equipment so as to minimize exhaust emissions. During mining, trucks and vehicles in loading and unloading queues shall have their engines turned off when not in use, to reduce vehicle emissions.
69. Vehicle Maintenance: The mine operator shall ensure that all equipment shall be properly tuned and maintained in accordance with manufacturer's specifications. Vehicle maintenance, servicing, and fueling will be accomplished onsite by a mobile maintenance truck and Best Management Practices shall be implemented. All used fluids will be removed from the equipment and from the site following standard regulations. No used fluids will be stored onsite.
70. Fuel Sources: The mine operator shall ensure onsite mobile equipment, including lighting, is powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) as feasible. Commercial power shall be used when feasible.
71. Exhaust Control Measures: The operator shall comply with all existing and future EPA (Clean Air Non-road Diesel Rule-May 2004), CARB and MDAQMD regulations related to diesel-fueled trucks and equipment, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

Operation of all off-road and on-road diesel vehicles/equipment shall comply with the County Diesel Exhaust Control Measures (SBCC, Section 83.01.040 (c)) including but not limited to:

- a. Equipment/vehicles shall not be left idling for period in excess of five minutes;
- b. Engines shall be maintained in good working order to reduce emissions;
- c. Onsite electrical power connections shall be made available where feasible;
- d. Ultra low-sulfur diesel fuel shall be utilized;
- e. Electric and gasoline powered equipment shall substitute for diesel powered equipment where feasible;
- f. Signs shall be posted requiring all vehicle drivers and equipment operators to turn off engines when not in use;

- g. In addition, all on-road diesel trucks shall not idle more than five minutes per truck trip or per day on the Project site.

72. Trackout and Spills: The mine operator shall take actions sufficient to prevent project-related trackout onto paved surfaces and cover loaded haul vehicles while operating on publicly maintained paved surfaces. The mine operator shall clean-up project-related trackout or spills on publicly maintained paved surfaces within 24 hours.

## Reclamation

73. Kramer Junction Borrow Pit 2 Mine Reclamation Plan 2019M-01: Surface mining operations shall adhere to the Kramer Junction Borrow Pit 2 Mine Reclamation Plan, prepared by Lilburn Corporation, dated October 2018. Any changes from the Reclamation Plan's provisions shall not be undertaken until reviewed and approved by the Land Use Services Department.
74. Reclamation Time Schedule: Reclamation shall be initiated at the earliest possible time on those portions of the disturbed lands that will not be subject to further disturbance by the surface mining operation.
75. Barriers/Signage: Safety barriers and signage per MSHA requirements shall be maintained around the mined slopes.
76. Stockpiling: Onsite materials shall not be stockpiled adjacent to an active drainage unless adequate protective measures are implemented. Adequate measures shall consider the most adverse conditions the stockpile will likely experience. Open storage piles susceptible to wind erosion shall be watered daily/or as needed, or shall be installed with temporary coverings to control PM<sub>10</sub> emissions, and be limited in height to 35 feet.
77. Growth Medium Stockpiles: The operator shall stockpile all topsoil and vegetation away from areas to be disturbed. Stockpiled topsoil shall be identified with clearly labeled signs stating "Topsoil – Do Not Disturb" and stored separately from silt and overburden material stockpiles and protected to preserve as much of the organic material and seeds as practicable. Locations for these topsoil stockpiles are to be identified in the Mining Plan.

Stockpiles shall be maintained with temporary erosion control methods, and shall be stabilized through establishment of temporary vegetative cover or other acceptable means of surface treatment for prolonged storage periods. At the time of reclamation, areas being reclaimed shall have the stockpiled growth medium and vegetation spread over them. Revegetation shall be supplemented by broadcast seeding with native and locally adapted seed and planting of established seedlings and/or shrubs in accordance to the approved Reclamation Plan.

78. Product Stockpiles: Product stockpile heights shall be maintained at no higher than 35' during the life of the project. Should the project go into idle status, the product stockpiles

shall be stabilized or removed as a condition of an Interim Management Plan (IMP) as required by SMARA, Section 2770(h)(1).

79. Graded Surfaces Stabilized: The mine operator shall stabilize graded site surfaces upon completion of earth moving activity when subsequent earth moving activity is delayed or expected to be delayed more than 30 days, except when such a delay is due to precipitation that dampens the disturbed surface sufficiently to eliminate visible fugitive dust emissions.
80. Slope Monitoring: Slope monitoring shall be implemented to assure that unnecessary hazards are not created with the active or final reclaimed slopes. A qualified independent California Certified Professional Civil Engineer and/or Engineering Geologist shall complete a stability assessment of existing and new quarry development areas when deemed necessary by the County inspector. The analysis shall identify and discuss significant structural features or indications of potential instability encountered.
81. Seed Types and Amounts: A unique seed mix has been prescribed for the project site to promote a plant community similar to that found onsite prior to disturbance. The seed mix will serve as a guideline for the revegetation plant community. Seed types and amounts will conform to the site's Revegetation Plan Update prepared by Jericho Systems, Inc., dated October 2017 (revised per DMR Comments February 2018). The seed mix will be applied based on the identified seeding methods and rates as shown in the Revegetation Plan.
82. Revegetation Annual Monitoring: The project biologist will document the progress of the revegetation effort at the Kramer Junction Borrow Pit 2 site and submit Annual Maintenance and Monitoring reports to the County of San Bernardino as necessary. Annual reports are due by December 31<sup>st</sup> of each year.
83. Revegetation Attainment: Revegetation will be deemed successful when all success criteria have been achieved on an average property-wide basis. If these criteria have not been achieved, maintenance seeding and monitoring will continue annually until success criteria has been met.
84. Financial Assurances - Re-vegetation: Re-vegetation in arid areas is tenuous at best and, therefore, the applicant shall provide in the Financial Assurance Cost Estimate, the costs to monitor and report on revegetation, incidental disturbance and erosion control for a time period of five (5) years following the termination date of operation.

#### **PUBLIC HEALTH – Environmental Health Services (DEHS) (800) 442-2283**

85. Noise Operations: Noise levels shall be maintained at or below County Standards, SBCC Section 83.01.080.
86. Refuse: Refuse generated at the premises shall at all times be stored in approved containers and shall be placed in a manner so that visual, or other impacts, and environmental public

health nuisances are minimized and complies with the SBCC, Section 33.0803 et seq. For information, please call DEHS/Local Enforcement Agency (LEA) at (800) 442-2283.

87. Solid Waste Removal: No landfilling of wastes shall occur onsite. In the event that refuse is stored onsite, all refuse not containing garbage shall be removed from the premises at least 1 time, and refuse containing garbage shall be removed from the premises at least 2 times per week, to an approved solid waste facility in conformance with SBCC Section 33.0803 et seq. For information, please call DEHS/LEA at (800) 442-2283.
88. Portable Toilets: An adequate number of portable toilets shall be provided and maintained so as not to create a public nuisance and shall be maintained by a DEHS permitted pumper. Portable unit shall provide hand washing capacity. Units shall be serviced at least weekly while in use. Submit a copy of the service contract from an approved pumper to DEHS. For information, call DEHS/Wastewater Section at (800) 442-2283.
89. Ponding Water: Applicant/Operator shall manage ponding water to avoid vector breeding, e.g., mosquitoes, midges, and gnats.

**PRIOR TO FINAL CLOSURE**  
**The Following Conditions Shall Be Met:**

**LAND USE SERVICES – Planning Division (909) 387-8311**

90. Equipment: At the time of termination of the operation for any reason, all equipment, structures and refuse associated with the operation shall be removed from the site, all hazards mitigated, and reclamation initiated as per the approved Mine Reclamation Plan 2018M-01.
91. Wells: Upon final reclamation, evidence shall be provided that all wells not retained for post-operation uses, exploration holes, or test holes, as defined by DWR Bulletin 74-81 as revised in 1988, or the latest revision, are destroyed in accordance with DEHS regulations and in such a manner that will no longer be a hazard to the health and safety of people and wildlife.
92. Access and Haul Roads: All access and haul roads onsite, not identified as retained for post-operation uses, shall be reclaimed at the conclusion of ground-disturbing activities.
93. Site Re-Contour: The applicant/operator shall re-contour the site at the conclusion of operations (platforms, stockpiles, settling ponds, etc.). The site should resemble natural landforms where possible.
94. Reclamation Verification: As portions of the site are reclaimed, they shall be identified on a map. The final map shall be provided to County Planning Division for review and approval.

95. Reclamation Completion: Following reclamation verification and release of Financial Assurances pursuant to CCR Section 3805.5, Planning will prepare a “Notice of Reclamation Plan Completion” on a form to be approved by the County Recorder’s Office. The operator shall pay any and all review and recording fees.

## **CONCLUSION OF CONDITIONS**

## **EXHIBIT C**

### **Natural Resources Assessment, Biological Updated, December 20, 2018**



**NATURAL RESOURCES ASSESSMENT, INC.**

**General Biological Assessment  
Route 58/395 Express Lane Borrow Site  
Kiewit Corporation  
Kramer Junction, California**

**Prepared for:**

**Lilburn Corporation  
1905 Business Center Drive  
San Bernardino, CA 92408**

**Prepared by:**

**Natural Resources Assessment, Inc.  
3415 Valencia Hill Drive  
Riverside, CA 92507**

**December 20, 2018**

**Project Number: LIL18-114**

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**CERTIFICATION**

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

  
\_\_\_\_\_  
Karen Kirtland  
Natural Resources Assessment, Inc.

December 20, 2018  
\_\_\_\_\_  
Date

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**Appendices**

- Appendix A - Plants and Animals Observed
- Appendix B - Description of Status Listings

## **1.0 Introduction**

Natural Resources Assessment, Inc. (NRAI) was contacted by Lilburn Corporation to conduct an updated biological assessment for a borrow pit site proposed by Kiewit Corporation (Kiewit) for use on their State Route 58/395 Express Lane project. This update is required prior to removal of any material from the proposed pit site.

## **2.0 Project Information**

### **2.1 Site Location**

The borrow pit site (Site) is composed of approximately 10 acres of highly disturbed high desert habitat. It is located north of State Route 58 and west of State Route 395 in the vicinity of Kramer Junction (Figures 1, 2 and 3).

The Site is located in Section 31 of Township 10 north, Range 6 west of the Kramer Junction U.S. Geological Survey (USGS) 7.5' topographic map, San Bernardino base and meridian. The elevation is approximately 2475 feet (Figure 2).

### **2.2 Project Description**

Kiewit intends to borrow soil from the 10-acre site to use at various locations in the larger State Route 58/395 Express Lane Project area.

## **3.0 Methods**

### **3.1 Data Review**

The California Department of Transportation (Caltrans) prepared an Environmental Impact Report and Environmental Impact Statement (EIR/EIS) that incorporated a biological assessment of the entire State Route 58/395 Express Lane Project area, including the Site (Caltrans 2014). Because the findings are four years old, Lilburn Corporation was asked to update the information on biological resources of the Site.

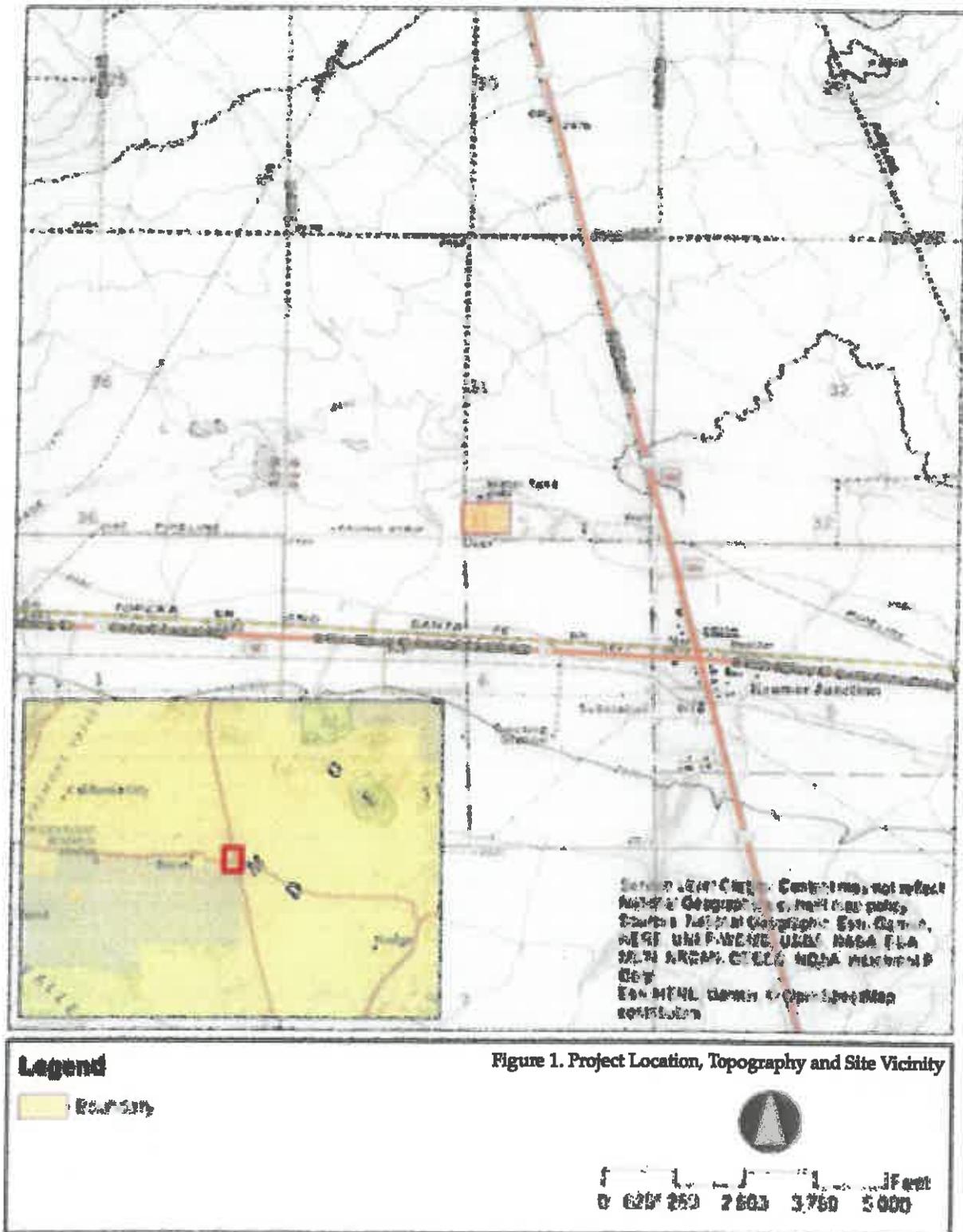
NRAI reviewed the Environmental Commitments Record (ECR) for the EIR/EIS. This document lists the measures to avoid, minimize or mitigate the impacts from the State Route 58/395 Express Lane Project. We also review the results of the consultation with resource agencies on the findings of the EIR/EIS and their comments.

The documents we reviewed were for the larger State Route 58/395 Express Lane Project. The findings on sensitive biological resources and requirements to offset impacts address the entirety of the project, including the Site location.

Requirements focused on replacement habitat for species and resources identified in the EIR/EIS include the Site. We focused our efforts on identifying whether certain species, such as the burrowing owl, may have moved onto the Site since the original surveys.

### **3.2 Field Survey**

Ms. Karen Kirtland of NRAI and Mr. Ricardo Montijo (subconsultant to NRAI) conducted the field survey on December 5, 2018. The field team surveyed the entire Site and the immediate surrounding area (Figure 2). The survey was conducted on foot.



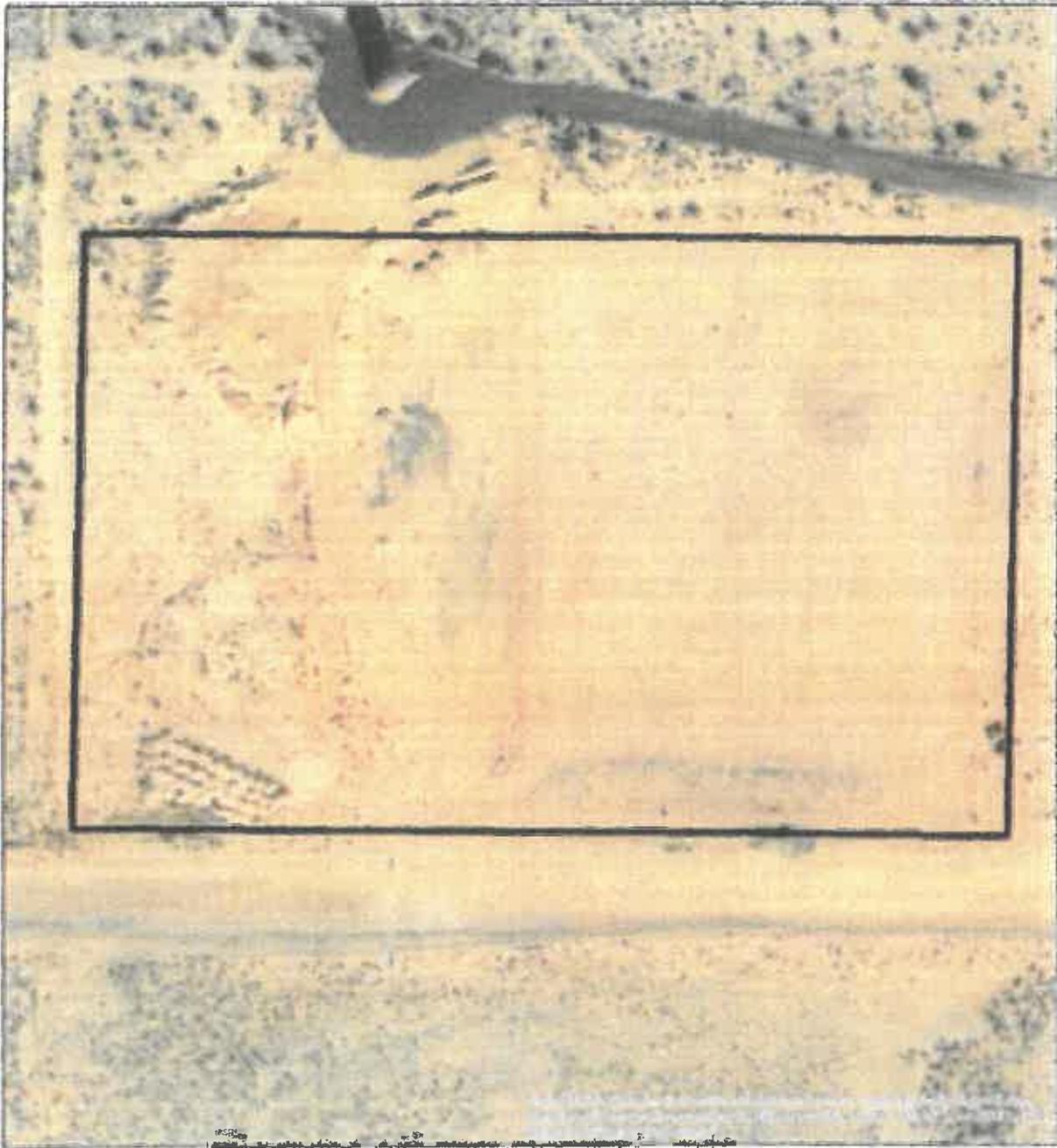
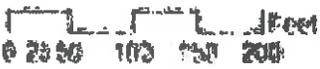


Figure 2. Project Aerial Showing 2018 Site Conditions

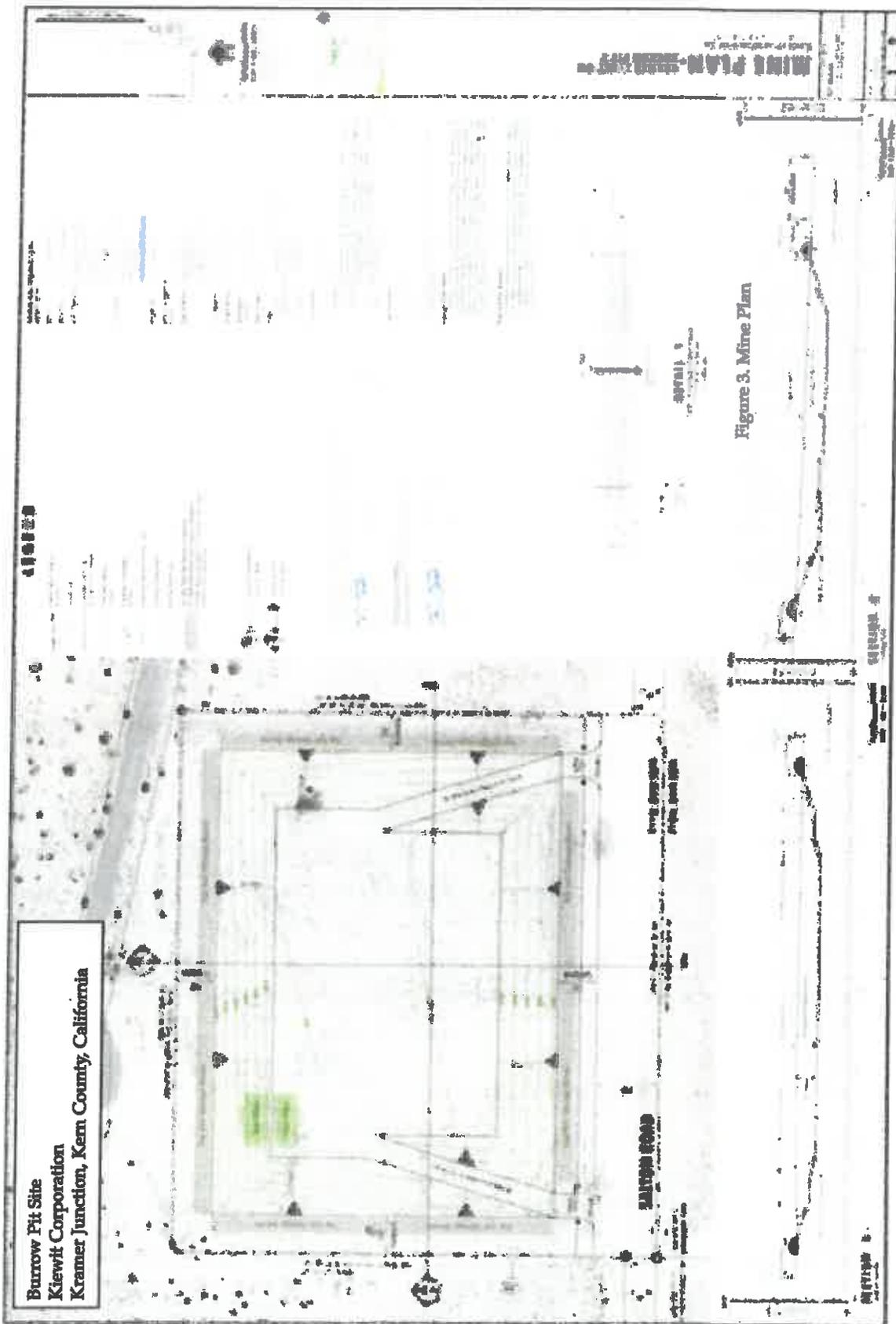
**Legend**

 Boundary



 Feet  
0 25 50 100 150 200

Borrow Pit Site  
Kiewit Corporation  
Kramer Junction, Kern County, California



## 4.0 Results

### 4.1 Data Review

The findings of the EIR/EIS are incorporated by reference; however, there are several resources in that document that could not be surveyed for due to the timing of the survey. Because our work was focused on updating findings, our survey was limited to surveying for seven resources of concern. These resources were desert tortoise, Mohave ground squirrel, burrowing owl, Le Conte's thrasher, American badger, Joshua trees and desert washes.

### 4.2 Disturbances

The Site is highly disturbed (Figure 2). Illegal off-road travel in the form of vehicle tracks and unimproved roads and trails are found throughout the Site (Photo 1). There appears to have been large scale grading or some other form of soil removal over most of the eastern two-thirds of the Site. There are several large dirt piles in the northern part (Photo 2) as well as the southwestern corner of the Site.

Trash dumping is isolated and was observed closer to State Route 58. There is relatively little wind-blown trash on the Site.

### 4.3 Weather, Topography and Soils

The temperature at the start of the survey was 43 degrees Fahrenheit, with nearly overcast skies, winds of three miles per hour out of the north-northeast and 66 percent humidity. By the end of the survey, the temperature was 49 degrees Fahrenheit, with winds of three miles per hour out of the north-northeast, overcast skies and the beginning of local rain.

The Site is located on a gently sloping desert plateau, with the principal slope trending southeast to Kramer Junction (Figure 1).

Soils are composed of mostly sandy loam, with some accumulations of fine sand and silt in low-lying areas.

### 4.4 Plant Communities

The relatively undisturbed western one third of the Site is occupied by a saltbush scrub plant community (Photo 3, Figure 2). Shrub density was approximately 20 percent. This plant community is represented by four-winged saltbush (*Atriplex polycarpa*) and spiny saltbush (*Atriplex spinifera*). Other shrub species observed were creosote bush (*Larrea tridentata*), interior California buckwheat (*Eriogonum fasciculata* var. *spinosa*) and burrobush (*Ambrosia dumosa*).

Scattered annual plant cover of approximately ten percent was represented by thin-leaved stillingia (*Stillingia linearifolia*), red-stemmed filaree (*Erodium cicutarium*), Mediterranean grass (*Schismus barbatus*), and red brome (*Bromus madritensis* ssp. *rubens*) (Photo 4).

A list of plant species observed is provided in Appendix A.

### 4.5 Wildlife

Surveys for wildlife included scat, trails, tracks, burrows, skeletal remains, calls and visual sightings. Wildlife activity on site was typical for saltbush desert scrub in winter. Species observed include side-blotched lizard (*Uta stansburiana*), black-tailed jackrabbit (*Lepus californicus*), white-tailed antelope squirrel (*Ammospermophilus leucurus*) and coyote (*Canis latrans*).

A list of wildlife species observed is provided in Appendix A.



**Photo 1. Unmaintained access road. Looking west southwest.**



**Photo 2. Dirt mounds in the northern section of the Site. Looking northeast.**



Photo 3. Sagebrush scrub. Looking east.



Photo 4. Annual plant cover. Looking north northwest.

#### 4.6 Sensitive Biological Species

The timing of the survey and the cold weather limited the possibility of direct observations of desert tortoise, Mohave ground squirrel, burrowing owl, Le Conte's thrasher and American badger. Our survey for the four wildlife species was limited to identifying sign, such as burrows, feathers, scat and other indirect evidence of the presence of these species.

We also searched for Joshua tree and desert washes.

##### 4.6.1 Desert Tortoise

The desert tortoise (*Gopherus agassizii*) is a desert dwelling reptile that occurs throughout the Mojave and Sonoran deserts. It is found in California, Nevada, Arizona, and Utah, occurring in almost every type of habitat except dry lakes or playas, sand dunes and sand sheets and rocky slopes.

Tortoises construct underground burrows as living quarters and spend most of the year down in the burrows. They come out for forage in the early spring (February and March) and remain active above ground until early June, when they retreat to their burrows for most of the summer, fall and winter months. They will emerge and be active during the fall months of September and October, depending upon late summer weather conditions. Although they stay underground for most of the year, tortoises can be found active above ground throughout of the year.

Tortoises forage on spring annual wildflowers and grasses. During the foraging season, they also breed and lay eggs in preparation for the next spring.

The desert tortoise hibernates or estivates underground for much of the year as an adaptation to the extreme temperature changes characteristic of desert winters and summers. As a result, determining whether desert tortoise are present in a particular area is generally restricted to locating sign, or evidence, of recent activity.

The tortoise has been undergoing a decline in population due to a number of factors. These include loss or destruction of habitat, killing or harming of animals in the wild, collection of individual animals, raven predation and disease.

The California Department of Fish and Wildlife listed the tortoise as threatened on June 22, 1989. The tortoise was emergency listed as endangered by the U. S. Fish and Wildlife Service on August 4, 1989. The Service listing was later changed to threatened. Both listings were made based on populations declining due to the factors listed above. The discovery that the tortoise was rapidly disappearing throughout its range as a result of a disease known as Upper Respiratory Disease Syndrome (URDS) was a critical part of the listing decisions.

##### Project Findings

The field survey team did not find tortoise or evidence of tortoise on the Site.

##### 4.6.2 Mohave Ground Squirrel

Mohave ground squirrel (*Spermophilus mohavensis*) is a ground-dwelling mammal that occupies creosote bush scrub, saltbush scrub and Joshua tree woodland. This species is found in all major desert scrub habitats in the western Mojave Desert, and has been found at oases, along riverbanks, and washes, in dunes and on rocky slopes. The Mohave ground squirrel prefers flat to moderate terrain and has only rarely been found on steep hillsides. Preferred soil types are sandy, alluvial soils, but this species also occupies gravelly and even rocky soils.

The documented habitat range for the Mohave ground squirrel includes suitable habitat within Inyo, Kern, Los Angeles and San Bernardino counties in the western Mojave Desert.

The diet of the Mohave ground squirrel is varied but is focused primarily on the leaves and seeds of forbs and shrubs. Green annual plants are foraged on early in spring, but as summer progresses, the leaves of perennial shrubs make up a larger part of their diet. They will also forage on invertebrates, but this food source is a relatively small part of their diet.

This species is active in spring from February to early July and estivates throughout most of the remaining months. Juveniles will remain above ground well into July and August to build up fat reserves.

The Mohave ground squirrel is not listed by the USFWS. It is listed as threatened by the CDFW. The species was listed because of the decline and loss of habitat in the Kern County portion of its range, as well as the loss of habitat due to development in the Victor Valley and Barstow areas.

#### **Project Findings**

The Site is located within the range for the Mohave ground squirrel, and is in Critical Habitat for this species. The Site provides suitable habitat for the Mohave ground squirrel, and ground squirrel burrows were observed on site.

One white-tailed antelope squirrel was observed foraging. The Mohave ground squirrel and the white-tailed antelope squirrel occur in the same habitats in this area of the Mojave Desert, and the burrows of the two animals cannot be told apart. Therefore, the burrows observed could not be positively identified as to which species they belonged.

#### **4.6.3 Burrowing Owl**

The burrowing owl (*Athene cunicularia hypogea*) is a resident species in lowland areas of southern California (Garrett & Dunn 1980). It prefers open areas for foraging and burrowing and is found widely scattered in open desert scrub. This species is scarce in coastal areas, being found mainly in agricultural and grassland habitats. The largest remaining numbers are in the Imperial Valley, where it is common in suitable habitat adjacent to the agricultural fields.

The burrowing owl prefers large flat open areas for nesting and hunting (Garrett & Dunn 1981). This species lives in burrows constructed by other ground-dwelling species in grassy or sparse shrubby habitat. Burrowing owls also take over other types of burrows, including manmade objects such as pipes. This species forages low over the ground surface for insect prey, and seldom flies very high in the air. As a result of coastal development, the burrowing owl is declining in coastal habitats. The California Department of Fish and Wildlife (CDFW) has designated the burrowing owl as a California Species of Special Concern (CSC). These species are so designated because "declining population levels, limited ranges and/or continuing threats have made them vulnerable to extinction." (California Department of Fish and Wildlife 2018).

#### **Project Findings**

Although the Site provides suitable foraging habitat for burrowing owls, no suitable or occupied burrows were found.

#### **4.6.4 Le Conte's Thrasher**

The Le Conte's thrasher (*Toxostoma lecontei*) is an uncommon and local resident in low desert scrub habitats such as open desert wash, desert scrub, alkali desert scrub and desert succulent shrub habitats. It is also occasionally found in Joshua tree woodland mixed with scattered shrubs (Zeiner, et al.).

The historical range includes Inyo and Kern counties down through eastern Los Angeles, San Bernardino, Riverside, and San Diego counties, as well as Imperial County outside the agricultural area around El Centro. There are also populations found in the southwestern corner of the San Joaquin Valley.

The breeding range extends from these areas into the eastern Mojave Desert, north into the Owens Valley and south into the lower Colorado Desert. This species is also recorded from southern Nevada and Utah, as well as western Arizona and New Mexico.

Loss of habitat from agricultural development and the increase in off-road activity have contributed to the decline of this species. The Le Conte's thrasher is listed as a SSC by the CDFW.

#### **Project Findings**

This species was not observed during the survey. The Le Conte's thrasher may forage on the Site, however, there is no nesting habitat on the Site. The saltbush scrub habitat found on site is sparse with short shrubs, and the Le Conte's thrasher prefers taller, thicker scrub habitat for nesting.

#### **4.6.5 American Badger**

American badger (*Taxidea taxus*) occurs over a wide range in Canada, the U.S. and into central Mexico. They occur statewide in open areas within a broad range of environments. This large mustelid (member of the weasel family) is a highly adept digger and leads a semifossorial (burrowing) existence.

Ground squirrels and pocket gophers make up the majority of the badger's diet, along with other reptile and mammal prey of appropriate size. The badger's range extends east to west from the Great Lakes regions of Canada and the U.S, including the Great Plains, to British Columbia south almost to the Yucatan in Mexico. The subspecies in California, *T. t. jeffersoni*, is found nearly everywhere suitable habitat exists.

Hunting and loss of habitat have contributed to the decline of this species. The American badger is listed as a SSC.

#### **Project Findings**

There are records of the badger in the overall State Route 58/395 Express Lane Project area (Caltrans 2014), but no burrows or other sign belonging to this species was found.

### **4.7 Jurisdictional Drainages and Wetlands**

#### **4.7.1 Army Corps of Engineers**

The Corps regulates discharges of dredged or fill material into waters of the United States. These watersheds include wetlands and non-wetland bodies of water that meet specific criteria. The lateral limit of Corps jurisdiction extends to the Ordinary High-Water Mark (OHWM) and to any wetland areas extending beyond the OHWM; thus, the maximum jurisdictional area is represented by the OHWM or wetland limit, whichever is greater.

Corps regulatory jurisdiction pursuant to Section 404 of the Clean Water Act is founded on a connection or nexus between the water body in question and interstate (waterway) commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations.

#### 4.7.2 State Water Resources Control Board

The Corps has delegated the authority for use of 404 permits to each individual state. The use of a 404 permit in California is regulated by the State Water Resources Control Board (SWRCB) under Section 401 of the Clean Water Act regulations. The Board has authority to issue a 401 permit that allows the use of a 404 permit in the state, with the authority in the state being vested in regional offices known as Regional Water Quality Control Boards (RWQCB).

In addition, the SWRCB has the responsibility to require that projects address ground water and water quality issues, which would be evaluated as part of the geotechnical and hydrology studies. Their authority extends to all waters of the State (of California).

Under the Porter-Cologne Act of 2003, the SWRCB has extended its responsibilities to include impacts to water quality from non-point source pollution.

The Act identifies beneficial uses of waters of the state that the RWQCB use to evaluate jurisdiction. These beneficial uses (BUs) include: Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), Groundwater Recharge (GWR), Agricultural Supply (AGR), and Non-Contact Water Recreation (REC2) (which is limited by fencing), beneficial use of "rare, threatened or endangered species habitat", Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), and Industrial Process Supply (PROC).

#### 4.7.3 California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW), through provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFW.

#### Project Findings

There are no drainages, wetlands or riparian habitats on the Site.

#### 4.8 Protected Desert Native Plant Species

The California Desert Native Plants Act regulates the taking of plant species for commercial purposes. It also regulates the permitting process for the taking of desert plant species, making it unlawful for "any person to destroy, dig up, mutilate or harvest any living native plant, or the living or dead parts of any native plant, except its fruit, without obtaining written permission from the landowner and a permit . . ." (State of California 1982, Division 23, Chapter 5, Section 80111).

The Act allows exceptions for "a public agency or to a publicly or privately-owned public utility when acting in the performance of its obligation to provide service to the public. This section does not prevent the landowner or his or her agent from complying with any other federal, state, or local laws or regulations." (State of California 1982, Division 23, Chapter 5, Section 80117).

In addition to the State Act, Division 8, Chapter 88.01: Plant Protection and Management, of the County Development Code (Code) requires the protection of California native plants within County boundaries. Excepted entities under the Code include "(b) Government Owned Lands. Removal from lands owned by the United States, State of California, or local governmental entity . . ." (Section 88.01.030).

### **Project Findings**

There are no Joshua trees or cactus species on the Site that would be protected by the Act and County Code.

#### **4.9 Raptors, Migratory Birds and Nesting Habitat**

Most of the raptor species (eagles, hawks, falcons and owls) are experiencing population declines because of habitat loss. Some, such as the peregrine falcon, have also experienced population losses because of environmental toxins affecting reproductive success, animals destroyed as pests or collected for falconry, and other direct impacts to individuals. Only a few species, such as the red-tailed hawk and barn owl have expanded their range despite or as a result of human modifications to the environment. As a group, raptors are of concern to state and federal agencies.

Raptors and all migratory bird species, whether listed or not, also receive protection under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, bird parts (including nests and eggs) except per regulations prescribed by the Secretary of the Interior Department (16 U. S. Code 703).

Additional protection is provided to all bald and golden eagles under the Bald and Golden Eagle Protection Act of 1940, as amended. State protection is extended to all birds of prey by the CDFW Code, Section 2503.5. No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

### **Project Findings**

Suitable shrub and tree nesting habitats are virtually non-existent on the Site. Habitat for ground-nesting species is limited because of the level of disturbance of the site.

The Site provides suitable foraging habitat for desert bird species.

#### **4.10 Habitat Fragmentation and Wildlife Movement**

Wildlife movement and the fragmentation of wildlife habitat are recognized as critical issues that must be considered in assessing impacts to wildlife. In summary, habitat fragmentation is the division or breaking up of larger habitat areas into smaller areas that may or may not be capable of independently sustaining wildlife and plant populations. Wildlife movement (more properly recognized as species movement) is the temporal movement of species along several types of corridors. Wildlife corridors are especially important for connecting fragmented wildlife habitat areas.

### **Project Findings**

The Site is in an area that has seen high levels of disturbance and is close to the heavily trafficked State Routes 58 and 395. The loss of habitat in this area will not substantially fragment habitat or have a significant impact on wildlife movement.

## **5.0 Discussion**

### **5.1 General Biological Resources**

The proposed project will result in the loss of saltbush scrub habitat. This loss has already been addressed as part of the EIR/EIS.

## **5.2 Sensitive Biological Resources**

### **5.2.1 Desert Tortoise, Burrowing Owl, Le Conte's Thrasher and American Badger**

Desert tortoise, burrowing owl, Le Conte's thrasher and American badger were not observed, and no suitable burrows or nesting habitat was observed.

### **5.2.2. Mohave Ground Squirrel**

Mohave ground squirrel could not be observed at the time of the survey. White-tailed antelope squirrel was observed. These two species coexist in the same habitat, and so Mohave ground squirrel might be present. The EIR/EIS has already addressed impacts to this species and includes Environmental Commitments to offset the loss of habitat (Caltrans 2014, BIO-5 Commitment, page G-19).

## **5.3 Jurisdictional Waters and Wetlands**

NRAI's professional judgment is that there are no Corps, RWQCB or CDFW jurisdictional waters, wetlands or riparian habitats on the Site.

## **5.4 Protected Native Plant Species**

There are no protected native plant species on the Site.

## **5.5 Raptors and Migratory Bird Species**

The use of the the Site will may have both direct and indirect construction-related impacts to raptor and migratory bird use of the Site, as well as any use of the Site by other species moving through the area. These impacts were addressed as part of the EIR/EIS document (Caltrans 2014, BIO-18 Commitment, page G-22).

## **5.6 Habitat Fragmentation and Wildlife Movement**

No mitigation is required for habitat fragmentation or impacts to wildlife movement.

## 6.0 References

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## Appendix A - Plants and Animals Observed

### Plants

\*indicates non-native species

### PLANTS

#### ANGIOSPERMAE: DICOTYLEDONES

##### Asteraceae

*Ambrosia acanthicarpa*  
*Ambrosia dumosa*  
*Ambrosia psilostachya*

##### Boraginaceae

*Amsinckia tessellata*  
*Cryptantha micrantha*

##### Brassicaceae

\**Sisymbrium altissimum*

##### Chenopodiaceae

*Atriplex polycarpa*  
*Atriplex spinifera*  
\**Salsola tragus*

##### Euphorbiaceae

*Stillingia linearifolia*

##### Geraniaceae

\**Erodium cicutarium*

##### Malvaceae

*Sphaeralcea ambigua*

##### Onagraceae

*Camissonia claviformis*  
*Oenothera deltoides*

##### Polygonaceae

*Chorizanthe brevicornu*  
*Eriogonum fasciculatum* var. *foliolosum*

##### Zygophyllaceae

*Larrea tridentata*

#### DICOT FLOWERING PLANTS

##### Sunflower family

Annual Bursage  
Burrobush  
Western Ragweed

##### Borage family

Desert fiddleneck  
Tiny popcorn flower

##### Mustard family

Tumble mustard

##### Saltbush family

Allscale  
Spinescale  
Russian thistle

##### Spurge family

Thin-leaved stillingia

##### Geranium family

Red-stemmed filaree

##### Mallow family

Desert mallow

##### Evening primrose family

Brown-eyed evening primrose  
Birdcage evening primrose

##### Buckwheat family

Brittle spineflower  
Interior California buckwheat

##### Caltrop family

Creosote bush

#### ANGIOSPERMAE: MONOCOTYLEDONES

##### Poaceae

\**Bromus madritensis* ssp. *rubens*  
\**Schismus barbatus*

#### MONOCOT FLOWERING PLANTS

##### Grass family

Red brome  
Mediterranean grass

**WILDLIFE**

**AVES**

**Alaudidae**  
*Eremophila alpestris*

**Corvidae**  
*Corvus corax*

**MAMMALIA**

**Leporidae**  
*Lepus californicus*

**Sciuridae**  
*Amiospermophilus leucurus*

**Canidae**  
*Canis latrans*

**BIRDS**

**Larks**  
Horned lark

**Crows , jays and ravens**  
Common raven

**MAMMALS**

**Rabbits and hares**  
Black-tailed jackrabbit

**Squirrels, chipmunks and marmots**  
White-tailed antelope squirrel

**Foxes, wolves and relatives**  
Coyote

## Appendix B - Description of Status Listings

### FED: Federal Classifications

END Taxa listed as endangered

THR Taxa listed as threatened

PE Taxa proposed to be listed as endangered

PT Taxa proposed to be listed as threatened

C2\* The U.S. Fish and Wildlife Service (USFWS) revised its classifications of candidate taxa (species, subspecies, and other taxonomic designations). Species formerly designated as "Category 1 Candidate for listing" are now known simply as "Candidate". The former designation of "Category 2 Candidate for listing" has been discontinued. The USFWS will continue to assess the need for protection of these taxa and may, in the future, designate such taxa as Candidates. NRAI has noted the change in species status by marking with an asterisk (\*) those C2 candidates that were removed from the list.

C Candidate for listing. Refers to taxa for which the USFWS has sufficient information to support a proposal to list as Endangered or Threatened and issuance of the proposal is anticipated but precluded at this time.

ND Not designated as a sensitive species

### STATE: State Classifications

END Taxa listed as endangered

THR Taxa listed as threatened

CE Candidate for endangered listing

CT Candidate for threatened listing

CFP California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.

CSC California Species of Special Concern. Taxa with populations declining seriously or that are otherwise highly vulnerable to human development.

SA Special Animal. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status.

ND Not designated as a sensitive species

### CNPS: California Native Plant Society Classifications

1A Plants presumed by CNPS to be extinct in California

1B Plants considered by CNPS to be rare or endangered in California and elsewhere

2P Plants considered by CNPS to be rare, threatened or endangered in California, but which are more common elsewhere.

3 Review list of plants suggested by CNPS for consideration as endangered but about which more information is needed.

4 Watch list of plants of limited distribution whose status should be monitored

### CNPS: Threat Codes

.1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 - Fairly endangered in California (20-80% occurrences threatened)

.3 - Not very endangered in California (<20% of occurrences threatened, or no current threats known)

# **EXHIBIT D**

## **AP20180100 Findings**

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## **FINDINGS: CONDITIONAL USE PERMIT**

Conditional Use Permit (CUP) to permit Mining and Reclamation Plan to develop the Kramer Junction Borrow Pit No. 2 on 8.7 acres and permit mining for a three (3) year operating period. (Project) (APN: 0491-171-10)

The following Chapter 85.06 CUP findings must be made in the affirmative, pursuant to Development Code Section 88.03.060(k)(1), in order to approve the Project's mining CUP:

- 1. The site for the proposed borrow pit mining site is adequate in terms of shape and size to accommodate the proposed use and all open space, setbacks, and other required features pertaining to the application.** The 8.7-acre parcel is of adequate size and shape to accommodate the borrow pit and operations equipment including trucking. The minimum setback requirements for the Rural Living (RL) zoning district in the desert region is 25 feet from the property line. To buffer the borrow pit, this setback has been extended to 50 feet from the property line. No other development is located within the vicinity.
- 2. The site for the proposed use has adequate access, which means that the site design incorporates appropriate street and highway characteristics to serve the proposed use.** Access for workers to the site will be from existing US Highway 395 (US 395) about 1/3 mile west on Salton Road, which is a public unimproved road. The material will be transported to the adjacent new State Route 58 (SR-58) alignment and the US 395 improvements along Salton Road.
- 3. The proposed use will not have a substantial adverse effect on abutting property or the allowed use of the abutting property, which means the use will not generate excessive noise, traffic, vibration, lighting, glare, or other disturbance.** As described in Finding No. 1 above, minimum setback requirements for the RL zoning district in the desert region is 25 feet from the property line. To buffer the borrow pit, this setback has been extended to 50 feet from the property line. As described in Finding No. 2 above, access roads have been established to permit workers to enter the site from US 395 about 1/3 mile west on Salton Road. County noise, vibration, and lighting standards apply and are included in the Project's Conditions of Approval.
- 4. The proposed use and manner of development are consistent with the goals, maps, policies, and standards of the County General Plan and any applicable Community or Specific Plan.** General Plan standards for the RL zoning district are to preserve open space. This Project is a temporary use of a large, 8.7-acre, privately-owned parcel of land that will remain as open space upon project completion. Use of the site for fill material extraction allows a measure of economic gain while maintaining the site's open space value.

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LAND USE ELEMENT: RL LAND USE ZONING DISTRICT

Applicable site-specific policies for the RL Zoning District include:

Purpose

- To encourage limited rural development that maximizes preservation of open space, watershed and wildlife habitat areas.
- To establish areas where open space and non-agricultural activities are the primary use of the land, but where agriculture and compatible uses may co-exist.

Locational Criteria

- Areas generally distant from urban centers with existing land uses including limited grazing, passive public and private recreation areas, rural residences and vacation cabins and watershed, wildlife and open space uses.
- Areas with limited or no infrastructure facilities and where none are planned within the next twenty years.

OPEN SPACE ELEMENT: GOALS AND POLICIES

Applicable site-specific Desert Region Goals and Policies from the Open Space Element include:

GOAL D/OS -1 Preserve open space lands to ensure that the rural desert character of the region is maintained.

D/OS 1.3 Maintain RL Land Use Zoning Districts or zoning on steep slopes and remote areas to minimize hillside grading and to protect the rural and natural environment.

SPECIFIC OR COMMUNITY PLANS: The Project site is not located within any Specific or Community Plan.

5. **There is supporting infrastructure, existing or available, consistent with the intensity of the development, to accommodate the proposed Project without significantly lowering service levels.** No additional County infrastructure or services are required to be supplied for this Project.
6. **The lawful conditions stated in the approval are deemed reasonable and necessary to protect the overall public health, safety and general welfare.** The Project Conditions of Approval include measures to minimize noise, vibration, lighting, air quality, and traffic impacts and to enforce performance standards.
7. **The design of the site has considered the potential for the use of solar energy systems and passive or natural heating and cooling opportunities.** Although solar energy generation and use is not a part of this Project proposal, neither would it be precluded should the need and desire for such use arise.

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## **FINDINGS: RECLAMATION PLAN**

Reclamation Plan for the Kiewit Kramer Junction Borrow Pit No. 2 to permit temporary excavation of the quarry as a borrow pit to provide aggregate for use during construction of State Route 58 Kramer Junction Expressway on 8.7 acres (Project) (APN: 0491-171-10).

Pursuant to Development Code Section 88.03.060(k)(2), the following findings must be made in the affirmative in order to approve the Project's mining Reclamation Plan:

1. **The Reclamation Plan complies with the California Surface Mining and Reclamation Act (SMARA) (Public Resources Code Sections 2772-2773) and any other applicable provisions.** The Kramer Junction Borrow Pit No. 2 Mine Reclamation Plan (Reclamation Plan) was reviewed, and conditioned, for compliance with SMARA. It has also been reviewed and accepted by the California Department of Conservation Division of Mine Reclamation.
2. **The Reclamation Plan complies with applicable requirements of State mining regulations (California Code of Regulations Sections 3500-3505 and 3700-3713).** The Reclamation Plan was reviewed, and conditioned, for compliance with State mining regulations. It has also been reviewed and accepted by the California Department of Conservation Division of Mine Reclamation.
3. **The Reclamation Plan and potential end use of lands reclaimed in compliance with the Plan are consistent with this Chapter and the General Plan and any applicable resource plan or element.** The Reclamation Plan and potential end use of lands disturbed and reclaimed in compliance with the Plan, as conditioned, are consistent with the Development Code and General Plan. No additional resource plans or elements apply.
4. **The Reclamation Plan has been reviewed in compliance with the California Environmental Quality Act (CEQA) and the County's environmental review guidelines, and all significant adverse impacts from reclamation of the surface mining operations are mitigated below a level of significance or to the maximum extent feasible.** An Addendum to the Caltrans Kramer Junction Expressway Final EIR/EIS (FEIR) was prepared in compliance with CEQA and all Mitigated Measures identified in the FEIR have been incorporated into the Reclamation Plan and Conditions of Approval.
5. **The land and/or resources, such as water, will be reclaimed to a condition that is compatible with, and blends in with, the surrounding natural environment, topography, and other resources, or suitable off-site development will compensate for related disturbance to resources values.** Affected lands will be reclaimed to a condition compatible with, and blending with, the surrounding natural environment, topography, and other open space resources as identified in the Reclamation Plan. Financial Assurances and annual mine inspections pursuant to SMARA will take place to ensure this occurs. Groundwater resources will also be monitored and mitigated should related disturbance to this resource occur.

6. **The Reclamation Plan will reclaim the mined lands to a usable condition which is readily adaptable for alternative land uses consistent with the General Plan and applicable resource plan.** The Reclamation Plan, as conditioned, along with annual mine inspections pursuant to SMARA will ensure reclamation of the mined lands return to a usable condition that is readily adaptable for alternative land uses consistent with Resource Conservation and Open Space.
  
7. **A written response to the State Department of Conservation has been prepared, describing the disposition of major issues raised by that Department. Where the County's position is at variance with the recommendations and objections raised by the State Department of Conservation, the response shall address, in detail, why specific comments and suggestions were not accepted.** The County sent a written response, dated March 29, 2019, to the California Department of Conservation Division of Mine Reclamation (DMR) in response to its March 5, 2019 review of the Kramer Junction Borrow Pit Mine Reclamation Plan. Staff provided a detailed response to each comment, along with the required 30-day notification of intent to adopt the project at a Planning Commission hearing scheduled for May 9, 2019. Each concern expressed by DMR has been addressed and/or incorporated into the revised Plan.

#### **FINDINGS: CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

**The Project will not have a significant adverse impact on the environment, subject to implementation of the proposed Conditions of Approval and mitigation measures.** An Addendum to the Caltrans Kramer Junction Expressway Final EIR/EIS (EIR) was prepared in compliance with CEQA and all Mitigated Measures identified in the EIR have been incorporated into the Reclamation Plan and Conditions of Approval based on a finding that the Project site was assessed under CEQA as Borrow Area No. 6 within the EIR and that none of the conditions described in CEQA Guidelines Section 15162 have occurred. The Addendum reflects the independent judgment of the County of San Bernardino. The EIR and Addendum were reviewed and considered prior to adoption and approval of the Project.

# **EXHIBIT E**

## **Addendum to the Caltrans SR-58 Kramer Junction Expressway Final EIR**

**Addendum to the  
State Route 58 (SR-58) Kramer Junction Expressway Project  
Final EIR/EIS (SCH No. 2007051051)  
for the  
Kramer Junction Borrow Pit 2 Mine and Reclamation Plan**

**SUMMARY**

The County of San Bernardino is reviewing the potential environmental impacts for a Mine Reclamation Plan for the Kramer Junction Borrow Pit 2 (Proposed Plan) submitted by Kiewit Infrastructure West Co. (Kiewit). The borrow pit will be the source for up to 200,000 cubic yards (cy) of material for the State Route 58 (SR-58) Kramer Junction Expressway Project (Project). The California Department of Transportation (Caltrans) is realigning and widening to four lanes approximately 13 miles of SR-58 from the Kern County line east about 7.5 miles east of Kramer Junction. The Project also includes a partial cloverleaf at the SR-58 and US 395 junction and railroad grade separation alleviating existing traffic issues. This site is approximately three miles east of the first Kramer Junction Borrow Pit just east of Boron.

The Proposed Plan site is located approximately 0.75 miles northwest of the SR-58 and US 395 interchange and Kramer Junction (see Figure 1 - Regional Map). The privately-held 8.7-acre parcel (APN 0491-171-10) is within the west part of San Bernardino County in the SE¼ of Section 31, Township 11 North, Range 6 West, SBBM (see Figure 2 - Vicinity Map). The site is being leased by Kiewit from the landowner. Access for workers to the site will be from existing US 395 about 1/3 mile west on Salton Road, a public road. This site will provide material in the immediate vicinity of Kramer Junction to reduce transportation costs and fuel usage. The material will be transported to the new SR-58 alignment and the US 395 improvements also along Salton Road as shown on Caltrans National Environmental Policy Act/California Environmental Quality Act (NEPA/CEQA) Re-Validation Form (August 8, 2017). The site is mostly disturbed by past grading and the east half is fenced.

The purpose of this application is to permit the Kramer Junction Borrow Pit 2 for a three-year period to provide landscape and fill material for construction of the SR-58 Kramer Junction Expressway Project. This project is also known as the Kramer Junction Gap Closure Project, is being constructed as a joint project by Caltrans and the Federal Highway Administration (FHWA) started in early 2018 and anticipated to be completed by the end of the year 2020. Kiewit is proposing to excavate to a depth of 25 feet with three horizontal to one vertical slopes (3H:1V) or 18° slope to remove up to 200,000 cy for a mining period of three years. Reclamation of the site will commence immediately upon termination of mining. Mined products will include landscape and general fill material.

Caltrans included the Proposed Plan Site and access routes defined by Caltrans as Area 6 Borrow Area, in their project design and environmental review. Caltrans concluded in their NEPA/CEQA

Re-Validation Form (August 9, 2017) that the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for SR-58 Kramer Junction Expressway Project (July 1, 2014) remains valid with implementation of project design and mitigation measures for the potential impacts of the Kramer Junction Borrow Pit 2 area.

The borrow pit site is a vacant, mostly graded site impacted by past grading, material storage, and equipment storage. There is a slight increase in elevation from the south to north by about 15 feet. Where vegetation has re-grown, it consists of scattered saltbush scrub. The adjacent properties are mostly vacant with past disturbances and there is a solar generating project approximately 0.25 miles north. A water tank is located just north on a small rise with a gravel road in a water company easement extending east to a parcel that appears to have been utilized for water ponds. There are no nearby residences. The existing SR-58 Highway and railroad track lie 0.3-mile to the south. The new SR-58 alignment is about 500 feet south of the Proposed Plan Site and a major interchange with US 395 and SR-58 is about 0.4 miles to the east.

**Figure 1: Regional Location**

## 1.0 BACKGROUND

This document is prepared as an Addendum to the EIR/EIS for the SR-58 Kramer Junction Expressway Project, San Bernardino and Kern County, California (SCH No. 2007051051). The Final EIR/EIS was approved by Caltrans acting as Lead Agency for CEQA and NEPA on July 1, 2014.

The SR-58 Kramer Junction Expressway Project (Project) consists of Caltrans plans to widen and realign an existing 13.3-mile segment of SR-58 near the Kern County/San Bernardino County line to approximately 7.5 miles east of US-395 in western San Bernardino County, from a two-lane conventional highway to a four-lane expressway; and construct a railroad grade separation and an interchange at the SR-58/US-395 Junction (see Figure 2 – SR-58 Kramer Junction Expressway Project). The purpose of the Project is to improve east-west mobility and reduce congestion and travel time; reduce potential traffic conflicts; and maintain uninterrupted and consistent facility design between economic and community centers. For a complete description of the Project and Alternatives (see the Summary and Chapter 2, Project Alternatives in the Final EIR/EIS).

In August 2017, as the design of the Project progressed, Caltrans prepared a NEPA/CEQA Re-Validation Form which determined that the following, among other sites and requirements, would be necessary to facilitate Project completion:

*Area 6 Borrow Area on APN 0491-171-10. It is proposed to excavate and remove soils to a depth of 25 feet, loaded onto trucks for use of the proposed alignment. Access is via existing dirt road accessible from US 395.*

Additionally, Kiewit, Caltrans' construction contractor for the Project, is submitting a Mine Reclamation Plan for the proposed Area 6 Borrow Area. Caltrans included the Kramer Junction Borrow Pit 2 area in their project design and environmental review and concluded in their NEPA/CEQA Re-Validation Form that the Final EIR/EIS conclusions remain valid with implementation of project design and mitigation measures for the operation of the Kramer Junction Borrow Pit 2 area and access road.

This Addendum supplements the information contained in the Final EIR/EIS and the NEPA/CEQA Re-Validation Form and has been prepared to ensure that the potential impacts of the proposed Kramer Junction Borrow Pit 2 have been fully evaluated and that any such potential impacts have been reduced to a level of less than significant.

**CEQA Determination** - When an EIR has been certified for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following: 1) substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of

Figure 2: SR-58 Kramer Junction Expressway Project

previously identified significant effects; 2) substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or 3) new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following: (a) the project will have one more significant effects not discussed in the previous EIR; (b) significant effects previously examined will be will be substantially more severe than shown in the previous EIR; (c) mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or (d) mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative (CEQA Guidelines Section 15162(a)). Pursuant to Section 15164(e) of the CEQA Guidelines, an addendum must provide a brief explanation of the decision not to prepare a subsequent EIR.

The Proposed Plan is considered to be necessary by the NEPA/CEQA Re-Validation Form in order to ensure facilitation of the Project as described by the Final EIR/EIS. As discussed below, new significant effects or increases in the severity of previously identified significant effects are not expected to result from the Proposed Plan.

Furthermore, the Final EIR/EIS was certified in July of 2014. Since that time, there have been no changes to the background conditions and no new important information that would suggest the circumstances under which the Proposed Plan would be undertaken are different than assumed or described in the certified Final EIR/EIS. The NEPA/CEQA Re-Validation Form concluded that the original environmental document remains valid and no further documentation is necessary. Because none of the circumstances set forth in Section 15162 of the CEQA Guidelines calling for the preparation of a subsequent EIR have occurred, and because only minor changes and additions are necessary to make the Final EIR/EIS adequate for purposes of approving the Proposed Plan, an Addendum is the appropriate environmental document. Pursuant to Section 15164(c) of the CEQA Guideline, an Addendum need not be circulated for public review but can be included in or attached to the Final EIR. This Addendum, together with the Final EIR/EIS, is being considered by the County prior to approving the Proposed Plan.

## **2.0 PREVIOUSLY CERTIFIED EIR**

On July 1, 2014, Caltrans certified the Final EIR/EIS for the Project. In addition to permits and approvals from the County and other state or local public agencies, the Project required approvals from the Bureau of Land Management (BLM) and other federal agencies. Furthermore, the Project is a joint project by Caltrans and FHWA and is subject to state and federal environmental review documents. A Draft EIR/EIS was prepared and was circulated to interested agencies, organizations, and the public for comment pursuant to CEQA and NEPA on July 5, 2013. A public hearing was held on August 6, 2013. Public and agency comments received during the circulation of the Draft EIR/EIS, and at the related public hearing, resulted in refinements that have been incorporated into the Final EIR/EIS. Final EIR/EIS included analysis of the Project's

potential impacts associated with categories included in the CEQA Environmental Checklist. The Final EIR/EIS CEQA Significance Determinations are listed in Table 1.

**Table 1  
CEQA Significance Determination**

<b>Impact on</b>	<b>CEQA Significance Determination</b>
Land Use	Less than Significant
Parks and Recreation	No Impact
Growth	Less than Significant
Farmlands and Timberlands	No Impact
Community Cohesion/Character	Less than Significant with Mitigation
Relocations	Less than Significant with Mitigation
Public Services	Less than Significant
Utilities and Service Systems	Less than Significant with Mitigation
Traffic	Less than Significant with Mitigation (for construction impacts only)
Visual/Aesthetics	Significant and Unavoidable
Cultural Resources	Less than Significant with Mitigation
Hydrology and Floodplains	Less than Significant with Mitigation
Water Quality	Less than Significant with Mitigation
Geology/Soils/Seismic/Topography	Less than Significant with Mitigation
Paleontology	Less than Significant with Mitigation
Hazardous Waste/Materials	Less than Significant with Mitigation
Air Quality	Less than Significant with Mitigation
Noise and Vibration	Less than Significant with Mitigation
Energy	Less than Significant
Natural Communities	Less than Significant with Mitigation
Wetlands and Other Waters	Less than Significant with Mitigation
Plant Species	Less than Significant with Mitigation
Animal Species	Less than Significant with Mitigation
Threatened and Endangered Species	Less than Significant with Mitigation
Invasive Species	Less than Significant with Mitigation

Source: Table 4-1: Final EIR/EIS for SR-58 Kramer Junction Expressway Project (2014)

The Final EIR/EIS concluded that, with exception of impacts to visual/aesthetics occurring as a result of implementation of build alternatives, the Project would not result in any cumulatively considerable impacts.

## **2.1 SIGNIFICANT IMPACTS AND MITIGATION MEASURES**

The Final EIR/EIS identifies various mitigation measures designed to reduce potential adverse environmental impacts of the Project. The mitigation measures are set forth in Appendix G, Environmental Commitments Record, of the Final EIR/EIS.

## **2.2 OTHER PERMITS AND AGENCY APPROVALS**

The Final EIR/EIS noted that the Project requires approval from the following agencies:

- County of San Bernardino (Freeway agreement and Temporary construction permits)
- Burlington Northern Santa Fe (Encroachment permit)
- Bureau of Land Management (Land Use Application and Permit)
- California Public Utilities Commission (Service contract and construction/maintenance agreements)
- California State Water Resources Control Board (Coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity: Construction General Permit, 99-08-DWQ)
- California Regional Water Quality Control Board (Waste discharge permit)
- California Department of Fish and Wildlife (1600/1602 Permit and 2081 Incidental Take Permit)
- U.S. Fish and Wildlife Service (Section 7 consultation for threatened and endangered species)
- U.S. Department of Defense, Edwards Air Force Base (AFFTC IMT 5926: Dig Permit, and Real Estate Permit/Lease)

## **3.0 REVISIONS TO ENVIRONMENTAL EVALUATION / IMPACT ANALYSES**

### **3.1 INTRODUCTION**

In August 2017, as the design of the Project progressed, Caltrans prepared a NEPA/CEQA Re-Validation Form which determined that the following, among other sites and requirements, would be necessary to facilitate Project completion:

*Area 6 Borrow Area on APN 0491-171-10. It is proposed to excavate and remove soil to a depth of 25 feet, loaded onto trucks for use on proposed alignment. Access is via existing dirt road accessible from US 395.*

As a response to this need, Kiewit, the Project's construction contractor, developed a Mine Reclamation Plan for the proposed Area 6 Borrow Area, also known as the Kramer Junction Borrow Pit 2. The Proposed Plan was prepared with adherence to the San Bernardino County General Plan and Development Code as well as California's Surface Mining and Reclamation Act of 1975 (SMARA) requirements and submitted to the County acting as local lead agency.

This Addendum supplements the information contained in the Final EIR/EIS and has been prepared to ensure that the potential impacts of the Proposed Plan to establish the Kramer Junction Borrow Pit 2, have been fully evaluated and that any such potential impacts have been

reduced to a level of less than significant incorporating mitigation measures included in the EIR/EIS. Note that this Addendum follows the NEPA format for environmental topics and all CEQA topics are adequately addressed.

### **3.2 KRAMER JUNCTION BORROW PIT MINE AND RECLAMATION PLAN**

As proposed in the Mine Reclamation Plan, the Kramer Junction Borrow Pit 2 is located approximately 0.75 miles northwest of the SR-58 and U.S. Route 395 interchange (US 395) and Kramer Junction (see Figure 1 - Regional Location). Specifically, the Proposed Plan Site is within the west part of San Bernardino County in the SE ¼ of Section 31, Township 11 North, Range 6 West, SBBM (see Figure 3 – Project Vicinity). Kiewit is leasing the privately-held 8.73-acre parcel (APN 0491-171-10) from the landowner to facilitate the required mining and reclamation activities. Kiewit is proposing to excavate to a depth of 25 feet with 3 horizontal to 1 vertical slopes (3H:1V) or 18° slope to remove up to 200,000 cy for a mining period of three years (see Figure 4 – Mine Plan). Reclamation of the site will commence immediately upon termination of mining. Mined products will include landscape and general fill material.

The Proposed Plan site is currently vacant and mostly graded, and appears to have been impacted by past grading, material storage, and equipment storage. There is a slight increase in elevation from the south to north by about 15 feet. Where vegetation has re-grown, it consists of scattered saltbush scrub. The adjacent properties are mostly vacant with past disturbances and there is a solar generating project located approximately 0.25-mile north. A water tank is located immediately north of the site on a small rise with a gravel road in a water company easement extending east to a parcel that appears to have been utilized for water ponds. There are no nearby residences. The existing SR-58 Highway and railroad track lie 0.3-mile to the south. The new SR-58 alignment is about 500 feet south of the Project Site and a major interchange with US 395 and SR-58 is about 0.4 miles to the east.

Mining operations are proposed to be undertaken over a period of up to three years beginning in early 2019 and extending until early 2022. The site will be fenced with a combination of desert tortoise fencing and four-strand wire according to the protocols in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009). Mining will take place on approximately 6.2 acres of the 8.7-acre parcel with 50-foot setbacks of approximately 2.5 acres. Equipment storage and parking area will be within the east portion of the excavated area. Reclamation of the Kramer Junction Borrow Pit 2 will commence immediately upon termination of mining and is estimated to be complete after approximately one year of revegetation monitoring and remediation (see Figure 5 – Reclamation Plan).

Figure 3: Project Vicinity

Figure 4: Mine Plan

Figure 5: Reclamation Plan

Mining will be achieved with one loader, one excavator, and a dozer to break, move, and load material directly into single trailer or double belly truck trailers with capacity of up to approximately 25 to 50 cy (typical). A complete list of the typical equipment to be used on-site and for transport to the SR-58 construction alignment is included in Table 2. There will be no crushing, screening, or conveying conducted on-site. There will be no buildings or scale on-site. On occasion, a grader may be used on-site for mining or haul road development and maintenance.

**Table 2  
Mobile Mine and Transport Equipment (Typical)**

<b>Equipment Make/Model</b>	<b>Typical Number</b>	<b>Hours/Day</b>	<b>Tier Level</b>	<b>Purpose</b>
CAT D9 Dozer	1	10	Tier 4: Final	Excavate and loosen material. Road construction and maintenance.
Peterbilt/Freightliner Double Belly Trailers	5-10	10	Compliant	Transportation of material to new SR-58 alignment.
CAT 16 Grader	1	4	Tier 3	Maintain roads.
CAT 390 Excavator	1	10	Tier 4: Final	Excavate and load material into trucks.
CAT 980M Loader	1	10	Tier 4	Excavate and load material into trucks.
CAT 740 Water Truck	1	4	Tier 3	Water for dust control on mining areas, haul roads, and stockpiles.
Kentworth T300 Lube Truck (Fuel)	1	4	Compliant	Maintain and fuel on-site equipment.
John Deere 9560	1	4	Tier 4	Haul road maintenance.

Source: Mine Reclamation Plan for the Kramer Junction Borrow Pit 2 (2018)

Slopes of 3H:1V (horizontal:vertical) to depths of 25 feet will be produced from excavation of the pit. The top of the pit will range from 2,480 feet amsl on the northwest to 2,465 feet amsl on the southeast with a depth elevation ranging from 2,455 feet on the north to 2,440 feet amsl on the south. Setbacks of 50 feet in width will be maintained around the entire excavation area. These setbacks will include desert tortoise and four-strand wire fencing with warning signs on the outside edge of the property and secured gates. Access into the borrow pit will be via five-percent decline ramp 40 feet in width located on the east side of the pit to allow direct access to Salton Road and the SR-58 construction alignment. Once off the project site, the street-legal transport trucks will utilize Salton Road east to the new SR-58 construction area.

Truck traffic is anticipated at a rate of 50 loads per day based on street-legal 25 cy trucks and adjacent construction demand. Production and material transport will be approximately 1,250 cy/day for 160 days or lower daily volumes on more days of the year. A total of up to 200,000 cy of fill and landscape material is estimated to be removed.

The trucks will travel on Salton Road to the new SR-58 construction alignment along US 395 or to the immediate south on construction roads which may be established by Caltrans. Little if any

public traffic utilizes Salton Road. To minimize dust generation, a water truck will be retained for use during excavations and loading of haul trucks, prior to departing from the site. The mine operator shall water spray working mine areas and access roads on-site and Salton Road on a regular basis and more frequently as needed during windy conditions. Water used for dust control shall be obtained by an adjacent well owned by the site landowner. Un-surfaced haul roads and access roads may also have dust controlled with biodegradable dust suppressants or covered with road base material as needed.

Site operations will be conducted primarily from 5:30 am until 8:00 pm, up to six days per week. Occasionally operations may be conducted 24 hours/day and up to seven days per week depending on construction needs. All refuse shall be disposed into approved trash bins and removed by a commercial vendor. Portable toilets will be used on-site and serviced by a commercial vendor. Bottled water will be provided to employees.

Upon completion of mining activities, all equipment will be removed from the site. All debris will be removed and disposed at a permitted facility. All quarry fencing will remain in place to prevent unauthorized access during reclamation and may be left in -place at the discretion of the landowner.

The revegetation plan will implement a series of activities to revegetate portions of the site after completion of mining operations. All disturbed areas will be reclaimed and revegetated. Physical reclamation procedures will include regrading to achieve planned slopes of 3H:1V as needed, ripping compacted surfaces to a depth of about one-foot to hold moisture, adding stockpiled surface material containing banked seeds to a depth up to 0.5 feet deep, seeding with commercially available native seeds, and staking or flagging reclaimed areas to eliminate additional disturbance. The reclaimed site will not preclude or necessitate any future mining activities with depth or surface modification.

### **3.3 ENVIRONMENTAL IMPACT ANALYSIS**

The NEPA/CEQA Re-Validation Form assessed several sites including the Proposed Plan site which were determined to facilitate the completion of the Project. Potential impacts created by the Proposed Plan are considered temporary and construction-related, not operational. This Addendum supplements the information contained in the Final EIR/EIS and has been prepared to ensure that the potential impacts of the Proposed Plan have been fully evaluated and that any such potential impacts have been reduced to a level of less than significant with implementation of project design and mitigation measures as presented below. Note that this Addendum follows the NEPA format for environmental topics and all CEQA topics are adequately addressed. Alternative 1A cited below is the SR-58 Kramer Junction Expressway Project (Project) as approved by Caltrans.

#### **3.3.1 Land Use**

As noted in the Mine Reclamation Plan, the San Bernardino County General Plan land use designation of the Proposed Plan Site is Rural Living (RL-5). As noted on page 3.1-13 of the Final EIR/EIS:

*Aside from uses that would be displaced at Kramer Junction and land-serving existing transportation uses, all of the land that would be used under Alternative 1A (Project) is land that is currently undeveloped (within districts zoned as RC and RL). Land use change would occur under Alternative 1 but given the proximity of the proposed alignments to the existing SR-58 alignment and the fact that most of the land is undeveloped, the changes in land use would constitute a minor adverse effect.*

Additionally, the Final EIR/EIS concludes the following on page 3.1-23:

*The inconsistencies of Alternatives 1, 1A, and 3 with land use designations, such as RC and RL zones, would be addressed through minor amendments to zoning and land use designations for parcels affected by these alternatives. Approval of permanent easements and conditional use permits (CUPs) that would be required would be adopted by the appropriate agencies.*

Furthermore, on page 4-4 the Final EIR/EIS notes:

*Build Alternatives 1, 1A, and 3 do not involve any project operations that would significantly affect land use and planning. It is anticipated that zoning and land use designation amendments and permanent easements, would occur to accommodate the proposed project.*

Potential impacts created by the Proposed Plan are considered temporary and construction-related. The Proposed Plan Site is vacant, and the adjacent properties are mostly vacant with past disturbances; a solar generating project is located approximately 0.25-mile north of the site. Given the proximity of the Proposed Plan site to the existing SR-58 alignment and the fact that most of the surrounding land is undeveloped, the conclusions drawn in the Land Use Section of the Final EIR/EIS remain accurate and unchanged by this Addendum. The Proposed Plan will not have any new or more severe significant land use impacts as compared to the original Project with approval of a CUP for mining and reclamation.

### **3.3.2 Parks and Recreation**

Page 4-2 of the Final EIR/EIS states the following in regard to parks and recreation:

*All parks and recreational facilities in the study area are within Boron and are located greater than one mile from the westernmost limit of the project. No parks exist within or adjacent to the proposed alignments; therefore, there would be no impacts on parks or recreational facilities.*

The Proposed Plan site is located east of the westernmost limit of the Project's area of disturbance, therefore the Parks and Recreation Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. For these reasons, the Proposed Plan will not have any new or substantially more severe significant impacts on parks and recreation as compared to the original Project.

### **3.3.3 Growth**

Regarding potential growth, the Final EIR/EIS concludes that because none of the build alternatives would result in substantial growth impacts, avoidance, minimization and/or mitigation measures are not required. Furthermore, the Proposed Plan will not displace any existing residents or create any new residents as the Proposed Plan site does not contain existing residences and the Proposed Plan does not include the construction of new residences. Therefore, the Growth Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have any new or more severe significant growth impacts compared to the original Project.

### **3.3.4 Farmlands and Timberlands**

Page 4-2 of the Final EIR/EIS, states that there are no designated farmlands or timberlands (e.g. Forestry Resources) within or adjacent to the proposed project alignments that would be affected or converted as a result of the project. The Proposed Plan site is located adjacent to the Project alignment and therefore farmlands and timberlands would not be affected or converted by the Proposed Plan. The Farmlands and Timberlands Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have any new or more severe significant farmland or timberland impacts compared to the original Project.

### **3.3.5 Community Cohesion/Character**

The Final EIR/EIS recommends that Mitigation Measure CI-2, amongst others, be implemented to mitigate temporary/construction impacts on community cohesion/character. Mitigation Measure CI-2 states the following:

#### **Mitigation Measure CI-2**

*A Construction Management Plan and a Transportation Management Plan will be prepared for the project and include coordination efforts that will inform the community about project activities, maintain access to and from the project area during construction, minimize construction-period traffic, and control glare, dust, and noise. Measures to minimize construction impacts in these sections also apply to minimizing permanent community cohesion/character impacts.*

The Proposed Plan will be required to adhere to the Construction Management Plan in accordance with Mitigation Measure CI-2. The Mine Reclamation Plan states that street-legal transport trucks will utilize Salton Road east to the new SR-58 construction alignment along US 395 or to the immediate south on construction roads which may be established by Caltrans. Little if any public traffic utilizes Salton Road. To minimize dust generation, a water truck will be used during excavations and loading of haul trucks, prior to departing from the site. Furthermore, the mine operator shall water spray working mine areas and access roads on-site and Salton Road on a regular basis and more frequently as needed during windy conditions. The Community Cohesion/Character Section of the Final EIR/EIS remains accurate and is unchanged by this

Addendum. The Proposed Plan will not have any new or more severe significant community cohesion/character impacts compared to the original Project.

### **3.3.6 Relocations**

In regard to temporary impacts on relocations caused by the Project, the Final EIR/EIS states the following on page 3.4-45:

*No temporary relocation would occur under the build alternatives. Relocations would occur prior to construction. No temporary relocation effects would occur as a result of implementation of any of the build alternatives.*

*Implementation of a Construction Management Plan (measure CI-2) that informs the community about project construction activities and maintains access to and from the project area during construction is expected to satisfactorily avoid or minimize the substantial adverse impacts on access to and from local businesses.*

The Proposed Plan would not result in the relocation of any existing residences or business as the Proposed Plan site is currently vacant. Furthermore, the Proposed Plan will be required to adhere to adopted Construction Management Plan in accordance with Mitigation Measure CI-2. Therefore, the Relocations Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have any new or more severe significant relocation impacts compared to the original Project.

### **3.3.7 Public Services**

Page 4-3 of the Final EIR/EIS states the following in regard to Public Facilities:

*The proposed project would not involve construction of any habitable structures, nor would it increase population growth in the project area that could significantly affect the demand for community facilities and public services. The nearest community facilities are located approximately more than one mile from the westernmost area of the proposed project, and therefore would not result in community facility impacts.*

*No emergency service providers are headquartered in the study area, so none of the project alternatives would require relocation of emergency facilities. Construction of the project may temporarily hinder traffic flow in the area, resulting in delays in the response times of emergency service providers. However, these effects would be less than significant with the implementation of a transportation management plan, which is standard on Caltrans projects. The proposed project would provide improvement in safety, traffic operations, and congestion, which would likely result in a modest reduction of emergency response times.*

The Proposed Plan will not result in a demand for community facilities and public services as it does not involve the construction of habitable structures, nor would it increase population growth in the vicinity. Furthermore, the Proposed Plan will be required to adhere to an adopted

Transportation Management Plan, as applicable. Therefore, the Public Facilities Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have any new or more severe significant impacts to public health and safety as compared to the original Project.

### **3.3.8 Utilities and Service Systems**

Page 3.5-14 of the Final EIR/EIS, states that several utility types may require relocation so that they can continue to function, including overhead and underground electrical, underground gas, overhead and underground telephone, overhead cable telephone, water, septic tanks, a petroleum pipeline, underground fiber optic cables. The Final EIR/EIS recommends the following Caltrans' standard practices, as mitigation measures in order to prevent unreasonable traffic delays and impacts to emergency access and utilities:

#### **Mitigation Measure UT-1**

*Caltrans will coordinate all utility relocation work with the affected utility companies to ensure minimum disruption to customers in the service areas during construction.*

#### **Mitigation Measure TR-1**

*Caltrans will prepare a Traffic Management Plan (TMP) to ensure that local and regional traffic moves efficiently during construction. The TMP and the construction plans will be provided to community agencies, such as the fire department, prior to project commencement. The information provided will include access and traffic management plans that describe any projected temporary street closures or expected traffic delays due to construction vehicles on the roadways.*

The Proposed Plan does not require the use of public or private utilities and currently no known utility infrastructure is located within the Proposed Plan site. All domestic waste shall be disposed into approved trash bins and removed by a commercial vendor. Portable toilets will be used on-site and serviced by a commercial vendor and bottled water will be provided to employees.

Furthermore, the Proposed Plan will be required to adhere to an adopted Transportation Management Plan, as applicable. Therefore, the Utilities and Service Systems Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have any new or more severe significant impacts to utility and service systems as compared to the original Project.

### 3.3.9 Traffic

In regard to temporary impacts on traffic, the Final EIR/EIS states the following on page 3.6-12:

*SR-58, which is a two-lane highway within the limits of the proposed project, is expected to remain open to traffic during the construction period. Detailed construction plans will be prepared during the design phase.*

*Although there are no emergency service facilities in the project study area, project construction may result in temporary traffic delays that could increase response times for emergency responders. Adoption of mitigation measure TR-1, which is standard for all Caltrans projects, would ensure that potential project effects on emergency services would not be substantial adverse effects under NEPA. This measure requires, for all build alternatives, preparation of a traffic management plan (TMP). The TMP will facilitate coordination with law enforcement, the California Highway Patrol (CHP), fire protection services, emergency service providers, and the public during the design phase and prior to construction. Key elements of a TMP include public awareness, motorist information strategies, and alternate route strategies, which are intended to minimize traffic delay and maintain access to key facilities throughout construction.*

The Proposed Plan will be required to adhere to an adopted Transportation Management Plan, as applicable. Additionally, the Mine Reclamation Plan states that street-legal transport trucks will utilize Salton Road east to the new SR-58 construction alignment along US 395 or to the immediate south on construction roads which may be established by Caltrans. Little if any public traffic utilizes Salton Road. Therefore, the Traffic Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to traffic as compared to the original Project.

### 3.3.10 Visual/Aesthetics

In regard to temporary impacts on aesthetics, the Final EIR/EIS states the following on page 3.7-95:

*Potential visual impacts would result from earthmoving activities, limited removal of vegetation in the construction zone, and other construction activities (e.g., staging/stockpiling road-building materials, the presence of construction equipment, and temporary traffic barricades). Construction activities would include grading work, other routine construction activities, and truck shipments.*

As stated in the Mine Reclamation Plan, after initial excavation, the borrow pit will be below grade and there will be no process plants on-site. When operations reach a depth of 10 feet, mining operation will be screened from the surrounding area. Furthermore, the current visual/aesthetic character of the Proposed Plan site is anticipated to be restored upon completion as the reclaimed site will be open space and could be used for other uses at the discretion of the landowner.

The following mitigation measures are included in the Final EIS/EIR and will be implemented by the Project Proponent, as applicable, to mitigate potential visual/aesthetic impacts associated with the Proposed Plan:

**Mitigation Measure AES-4**

*Native plantings will be used to minimize the visual impact of the highway and associated detention basins. Drought-tolerant native trees and shrubs will be planted at appropriate locations, especially near the drainages and drainage basins, and at the two proposed interchanges and railroad overcrossing to soften the structures. These interchanges will become the gateways into the community and will be landscaped. Inert materials will also be considered where appropriate to beautify these areas and reduce erosion. The restoration of desert scrub vegetation will include replanting of native vegetation and Joshua trees on disturbed sites, including staging areas, borrow pits, and other areas of surface disturbance. Any portion of existing SR-58 roadway pavement which is no longer needed will be removed, leaving an earthen surface that will be seeded with native seeds.*

**Mitigation Measure AES-6**

*All disturbed soil areas will be treated with erosion control measures, including seeding with native plant/native grass seeds.*

**Mitigation Measure AES-7**

*During construction, existing vegetation will be retained to the maximum extent feasible by minimizing the amount of clearing and earthwork. During construction, Environmentally Sensitive Area (ESA) fencing will be provided around trees and vegetation to ensure its preservation.*

**Mitigation Measure AES-8**

*Joshua trees that would be removed will be replanted away from the proposed pavement areas. If onsite relocation is not feasible, Caltrans will contact the San Bernardino County Building and Safety Office for a list of residents willing to adopt and care for the relocated trees. Transportation standards will follow best nursery practices.*

**Mitigation Measure AES-9**

*Slopes will be landscaped with native vegetation to reflect vegetation in the surrounding area and to mask the hard lines created by engineered cuts and embankments.*

The Visual/Aesthetics Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to visual/aesthetics as compared to the original Project.

### 3.3.11 Cultural Resources

In regard to temporary impacts on cultural resources, the Final EIR/EIS states the following on page 3.8-10:

*Impacts on cultural resources would result from construction of any of the build alternatives, not from operation of the facility itself. Impacts on cultural resources are considered permanent, not temporary.*

Therefore, although potential impacts created by the Proposed Plan are considered temporary and construction-related, potential impacts on cultural resources shall be considered permanent, not temporary.

Mitigation Measures CR-3 and CR-3a concerning “sensitive areas” and CR-4 and CR-5 concerning defined Environmentally Sensitive Areas (ESA) are among the mitigation measures recommended in the Final EIR/EIS to protect cultural resources. Mitigation Measures CR-3 and CR-3a are not considered applicable to the Proposed Plan as sensitive areas have not been identified within the Proposed Plan site. Furthermore, consultation with Laura Chatterton PQS, Lead Archaeological Surveyor from Caltrans District 8, on November 2, 2017, revealed that the Environmentally Sensitive Areas listed in Mitigation Measures CR-4 and CR-5 are not within the Proposed Plan site and therefore Mitigation Measure CR-4 and CR-5 shall not apply to the Proposed Plan.

In March 2017, Caltrans prepared the 4<sup>th</sup> Supplemental Historic Property Survey Report (HSPR) which incorporated analysis of the Proposed Plan site. The Area of Potential Effects (APE) for the Project was revised in consultation with Laura Chatterton PQS, Lead Archaeological Surveyor and Wil Ochoa, Project Manager. The Revised APE includes the limits of all three Build Alternatives proposed for the Project, including construction easements site, assessing direct and potential indirect impacts. The 4<sup>th</sup> Supplemental HSPR included the 3<sup>rd</sup> Supplemental Archaeological Survey Report (ASR) which concluded that no cultural resources were identified during cultural resource investigations. Although no new cultural resources were identified during the cultural resources investigations, the 3<sup>rd</sup> Supplemental ASR concluded the following shall be implemented:

*If previously unidentified cultural resources are discovered during project activities, it is Caltrans policy that work stop within 60 feet of the discovery until a Qualified Archaeologist can determine the nature and significance of the discovery.*

Furthermore, in regard to potential impacts on tribal cultural resources and Native American consultation, the Final EIR/EIS states the following on page 3.8-2:

*Consultation with interested parties, including Native American groups and historical organizations, was conducted beginning in 2007. A request was made to the Native American Heritage Commission (NAHC) for a search of the Sacred Lands file on July 6, 2007. The NAHC responded on November 15, 2007, stating that a search of the Sacred Lands File failed to indicate the presence of Native American cultural resources in the immediate project area. A list of twelve Native American individuals/organizations was provided by the NAHC for additional consultation in regard to Native American cultural resources or project-related concerns. The Caltrans District 8 Native American Coordinator ultimately decided that 10 individuals/organizations should be contacted. In addition, four local historical societies and preservation groups were contacted on December 27, 2007, to illicit comments or concerns regarding the proposed project. No concerns regarding cultural resources were raised by these groups. [Native American correspondence related to the proposed project is included in the Final EIR/EIS as attachments.]*

The 4<sup>th</sup> Supplemental HSPR included Native American consultation that began in 2007 and remained ongoing with the San Manuel Band of Mission Indians from 2007 to the time that the 4<sup>th</sup> Supplemental HSPR was prepared, March 2017. Additionally, the NAHC was contacted July 6, 2007 and a response was received on November 15, 2007 (as stated above); however, no further communication with the NAHC has occurred, as of the time that the 4<sup>th</sup> Supplemental HSPR was prepared, March 2017.

In accordance with the conclusion of the 3<sup>rd</sup> Supplemental ASR, as well as general preventative measures associated with potential human remains to be found on the Proposed Plan site, the following mitigation measures, which are included in the Final EIS/EIR, shall be implemented by the Project Proponent to protect cultural resources:

#### **Mitigation Measure CR-1**

*If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature of significance of the find.*

#### **Mitigation Measure CR-2**

*If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the county coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Gary Jones, District 8 Native American Coordinator at (909) 383-7505 so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable.*

The Cultural Resources Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to cultural resources as compared to the original Project.

### **3.3.12 Hydrology and Floodplains**

As stated by the Mine Reclamation Plan, the Proposed Plan site is within the Mojave hydrologic basin of the Antelope-Fremont Valleys and Coyote-Cuddeback Lakes watersheds. The overall Mojave hydrologic basin, which has a surface area of approximately 4,500 square miles, is located entirely within the County of San Bernardino. The Mojave River, located approximately 13 miles southeast of the Proposed Plan site, is the nearest major watercourse.

The Proposed Plan site is relatively flat with a slight gradient to the south. No drainages are intersected by the proposed excavation area.

The Project Proponent is required, per Caltrans contract, to comply with Statewide National Pollutant Discharge Elimination System (NPDES) and to prepare and implement a Storm Water Pollution Protection Plan (SWPPP) including applicable Best Management Practices (BMPs). The control of drainage, erosion, and sedimentation of the mine site will primarily involve the following BMPs:

- Limiting surface disturbance to the minimum area required for active operations;
- Monitoring erosion on slopes and implementation of one or more soil stabilization practices as applicable for the site such as: earthen berms or dikes; silt fence; fiber rolls; straw bales; gravel bags; sediment basin(s); straw mulch.
- Stabilizing disturbed areas through grading slopes to 3H:1V; and
- After project completion – final revegetation by seeding or hydro-seeding with native species.

There are no drainage or run-off channels that will be affected by the borrow pit. Further discussion regarding hydrology is included in Section 3.3.13 Water Quality, below. The Hydrology and Floodplains Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to hydrology and floodplains as compared to the original Project.

### **3.3.13 Water Quality**

The Mine Reclamation Plan states that groundwater is anticipated to flow northwest and west, generally mimicking surface topography. The Final EIR/EIS reports groundwater at depths greater than 150 feet below ground surface (bgs). The Antelope Valley and Harper Valley groundwater basins underlie the Proposed Plan site.

According to the GeoTracker website, depth to groundwater is reported to be approximately 70 feet bgs in wells located near the area of Kramer Junction with a historical high groundwater

elevation reported at 64.5 feet bgs in 2012. The Proposed Plan Site is to be excavated to an average depth of 25 to 40 feet, which is not anticipated to impact the water table. Water used for dust suppression on-site will be pumped from an on-site well. Water usage for dust suppression is not expected to have an impact or potential to increase siltation on the Proposed Plan site as most water used will evaporate.

Only direct precipitation may affect the Proposed Plan site and the borrow pit is designed with a 2% natural grade towards the southeast to collect any run-off that may collect in the pit and off the slopes in that area that will act as a sediment or percolation basin. The slopes are designed at 3H:1V which would reduce possible slope erosion and runoff channeling down the slopes. There will be no run-off away from the site. All precipitation will be collected within the borrow pit and allowed to evaporate or percolate.

During the course of mining and the final design of the 3H:1V slope contouring, some erosion may occur during heavy rainfall on the slopes. Erosion caused by rainfall will be retained at the bottom of the pit and rills or channels backfilled. Any water retained within the borrow pit will not impact adjacent properties or local roads due to its containment.

After each major storm event or at least quarterly, any final slopes and the access and haul roads will be visually inspected to determine if any substantial erosion is evident such as sheet, rill or gully erosion. A major storm event is defined as precipitation totals of 0.5 inch per 24-hour period. Any rills or gullies in excess of eight square inches and more than 10 linear feet located on final slopes shall be arrested using methods above.

Revegetation will be used for the long-term control of erosion. Access roads and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations.

The following mitigation measures are included in the Final EIS/EIR and will be implemented by the Project Proponent as required per contract with Caltrans to protect water quality:

### **Mitigation Measure WQ-1**

*The project will comply with the provisions of the Statewide NPDES permit. Treatment BMPs, as described in Section 3 of the Department's Statewide Storm Water Management Plan (SWMP) (Department 2003b) and the Project Planning and Design Guide (PPDG) (Department 2010), will be evaluated prior to completion of the Project Approval and Environmental Document phase and incorporated into the project's engineering plans and specifications during final design. Design pollution prevention BMPs are selected to reduce post-construction discharges. If greater than 90 percent of the Water Quality Volume cannot be infiltrated within State Right of Way, approved Treatment BMPs will be included to remove general pollutants; for example, infiltration devices or detention basins. Construction site BMPs, as described in WQ-3, will be itemized in the final contract documents, incorporated into the SWPPP, and implemented during the construction period.*

### **Mitigation Measure WQ-2**

*The contractor will be responsible for preparing a SWPPP according to the Department's standards, incorporating all the BMPs listed in the contract plans, and amending the SWPPP during the course of construction as necessary. The resident Engineer will review and accept the SWPPP. The Resident Engineer will file electronically all compliance documents related to the Construction General Permit using the Storm Water Multi Application and Report Tracking System (SMARTS). The general contractor will also implement, inspect, and maintain all measures with oversight by the Resident Engineer.*

### **Mitigation Measure WQ-3**

*Table 1-1 of the Department's Construction Site Best Management Practices Manual (Department 2003c) and/or the Department's Storm Water Quality Handbooks, Project Planning and Design Guide (Department 2010) include the following BMPs:*

- *Temporary soil stabilization*
- *Temporary sediment controls*
- *Tracking control*
- *Non-stormwater management*
- *Waste management*
- *Material storage and handling controls*

*At a minimum, the contractor will implement all of the appropriate BMPs under the minimum requirement column of Table 1-1 of the Department's Construction Site Best Management Practices Manual (Department 2003c) and/or the Department's Storm Water Quality Handbooks, Project Planning and Design Guide (Department 2010). During completion of the final engineering and design plans, specific BMPs would be implemented by the contractor through the SWPPP. The plan will also include post-construction erosion control measures such as stabilization of all disturbed soil areas.*

The Water Quality Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to water quality as compared to the original Project.

### **3.3.14 Geology/Soils/Seismic/Topography**

Page 4-6 and page 4-7 of the Final EIR/EIS states the following regarding geology and soils:

*Ground shaking is expected to occur at the site due to the predicted magnitude of peak ground accelerations for earthquakes along nearby faults. Landslides are not a major problem because the topography in the site region is subdued. Accordingly, the currently proposed design is favorable for accommodating future ground shaking or surface rupture. Compliance with Caltrans' procedures regarding seismic design would also minimize any adverse effects related to seismic ground shaking. Seismic design would also meet County requirements for near-source design parameters under the UBC.*

*The potential for liquefaction during a seismic event is considered minimal to non-existent based on the reported deep groundwater depths. The potential for other geologic hazards related to liquefaction, such as lateral spreading, is also considered minimal to non-existent.*

Additionally, in December 2016, Stantec prepared a Soil Survey Investigation Report for Caltrans and the Proposed Plan site was included within the Study Area. The Study Area is generally underlain by recent age alluvium, lake, playa, and terrace deposits made up of weathered rock and sand; unconsolidated and semi-consolidated.

The Study Area, as is most of Southern California, is located in a seismically active area. According to the DMG Preliminary Fault Activity Map of San Bernardino, the nearest recently active faults include the Kramer Junction Area Faults and South Lockhart Fault (CDMG, 1994). The Study Area is not located within an Alquist Priolo Special Studies Zone (A-P Zone). The nearest A-P Zone is for the South Lockhart Fault which intersects SR-58 approximately seven miles east of the Kramer Junction intersection (CDMG, 2000). These and other faults are capable of generating significant seismic events (greater than 5.0 magnitude).

Based on the study findings, and conclusions of the Soil Survey Investigation Report, the following are recommended for the Study Area soil:

- Soil represented by the investigation may be used within the Study Area for its intended purposes.
- No special requirements are warranted to protect construction workers from exposure to the chemicals of potential concern (COPCs) in soil during construction other than the normal safety practices associated with any grading construction project.

Additionally, the Proposed Plan site does not fall within a Geological Hazard Zone, as identified on the San Bernardino County General Plan Map Atlas, overlay map, CHDHC. There are no geologic conditions that could adversely affect the Proposed Plan.

The following mitigation measure is included in the Final EIS/EIR and will be implemented by the Project Proponent to minimize potential impacts related to geology and soils:

#### **Mitigation Measure GEO-1**

*Earthwork in the project area will be performed in accordance with the latest edition of the Caltrans Standard Specifications.*

The Geology/Soils/Seismic/Topography Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to geology and soils as compared to the original Project.

#### **3.3.15 Paleontology**

In regard to temporary impacts on paleontological resources, the Final EIR/EIS states the following on page 3.12-9:

*Any impacts to paleontological resources are permanent and irreparable; therefore, there would be no temporary impacts for any of the build alternatives.*

Therefore, although potential impacts created by the Proposed Plan are considered temporary and construction-related, potential impacts on paleontology shall be considered permanent, not temporary.

The Final EIR/EIS concludes that the stratigraphy of the study area suggests that there is a high potential for the presence of fossil resources and therefore a potential for adverse effects to occur to paleontological resources. The Proposed Plan site is within the vicinity of the study area as shown on Figure 3.12.2 of the Final EIR/EIS and therefore there is a high potential for the presence of fossil resources at the Proposed Plan Site.

The following mitigation measures are included in the Final EIS/EIR and will be implemented by the Project Proponent to minimize potential impacts related to paleontological resources:

**Mitigation Measure PA-1**

*Grading, excavation, and other surface and subsurface excavation in defined areas of the proposed project have the potential to affect nonrenewable fossil resources. A Paleontological Mitigation Plan (PMP) shall be prepared during final project design by a qualified paleontologist. The PMP will detail the measures to be implemented in the event of paleontological discoveries. The PMP shall include, at a minimum, the following elements.*

**Mitigation Measure PA-2**

*Required 1-hour preconstruction paleontological awareness training for earthmoving personnel, including documentation of training, such as sign-in sheets, and hardhat stickers, to establish communications protocols between construction personnel and the Principal Paleontologist.*

**Mitigation Measure PA-3**

*There will be a signed repository agreement with an appropriate repository that meets Caltrans requirements and is approved by Caltrans.*

The additional paleontological measures in the EIR/EIS pertain to details of the PMP which is under the overall management of Caltrans environmental contractors. The Paleontology Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to paleontological resources as compared to the original Project.

### 3.3.16 Hazardous Waste/Materials

No hazards related to explosives shall occur as a result of the Proposed Plan as excavations will not require any blasting. Page 3.13-33 of the Final EIR/EIS states the following regarding temporary impacts associated with hazardous waste/materials:

*Construction activities, including earth moving activities, structure demolition, and pavement removal, could result in the disturbance and release of hazardous materials into the environment, a potential substantial adverse impact.*

However, Stantec's Soil Survey Investigation Report concluded that soil obtained from the Proposed Plan Site does not exhibit a characteristic of hazardous waste. Additionally, Stantec provided the following recommendations:

- Soil represented by the investigation may be used within the Study Area for its intended purposes.
- No special requirements are warranted to protect construction workers from exposure to the chemicals of potential concern (COPCs) in soil during construction other than the normal safety practices associated with any grading construction project.

Furthermore, the following determination is made on page 4-8 of the Final EIS/EIR:

*According to the County of San Bernardino Hazard Overlay Maps, the project site is not within or adjacent to a high fire hazard area. The proposed project would not increase the exposure of people or structures to the risk of loss, injury, or death involving wildland fires.*

The following mitigation measures are included in the Final EIS/EIR and will be implemented by the Project Proponent to ensure that impacts related to hazards and hazardous materials would be minor adverse:

#### **Mitigation Measure HAZ-6**

*All soil excavation conducted on-site will be monitored by the construction contractor for visible soil staining, odor, and the possible presence of unknown hazardous-material sources. Contaminated soils will be segregated and profiled for disposal.*

#### **Mitigation Measure HAZ-13**

*A site safety plan that addresses issues related to the management of potential health and safety hazards to workers and the public will be prepared and implemented prior to initiation of the proposed construction activities. Instructions, guidelines, and requirements for handling hazardous materials will be included in the site safety plan to ensure employee safety, as provided in Chapter 16, Hazardous Materials Communication Program, of the Caltrans Safety Manual.*

#### **Mitigation Measure HAZ-14**

*Wastes and petroleum products used during construction will be collected, transported, and removed from the project site in accordance with Resource Conservation and Recovery Act (RCRA) regulations and federal Occupational Safety and Health Administration (OSHA) standards, including Waste Management and Materials Pollution Control BMPs, Spill Prevention and Control, and Materials and Waste Management BMPs, Hazardous Waste Management. All hazardous waste will be stored, transported, and disposed of as required in Title 22, CCR, Divisions 4.5 and 49; CFR 261-263; and Caltrans requirements, as stated in Section 7-109, Solid Waste Disposal and Recycling Reporting, of the Caltrans Construction Manual.*

#### **Mitigation Measure HAZ-20**

*Coordination with the San Bernardino County Department of Airports and impacted airstrip and Boron Airport owners will be conducted to establish the appropriate construction or closure notification and safety procedures. The airstrip and Boron Airport do not appear to meet the requirements of CFR Title 14 Part 77.9; however, if during the coordination process it is determined that the FAA should be notified, then all notification requirements in accordance with CFR Title 14 Part 77.9 will be followed.*

The Hazardous Waste/Materials Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to hazards and hazardous materials as compared to the original Project.

#### **3.3.17 Air Quality and Climate Change**

Page 3.14-16 of the Final EIR/EIS states the following regarding temporary impacts on air quality:

*During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, NO<sub>x</sub>, VOCs, PM<sub>10</sub> and PM<sub>2.5</sub>, and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO<sub>x</sub> and VOCs in the presence of sunlight and heat.*

*Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.*

To minimize dust generation, a water truck will be retained for use during excavations and loading of haul trucks, prior to departing from the Proposed Plan site. The mine operator shall water spray working mine areas and access roads on-site and Salton Road on a regular basis and more frequently as needed during windy conditions. Un-surfaced haul roads and access roads may also have dust controlled with biodegradable dust suppressants or covered with road base material as needed.

Furthermore, in regard to adherence to the applicable air quality management plan, the Final EIS/EIR states the following on page 4-8:

*During construction, the project would comply with all Mojave Desert Air Quality Management District (MDAQMD) Rules and Regulations regarding construction materials and methods identified in the region's Air Quality Management Plan (AQMP). For example, all site disturbance activities would comply with Rule 403 (Fugitive Dust) requirements for fugitive dust suppression. In addition, the project will implement the Caltrans' construction requirements specified in Caltrans' Standard Specifications, Section 7-1.01F (Air Pollution Control). Avoidance, minimization, and/or mitigation measures have been incorporated into the proposed project to ensure that state and federal ambient air quality standards would not be exceeded.*

Additionally, on page 4-9 of the Final EIR/EIS:

*Construction odors resulting from the construction of the proposed project are not likely to affect a substantial number of people due to the fact that construction activities do not usually emit offensive odors.*

The findings of the Final EIR/EIS remain valid for the Proposed Plan as compliance with the MDAQMD rules and regulations will be required. The Proposed Plan does not anticipate emittance of offensive odors as such odors are not identified as being associated with the proposed mining activities. The following mitigation measures are included in the Final EIS/EIR and will be implemented by the Project Proponent as applicable to minimize potential impacts related to air quality:

#### **Mitigation Measure AQ-1**

*Measures to reduce exhaust emissions specified in Section 7-1.01F (Air Pollution Control-Caltrans) shall include the following:*

- *Maintain and operate construction equipment to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would have their engines turned off when not in use to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.*
- *Properly tune and maintain all equipment in accordance with the manufacturer's specifications.*

- *Use electricity from power poles rather than temporary diesel- or gasoline-powered generators if and/or where feasible.*
- *Use on-site mobile equipment powered by alternative fuel sources (i.e., methanol, natural gas, propane, butane) as feasible.*
- *Develop a construction traffic management plan that includes (1) consolidating truck deliveries; (2) providing a rideshare or shuttle service for construction workers; and (3) providing dedicated turn lanes for construction trucks and equipment on- and off-site.*
- *Use solar-powered changeable message sign.*

## **Mitigation Measure AQ-2**

*Measures to reduce particle emissions specified in MDAQMD Rule 403.2 (Fugitive Dust Control) include the following:*

*The owner or operator of any construction/demolition source shall:*

- *Use periodic watering for short-term stabilization of disturbed surface areas to minimize visible fugitive dust emissions. For purposes of this rule, use of a water truck to moisten disturbed surfaces and actively spread water during visible dusting episodes shall be considered adequate to maintain compliance.*
- *Take actions to prevent project-related trackout onto paved surfaces.*
- *Cover loaded haul vehicles while operating on publicly maintained paved surfaces.*
- *Stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than 30 days, except when such a delay is due to precipitation that dampens the disturbed surface enough to eliminate visible fugitive dust emissions.*
- *Clean up project-related trackout or spills on publicly maintained paved surfaces within 24 hours.*
- *Reduce nonessential earthmoving activity under high wind conditions. For purposes of this rule, a reduction in earthmoving activity when visible dusting occurs shall be considered enough to maintain compliance.*

The Air Quality Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts to air quality as compared to the original Project.

## **Climate Change**

The Final EIR/EIS discusses Climate Change and Greenhouse Gases in Section 4.3 at the State and Federal level. The County of San Bernardino adopted a Greenhouse Gas Emissions (GHG) Reduction Plan (September 2011; updated March 2015) (GHG Plan). The GHG Plan presents a comprehensive set of actions to reduce the County's GHG emissions to 15% below 2007 levels by 2020, consistent with the AB 32 Scoping Plan. GHG emissions impacts are assessed through the GHG Development Review Process (DRP) by applying appropriate reduction requirements as part of the discretionary approval of new development projects. Through its development review process, the County implements CEQA requiring new development projects to quantify project GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. A review standard of 3,000 MTCO<sub>2e</sub> per year is used to identify projects that require the use of Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions.

### SR-58 Kramer Junction Expressway Project (Overall Highway Project)

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improving the transportation system and operational efficiencies, 2) reducing travel activity, 3) transitioning to lower GHG-emitting fuels, and 4) improving vehicle technologies/efficiency.

To be most effective all four strategies should be pursued cooperatively. Caltrans and its parent agency, the California State Transportation Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 40 percent of all human-made GHG emissions are from transportation, Caltrans created and is implementing the Climate Action Program that was published in December 2006. One of the main strategies in the Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0–25 miles per hour [mph]) and speeds over 55 mph; the most severe emissions occur from 0–25 miles per hour.

The purpose of the Project is to alleviate existing and future traffic congestion along SR-58 during peak hours. The Project would not generate new vehicular traffic trips since it would not construct new homes or businesses. In addition, the SR-58 improvements would reduce congestion and improve Levels of Service (LOS). Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors would lead, in general, to reductions in GHG emissions.

In addition, vehicle fuel economy is increasing and near zero carbon vehicles will come into the market during the design life of this project. The greater percentage of alternative fuel vehicles on the road in the future will reduce overall GHG emissions as compared to scenarios in which vehicle technologies and fuel efficiencies do not change. California has recently adopted a low-carbon transportation fuel standard in 2009 to reduce the carbon intensity of transportation fuels by 10 percent by 2020.

The following measures from the Final EIR/EIS will also be included in the Proposed Plan's conditions to reduce the GHG emissions and potential climate change impacts from the overall Project:

1. Caltrans and the California Highway Patrol are working with regional agencies to implement intelligent transportation systems (ITS) to help manage the efficiency of the existing highway system. ITS commonly comprise electronics, communications, or information processing used singly or in combination to improve the efficiency or safety of a surface transportation system.
2. Landscaping reduces surface warming and through photosynthesis, decreases CO<sub>2</sub>. The Project proposes planting in the intersection slopes and drainage channels and seeding in areas next to frontage roads. Plants will vary in size, making sure that views are not obstructed.
3. The Project would incorporate the use of energy-efficient lighting along proposed ramps. LED bulbs installed by Caltrans have reduced energy associated with traffic signal lighting by about 80 percent from traditional incandescent traffic signals. This also helps reduce the project's CO<sub>2</sub> emissions. Indirect emissions from electricity use will continue to decline in the future as policies such as the state's renewable portfolio standards implemented.
4. According to Caltrans' Standard Specification Provisions, idling time for lane closure during construction is restricted to ten minutes in each direction; in addition, the contractor must comply with MDAQMD rules, ordinances, and regulations in regard to air quality restrictions.

#### Kramer Junction Borrow Pit (Proposed Plan)

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

Three gases are currently evaluated due to typical combustion and operational sources; carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Nitrous oxide is not of concern due its very low emissions from this type of operation and methane is included but is also a very minor contributor.

The Proposed Plan is part of the construction process for the SR-58 Kramer Junction Expressway Project. The Proposed Plan's GHG emissions are entirely related to mobile equipment (refer to Table 3). No processing equipment will be used on-site. GHG emissions were estimated using

the CARB - SCAQMD's Off-road Model - Mobile Source Emission Factors (<http://www.aqmd.gov/ceqa/handbook/offroad/offroad.html>); and Emission Factors for On-Road Heavy-Heavy Duty Diesel Trucks (EMFAC 2012; SCAQMD 2015 for year 2018); These factors are state-wide factors and are appropriate for this project.

Table 3 below lists the estimated mobile construction GHG emissions assuming 300 days of construction for up to three years. A screening threshold of 3,000 MTCO<sub>2e</sub> per year has been adopted by the County as potentially significant to global warming. The Proposed Plan's GHG emissions of 1,790.2 metric tons of carbon dioxide equivalent (MTCO<sub>2e</sub>) per year would not exceed the County's annual threshold. Note that construction emissions for a project may be spread over the lifespan of the overall Project life, in this case the 40-year life of the highway. This further reduces the annual emissions to 134.3 MTCO<sub>2e</sub>.

**Table 3**  
**Greenhouse Gas Construction Emissions**  
**Tons Per Year**

Source/Phase	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
Lube Truck	1,040	0.0508	Negl
Haul Trucks	421	0.0062	Negl
Wheel Loader	1,930	0.0970	Negl
Excavator	4,680	0.1210	Negl
D9 Dozer	2,350	0.1630	Negl
Water Truck	1,040	0.0596	Negl
Grader	604	0.0420	Negl
Scraper	1,048	0.0888	Negl
Sub-Total Pounds/Day	13,113	0.63	---
MTCO <sub>2e</sub> / Year	1,788.1	2.14	---
<b>Total MTCO<sub>2e</sub> / Year</b>	<b>1,790.2</b>		
<b>Total MTCO<sub>2e</sub> per year / 40-yr lifespan</b>	<b>134.3</b>		
San Bernardino County Screening Threshold	<b>3,000</b>		
<b>Significant?</b>	<b>No</b>		

Source: SCAQMD Off-road Mobile Source Emission Factors 2018 and SCAQMD On-Road Heavy-Heavy Duty Diesel Trucks Emission Factors 2018; MTCO<sub>2e</sub> factors: CH<sub>4</sub> x 25  
Construction Period: 300 Days/year for three years

Mitigation Measure AQ-1 above includes several measures that will also reduce GHG emissions. These are related to maintaining equipment in accordance with manufacturer's specifications and reducing idling times. As noted in the County GHG Plan, projects that do not exceed 3,000 MTCO<sub>2e</sub> are considered to be consistent with the County GHG Plan and determined to have less than a cumulatively considerable impact for GHG emissions with implementation of conditions listed below. The operator will be required to implement air quality mitigation measures that also reduce GHG emissions. These measures correspond to GHG reducing performance standards developed by the County in the GHG Plan and are listed below. To reduce GHG emissions, projects that emit 3,000 MTCO<sub>2e</sub> per year or less are considered to have less than significant impacts to climate change if they include the following performance standards as conditions of approval:

- *Waste Stream Reduction: recycling at least 75% of waste normally sent to landfills. This condition is not applicable for the Proposed Plan. The Proposed Plan is the development and utilization of fill material from an area directly adjacent to the new highway alignment instead of mining new material from a more distant location, reducing emissions from truck transportation.*
- *Vehicle Trip Reduction: This project demonstrates significant trip reduction because it is located adjacent to the new highway alignment.*
- *Water Conservation: The Proposed Plan will only use water for required dust control measures.*
- *Providing Education Materials: Provide employees and staff educational materials about reducing waste, water conservation, and ride sharing available to employees. The mine operator will provide these materials to employees. San Bernardino County Greenhouse Gas Emissions Development Review Processes (March 2015).*

The GHG assessment determined that the Proposed Plan GHG emissions would not exceed the County GHG screening threshold of 3,000 MTCO<sub>2e</sub> per year and are consistent with the County GHG Plan and to have less than a cumulatively considerable impact. Compliance and implementation of the above conditions and mitigation measures and MDAQMD rules and regulations will further reduce emissions.

### **3.3.18 Noise and Vibration**

No blasting is proposed on-site therefore, no noise and vibration impacts related to explosives shall occur as a result of the Proposed Plan.

Page 4-4 of the Final EIR/EIS states the following regarding noise and vibration:

*Temporary noise impacts during construction of the project may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans' Standard Specifications, Section 14-8.02, and, as a result, any temporary impacts would be less than significant.*

Potential impacts created by the Proposed Plan are considered temporary and construction-related and therefore the Proposed Plan shall adhere to Caltrans' Standard Specifications. The following mitigation measures are included in the Final EIS/EIR and will be implemented by the Project Proponent as applicable to avoid and minimize potential impacts related to noise and vibration:

#### **Mitigation Measure NOI-1**

*To reduce noise levels from construction to the extent that is technically feasible and avoid unnecessary annoyance from construction noise, the construction noise control measures listed below will be implemented:*

- *To the extent practicable, avoid using construction equipment or any other activity that could generate high noise levels near homes. If nighttime construction is required, the community will be advised.*
- *Place maintenance yards, batch plants, haul roads, and other construction-oriented operations in locations that would be the least disruptive to the community.*
- *Hold community meetings to explain to area residents the construction work, time involved, and control measures to be taken to reduce the impact of construction work, as appropriate.*
- *Schedule the timing and duration of construction activities to minimize noise impacts at noise-sensitive locations.*
- *As practicable, use noise-attenuating “jackets” or portable noise screens to provide shielding for pavement breaking, jack hammering, or other similar activities when work is close to noise-sensitive areas.*
- *Comply with Caltrans’ Standard Specification 14-8.02A (2010);*
  - *Do not exceed 86 dBA Lmax at 50 feet from the job site activities from 9 p.m. to 6 a.m.*
  - *Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.*

The Noise and Vibration Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts related to noise and vibration as compared to the original Project.

### **3.3.19 Energy**

Page 4-3 of the Final EIR/EIS states the following regarding energy:

*Construction of the proposed project would result in short-term energy consumption related to the manufacture of construction materials, the use of construction equipment, and the use of workers; motor vehicles during the construction period of the project. However, construction-related energy consumption would be finite and limited and would have an incremental impact on area energy supplies.*

Similarly, the Proposed Plan will result in a short-term increase in energy consumption due to construction-related mining, however, the increase in energy consumption would be finite and limited and would only have an incremental impact on area energy supplies. Therefore, the Energy Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have any new or more severe significant impacts to energy as compared to the original Project.

### 3.3.20 Natural Communities

The Proposed Plan site is co-dominated by spinescale saltbush (*Atriplex spinifera*) and white bursage (*Ambrosia dumosa*). Other shrub species include burrobush (*Ambrosia salsola*), winter fat (*Krascheninnikovia lanata*), Mojave cottonthorn (*Tetradymia stenolepis*), and all-scale (*Atriplex polycarpa*). No natural communities of special concern (as listed in the California Natural Diversity Database (CNDDDB)) are present.

Although the Proposed Plan is not anticipated to result in impacts to natural communities, potential impacts to animal species and listed species are discussed and mitigated for in the following sections. The Natural Communities Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have any new or more severe significant impacts to natural communities as compared to the original Project.

### 3.3.21 Wetlands and Other Waters

No federal or state jurisdictional waters are present on the Proposed Plan site and no drainages are intersected by the proposed excavation area. Although the Proposed Plan Site is not anticipated to impact any federal or state jurisdictional waters, the Project Proponent shall implement the following Final EIS/EIS mitigation measure, as applicable to avoid and minimize potential impacts related to wetlands and other waters:

#### **Mitigation Measure BIO-2**

*Water Pollution Control: Avoidance and minimization measures to be utilized in order to protect aquatic resources during the course of the project will include the implementation of BMPs (Department 2003a) and the Storm Water Pollution Prevention Plan (SWPPP) (Department 2003b) during all phases of construction.*

The Wetlands and Other Waters Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts related to wetlands and other waters as compared to the original Project.

### 3.3.22 Plant Species

The Proposed Plan Site consists of atriplex (saltbush or spinescale) scrub co-dominated by spinescale saltbush and white bursage. Other shrub species include burrobush, winter fat, Mojave cottonthorn, and all-scale. The Proposed Plan includes a revegetation plan to meet SMARA requirements which will implement a series of activities to revegetate portions of the site after completion of mining operations. Physical reclamation procedures will include regrading to achieve planned slopes of 3H:1V, ripping compacted surfaces to a depth of about one-foot to hold moisture, adding stockpiled surface material containing banked seeds in “islands” to a depth up to one-foot deep, seeding or hydro-seeding with commercially available native seeds, and staking or flagging reclaimed areas to eliminate additional disturbance. A representative description of the Proposed Plan’s revegetation is provided by the Revegetation Plan for the SR-59 Kramer Junction Expressway Project Kramer Junction Borrow Pit which was prepared by

Jericho Systems Incorporated in October 2017 for the first Kramer Junction Borrow Pit located just east of Boron.

The Project Proponent shall implement the following Final EIS/EIS mitigation measures as applicable to protect the special-status plants that could be present:

**Mitigation Measure BIO-6**

*Preconstruction surveys for rare plants will be conducted by a qualified biologist during the appropriate blooming period. Any plants identified will be flagged and avoided, if feasible.*

**Mitigation Measure BIO-7**

*The project design will avoid impacts to special-status plants to the extent feasible.*

**Mitigation Measure BIO-8**

*Temporary Fence (Type ESA). ESA fencing will be established around those populations of special-status plants that are to be protected in place to prohibit all construction activities and access from impacting the rare plant populations within the project area.*

**Mitigation Measure BIO-9**

*Seeds will be collected from all those plant populations deemed appropriate for seed relocation if suitable habitat is available.*

**Mitigation Measure BIO-10**

*Biological Monitor. A qualified biological monitor will monitor construction activities to ensure avoidance of any construction-related impacts to special status plant species.*

**Mitigation Measure BIO-11**

*Species Protection Measures will be made to ensure that temporary staging areas, storage areas, and access roads involved with this project will occur in the area of permanent direct impact. Access to the project site will be gained from the existing SR-58. No new access roads will be built as part of this project accept what was analyzed on project maps (refer to Area 6 – Kramer Services Parcel). Staging areas and equipment storage will take place on existing right-of-way of the realigned SR-58.*

**Mitigation Measure BIO-12**

*Joshua trees within the direct impact area with a circumference of 50 inches measured at four feet, measuring 15 feet high, or occurring in a cluster of 10 or more within close*

*proximity to each other will be transplanted or stockpiled for future transplanting to the extent feasible. Joshua trees will be shown on the plans for avoidance or transplanting.*

### **Mitigation Measure BIO-13**

*An Environmentally Sensitive Area (ESA) will be established around all Joshua trees within the project area that are to be protected in place, as shown on plans. To prohibit all construction activities and access from impacting the Joshua trees within the project area, temporary ESA fencing would be placed around the Joshua trees.*

The Plant Species Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts related to plant species as compared to the original Project.

### **3.3.23 Animal Species (Non-Listed Special Status Animals)**

The Final EIR/EIS considers all direct impacts to non-listed special-status animals as permanent and therefore no analysis of potential temporary impacts occurred.

Six non-listed special-status animals are known to occur in the general region, and four have the potential to occur within the Proposed Plan site. These four are burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), Le Conte's thrasher (*Toxostoma lecontei*), and American badger (*Taxidea taxus*). Potential habitat for the other two species, prairie falcon (*Falco mexicanus*) and silver-haired bat (*Lasionycteris noctivagans*), is not present in the Proposed Plan site.

The Project Proponent shall implement the following Final EIS/EIS mitigation measures, as applicable to protect the non-listed special-status animals that could be present:

### **Mitigation Measure BIO-14**

*A preconstruction survey of the project site for burrowing owl will be conducted; the time lapse between surveys and site disturbance will be as short as possible and will be determined based on consultation with CDFW but will not exceed 7 days prior to commencing construction activities.*

### **Mitigation Measure BIO-15**

*Species Protection. Measures will be implemented to ensure that temporary staging areas, storage areas, and access roads for this project will occur in the area of permanent direct impact. Access to the project site will occur in the area of permanent direct impact.*

### **Mitigation Measure BIO-16**

*Species Protection: If burrowing owls are found on-site during the preconstruction sweep:*

- *Occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a biologist can verify through non-invasive methods that either the owls have not begun egg laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent flight.*
- *A Burrowing Owl Mitigation and Monitoring Plan will be submitted to CDFW for review and approval.*
- *All relocation shall be approved by CDFW.*

### **Mitigation Measure BIO-17**

*If, during preconstruction surveys, a burrowing owl is encountered, habitat compensation will be assessed and coordinated with CDFW during preparation of the Burrowing Owl Mitigation and Monitoring Plan.*

*Appropriate mitigation lands for burrowing owl will be determined during preparation and CDFW agency approval of the Burrowing Owl Mitigation and Monitoring Plan. CDFW may allow the mitigation lands acquired following the above mitigation ratios to account for more than just burrowing owl, if species-specific habitat criteria are met in the habitat acquisition proposal. As provided in CDFW (2012) the mitigation for permanent habitat loss necessitates replacement with an equal or greater habitat area.*

### **Mitigation Measure BIO-18**

*To avoid any impacts to migratory birds (including loggerhead shrike and Le Conte's thrasher), vegetation removal must take place between September 15 and February 15 (outside of the breeding season). If, because of construction schedules, it is necessary to remove vegetation, including trees, during the breeding season (February 16 through September 14), a biological construction monitor must perform a preconstruction survey of the entire area where vegetation will be removed. All measures shall be taken to minimize impacts on nesting birds. A preconstruction sweep for nesting birds will be conducted prior to construction activities outside of the nesting season as well. The sweep will include areas used for staging, storage, sign placement, or parking. If an active bird nest is detected during surveys, a nest avoidance buffer will be implemented with a radius of 100 feet or as determined by the biological monitor present during construction to monitor nest activity while still allowing construction to take place.*

### **Mitigation Measure BIO-19**

*A preconstruction survey will take place to ensure that no American badgers are located within the project limits.*

## **Mitigation Measure BIO-20**

*Biological Monitor: A qualified biological monitor will monitor construction activities to ensure avoidance of any construction related impacts on American badger.*

## **Mitigation Measure BIO-21**

*Species Protection: If a burrow occupied by badgers is found during construction, all construction activities will cease in the vicinity of the burrow, and coordination with CDFW will take place so that appropriate protective measures can be implemented.*

The Animal Species Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts related to animal species as compared to the original Project.

### **3.3.24 Threatened and Endangered Species**

The Final EIR/EIS considers all direct impacts to threatened and endangered species as permanent and therefore no analysis of potential temporary impacts was included. The Final EIR/EIS found two animal species listed as threatened under state and federal endangered species laws were found along portions of the new SR-58 alignment and have potential for occurrence in the Proposed Plan site; the desert tortoise (*Gopherus agassizii*) (federally and state Threatened) and the Mohave ground squirrel (*Xerpermophilus mohavensis*) (state Threatened).

The proposed borrow pit which consists of disturbed saltbush scrub and is impacted by past grading and fill and was deemed low quality for desert tortoise in the EIR/EIS. The site was surveyed by Caltrans biologists and no sign were detected. The site is not within critical habitat and will be further isolated by the new SR-58 alignment to the north.

Caltrans has been in contact with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) over the course of the Project's environmental review. The original Biological Opinion (BO) FWS-SB/KRN-12B0203-14F0423 dated June 30, 2014 was amended with BO FWS-SBR-12B0203-17TA0886 dated June 14, 2017. This Amendment assessed several additional impact areas including the Proposed Plan site.

The Amendment concluded that desert tortoises are highly unlikely to reside with the Proposed Plan site as the site has been heavily disturbed by past vehicular activity and excavations; and supports little to no saltbush scrub vegetation. Additionally, the Proposed Plan site is not within critical habitat of the desert tortoises and therefore, desert tortoises are highly unlikely to reside within the Proposed Plan site. Disturbance of the Proposed Plan site would not affect critical habitat of the desert tortoise or other areas important for the long-term conservation of the species with implementation of the mitigation measures below, which are included in the Final EIS/EIS, as applicable to protect threatened and endangered species that could be present.

In addition, the CDFW issued a California Endangered Species Act Incidental Take Permit No. 20181-2016-004-R6 for the SR-58 Kramer Realignment Project to Caltrans, the Permittee on

September 15, 2017. The 2081 take permit includes “Area 6” (Proposed Plan site) and covers desert tortoise and Mohave ground squirrel. The 2081 take permit’s conditions of approval require compliance and implementation of the mitigation measures in the Final EIR/EIS and conditions in the BO referenced above. The complete set of the Conditions of Approval are included in the 2018 Take Permit on file with the County and the CDFW.

## **Final EIR/EIS Mitigation Measures for Desert Tortoise and Mojave Ground Squirrel**

### **Mitigation Measure BIO-22**

*Field Contact Representative or Resident Engineer. Caltrans will assign/designate a staff response to act as the Field Contact Representative (FCR) or Resident Engineer (RE) with specific experience in the implementation of environmental compliance programs. The FCR/RE will serve as the environmental compliance monitor for the project. They will be present throughout construction period. This individual will be the liaison among the wildlife agencies, FHWA, Authorized Biologist(s), and Biological Monitor(s). The FCR/RE and Authorized Biologist will work closely together to ensure compliance with the various conditions and requirements of project permits and approvals set forth in the biological opinion and supporting plans appended to the biological assessment.*

*Caltrans’ FCR/RE will act on the advice of the Authorized Biologist(s) and Biological Monitor(s) to ensure conformance with the protective measures set forth in the biological opinion. The Authorized Biologist(s) will have the authority to immediately top any activity that is not in compliance with these conditions and/or order any reasonable measure to avoid take of an individual of a listed species. If required by an Authorized Biologist and Biological Monitor(s), Caltrans’s FCR/RE will halt all construction-related ground disturbance and other activities in areas specified by the Authorized Biologist(s)*

### **Mitigation Measure BIO-23**

*Authorized Biologists and Biological Monitors. Caltrans will review the credentials of all individuals seeking approval as Authorized Biologists prior to being submitted to USFWS to ensure the individuals possess the appropriate experience and training to serve as Authorized Biologists. Caltrans will then submit the credentials of appropriate individuals to USFWS and CDFW for approval at least 30 days prior to the time they must be in the field.*

*The Authorized Biologist will be responsible for all aspects of clearance surveys, monitoring, developing and implementing the worker environmental awareness program, contacts with agency personnel, reporting, and long-term monitoring and reporting and be present, along with approved Biological Monitors, during construction, operation, and maintenance that could affect desert tortoises. Biological Monitors will be approved and supervised by the Authorized Biologist.*

## **Mitigation Measure BIO-24**

*Pre-Construction Surveys.* Within desert tortoise habitat, Authorized Biologists will conduct pre-construction surveys of the project area including the right-of-way, staging areas, access routes, and all other construction sites. The surveys will also cover the adjacent undeveloped lands located between the existing and new alignment. Authorized Biologists will survey the right-of-way to locate tortoises and their burrows within 50 feet of the right-of-way. Transects will be no greater than 10 meters (30 feet) apart. If construction occurs during the desert tortoise active season (March 1 through October 31), or when temperatures and environmental conditions are conducive to tortoise activity as determined by an Authorized Biologist, the survey will occur within 48 hours of surface disturbance. During the inactive season (November 1 through February 28, except as noted above), when conditions are not conducive to tortoise activity as determined by an Authorized Biologist, one survey must occur within 72 hours of surface disturbance or up to five days in advance of disturbance.

The Authorized Biologist will flag all desert tortoise burrows and will only excavate burrows and move desert tortoises if project activities are likely to affect them. If a desert tortoise is moved, the Authorized Biologist will move it into appropriate habitat adjacent to the project site but will not move it more than 1,000 feet if it is an adult or 300 feet if it is a juvenile or hatchling. Following the preconstruction survey and the relocation of desert tortoises if determined necessary by the Authorized Biologist, the contractor will install permanent fencing to exclude desert tortoises from all work areas and rights-of-way, as specified in Measure BIO-29.

## **Mitigation Measure BIO-25**

*Biological Resource Information Program.* Caltrans will be responsible for ensuring that all workers at the site receive worker environmental awareness training (Worker Environmental Awareness Program [WEAP]) prior to and throughout construction. The training will be administered to all on-site personnel including surveyors, construction engineers, employees, supervisors, inspectors, subcontractors, and delivery personnel. Caltrans will implement the WEAP to ensure that project construction and operation are both conducted within a framework of safeguarding environmentally sensitive resources. The WEAP will be available to all workers on site throughout the life of the project. Multiple sessions of the presentation may be given to accommodate training all workers. The WEAP will include but will not be limited to the following:

- a. Be developed by or in consultation with the Authorized Biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species are made available to all participants;
- b. Provide an explanation of the purpose and function of the desert tortoise minimization measures and the possible penalties for not adhering to them;

- c. *Inform workers that the FCR/RE, Authorized Biologist(s), and Biological Monitor(s) have the authority to halt work in any area where there would be an unauthorized adverse impact to biological resources if the activities continued;*
- d. *Discuss general safety protocols such as hazardous substance spill prevention and containment measures and fire prevention and protection measures;*
- e. *Provide an explanation of the sensitivity and locations of the vegetation, biological resources, and habitat within and adjacent to work areas, and proper identification of these resources;*
- f. *Place special emphasis on desert tortoise and southwestern will flycatcher, including information on physical characteristics, photos, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and conservation measures required for the project;*
- g. *Provide contact information for the Authorized Biologist(s) and Biological Monitor(s) for WEAP trainees to submit late comments and questions about the material discussed in the program, as well as to report any dead or injured wildlife species encountered during project-related activities;*
- h. *Direct all WEAP trainees to report all observations of listed species and their sign to an Authorized Biologist for inclusion in the monthly compliance report;*
- i. *Include a training acknowledgement form to be signed by each worker indicating that they received training and will abide by the guidelines; and*
- j. *Provide an explanation regarding the protective measures to reduce the adverse effects associated with predation of desert tortoises by common ravens (*Corvus corax*) and other known predators of desert tortoise.*

*Only workers who have successfully completed the education program will be allowed to work on the project site.*

### **Mitigation Measure BIO-26**

*Species Protection. Caltrans will ensure that the Authorized Biologist(s) will follow the procedures for handling tortoises in the USFWS field manual (2009). Only the Authorized Biologist(s) will move desert tortoises and then solely for the purpose of moving them from harm's way. The authorized Biologist(s) will document each desert tortoise encounter/handling with the following information, at a minimum: a narrative describing circumstances; vegetation type; date; conditions and health; any apparent injuries and state of healing; if moved, the location from which it was captured and the location in which it was released; maps; whether animals voided their bladders; and diagnostic markings (that is, identification numbers marked on lateral scutes).*

*Tortoises found in the project area will be handles and relocated by an Authorized Biologist in accordance with the most current USFWS protocol in the Desert Tortoise Field Manual. Tortoises excavated from burrows must be relocated to unoccupied*

*natural or artificially constructed burrows immediately following excavation. The artificial or unoccupied natural burrows must occur 150 to 300 feet from the original burrow. Relocated tortoises will not be placed in existing occupied burrows. If an existing burrow that is similar in size, shape, and orientation to the original burrow is unavailable, the Authorized Biologist(s) would construct one. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in new burrows to ensure their safety. The Authorized Biologist(s) would be allowed some judgement and discretion to ensure that survival of the desert tortoise is likely. The relocated tortoise will be monitored during construction activities to ensure that it shelters and does not return to the right-of-way and be in harm's way.*

*Desert tortoises that are found aboveground and need to be moved from harm's way will be placed at unoccupied shelter sites including unoccupied soil burrows, spaces within rock outcrops, Caliche caves, and the shade of shrubs at 150 to 300 feet from the point of encounter. During periods of the year when desert tortoises are generally active, a Biological Monitor will monitor these individuals to ensure that they do not move back into harm's way or exhibit signs of physiological stress (e.g., gaping, foaming at the mouth). If a Authorized Biologist will immediately undertake actions to stabilize it (e.g., place it in a climate-controlled facility, shade it, lightly mist it with water); the desert tortoise will be released only after it is exhibiting normal behavior and temperatures are appropriate.*

*Whenever a vehicle or construction equipment is parked longer than two minutes within desert tortoise habitat, workers will inspect the ground around underneath the vehicle for desert tortoises prior to moving the vehicle. If the worker observes a desert tortoise, he or she will contact an Authorized Biologist or Biological Monitor. If possible, the desert tortoise will be left to move out of harm's way on its own. If the desert tortoise does not move out of harm's way within 15 minutes, an Authorized Biologist will move it out of harm's way in accordance with the handling procedures.*

*Caltrans will ensure that no project personnel will exceed a vehicle speed limit of 20 miles per hour during project activities on unpaved access roads within tortoise habitat.*

*To prevent entry by common ravens (*Corvus corax*) and other predators such as the coote (*Canis latrans*), trash will be placed in a sealed container and emptied at the close of business each day. The project area will be kept as clean of debris as possible. Each water source will be caged or netted to prevent use by ravens.*

*Caltrans will ensure that workers do not bring firearms and pets into the project area. This measure does not apply to law enforcement personnel and working dogs.*

### **Mitigation Measure BIO-27**

*Locating a Dead or Injured Tortoise. The Authorized Biologist will notify USFWS within 24 hours upon located a dead or injured desert tortoise during construction, operation,*

*and maintenance of the project. The notification will be made by telephone and in writing or by electronic mail to BLM and USFWS. The report will include the date and time of the finding or incident (if known), location of the carcass, a photograph, cause of death (if known), and other pertinent information. Caltrans will submit desert tortoises that are fatally injured during project-related activities for necropsy, at its expense, as outlined in Berry (2001).*

*Locating a Dead or Injured Tortoise. The Authorized Biologist will notify USFWS within 24 hours upon located a dead or injured desert tortoise during construction, operation, and maintenance of the project. The notification will be made by telephone and in writing or by electronic mail to BLM and USFWS. The report will include the date and time of the finding or incident (if known), location of the carcass, a photograph, cause of death (if known), and other pertinent information. Caltrans will submit desert tortoises that are fatally injured during project-related activities for necropsy, at its expense, as outlined in Berry (2001).*

### **Mitigation Measure BIO-28**

*Designated Areas. Caltrans will confine all project activities to the right-of-way, approved access roads, and storage areas. All storage areas and vehicle turn-around locations will use previously disturbed habitat as much as possible and will require USFWS approval prior to the initiation of project activities. Caltrans will restrict project vehicles to the right-of-way, designated areas, or existing roads and will prohibit off-road or cross-country travel except in emergencies. Caltrans will not create any new dirt or paved roads. The project construction boundaries will be clearly delineated with fencing, skates or flagging. If unforeseen circumstances require disturbance beyond the project right-of-way, Caltrans will notify USFWS immediately.*

*Caltrans will ensure that the Authorized Biologist or Biological Monitor will inspect any open trenches or excavations within project work sites at least three times daily and prior to backfilling. If a desert tortoise is located within an open trench, a USFWS-authorized biologist will remove it. Project personnel will cover open trenches or excavations with metal plates if they are left open overnight or on the weekend to prevent desert tortoises from entering them.*

### **Mitigation Measure BIO-29**

*Permanent Fence. Following preconstruction surveys and the relocation of desert tortoises if determined necessary by the Authorized Biologist but prior to the start of construction, Caltrans will require the contractor to install permanent fencing to exclude desert tortoises from all work areas and rights-of-way under the direction of an Authorized Biologist. Caltrans will construct the fence according to the protocols provided in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009). If desert tortoises are encountered during installation of the fence, the Authorized Biologist will move the individual the shortest distance possible to an area outside the fence where it will be safe. The Authorized Biologist will use his or her judgement regarding the best*

*measures to use to ensure the desert tortoise does not immediately return to the area inside of the fence. The Authorized Biologist may contact USFWS or CDFW to discuss specific situations if the need arises.*

*After the fencing is installed and before the onset of ground-disturbing activities, the Authorized Biologist will survey the area and remove all desert tortoises. The Authorized Biologist will survey the area as much as is needed to ensure that all desert tortoises have been found; generally, all desert tortoises will be considered to have been removed once a complete survey of the work area is conducted without finding any additional animals. Desert tortoises that are found inside the fenced area will be placed on the other side of the desert tortoise exclusion fence. The authorized Biologist will use his or her best judgement to determine the optimal location for placement of desert tortoises. In general, desert tortoises will be moved to the nearest safe area south of the road alignment.*

*Caltrans will maintain the integrity of the fence to ensure that desert tortoises are excluded from the work area during construction and from the roadway thereafter. The fence will be inspected regularly; initially, it will be inspected on a monthly basis, but Caltrans may adopt a different schedule, based on experience. Caltrans will inspect and, if necessary, repair the fence immediately after any rainstorm that occurs during times of the year or at temperatures when desert tortoise are likely to be active.*

### **Mitigation Measure BIO-30**

*Construction Monitoring. An appropriate number of Authorized Biologists and Biological Monitors will be available during construction for the protection of desert tortoise. Authorized Biologists will be assigned to monitor each area of activity where conditions exist that may result in take of desert tortoise (e.g., clearing, grading, re-contouring, restoration activities).*

*The Biological Monitor will survey ahead of the project activities and halt construction if he or she finds a desert tortoise in the path of construction equipment. Project activities will not resume until the desert tortoise moves out of harm's way of the Authorized Biologist has relocated it.*

*An Authorized Biologist or Biological Monitor will inspect all excavations that are not within desert tortoise exclusion fencing on a regular basis (several times per day) and immediately prior to filling of excavation. If project personnel discover a desert tortoise in an open trench, an Authorized Biologist will move it to a safe location in accordance with the Desert Tortoise Field Manual (2009).*

### **Mitigation Measure BIO-31**

*Biological Monitor. A qualified biological monitor will monitor construction activities to ensure avoidance of any construction activities related to Mohave ground squirrel (MGS).*

### **Mitigation Measure BIO-32**

*Biological Resource Information Program. MGS Awareness Training will be provided and integrated with WEAP Training prior to construction.*

### **Mitigation Measure BIO-33**

*Species Protection. If any MGS are injured or killed during the course of construction, work must stop in the immediate area, the animal must be left in place as is, and the project monitor and the Resident Engineer will be immediately notified. Only the authorized biologist will handle and transport the animal to a qualified veterinarian.*

Furthermore, lands are to be acquired by Caltrans to mitigate the effects of the Project on the desert tortoise and the Mohave ground squirrel and will also mitigate any potential effect to migratory bird species. In Mitigation Measure BIO-34 through BIO-36 (listed below), which are included in the Final EIR/EIS, Caltrans, CDFW, and USFWS have agreed to mitigate affected areas of the overall Project at specific compensation ratios of 5:1 to 3:1 depending on location and habitat for both the desert tortoise and the Mojave Ground Squirrel. The areas of compensation take into account the Proposed Plan site.

### **Mitigation Measure BIO-34**

*Caltrans, CDFW, and USFWS agreed to mitigate affected areas east of Fornessa Road with a mitigation ratio of 5:1, including the critical habitat areas east of US-395. Due to habitat quality, all areas west of Fornessa Road will be mitigated at a ratio of 3:1. The total impact area to be mitigated is shown in Table 3.21-2 in Section 3.21.3.1 (of the Final EIR/EIS). Alternative 3 is the alternative that would require most mitigation for desert tortoise, followed by Alternative 1 and Alternative 1A. Since Alternative 2 is located within more previously disturbed areas, and areas already mitigated by previous projects, it is the alternative that would require less mitigation for this project. These mitigation ratios are combined with the mitigation ratios for the MGS.*

### **Mitigation Measure BIO-35**

*In coordination with CDFW and USFWS, two oversized culverts, east and west of US-395, will be installed as part of the project. These culverts will be a minimum of 6 feet tall and 10 feet wide.*

### **Mitigation Measure BIO-36**

*Similar to compensatory mitigation for desert tortoises, Caltrans and CDFW have agreed to mitigate affected areas east of Fornessa Road with a mitigation ratio of 5:1. Due to habitat quality all areas west of Fornessa Road will be mitigated at a ratio of 3:1. The total impact area to be mitigated is disclosed on Table 3.21-2 in Section 3.21.2.1 (of the Final EIS/EIR). Alternative 3 is the alternative that would require most mitigation for*

*MGS, followed by Alternative 1 and Alternative 1A. Since Alternative 2 is located within ore previously disturbed areas, and areas already mitigated by previous projects, it is the alternative that would require less mitigation for this project. These mitigation ratios are combined with the mitigation ratios for desert tortoise.*

The Threatened and Endangered Species Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts related to threatened and endangered species as compared to the original Project.

### **3.3.25 Invasive Species**

Page 3.22-2 of the Final EIR/EIS states the following regarding permanent impacts associated with invasive species:

*Roads have been identified as potential avenues for the spread of invasive and exotic plants. Post-construction bare ground can serve as a breeding ground for invasive plant species. During construction activities, construction vehicles may transport invasive plant species from past work sites to the study area, or between work areas within the study area. The potential for adverse effects to natural open spaces from the introduction of invasive species from the proposed build alternatives is a possibility and potential impacts could be severe.*

Therefore, the Project Proponent shall implement the following Final EIS/EIS mitigation measures, as applicable to reduce potential impacts from the introduction of invasive species during construction:

#### **Mitigation Measure BIO-38**

*Measures to minimize the introduction or spread of nonnative species would include cleaning all equipment and vehicles with water (or another Caltrans approved method) to remove dirt, seeds, vegetative material, or other debris before entering and upon leaving the project site and the removal and disposal off site of existing nonnative species within the project area.*

#### **Mitigation Measure BIO-39**

*Landscaping and erosion control measures proposed during the Project will not contain invasive species in the plant selections or seed mixtures.*

In addition to the mitigation measures listed above, Mitigation Measures AES-4, AES-6, AES-8, and AES-9 (listed in Section 3.3.10 of this Amendment) will also be incorporated to reduce potential impacts from the introduction of invasive species during construction, in accordance with the Final EIR/EIS. The Invasive Species Section of the Final EIR/EIS remains accurate and is unchanged by this Addendum. The Proposed Plan will not have new or more severe significant impacts related to invasive species as compared to the original Project.

### 3.3.26 Summary

**Table 5**  
**Comparison of Environmental Findings for the Original**  
**Project and the Proposed Plan**

<b>Environmental Issue</b>	<b>Original Project</b>	<b>Proposed Plan</b>
Land Use	Less than Significant	Less than Significant
Parks and Recreation	No Impact	No Impact
Growth	Less than Significant	Less than Significant
Farmlands and Timberlands	No Impact	No Impact
Community Cohesion/Character	Less than Significant with Mitigation	Less than Significant with Mitigation
Relocations	Less than Significant with Mitigation	Less than Significant with Mitigation
Public Services	Less than Significant	Less than Significant
Utilities and Service Systems	Less than Significant with Mitigation	Less than Significant with Mitigation
Traffic	Less than Significant with Mitigation (for construction impacts only)	Less than Significant with Mitigation (for construction impacts only)
Visual/Aesthetics	Significant and Unavoidable	Significant and Unavoidable
Cultural Resources	Less than Significant with Mitigation	Less than Significant with Mitigation
Hydrology and Floodplains	Less than Significant with Mitigation	Less than Significant with Mitigation
Water Quality	Less than Significant with Mitigation	Less than Significant with Mitigation
Geology/Soils/Seismic/ Topography	Less than Significant with Mitigation	Less than Significant with Mitigation
Paleontology	Less than Significant with Mitigation	Less than Significant with Mitigation
Hazardous Waste/Materials	Less than Significant with Mitigation	Less than Significant with Mitigation
Air Quality	Less than Significant with Mitigation	Less than Significant with Mitigation
Noise and Vibration	Less than Significant with Mitigation	Less than Significant with Mitigation
Energy	Less than Significant	Less than Significant
Natural Communities	Less than Significant with Mitigation	Less than Significant with Mitigation
Wetlands and Other Waters	Less than Significant with Mitigation	Less than Significant with Mitigation
Plant Species	Less than Significant with Mitigation	Less than Significant with Mitigation
Animal Species	Less than Significant with Mitigation	Less than Significant with Mitigation
Threatened and Endangered	Less than Significant with Mitigation	Less than Significant with Mitigation
Invasive Species	Less than Significant with Mitigation	Less than Significant with Mitigation

## 4.0 ALTERNATIVES

As explained in the Section 3 and shown in Table 5 of this Addendum, the Proposed Plan will not have new or more severe significant impacts as compared to the original Project. This Addendum supplements the information provided in the Final EIR/EIS but does not alter its conclusions or require the evaluation of additional alternatives. Furthermore, Caltrans concluded

in their NEPA/CEQA Re-Validation Form that the Final EIR/EIS for the SR-58 Kramer Junction Expressway Project remains valid with implementation of project design and mitigation measures for the potential impacts of the Kramer Junction Borrow Pit 2 area.

## **5.0 CEQA REQUIRED CONCLUSIONS**

The discussion of the environmental topics in the Final EIR/EIS as listed in Table 5 above remains accurate and is unchanged by this Addendum. Pursuant to Section 15162 of the CEQA Guidelines, a subsequent EIR is not required for the Proposed Plan because:

(1) Substantial changes have NOT been proposed in the original Project that will require major revisions of the Final EIR/EIS due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes have NOT occurred with respect to the circumstances under which the Project is undertaken that will require major revisions of the Final EIR/EIS due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(3) There is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the Final EIR/EIS was certified, that shows any of the following: (a) that the Project will have one or more significant effects not discussed in the Final EIR/EIS, (b) that significant effects previously examined will be substantially more severe than shown in the Final EIR/EIS, (c) that mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the Project proponents have declined to implement the mitigation measure or alternative, or (d) that mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measure or alternative.

## REFERENCES

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- California Department of Fish and Wildlife. *California Endangered Species Act Incidental Take Permit No. 20181-2016-004-R6 for the SR-58 Kramer Realignment Project*. Permittee: Caltrans. September 15, 2017
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- Stantec. *Soil Survey Investigation Report. Task Order No. 34; Soil Survey for 4 Parcels. Location: 08-SBD-58-PM R0.0/R12.9 San Bernardino County, California*. Prepared for California Department of Transportation, District 8. December 2, 2016.
- U.S. Fish and Wildlife Service. *Biological Opinion for State Route 58 Kramer Junction Expressway Project, Kern and San Bernardino Counties, California (FWS-SB/KRN-12B0203-14F0423)*. June 30, 2014.
- U.S. Fish and Wildlife Service. *Amendment to the Biological Opinion (FWS-SBR-12B0203-17TA0886) for the Kramer Junction Expressway Project (FWS-SB/KRN-12B0203-14F0423)*. June 14, 2017.