LAND USE SERVICES DEPARTMENT
PLANNING COMMISSION STAFF REPORT

HEARING DATE: November 19, 2020 **AGENDA ITEM #2**

Project Description

APN:	0438-082-01
Applicant:	Nancy Sansonetti/Department of Public Works
Community:	Apple Valley/1st Supervisorial District
Location:	N 1/2 NW 1/4 NE 1/4 SEC 24 TP 4N R 3W 20 AC
Project No:	PROJ-2020-00014
Staff:	Steven Valdez, Senior Planner
App Rep:	Lilburn Corporation
Proposal:	A Proposal from the County of San Bernardino, Department of Public Works (DPW) to request the approval of a Mining Conditional Use Permit and a Reclamantion Plan (2020M-03) for the proposed Ocotillo Borrow Pit.

Vicinity Map

29 Hearing Notices Sent On: November 4, 2020 Report Prepared By: Steven Valdez

SITE INFORMATION

Project Size: 20 Acres
Terrain: Disturbed Mojave Desert Alluvial Terrain
Vegetation: Joshua Tree woodland

SURROUNDING LAND DESCRIPTION:

AREA	EXISTING LAND USE	LAND USE ZONING DISTRICT
Site	Vacant	Apple Valley / Rural Living (AV/RL-5)
North	Vacant, Well Site	Apple Valley / Rural Living (AV/RL-5)
South	Vacant	Apple Valley / Resource Conservation (AV/RC)
East	Vacant, Well Site	Apple Valley / Rural Living (AV/RL-5)
West	Vacant	Apple Valley / Rural Living (AV/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 **ADOPT** THE MITIGATED NEGATIVE DECLARATION, **APPROVE** THE MINING CONDITIONAL USE PERMIT AND RECLAMATION PLAN 2020M-02 SUBJECT TO THE ATTACHED CONDITIONS AND INCORPORATED MITIGATION MEASURES, **ADOPT** THE RECOMMENDED FINDINGS, AND **FILE** THE NOTICE OF DETERMINATION.

Figure 1
REGIONAL LOCATION

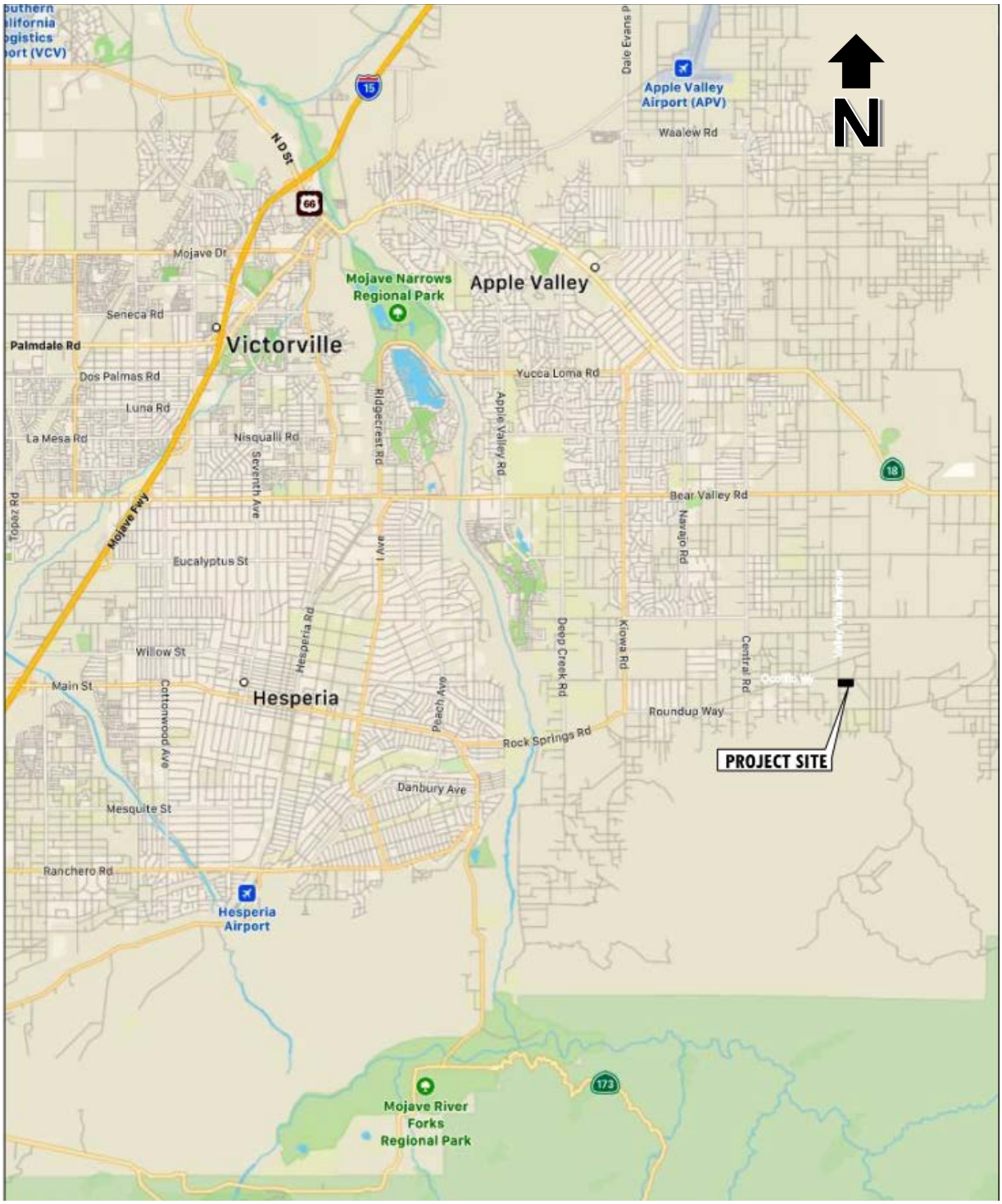

Figure 2
VICINITY MAP

Figure 3
OFFICIAL LAND USE DISTRICT & VICINITY MAP

ZONING DESIGNATION
Apple Valley Sphere of Influence / Rural Living (AV/RL)

Figure 4
MINE PLAN
Ocotillo Borrow Pit

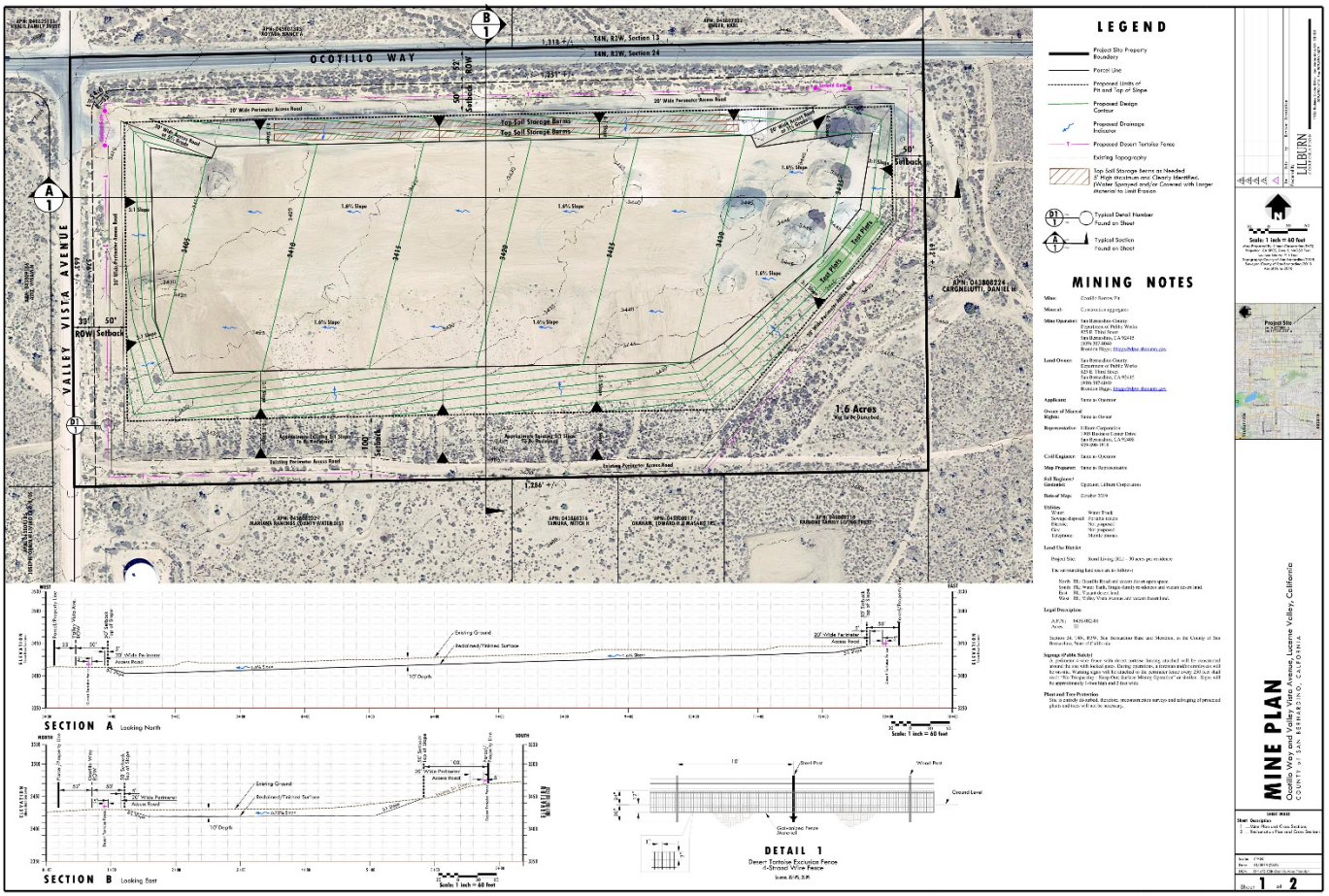

Figure 5
RECLAMATION PLAN
Ocotillo Borrow Pit

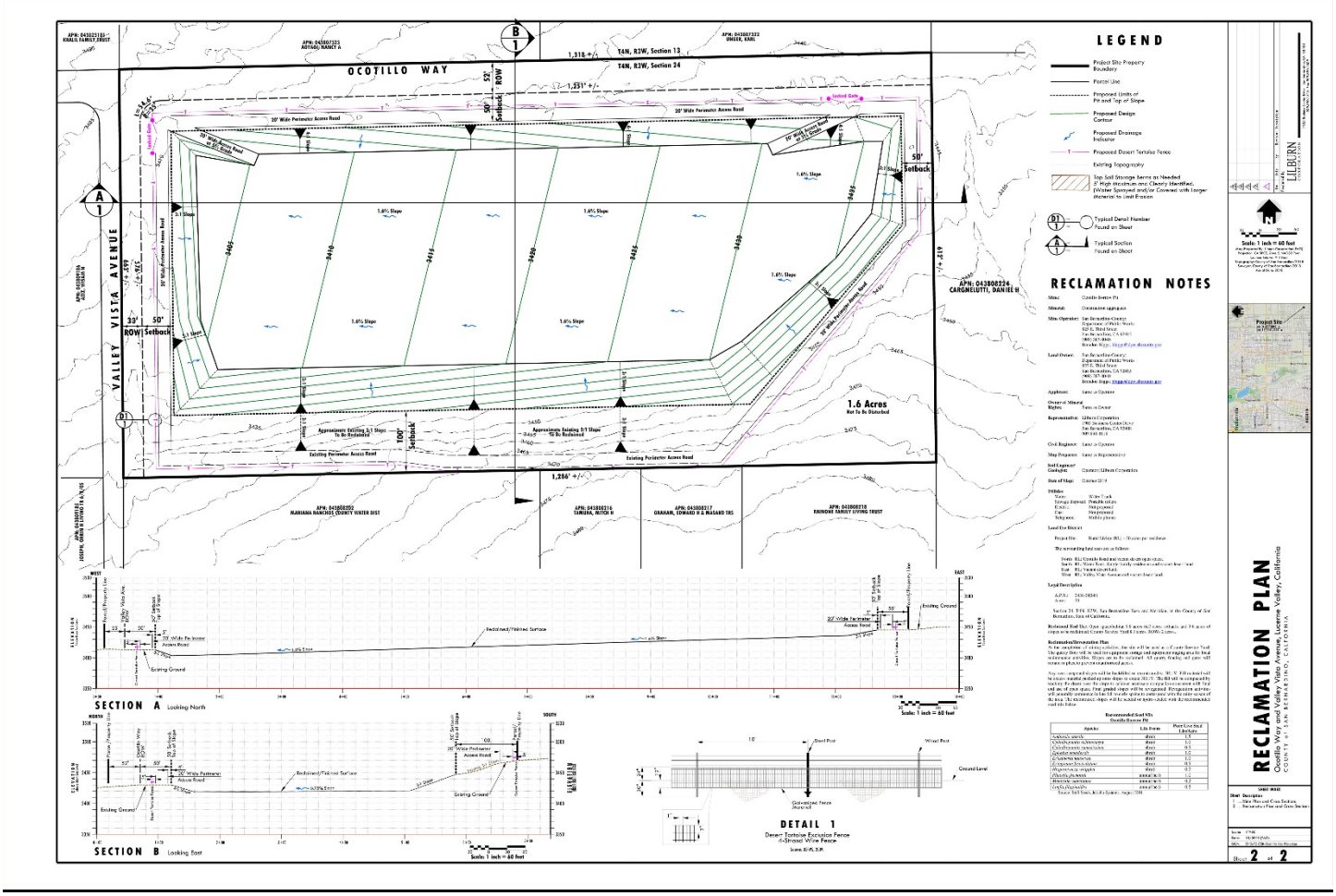

Figure 6
AERIAL SITE VIEW

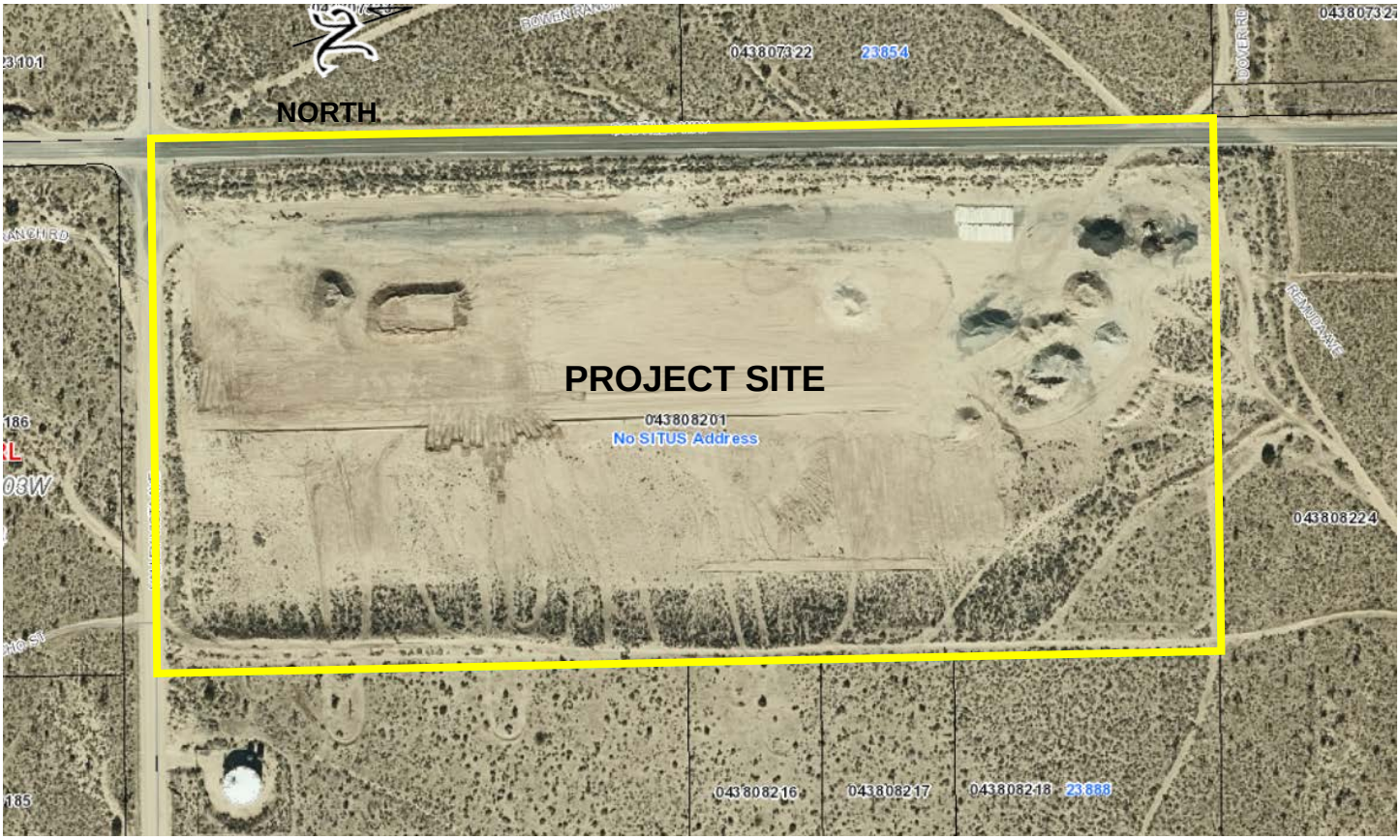

Figure 7
Photos

Photo 1. Looking down Western Site boundary along Valley Vista Ave from Ocotillo Way.

Photo 2. Looking Northwest from southern Site boundary.

Photo 3. Looking East along southern Site boundary from Valley Vista Avenue.

Photo 4. Looking northeast from southwest Corner of Site.

PROJECT DESCRIPTION AND BACKGROUND:

Project Summary

The San Bernardino County, Department of Public Works (DPW) submitted an application for a Mining Conditional Use Permit (CUP) and Reclamation Plan for the proposed Ocotillo Borrow Pit (Project). The application is to permit further development of the Ocotillo Borrow Pit, for a 100-year period, to provide general fill material for various DPW projects for annual maintenance and/or emergencies. DPW is proposing to excavate up to a depth of 15 feet with 3 horizontal to 1 vertical slopes (3H:1V), remove up to 1,000 cubic yards (cy) a year for a mining period of 100 years. The reclaimed end use of the Project site will be a material maintenance and storage yard.

Location and Site Description

The Project site is located near the northern edge of the San Bernardino Mountain foothills approximately 5.5 miles southeast of the Town of Apple Valley within the Mojave Desert. The general Project vicinity consists of rural residential housing and undeveloped open space. The habitat surrounding the Project site consists primarily of Western Joshua trees and related woodlands.

The general Project vicinity and area surrounding the Project Site consists almost entirely of undeveloped, but disturbed, open space. Joshua tree woodland dominates undisturbed areas that are largely devoid of vegetation with some native and non-native species colonizing the edges, stockpiles and other unused areas. The southeast corner of the Project site is largely undisturbed, with small patches of moderate disturbed areas along the eastern portion. Disturbances on-site are primarily due to the material removal and staging operations that have been associated with maintenance and emergency repair of San Bernardino road projects including unpaved roads, removal of materials, and material stockpiles.

Hydrologically, the Project site is within the Upper Mojave watershed; the soils on-site are solely comprised of Lucerne sandy loam. The Project site topography is relatively uniform throughout with inclined 25-foot slopes on the eastern, southern, and northern edges of the site, resulting from historical excavation and material removal of materials. Elevations on-site ranges from approximately 3,369 feet above mean sea level (amsl) at the southeastern portion of the Project site, to 3,414 feet amsl at the northwestern most portion of the site.

Mining

Mining will take place on approximately 11.7 acres of the 20-acre parcel. A 50-foot wide setback will be established on the west, south, and east side of the property. The north side of the mine area will be setback 52 feet from the centerline of Ocotillo Way right-of-way and an additional 50 feet from the south edge of the right-of-way or approximately 102 feet to buffer the borrow pit from the street. Much of the setbacks are already naturally vegetated. In addition, the undisturbed southeast corner of the Project site, which is approximately two acres in size will be avoided. The setback area is approximately 6.2 acres. An estimated 1,000 cy would be excavated annually or on an intermittent basis over the course of 100 years. Equipment storage and vehicle parking area will take place within the east portion of the excavated area.

Mining of the site is achieved with one loader, one excavator, and one dozer to break, move, and load material directly into single trailer or double truck trailers with capacity of up to approximately 10 to 25 cy (typical). A complete list of the typical equipment to be used on-site and for transport to various sites within the vicinity is included in Table 1. There will be no crushing, screening, or conveying conducted on-site. There will be no buildings or scale located on the Project site.

Slopes of 3H:1V incline up to a depth of 15 feet will be produced from excavation of the pit. 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 26 feet in width located on the north sides of the pit to allow direct access to Ocotillo Way. Once off the Project site, the street-legal transport trucks will utilize Ocotillo Way.

Truck traffic is anticipated at a rate of about 50 loads per year utilizing street-legal 20 cy trucks and in accordance with DPW project demands.

The trucks will travel on Ocotillo Way to various DPW construction sites throughout the County. To minimize dust generation, a water truck will be available on-site 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 on a regular basis and more frequently as needed during windy conditions. Water used for dust control shall be obtained from a local water supplier via a water truck (source of water attached to application). Non-paved haul roads and access roads will be dust controlled by adding road base material to the non-paved roads, as needed.

Reclamation

The Mine Reclamation Plan 2020M-03 (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, ("SMARA"), an inspection monitoring program and financial assurances will be required to ensure compliance and reclamation is completed in accordance with the approved Reclamation Plan.

Reclamation is designed to minimize environmental impacts from mining operations by reclaiming the site to a beneficial, usable, post-mining condition. End uses include open space/habitat or re-establishing the prior land use as allowed by the Development Code. 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.

Reclamation of the Borrow Pit will be concurrent and finished at the completion of mining operations. Any over-steepened slopes will be partially backfilled or re-contoured 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 DWP material that is used at the County's maintenance and storage yard. Any rock or gravel on the roads to be reclaimed will be removed and used as fill in the pit area. Final graded slopes will be revegetated. The pit floor, storage areas, and access roads are to remain. The re-contoured slopes will be seeded with the recommended seed mix in this Reclamation Plan.

The revegetation plan will implement a series of activities to revegetate portions of the site after completion of mining operations. All slopes (approximately 3.6 acres) will be reclaimed and revegetated. The Project Site is a relatively barren due to past grading, lack of topsoil and very dry conditions.

Physical reclamation procedures will include regrading to achieve planned slopes of 3H:1V as needed; ripping compacted surfaces to a depth of about 1.5 feet allow the material to hold moisture; adding available stockpiled surface material containing banked seeds that will be spread out evenly over the site to a depth up to one-foot deep; seeding with commercial available native seeds; and staking or flagging reclaimed areas to eliminate additional disturbance.

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 Apple Valley, Rural Living (AV/RL) Land Use District. Final reclamation should be completed approximately four years following termination of mining activities, which is anticipated by 2121. 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 Ocotillo Borrow Pit is located within the Apple Valley, Rural Living (AV/RL) Land Use District. This zoning district allows for mineral resource development (mining), subject to approval of a Mining CUP by the County Planning Commission, and the Project meets applicable County Development Code requirements and findings. All properties adjacent to and within the vicinity of the Project are also zoned Apple Valley, Rural Living (AV/RL). The future Countywide Plan, Policy Plan Land Use Category for the Project Site will be Rural Living (RL). The resolution adopting the Countywide Plan authorizes an applicant to develop a property based on the current Land Use Zoning District until an updated Zoning Map is approved. Therefore, the Project will be consistent with both the current General Plan and future Countywide Plan, Policy Plan. Project-specific Conditions of Approval have been included as Exhibit B.

Site operations will be conducted as needed intermittently primarily between 5:30 am until 8 pm, up to 6 days per week. Occasionally operations may be conducted up to seven days per week depending on construction and road maintenance needs. All refuse shall be disposed of into approved trash bins and removed by the operator or a commercial vendor. Portable toilets will be used on-site when in operation and serviced by a commercial vendor. Bottled water will be provided to employees for a supply of drinking water as needed.

Mine Waste: Although the Project site has been 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 to be created; therefore, no method is required or planned for handling or storage 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 Project Site following standard regulations. No used fluids will be stored on-site.

Ore Processing: The borrow pit material will be loaded directly into trucks for transport to DWP sites. 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

Adjacent Land Uses: There are no residential uses in the vicinity of the Project site (See Figure 2). Protective mitigation measures are included in the Mine Reclamation Plan and the Project Conditions of Approval.

Truck Traffic and Dust Control: Truck traffic is anticipated to enter and leave the Project site at a rate of about 50 loads per year based on street-legal 20 cy trucks and DPW project demand. The trucks will travel on Ocotillo Way to DPW project sites. To minimize dust generation, a water truck will be retained for use during excavations and loading of haul trucks. The mine operator shall water spray working mine areas and access roads onsite on a regular basis and more frequently as needed during windy conditions. Water used for dust control shall be obtained from a local water supplier via a water truck (source of water attached to application). Non-paved haul roads and access roads will also be dust controlled by covering them with 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 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.

Water Production: 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 4,000 gallons of water a day (6 to 20 days a year) may be used for dust suppression activities. The 4,000-gallon water truck will be filled at a designated water hydrant at the Mojave Water Agency facility. It is not anticipated that there will be any excess water run-off from the wetting-down procedure; therefore, no water recycling is anticipated to be required. The County has a Memorandum of Understanding (MOU) with the Mojave Water Agency relative to obtaining the needed water for the mine site.

California Environmental Quality Act

An Initial Study (IS) has been completed in compliance with the California Environmental Quality Act (CEQA). The IS concludes that the Project will not have a significant adverse impact on the environment with the implementation of recommended Conditions of Approval and mitigation measures contained in the IS, which have been incorporated in the Conditions of Approval (Exhibit D). A Notice of Availability/Notice of Intent (NOA/NOI) to adopt a Mitigated Negative Declaration (MND) was advertised and distributed to initiate a 30-day public comment period, which concluded on July 7, 2020. A copy of the IS/MND is attached as Exhibit E. No comments were received during the IS/MND comment period. Following are summaries of topics addressed in the IS/MND.

Biological Resources: On July 2019, Jericho Systems Incorporated (Jericho) prepared a Biological Resources Assessment and Jurisdictional Delineation for the proposed Project (available at the County offices for review). Jericho describes the Project site as consisting almost entirely of undeveloped, but disturbed, open space. Joshua Tree woodland dominates undisturbed areas with disturbed areas being either bare or populated by a subset of species that occur nearby. Disturbances on-site are primarily due to the minor material removal and staging operations at the site that have been associated with County road projects since the 1960's.

The habitat in vicinity of the Project site consists primarily of Yucca brevifolia Woodland Alliance (Joshua Tree Woodland). The tree canopy of the community contains only two species and is co-dominated by Y. brevifolia and Y. schirdigera (Mojave yucca). The shrub canopy is diverse with 21 species with Ambrosia salsola (Burrobrush), Ephedra nevadensis (Nevada ephedra), Hesperoyucca whipplei (Chaparral yucca), and Salvia dorrii (Dorr's sage) being the most common. Fifty-one herbaceous species were found, including four non-natives species.

No state and/or federally listed threatened or endangered species, or other sensitive species were observed on-site during the field surveys; however, Jericho noted that there is some potentially suitable habitat in the undisturbed areas of the Project site and in the adjacent undisturbed habitat for various sensitive species identified in the literature review. As such, habitat suitability assessments were conducted within the Project site for golden eagle (Aquila chrysaetos) [GOEA], desert tortoise (DT), burrowing owl (BUOW), and Mohave ground squirrel (MGS). As a result of the habitat suitability assessments Jericho concluded that the Project site is not considered suitable for any of these species. In addition, no sensitive plants were observed during the survey. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required. No Western Joshua trees recently considered for listing under the California Endangered Species Act will be impacted by the proposed Project

Tribal Consultation: On October 22, 2018, the County initiated environmental review under CEQA for the proposed Project. On October 22, 2018, DPW sent Project notification letters to the following California Native American tribes, which had previously submitted general consultation request letters pursuant to 21080.3.1(d) of the Public Resources Code:

- San Manuel Band of Mission Indians
- Twentynine Palms Band of Mission Indians

Each recipient was provided a brief description of the proposed Project and its location, the lead agency contact information, and a notification that the tribe has 30 days to request consultation. The 30-day response period concluded on November 22, 2018.

Below is a summary of responses received by DPW and subsequent consultation actions and results:

- Twenty-Nine Palms Band of Mission Indians: November 20, 2018; No known Tribal cultural resources on site. Tribe requested copies of cultural resources report prior to concluding consultation. Cultural Resources report forwarded to Tribe on November 4, 2019. Consultation closed.
- San Manuel Band of Mission Indians: November 19, 2018; No known Tribal cultural resources on site. Tribe requested incidental find language be added to conditions of approval. Copies of cultural resources report were also forwarded to the Tribe on November 4, 2019. Consultation closed.

San Manuel Band of Mission Indians requested incidental finds measures be added to the proposed Project. Specific measure language was agreed upon on November 19, 2018 (Mitigation Measures TCR-1 through TCR-4 below) and consultation was closed.

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 Division of Mine Reclamation, (DMR), the Ocotillo Borrow Pit 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 Ocotillo Borrow Pit 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 Project approval process.

Public Input

In response to a Borrow Pit Project Notice sent to reviewing agencies and adjacent property owners. The DMR and California Department of Fish and Wildlife stated in their comments that the MND lacked analysis of potential biological impacts to special status species, Desert Tortoise and Burrow Owl and recommended mitigation measures to reduce the impact. They also asked that ramps and planks be added to the open pit areas to allow animals that are trapped to escape.

Staff Response: Staff reviewed the comments with the environmental consultant and determined that the comments and proposed mitigation measures were not necessary given that the Borrow Pit is currently in operation and no new areas will be disturbed that will affect special status species, Burrowing Owls or Desert Tortoise. Lastly, given that no trenching will be utilized, the possibility of animals being trapped is not possible and therefore planks and ramps are not necessary. Responses to comments are attached (Exhibit F).

RECOMMENDATION: That the Planning Commission:

1) **ADOPT** the Mitigated Negative Declaration (Exhibit E);

2) **APPROVE** the Mining Conditional Use Permit and Reclamation Plan 2020M-03 (Exhibit A) to permit mineral extraction on 11.7-acres of a 20-acre parcel for a 100 year operating period, subject to the Conditions of Approval (Exhibit B);

3) **ADOPT** the Findings as contained within the staff report (Exhibit D); and

4) **DIRECT** staff to file the Notice of Determination.

ATTACHMENTS:

Exhibit A: Reclamation Plan
Exhibit B: Conditions of Approval
Exhibit C: Biological Report
Exhibit D: Findings
Exhibit E: Initial Study / Mitigated Negative Declaration
Exhibit F: Comment Letters and Responses to Comments

EXHIBIT A

Reclamation Plan

MINE RECLAMATION PLAN
FOR THE
OCOTILLO BORROW PIT

Prepared For:
San Bernardino County:
Department of Public Works
825 E. Third Street
San Bernardino, CA 92415

Submitted To:
County of San Bernardino
Land Use Services
385 North Arrowhead Avenue, 1st Floor
San Bernardino, California 92415

Prepared By:
Lilburn Corporation
1905 Business Center Drive
San Bernardino, California 92408

November 2020

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APPENDICIES

MAP SHEETS (attached)

1.0 MINE PLAN

San Bernardino County, Department of Public Works (DPW) is submitting an application for a Mine Reclamation Plan (Plan) for the Ocotillo Borrow Pit. This application is to annually provide up to 1,000 cubic yards (cy) of material for various roads, culverts, and other DPW sites for annual maintenance and/or emergency repair due mainly to storm events.

The proposed project site is located at the southeast corner of Ocotillo Way and Valley Vista Avenue, southeast of the Town of Apple Valley (see Figure 1 - Regional Map). The County owned parcel is 20-acres (APN 0438-082-01) and is within the west part of San Bernardino County in Section 24, Township 4 North, Range 3 West, SBBM (see Figure 2 - Vicinity Map). Access to the site will be from existing Ocotillo Way, a paved public road. This site will provide construction material in the vicinity to reduce transportation costs and fuel usage from transporting material from more distant material sources. The material will be transported to DPW sites for annual facility maintenance and/or emergency repairs. The site is mostly disturbed by past grading and material storage uses. The Site has been used by the DPW since the 1960s.

The purpose of this application is to permit the Ocotillo Borrow Pit for a 100-year period to provide general fill material for various DPW Sites for annual maintenance and/or emergencies. DPW is proposing to excavate up to a depth of 10 feet with 3 horizontal to 1 vertical slopes (3H:1V) or 18° slopes to annually remove up to 1,000 cubic yards (cy) for a mining period of 100 years. The reclaimed end use of the site is for a DWP material maintenance and storage yard.

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 approximately 45 feet. The Site is largely devoid of vegetation with some native and non-native species colonizing the edges. The adjacent properties are mostly vacant with past disturbances and there is a water tank to the south and two single family residences north of Laramie Street (approximately 200 feet from the Site).Valley Vista Avenue (unpaved) borders the site to the west and Ocotillo Way borders the site to the north with appropriate right-of way easement widths.

Land Owner: County of San Bernardino
825 E. Third Street
San Bernardino, CA 92415

Operator: San Bernardino County:
Department of Public Works
825 E. Third Street
San Bernardino, CA 92415
909-387-8109
Brendon Biggs; bbiggs@dpw.sbcounty.gov

Representative: Lilburn Corporation
1905 Business Center Drive
San Bernardino, California 92408
Frank Amendola – Project Manager
909-890-1818
frank@lilburncorp.com

General Plan Designation: Rural Living (RL) – 30 acres per residence

APN: 0438-082-01; Section 24, T4N, R3W

Parcel Size: 20 acres

Mine Area: approx. 11.7 acres, setbacks 6.3 acres, ROWs 2.0 acres

Estimate Operating Life: 100 years from County approval (assumed January 1, 2020).

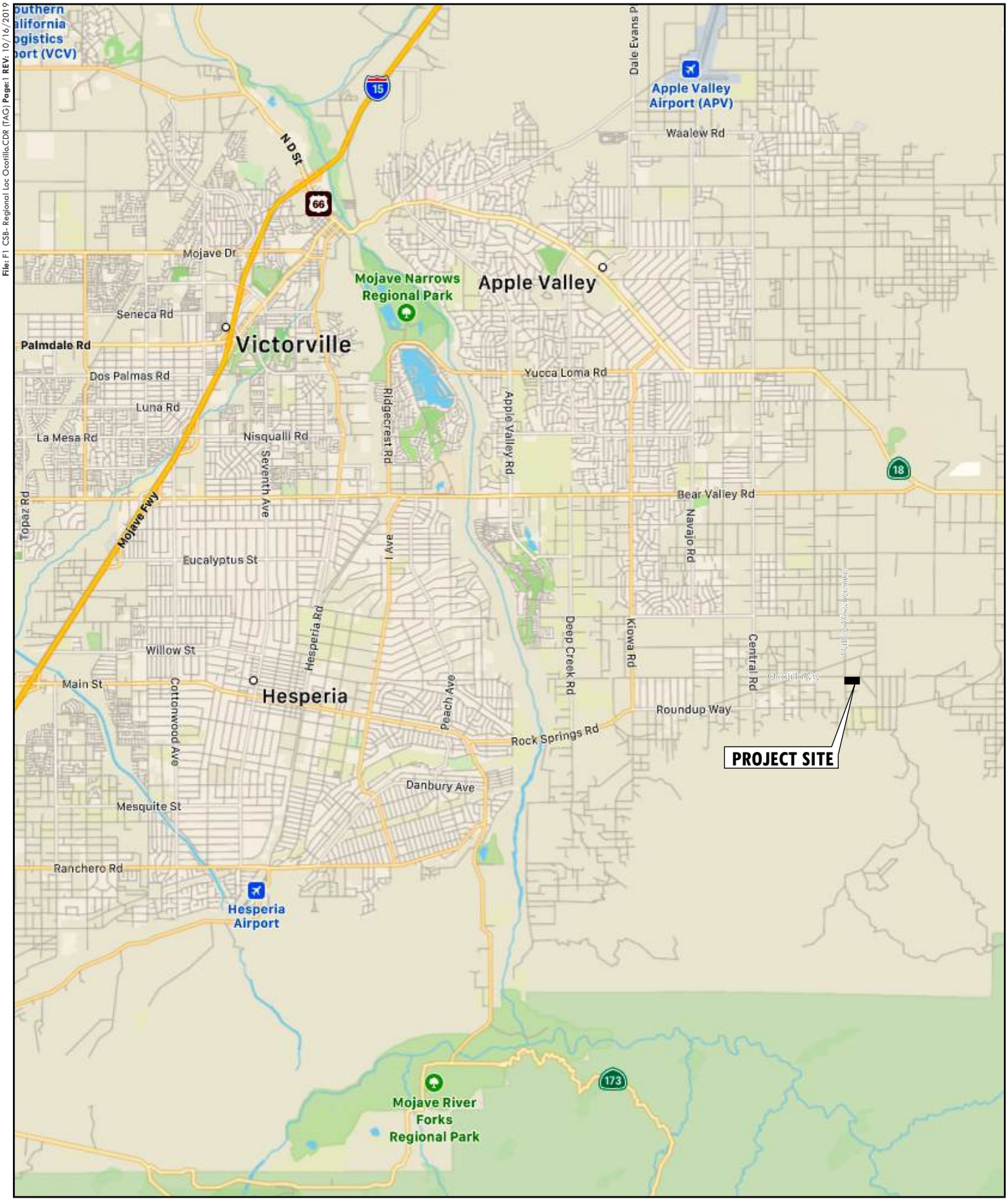
Estimated Operations Termination Date: December 31, 2119 (with approval by December 2019) or 100 years from date of County approval

Area to be reclaimed: 11.7 acres

Estimated Reclamation Completion: December 31, 2120

Reclaimed End Use: DPW Maintenance Yard

File: F1 CSB- Regional Loc Ocotillo.CDR (TAG) Page: 1 REV: 10/16/2019



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Miles

Source: Lilburn Corp., 10/2020 (TAG).

LILBURN CORPORATION

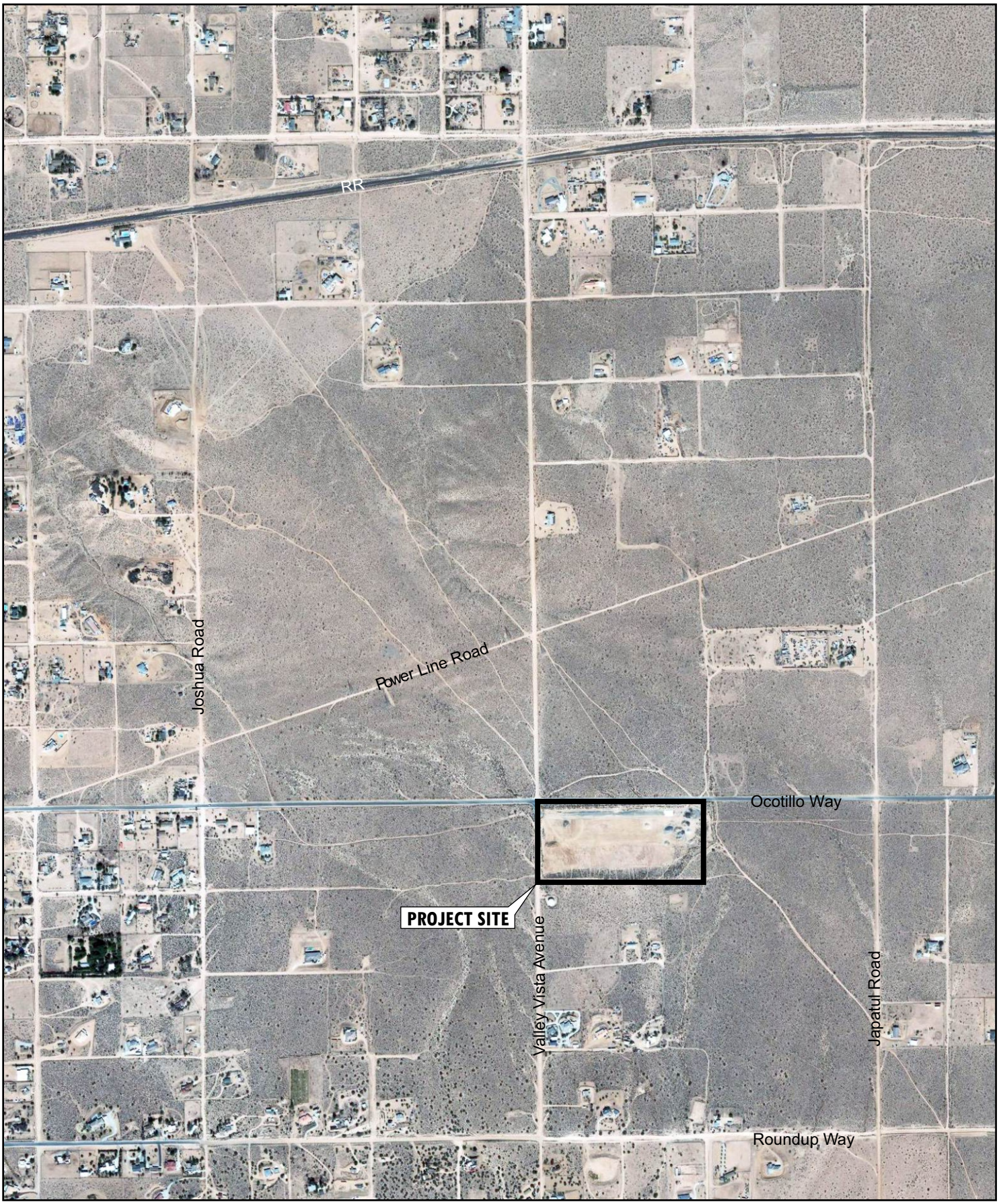
REGIONAL LOCATION

OCOTILLO BORROW PIT

County of San Bernardino, California

FIGURE 1

File: F1 CSB- Regional Loc Ocotillo.CDR (TAG) Page:1 REV: 10/16/2019



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Feet

Source: Lilburn Corp., 10/2020 (TAG).

LILBURN CORPORATION

PROJECT VICINITY

OCOTILLO BORROW PIT

County of San Bernardino, California

FIGURE 2

1.1 MINING OPERATIONS

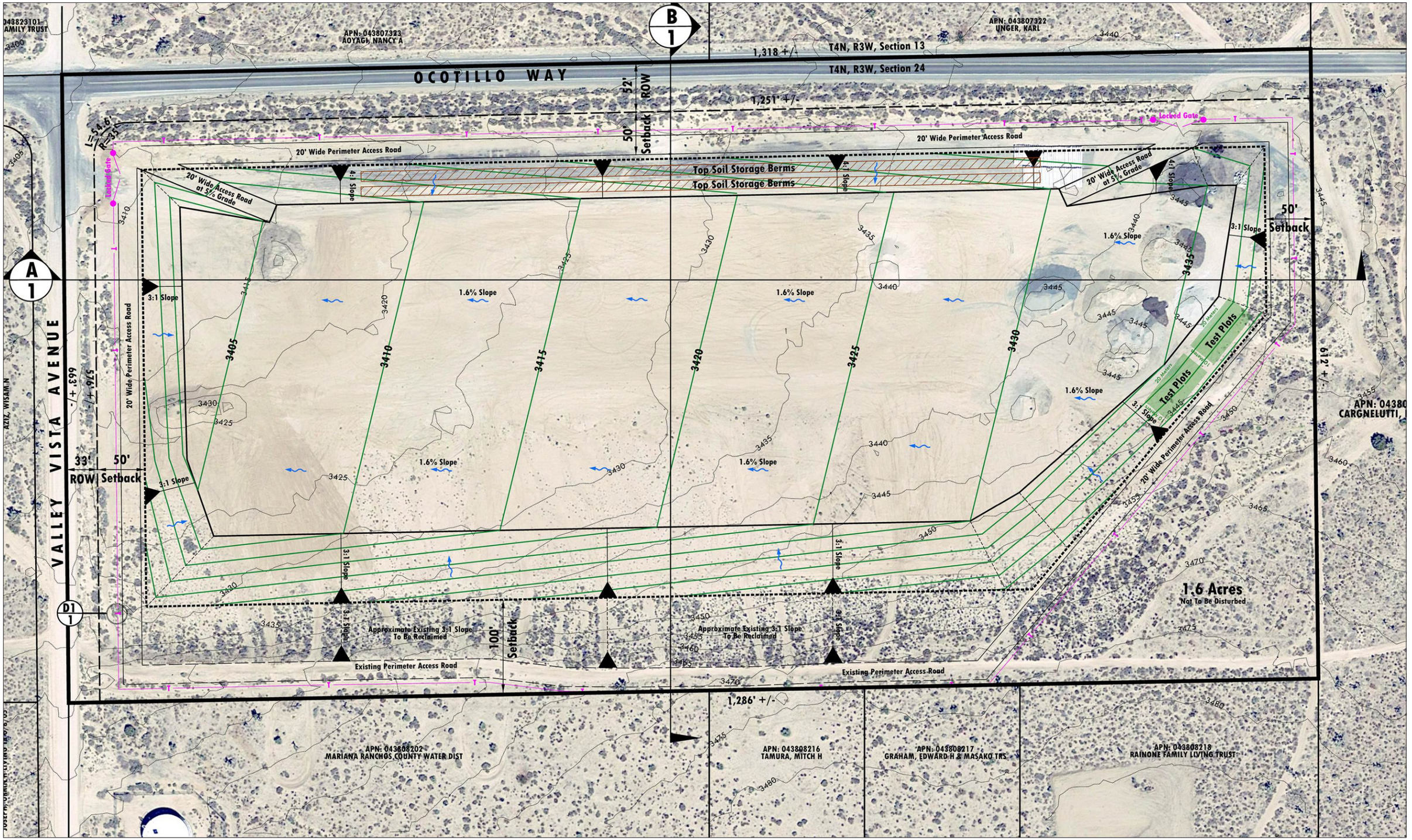
Please refer to Figures 3 and 4 and/or Sheet 1 to review the Mine Plan and cross sections. Mining operations will be undertaken over a period of up to 100 years beginning in early 2020 and extending until the end of 2119. The site will be fenced with a combination of desert tortoise fencing and 4-strand wire according to the protocols in Chapter 8 of the Desert Tortoise Field Manual (USFWS 2009).

Mining will take place on approximately 11.7 acres of the 20-acre parcel. 50-foot wide setbacks will be established on the east; 100 feet on the south where an existing revegetated slope exists; a 52-foot right-of-way from the centerline for the road with an additional 50 feet from the south edge of the right-of-way or approximately 102 feet; and a 33-foot right-of-way width and an additional 50-foot set back on the west. Much of the setbacks are vegetated. In addition, the undisturbed southeast corner consisting of approximately 1.6 acres will be avoided. The setbacks total approximately 6.3 acres and the ROW areas total 2.0 acres. An estimated 1,000 cubic yards (cy) annually would be excavated on an intermittent basis over the course of 100 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 truck trailer or double truck trailers with capacity of up to approximately 10 to 25 cy (typical). A complete list of the typical equipment to be used on-site and for transport to various sites within the vicinity 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.

Most of the site will be mined to a depth of 10 feet gradually increasing to about 15 to 20 feet with increasing existing elevations to the south and southeast. Slopes of 3H:1V to depths of up to 15 to 20 feet will be produced from excavation of the pi on the south side. The northern slopes will be 10 feet in height with 3H:1V slopes. The top of the pit will range from 3,460 feet above mean sea level (amsl) on the southeast corner to a low of 3,410 feet amsl in the northwest. The natural grade of the site is 5.3% from southeast (3,475feet amsl) to the northwest (3,405 feet amsl) which is generally maintained be the excavation plan. The setbacks as described above will be maintained around the entire excavation area for safety and a perimeter access road. These setbacks will include desert tortoise and 4-strand wire exclusion 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, 26 feet in width located on the north side of the pit to allow direct access to Ocotillo Way. Once off the project site, the street-legal transport trucks will utilize Ocotillo Way.

Truck traffic is anticipated at a rate of about 50 loads per year based on street-legal 20 cy trucks and DPW project demand. The trucks will travel on Ocotillo Way to DPW projects. To minimize dust generation, a water truck will be retained for use during excavations and loading of haul trucks. The mine operator shall water spray working mine areas and access roads onsite on a regular basis and more frequently as needed during windy conditions. Water used for dust control shall be obtained from a local water supplier via a water truck (source of water attached to application). Un-surfaced haul roads and access roads will also have dust controlled with or covered with road base material as needed.



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Feet

Source: Lilburn Corp., 10/2020 (TAG).

LILBURN CORPORATION

LEGEND

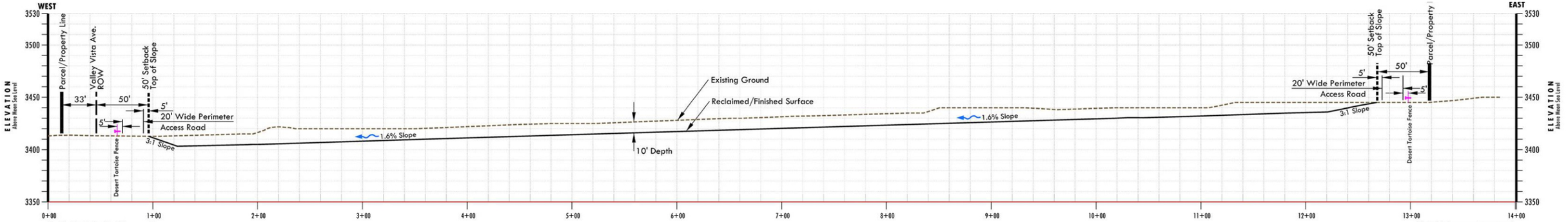
- Property Line
- Top of Slope
- Proposed Contour
- Desert Tortoise Fence

MINE PLAN

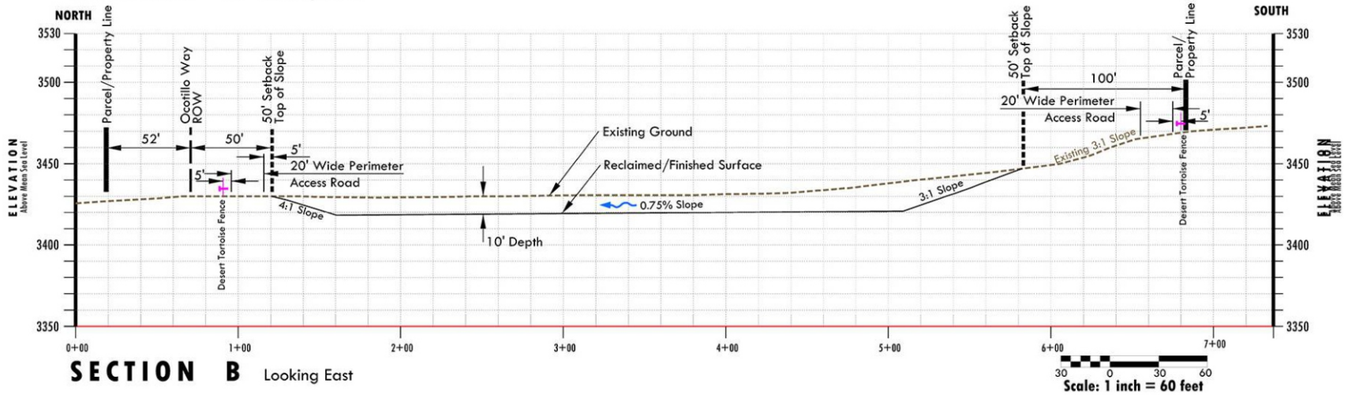
OCOTILLO BORROW PIT

County of San Bernardino, California

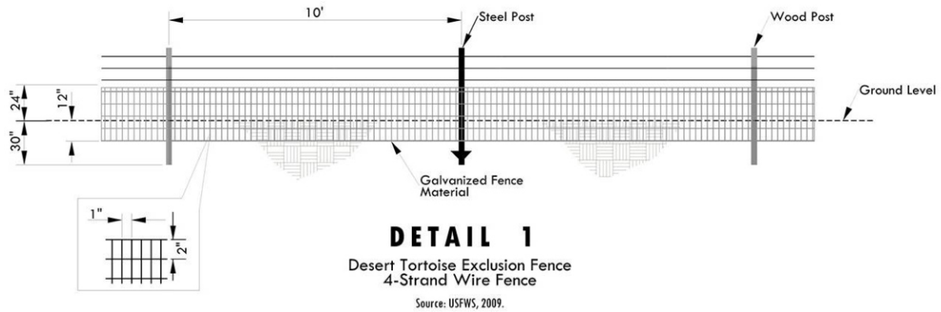
FIGURE 3



SECTION A Looking North



SECTION B Looking East



DETAIL 1
Desert Tortoise Exclusion Fence
4-Strand Wire Fence
Source: USFWS, 2009.

CROSS SECTIONS
OCOTILLO BORROW PIT
County of San Bernardino, California

FIGURE 4

LILBURN CORPORATION

Table 1
Mobile Mine and Transport Equipment (Typical)

Equipment Type	Typical Number	Hours/day	Purpose
Dozer	1	4	Excavate and loosen material. Access construction and maintenance
2-5 Axle Dump / Haul Trucks	2	4	Transportation of material
Excavator	1	4	Excavate and load material into trucks.
Loader	1	4	Excavate and load material into trucks.
Water Truck	1	4	Water for dust control on mining areas, haul roads, and stockpiles.

Source: DPW July 2019
Note that equipment listed is typical and makes and models will vary.

Site operations will be conducted as needed intermittently primarily from 5:30 am till 8 pm, up to 6 days per week. Monday through Saturday. Occasionally operations may be conducted on Sundays depending on possible emergency road repair, construction, and maintenance needs. All refuse shall be disposed into approved trash bins and removed by the operator or a commercial vendor. Portable toilets will be used on-site when in operation and serviced by a commercial vendor. Bottled water will be provided to employees.

1.2 MINE WASTE

Although the site has been 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 or storage 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 if needed 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 DWP Sites. 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 4,000 gallons of water a day (6 to 20 days a year) may be used

for dust suppression activities. The 4,000-gallon water truck will fill at Mojave Water Agency designated hydrant. It is not anticipated that there will be any excess water from the wetting-down procedure; therefore, no recycling is required or planned. The County has a memorandum of understanding (MOU) with the Mojave Water Agency.

1.5 EROSION AND SEDIMENTATION CONTROL

DPW is required to comply 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 as applicable:

- 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 of slopes will be by seeding or hydro-seeding with native species.

The final borrow pit floor site will slope gently upward 30 feet at about 3% from the west to east. There are no drainage or run-off channels that will be affected by the pit. Principally only direct precipitation will affect the site. The pit is designed with a 3% 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 run-off 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 sediment 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 annually, any final slopes 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 points and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations.

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 Ocotillo Borrow Pit is vacant land that has been disturbed by DPW since the 1960s for various DPW projects and equipment storage. Re-growth on-site consists of burro brush, Chaparral yucca, and Dorr's sage (along the property line as much of the site is disturbed and void of vegetation). The adjacent properties are vacant. Ocotillo Way alignment is north of the Site and Valley Vista Avenue is west of the Site.

The site is generally level rising approximately 65 feet from the northwest to southeast with elevations ranging from 3,410 to 3,475 feet amsl. The planned depth of the pit will range from 3,405 to 3,435 feet amsl with a general depth of 10 feet. The General Plan Land Use designation is Rural Living – RL (one residence per 30 acres). 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; Ocotillo Way and vacant desert DWP material maintenance and storage yard.
South	RL; Water Tank, Single-family residences and vacant desert land.
East	RL; Vacant desert land.
West	RL; Valley Vista Avenue and vacant desert land.

2.2 VISIBILITY

The mine site is located at the southeast corner of Ocotillo Way and Valley Vista Avenue, southeast of the Town of Apple Valley. Access to the site will be from existing Ocotillo Way, a paved public road. The Site has been disturbed and providing material to DPW Sites since the 1960s. As the borrow pit reaches its ultimate depth, it will be below grade and there will be no process plants on-site.

2.3 VEGETATION

For a complete description of the onsite vegetation, please review the Biological Resource Assessment prepared by Jericho Systems included in Appendix A of this Plan.

The topography of the site is mostly uniform throughout. Joshua Tree woodland dominates undisturbed areas on the south with disturbed areas being either bare or populated by a subset of species that occur nearby. The Project site consists almost entirely of undeveloped DWP material maintenance and storage yard, occupying mostly flat to gently sloped terrain. Most of the Project site is disturbed. Disturbances on site are primarily due to the minor material removal and

staging operations that have been associated with San Bernardino road projects and include unpaved roads, removal of materials, and material stockpiles and off-road vehicle use.

The habitat on the Project site mainly occurs on the south within the 6.3 acres of setbacks to be established and consists primarily of *Yucca brevifolia* Woodland Alliance (Joshua Tree Woodland). The tree canopy of the community contains only two species and is co-dominated by *Y. brevifolia* and *Y. schirdigera* (Mojave yucca). The shrub canopy is diverse with 21 species with *Ambrosia salsola* (Burrobrush), *Ephedra nevadensis* (Nevada ephedra), *Hesperoyucca whipplei* (Chaparral yucca), and *Salvia dorrii* (Dorr's sage) being the most common. Fifty-one herbaceous species were found, including four non-natives species.

No State and/or federally listed threatened or endangered species or otherwise sensitive species were observed on site during the field surveys and due to the lack of suitable habitat on site, and none are expected to occur. The borrow pit is completely within an un-vegetated area. Further investigation is not warranted or required.

There is habitat adjacent to the Project site that is suitable to support nesting birds. Since the Project site is devoid of vegetation, nesting birds would not be impacted.

2.4 WILDLIFE

A Biological Resource Assessment appears in Appendix A of this plan.

No amphibian species were observed or otherwise detected within the project area and none are expected to occur. The only reptile species observed within the project area was western side-blotched lizard (*Uta stansburiana elegans*), desert spiny lizard (*Sceloporus magister*), Western Whiptail Lizard (Aspidoscelis tigris), and Red Racer (*Coluber flagellum piceus*). Other common reptile species expected to occur within the Project area include Panamint rattlesnake (*Crotalus stephensi*), California kingsnake (*Lampropeltis californiae*) and gopher snake (*Pituophis catenifer deserticola*). Avian species observed in the project area include greater roadrunner, red-tailed hawk, American kestrel, prairie falcon, turkey vulture, common raven, and rock wren. Identification of mammals within the project area was generally determined by physical evidence rather than direct visual identification. This is because 1) many of the mammal species that potentially occur onsite are nocturnal and would not have been active during the survey and 2) no mammal trapping was performed. The only mammal species observed was black-tailed jackrabbit (*Lepus californicus*). Other common species expected to occur within the project area include coyote (*Canis latrans*), Merriams' kangaroo rat (*Dipodomys merriami*), and desert cottontail (*Sylvilagus audubonii*).

Desert Tortoise

Per the California Natural Diversity Database (CNDDB), the nearest documented desert tortoise occurrence (2006) is approximately 5 miles northwest of the Project site. There are no desert tortoise occurrences documented in the project area and there is no suitable habitat for this species within the Project site. However, some of the surrounding area adjacent to the Project site does contain habitat potentially suitable to support desert tortoise.

Per the U.S. Fish and Wildlife (USFWS) desert tortoise Critical Habitat overlay, the project site is not within any USFWS designated desert tortoise Critical Habitat. Furthermore, the Project site is not within a BLM designated Desert Wildlife Management Area (USFWS 2011). Therefore, the habitat surrounding the site would be characterized as Category 3 Habitat, per the BLM categorization of desert tortoise habitat on public lands.

The site surveys were conducted to detect desert tortoise sign. The survey consisted of walking transects spaced approximately 10 meters apart to provide 100% visual coverage of the Project site, as well as an approximately 500-foot buffer area surrounding the site. The result of the survey was that no evidence of desert tortoise was found in the survey area. No desert tortoise individuals or sign including burrows or scat were observed. Therefore, desert tortoise are considered absent from the Project site.

Mohave Ground Squirrel

Although a focused Mohave Ground Squirrel (MGS) trapping survey was not performed, a Mohave ground squirrel habitat suitability assessment of the Project site and adjacent habitat was conducted. The habitat assessment included a pedestrian field assessment, review of reported occurrences of the MGS in the region (CNDDB 2019), and adherence to CDFW's criteria for assessing potential impacts to the Mohave ground squirrel. The criteria questions are as follows:

- Is the site within the range of the Mohave ground squirrel?
- Is there native habitat with a relatively diverse shrub component?
- Is the site surrounded by development and therefore isolated from potentially occupied habitat?

The Project site occurs outside the established current range for this species and no further discussion or investigation is warranted. Previously documented occurrences are north of the Project site and were recorded in the 1920's. This species is likely extirpated from the local vicinity and is likely the reason for exclusion from the current range maps. MGS are considered absent from the Project site and adjacent areas.

Golden Eagle

Although the local vicinity surrounding the Project site likely provides suitable foraging habitat for Golden Eagle (GOEA), there are no tall trees or cliffside habitat present that could provide potential GOEA nest sites. Furthermore, no GOEA were observed within the project area during the site surveys. Given the level of disturbance from the existing site conditions and the general lack of suitable nest sites within the immediate project vicinity, the Project site and surrounding area is not considered suitable to support nesting GOEA.

Burrowing Owl

There are no (burrowing owl) BUOW occurrences documented in the project area. The nearest documented occurrences are three miles west of the Project site. The assessment survey was structured, in part, to detect BUOW. The survey consisted of walking transects spaced to provide

100% visual coverage of the project site, including an approximately 500-foot buffer area around the Project site. The result of the survey was that no evidence of BUOW was found in the survey area. No BUOW individuals or sign including pellets, feathers or whitewash were observed.

Per the definition provided in the 2012 CDFG Staff Report on Burrowing Owl Mitigation, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey." Therefore, although the Project site does contain friable soils, it would not be considered suitable for BUOW as it is mostly bare and no appropriately sized burrows or burrow surrogates were detected within the Project site or adjacent areas.

2.5 RECLAMATION

The intent of the California Surface Mining and Reclamation Act of 1975 as amended (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).

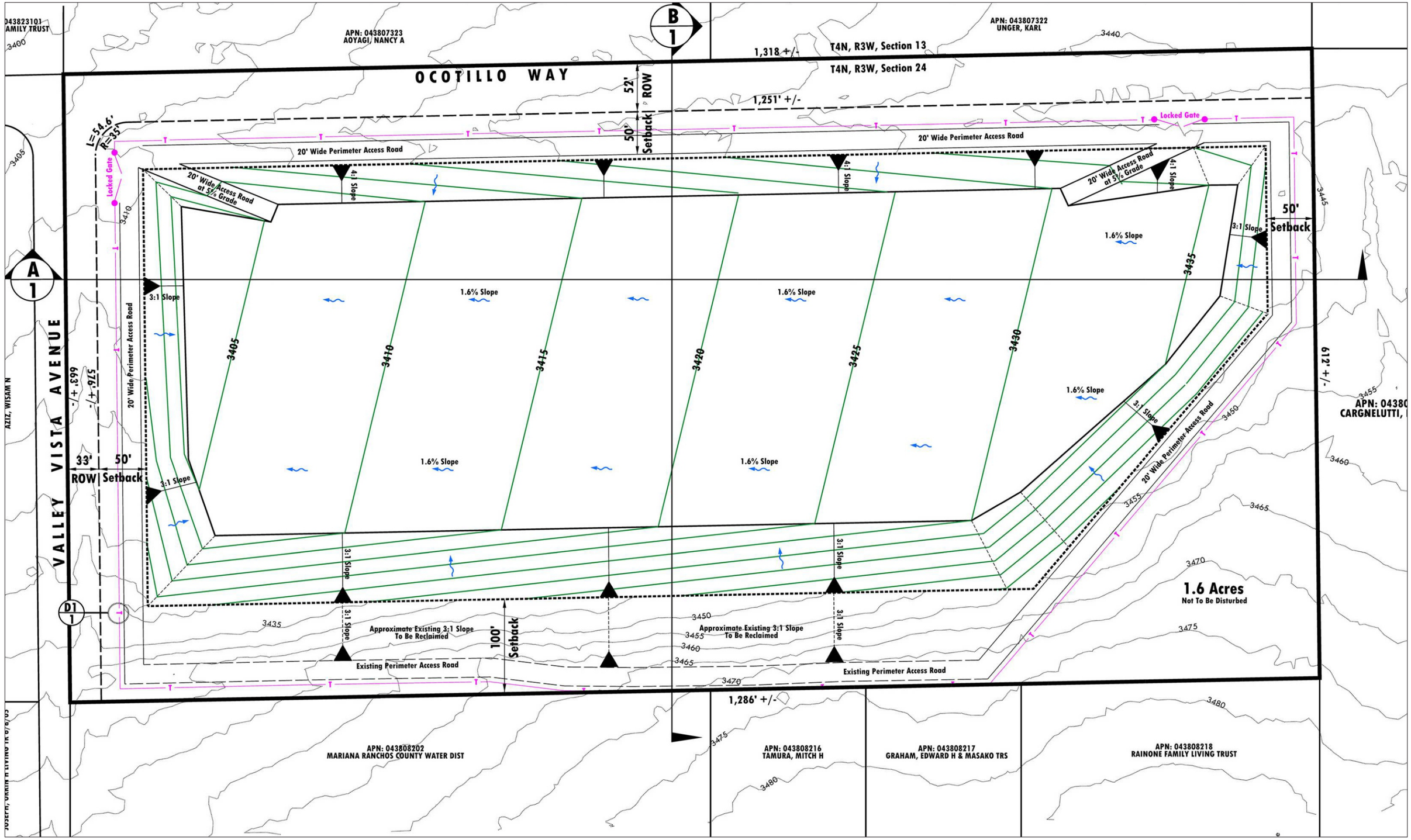
Article 9, Section 3700 of SMARA states the following: "Reclamation of mined lands shall be implemented in conformance with standards in this Article (Reclamation Standards). The standards shall apply to each surface mining operation to the extent that:

(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 DWP material maintenance and storage yard.
- 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 5 and/or Sheet 1 to review the Reclamation Plan. Reclamation of the mine will be undertaken at the completion of mining operations. Any over-steepened slopes will be partially 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



0 90 Feet

Source: Lilburn Corp., 10/2020 (TAG).

LILBURN CORPORATION

LEGEND

- Property Line
- Top of Slope
- Proposed Contour
- Desert Tortoise Fence
- Existing Contour

RECLAMATION PLAN

OCOTILLO BORROW PIT

County of San Bernardino, California

FIGURE 5

achieve necessary compaction consistent with final end use of DWP material maintenance and storage yard. Any rock or gravel on the roads to be reclaimed will be removed and used as fill in the pit area. Final graded slopes will be revegetated. The pit floor, storage areas, and access roads are to remain. The re-contoured slopes will be seeded with the recommended seed mix in this Reclamation Plan.

2.6 REVEGETATION

The revegetation plan will implement a series of activities to revegetate portions of the site after completion of mining operations. All slopes (approximately 3.6 acres) will be reclaimed and revegetated. The project 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 100º 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 1.5 feet to hold moisture; adding available stockpiled surface material containing banked seeds that will be spread out evenly over the site to a depth up to one-foot deep; seeding with commercial available native seeds; and staking or flagging reclaimed areas to eliminate additional disturbance. Islands will not be utilized as discussed in the Revegetation Plan as the end use will be a County Maintenance Yard. Only the slopes are to be revegetated.

Baseline Data

Jericho Systems prepared a *Revegetation Plan* and collected baseline vegetation data for Ocotillo Borrow Pit. 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 September 2019. The site consists of a disturbed burro brush, Chaparral yucca, and Dorr's sage communities (located along the property lines and the south as much of the site is disturbed and void of vegetation).

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 burro bush scrub. Average shrub cover was measured at 37% co-dominated by Nevada ephedra (5%) and Branched pencil cholla (5%); average shrub density measured 50 shrubs per 100 square meter plot; and an average of 4 species was observed to occur per 100 square meter plot; 8 species in all the plots. Complete data tables are included in Appendix 1 and summarized in Table 3 below.

Site Preparation

No Joshua trees will be removed per this Plan. However, per Sections 88.01.050(f) and 88.01.060(c) of the County of San Bernardino's Development Code, several species of yuccas occur on-site and if some need to be removed, these plants will be salvaged and then transplanted to completed slopes areas following approved transplant methods for the species.

The entire mining site is disturbed and has been mined intermittently by DPW. However, any available surface material will be salvaged to a depth of one foot and graded into perimeter berms generally on the north side 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 will be reclaimed and revegetated within one year. Any rock or gravel on the roads to be reclaimed will be removed and used as fill in the pit area. The slopes will be ripped to a depth of one foot parallel to the slope to break up compacted areas and aid in holding moisture and seeds. The stored surface material will be spread out evenly. 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 March 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 100-square meter test plots. The test plots will be located in the southeastern portion of the site on the shallow slopes, refer to Sheet 1 of the Mine Plan. The plot areas shall be representative of disturbed slope area with the following treatments: (1) ripping to depth of 1-foot with no seeding; and (2) ripping and covering with available topsoil

and seeding. The test plots will be maintained and monitored, and tests conducted to refine revegetation techniques, species type, and seeding rates.

Table 2
Recommended Seed Mix
Ocotillo Borrow Pit

Species	Life Form	Pure Live Seed Lbs/Acre
Ambrosia salsola	shrub	1.5
Cylindropuntia echinocarpa	shrub	1.0
Cylindropuntia ramosissima	shrub	0.5
Ephedra nevadensis	shrub	1.0
Ericameria nauseosa	shrub	1.0
Eriogonum fasciculatum	shrub	0.5
Hespero yucca whipplei	shrub	0.2
Phacelia fremontii	annual herb	1.0
Mentzelia veatchiana	annual herb	0.2
Logfia filaginoides	annual herb	0.5

Source: S&S Seeds, Jericho Systems, August 2019 (typical depending on seed availability)

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.

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

Per the Revegetation Plan, the purpose of the non-native invasive species control 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 four species of mustard, Coastal heron's bill *(Erodium cicutarium*), Foxtail brome (*Bromus madritensis*), and Old han schismus (*Schismus barbatus*). These species accounted for approximately 68% of the ground cover within the sampled areas.

The occurrence of non-native invasive species on-site during 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 consists 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. Refer to the Revegetation Plan for additional information.

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
Ocotillo Borrow Pit
Recommended Revegetation Success Criteria

Mixed Desert Scrub	Baseline Mean	Standard Success Percentage	Success Criteria
Shrub Cover (%)	37	45%	17% cover of native perennials
Shrub Density (stems/100 m^2)	50	45%	23 native perennials/100 sq. meters
Species Diversity (species/100 m^2)	8 for all sample areas; 4 per 100 m^2	40%	3 native perennials/100 sq. meters (higher criteria selected)

Source: Revegetation Plan – Jericho Systems Inc.; October 2019 (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 DWP material maintenance and storage yard and could be used for other uses at the discretion of the DWP. The site will be 15 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 concurrent with final sloping of a completed slope and 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 reclaimed at 3H:1V so backfilling will be minimized. 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 DWP material maintenance and storage yard. 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

Soils on site are solely comprised of Lucerne sandy loam. The Lucerne series consists of very deep, well drained soils that formed in alluvium from dominantly granitic sources. Lucerne soils

are on alluvial fans, fan terraces and terraces and have slopes of 0 to 15 percent. All identified topsoil, or at minimum the top 6 inches of surface soils and material (12 inches within areas if white bursage scrub habitat), 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. As the Site is mainly disturbed, approximately 3 acres at 1-foot depth, or approximately 4,840 cubic yards may 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 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 landowner (County of San Bernardino).

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. 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 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 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 with 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.

2.16 MONITORING AND MAINTENACE PER PRC SECTION 2770.1

Public Works will secure the site and establish best management practices to ensure that mining operations can easily resume when road maintenance activities are required. Prior to and during the pendency of the present IMP period, Public Works will continue operations at the site through the ongoing compliance with its land use entitlements, and all other state and federal regulations required to maintain current and future activities at the site. Public Works will secure the Site as follows:

- Maintaining appropriate berms, walls, and fences around the Site. Public Works will also repair any damaged berms, walls and/or fences within 48 hours of discovery.
- Inspecting quarry areas and removing any deleterious or hazardous materials in accordance with government requirements.
- Patrolling quarry areas on an ongoing basis, utilizing County personnel or outside security personnel, to discover any items that are inconsistent with the Site's IMP, Public Works protocol or applicable regulation.
- Reporting/recording any such items for prompt attention.

Maintenance and Monitoring:

Public Works employees will continue to monitor all slopes and vegetation while the Site is idle. Public Works will also ensure that all erosion control measures outlined in the Site's Erosion Control Plan are maintained throughout the term of the IMP.

For the purposes of a borrow pit surface mining operation that is owned or operated by a lead agency solely for use by that lead agency, all the following shall apply:

(a) (1) In addition to the requirements of Sections 2772 and 2773, the lead agency shall include in its reclamation plan maintenance measures that become effective when the borrow pit surface mining operation is idle. The maintenance measures shall maintain the site in compliance with this chapter while the borrow pit surface mining operation is idle.

(2) Notwithstanding paragraph (1), a lead agency may obtain an interim management plan pursuant to subdivision (h) of Section 2770.

(3) A lead agency that complies with this subdivision shall be exempt from the requirements of paragraph (6) of subdivision (h) of Section 2770.

(b) Notwithstanding paragraph (2) of subdivision (h) of Section 2770, an interim management plan for a borrow pit surface mining operation may remain in effect until reclamation of the borrow pit surface mining operation is completed in accordance with the approved reclamation plan.

(c) Notwithstanding subdivision (b) of Section 2774, a lead agency may conduct an inspection of a borrow pit surface mining operation once every two calendar years during a period when the borrow pit surface mining operation is idle.

3.0 GEOLOGY

The Ocotillo Borrow Pit is located approximately 10 miles southeast of the city of Apple Valley 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 in a seismically active area. According to the California Geologic Survey, Fault Activity Map, 2010, the nearest recently active faults include the Helendale Fault and North Frontal Fault. The Study Area is not located within a Geologic Hazard Overlays (SBCLUP, Apple Valley South, FH07C). These and other faults can generate 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, Apple Valley South, FH07C. There are no geologic conditions that could adversely affect this project.

4.0 HYDROLOGY

Surface Hydrology

The Project site is located within the upper Mojave watershed. 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. According to State Water Board "Groundwater Ambient Assessment Program" (GAMA), groundwater is recorded at a depth greater than 350 feet below ground surface (bgs). The proposed project site is to be excavated to an average depth of 15 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 4,000 gallons of water a day (6 to 20 days a year) may be used for dust suppression activities. The 4,000-gallon water truck will fill at Mojave Water Agency designated hydrant. It is not anticipated that there will be any excess water from the wetting-down procedure; therefore, no recycling is required or planned. The County has a memorandum of understanding (MOU) with the Mojave Water Agency.

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 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. September 2019*

Jericho Systems, Inc, *Biological Resources Assessment*, September 2019

CRM Tech, Historical/Archaeological Resources Survey Report, September 2019

CRM Tech, Paleontological Resources Assessment Report, September 2019

The State Water Board GAMA Program;
https://www.waterboards.ca.gov/water_issues/programs/gama/online_tools.html

CROSS REFERENCE MATRIX

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

Prepared by Lilburn Corporation – November 2020

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 PRACTIVE. SECTION 3500 et seq.
ARTICLE 9. RECLAMATION STANDARDS. SECTION 3700 et seq.

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
MINING OPERATIONS AND CLOSURE				
SMARA 2770.5	100-year flood, Caltrans contact	X		
SMARA 2772 (c) (1)	Name and Address of operator/agent.		1	1.0
SMARA 2772 (c) (2)	Quantity & type of minerals to be mined.		1, 5	1.0, 1.1
SMARA 2772 (c) (3)	Initiation and termination date.		5	1.1
SMARA 2772 (c) (4)	Maximum anticipated depth of mining.		5, 11	1.1, 2.1
SMARA 2772 (c) (5)	Description, including map with boundaries, topographic details, geology, streams, roads, utilities.		1 – 10 Sheets 1 & 2	1.0 - 1.6
SMARA 2772 (c) (6)	Mining plan and time schedule for reclamation (concurrent or phased reclamation).		1- 8, 14	1.0, 1.1, 2.5
SMARA 2772 (c) (7)	Proposed subsequent use.		21	2.8
SMARA 2772 (c) (8)	Description of reclamation measures adequate for proposed end use.		14-21	2.5 -2.7

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
MINING OPERATIONS AND CLOSURE				
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.		21	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.		9, 22 SWPPP to be prepared upon approval	1.5, 2.12
SMARA 2773 (a)	Sediment and erosion control monitoring plan specific to property.		9, 22 SWPPP to be prepared upon approval	1.5, 2.12
SMARA 2773 (a)	Revegetation plan specific to property. Monitoring Plan.		16-21	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.).		11-16	2.1-2.5
CCR 3502 (b) (2)	Public health and safety (exposure).		22	2.13
CCR 3502 (b) (3)	Slopes: critical gradient, consider physical properties and landscaping.		5, 21	1.1, 2.9

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
MINING OPERATIONS AND CLOSURE				
CCR 3502 (b) (4)	Fill materials in conformance with current engineering practice.	X	---	
CCR 3502 (b) (5)	Disposition of old equipment		21	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.		14-21	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.		9, 22	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).		11-14	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).		9, 22	1.5, 2.12
CCR 3503 (f)	Resoiling (fine material on top plus mulches).		16-21	2.6, 2.11
CCR 3503 (g)	Revegetation and plant survival (use available research).		16-21	2.6
CCR 3703 (a)	Sensitive species conserved or mitigated		11-12	2.3
CCR 3703 (b)	Wildlife habitat at least as good as pre-project, if approved end use is habitat.		16-21	2.6

SMARA/CCR SECTION	DESCRIPTION	N/A	PAGE(S)	SECTION(S)
MINING OPERATIONS AND CLOSURE				
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.		14, 21	2.5, 2.9
CCR 3704 (f)	Cut slopes have minimum factor of safety for end use and conform with surrounding topography.		14, 21	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.		16-21; Table 3	2.6; Appendix 1
CCR 3705 (b)	Test plots if success has not been proven previously		16-21	2.6
CCR 3705 (c)	Decompaction of site.		14-21	2.5, 2.6
CCR 3705 (d)	Roads stripped of road base materials, resoiled and revegetated, unless exempted.		14-21	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)
MINING OPERATIONS AND CLOSURE				
CCR 3705 (f)	Temporary access not bladed. Barriers installed.	X		
CCR 3705 (g)	Use native plant species, unless exotic species meet end use.		16-21	2.6
CCR 3705 (h)	Plant during correct season.		14-21	2.5, 2.6
CCR 3705 (i)	Erosion control and irrigation, when necessary.		9, 22	1.5, 2.12
CCR 3705 (j)	If irrigated, demonstrate self-sustaining without for two-year minimum.	X		
CCR 3705 (k)	Weeds managed.		16-21	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.		16-21; Table 3	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.		9, 22	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.		9, 22	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)
MINING OPERATIONS AND CLOSURE				
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.		21	2.7
CCR 3710 (a)	Surface and groundwater protected.		9, 22	1.5, 2.12
CCR 3710 (a)	Surface and groundwater projected in accordance with Porter Cologne and Clean Water Acts (RWQCB/SWRCB).		9, 22	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)
MINING OPERATIONS AND CLOSURE				
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.		21-22	2.11
CCR 3711 (b)	Topsoil resources mapped prior to stripping, location of stockpiles on map. Topsoil and growth media in separate stockpiles.		21-22	2.11
CCR 3711 (c)	Soil salvage and phases set forth in plan, minimize disturbance, designed to achieve revegetation success.		21-22	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.		21-22	2.11
CCR 3711 (e)	Topsoil redistributed in stable site and consistent thickness.		16-22	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
BIOLOGY STUDY/ REVEGETATION PLAN; JERICHO SYSTEMS JULY/AUGUST 2019

47 1st Street, Suite 1
Redlands, CA 92373-4601
(909) 307-5633

July 24, 2019

Cheryl A. Tubbs
Lilburn Corporation
1905 Business Center Drive
San Bernardino, CA 92408

RE: Biological Resources Assessment and Jurisdictional Delineation
Ocotillo Borrow Pit -Unincorporated Area of San Bernardino County, California
USGS –Apple Valley South Quadrangle, north ½ of Section 24 of Township 4 North, Range 3 West.

Dear Ms. Tubbs,

On behalf of Lilburn Corporation, Jericho Systems, Inc. (Jericho) conducted a general biological resources assessment (BRA). habitat suitability assessments, and Jurisdictional Delineation (JD) of existing conditions at property owned by the County of San Bernardino Department of Public Works and referred to as the Ocotillo Borrow Pit Project (Proposed project). The Project site is located approximately 3.25 miles south of Highway 18, 4.3 miles east of the Mojave River and is bordered by Ocotillo Way to the north, Japatul Road to the east, vacant land to the south and Valley Vista Avenue to the west (Figures 1 and 2). The Project site can be found on the *Apple Valley South* U.S. Geological Survey (USGS) 7.5-minute series quadrangle within the north ½ of Section 24 of Township 4 North, Range 3 West.

This report is designed to address potential effects of the proposed Project to designated Critical Habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA), or species designated as sensitive by the California Department of Fish and Wildlife (CDFW), or the California Native Plant Society (CNPS).

Attention was focused on sensitive species known to occur locally including the State- and federally-listed as threatened desert tortoise (*Gopherus agassizii*) [DT] and the State-listed as threatened Mohave ground squirrel (*Xerospermophilus mohavensis*) [MGS] as well as burrowing owl (*Athene cunicularia*) [BUOW] which is a State and federal Species of Special Concern (SSC). This report also addresses resources protected under the Migratory Bird Treaty Act; federal Clean Water Act (CWA) regulated by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) respectively; and Section 1602 of the California Fish and Game Code (FCG) administered by the CDFW.

In addition to the BRA and habitat assessments, Jericho biologists Shay Lawrey, CJ Fotheringham, Christian Nordal and Todd White conducted a JD of the project site. The purpose of the JD is to determine the extent of State and federal jurisdictional waters within the project area potentially subject to regulation by the USACE under Section 404 of the CWA, RWQCB under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and CDFW under Section 1602 of the FGC, respectively.

ENVIRONMENTAL SETTING

The project site is situated near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The Apple Valley area is subject to both seasonal and annual variations in temperature and precipitation. Average annual maximum temperatures peak at 96.5 degrees Fahrenheit (° F) in July and fall to an average annual minimum temperature of 32.0° F in December and January. Average annual precipitation is greatest from November through March and reaches a peak in February (1.4 inches). Precipitation is lowest in the month of June (0.09 inches). Annual precipitation averages 8.4 inches. The topography of the local landscape is a slight slope to the north. The Project area is relatively flat with steep ~25-foot slopes on the eastern, southern and northern portions of the Project site as a result of historical excavation and removal. Elevation on site ranges from approximately 3,369 feet above mean sea level (amsl) in the southeastern portion of the site, to 3,414 feet amsl in the northwesternmost portion of the site.

Hydrologically, the Project site is located within the upper Mojave watershed and soils on site are solely comprised of Lucerne sandy loam, 2 to 5 percent slopes (Figure 3).

The general project vicinity consists of rural housing, and undeveloped open space. Habitat surrounding the Project site consists primarily of *Yucca brevifolia* woodland alliance (Joshua tree woodland). The Project site itself is largely devoid of vegetation with some native and non-native species colonizing the edges, stockpiles and other unused areas. The southeast corner of the Project site is largely undisturbed, with small patches of moderate disturbed areas along the eastern portion (Figure 4).

METHODS

As stated above, the objective of this document is to determine whether the Project site supports special status or otherwise sensitive species and/or their habitats, and to address the potential effects associated with the Proposed project on those resources. The species and habitats addressed in this document are based on database information and field investigation.

Prior to conducting the field study, species and habitat information was gathered from the reports related to the specific project and relevant databases for the *Apple Vallley South, Fifteenmile Valley, and Lucerne Valley* USGS quadrangles to determine which species and/or habitats would be expected to occur on site. The Project site is situated in the central western portion of the *Apple Valley South* quad. The site's similar elevation ecology and proximity to the *Fifteenmile Valley and Lucerne Valley* to the site lead to their inclusion in the review. These databases contain records of reported occurrences of State- and federally-listed species or otherwise sensitive species and habitats that may occur within the vicinity of the project site. These sources include:

- U.S. Fish and Wildlife (USFWS) threatened and endangered species occurrence GIS overlay;
- USFWS Information for Planning and Consultation System (IPaC);
- California Natural Diversity Database (CNDDB) *Rarefind 5*);
- CNDDB Biogeographic Information and Observation System (BIOS);
- California Native Plant Society Electronic Inventory (CNPSEI) database;
- Calflora Database;
- USDA Natural Resources Conservation Service (NRCS) Web Soil Survey;
- USFWS National Wetland Inventory;
- Environmental Protection Agency (EPA) Water Program "My Waters" data layers
- USFWS Designated Critical Habitat Maps
- Mohave Ground squirrel Range maps

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

Jericho biologists Shay Lawrey, CJ Fotheringham, Christian Nordal, and Todd White conducted a biological resources assessment of the project area on April 3, 4 & 18, 2019. Each biologist has advanced degrees in biology and several years of survey experience throughout San Bernardino County and southern California.

The surveyors conducted the systematic and comprehensive surveys during calm weather, between the hours of 6 a.m. and 3 p.m. Weather conditions during the surveys consisted of clear skies to overcast with temperatures ranging from 62 degrees Fahrenheit (° F) to 76° F and light wind <5 mph. The survey area encompassed the entire Project site and included 100 percent coverage of the site with plots spaced ≥ 10 meters apart. A surrounding 500-foot buffer area surrounding the site was also surveyed for species diversity and discovery of rare species.

Wildlife species were detected during field surveys by sight, calls, tracks, scat, or other sign. In addition to species observed, expected wildlife usage of the site was determined per known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The focus of the faunal species surveys was to identify potential habitat for special status wildlife within the project area. Disturbance characteristics and all animal sign encountered on the site are recorded in the results section of this report.

The site was also evaluated for the presence of jurisdictional waters, i.e. waters of the U.S. as regulated by the USACE and RWQCB, and/or streambed and associated riparian habitat as regulated by the CDFW. Evaluation of potential federal jurisdiction followed the regulations set forth in 33CFR part 328 and the USACE guidance documents and evaluation of potential State jurisdiction followed guidance in the Fish and Game Code and A Review of Stream Processes and Forms in Dryland Watersheds (CDFW, 2010).

RESULTS

Existing Biological and Physical Conditions

The Project site consists almost entirely of undeveloped open space, occupying mostly flat to gently sloped terrain. The topography of the site is mostly uniform throughout. Joshua Tree woodland dominates undisturbed areas with disturbed areas being either bare or populated by a subset of species that occur nearby. Most of the Project site is disturbed. Disturbances on site are primarily due to the mining and staging operations that have been associated with San Bernardino road projects and include unpaved roads, removal of materials, and material stockpiles (Figure 4).

The habitat on the Project site consists primarily of *Yucca brevifolia* Woodland Alliance (Joshua Tree Woodland). The tree canopy of the community contains only two species and is co-dominated by *Y. brevifolia* and *Y. schirdigera* (Mojave yucca). The shrub canopy is diverse with 21 species with *Ambrosia salsola* (Burrobrush), *Ephedra nevadensis* (Nevada ephedra), *Hesperoyucca whipplei* (Chaparral yucca), and *Salvia dorrii* (Dorr's sage) being the most common. Fifty-one herbaceous species were found, including four non-natives species.

Wildlife

No amphibian species were observed or otherwise detected within the project area and none are expected to occur. The only reptile species observed within the project area was western side-blotched lizard (*Uta*

stansburiana elegans), desert spiny lizard *(Sceloporus magister*), Western Whiptail Lizard (*Aspidoscelis tigris*), and Red Racer (*Coluber flagellum piceus*). Other common reptile species expected to occur within the Project area include Panamint rattlesnake (*Crotalus stephensi*), California kingsnake (*Lampropeltis californiae*) and gopher snake (*Pituophis catenifer deserticola*). Avian species observed in the project area include greater roadrunner, red-tailed hawk, American kestrel, prarie falcon, turkey vulture, common raven, and rock wren. Identification of mammals within the project area was generally determined by physical evidence rather than direct visual identification. This is because 1) many of the mammal species that potentially occur onsite are nocturnal and would not have been active during the survey and 2) no mammal trapping was performed. The only mammal species observed was black-tailed jackrabbit (*Lepus californicus*). Other common species expected to occur within the project area include coyote (*Canis latrans*), Merriams' kangaroo rat (*Dipodomys merriami*), and desert cottontail (*Sylvilagus audubonii*).

Special Status Species and Habitats

According to the database queries, 38 sensitive species (23 plants and 15 animals) have been documented in the *Apple Valley South, Fifteenmile Valley, Lucerne Valley,* and *Hesperia* USGS 7.5-minute series quadrangles. This list of sensitive species includes any State- and/or federally-listed threatened or endangered species, CDFW designated Species of Special Concern (SSC), and otherwise Special Animals. "Special Animals" is a general term that refers to all the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species." The CDFW considers the taxa on this list to be those of greatest conservation need.

Table 1, located at the end of this document, represents a compiled list of results from the IPaC, CNDDB and CNPSEI databases of species which have been documented within three miles of the Project site and/or have the potential to occur based on potentially suitable habitat adjacent to, or within, the Project site (Figure 5). Table 1 also provides a potential to occur assessment based on the field investigation and surveyor's knowledge of the species and local ecology and considers the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements relative to the current site conditions and species' range.

No State- and/or federally-listed threatened or endangered species, or other sensitive species were observed on site during the field surveys. However, there is some potentially suitable habitat in the undisturbed areas of the Project site and in the adjacent undisturbed habitat for some of the sensitive species identified in the literature review (Table 1). Therefore, habitat suitability assessments were conducted within the Project area for golden eagle (*Aquila chrysaetos*) [GOEA], DT, BUOW, and MGS.

Desert Tortoise

The desert tortoise is a State- and federally-listed threatened species. Throughout its range, it is threatened by habitat loss, domestic grazing, predation, collections, and increased mortality rates. The desert tortoise is typically found in creosote bush scrub. They are most often found on level or sloped ground where the substrate is firm but not too rocky. Tortoise burrows are typically found at the base of shrubs, in the sides of washes and in hillsides. Because a single tortoise may have many burrows distributed throughout its home range, it is not possible to predict exact numbers of individuals on a site based upon burrow numbers.

In 1992 the BLM issued the *California Statewide Desert Tortoise Management Policy* which included categorizing habitat into three levels of classification. The management goal for Category I areas is to maintain stable, viable populations and to increase the population where possible. The management goal

for Category II areas is to maintain stable, viable populations. The management goal for Category III areas is to limit population declines to the extent feasible. In April 1993, the BLM amended the CDCA plan to delineate these three categories of desert tortoise habitat on public lands. With the adoption of the West Mojave Plan (BLM 2005), all lands that are outside Desert Wildlife Management Areas are characterized as Category 3 Habitat, which is the lowest priority management area for viable populations of the desert tortoise.

> *Findings*: Per the CNDDB, the nearest documented desert tortoise occurrence (2006) is approximately 5 miles northwest of the Project site. There are no desert tortoise occurrences documented in the project area and there is no suitable habitat for this species within the Project site. However, some of the surrounding area adjacent to the Project site does contain habitat potentially suitable to support desert tortoise.
>
> Per the USFWS desert tortoise Critical Habitat overlay, the project site is not within any USFWS designated desert tortoise Critical Habitat. Furthermore, the Project site is not within a BLM designated Desert Wildlife Management Area (USFWS 2011). Therefore, the habitat surrounding the site would be characterized as Category 3 Habitat, per the BLM categorization of desert tortoise habitat on public lands.
>
> The site surveys were structured, in part, to detect desert tortoise. The survey consisted of walking transects spaced approximately 10 meters apart to provide 100% visual coverage of the Project site, as well as an approximately 500-foot buffer area surrounding the site. The result of the survey was that no evidence of desert tortoise was found in the survey area. No desert tortoise individuals or sign including burrows or scat were observed. Therefore, desert tortoise are considered absent from the Project site.

Mohave Ground Squirrel

The MGS is a State-listed threatened species. This small, grayish, diurnal ground squirrel is endemic to two million hectares in the western Mojave Desert. It typically inhabits sandy soils of alkali sink and creosote bush scrub habitat. The Mohave ground squirrel forages on leaves and seeds and aestivate/hibernate for long periods of the year. Plants documented as forage for this species include: fiddleneck (*Amsinckia tessellata*), allscale (*Atriplex canescens* and *A. polycarpa*), desert holly (*A. hymenelytra*), coreopsis (*Coreopsis* sp.), spiny hopsage (*Grayia spinosa*), winterfat (*Krascheninnikovia lanata*), wolfberry (*Lycium andersonii*), Joshua tree (*Yucca brevifolia*) and the seeds of Joshua tree. It is suspected that Mohave ground squirrel forage on the plant species with the highest water content available at the time.

They emerge from hibernation in February and begin pair bonding and mating during March. If rainfall is adequate, MGS will reproduce. If rainfall levels do not provide sufficient rainfall to support significant annual plant growth, then MGS will merely forage on herbaceous perennials and shrubs in order to gain enough body mass to survive another prolonged period of dormancy and will not reproduce in that year. The adult males can enter dormancy as early as late May. Juveniles will remain above-ground until August in order to gain sufficient fat reserves prior to entering dormancy.

MGS occur in the western half of the Mojave Desert. Its historical range encompasses an area between Antelope Valley and Lucerne Valley, in the south. However, MGS occurrences in the southern portion of its range are very rare. The northern limits of the range are near Owens Dry Lakebed, in the north, and through China Lake Naval Weapons Station and Fort Irwin Military Base, in the east. The eastern limits extend to Barstow and south along the Mojave River. The western limits loosely follow Highway 14 and the foothills of the southern Sierra Nevada escarpment. MGS are dormant in the fall and winter months.

Findings: Although a focused MGS trapping survey was not performed, Jericho conducted a Mohave ground squirrel habitat suitability assessment of the Project site and adjacent habitat. The habitat assessment included a pedestrian field assessment, review of reported occurrences of the MGS in the region (CNDDB 2019), and adherence to CDFW's criteria for assessing potential impacts to the Mohave ground squirrel. The criteria questions are as follows:

1. *Is the site within the range of the Mohave ground squirrel?;*
2. *Is there native habitat with a relatively diverse shrub component?; and*
3. *Is the site surrounded by development and therefore isolated from potentially occupied habitat?*

The Project site occurs outside the established current range for this species and no further discussion or investigation is warranted. Previously documented occurrences are north of the Project site and were recorded in the 1920's. This species is likely extirpated from the local vicinity and is likely the reason for exclusion from the current range maps. MGS are considered absent from the Project site and adjacent areas.

Golden Eagle

The GOEA is a CDFW Fully Protected species. GOEA are found throughout North America, but are more common in western North America (CDFW 2017). Habitat typically consists of rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops (Polite and Pratt 1990). GOEA build large platform nests, typically on cliffs and in large trees in open areas of rugged, open habitats with canyons and escarpments (Polite and Pratt 1990). Threats include loss of foraging areas, loss of nesting habitat, pesticide poisoning, lead poisoning and collision with man-made structures such as wind turbines (CDFW 2019).

Raptors and all migratory bird species, whether listed or not, receive protection under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, or bird parts (including nests and eggs) except in accordance with regulations prescribed by the Secretary of the Interior Department (16 U. S. Code 7035). 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 California FGC, Section 2503.57. No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

Findings: Although the local vicinity surrounding the Project site likely provides suitable foraging habitat for GOEA, there are no tall trees or cliffside habitat present that could provide potential GOEA nest sites. Furthermore, no GOEA were observed within the project area during the site surveys. Given the level of disturbance from the existing site conditions and the general lack of suitable nest sites within the immediate project vicinity, the Project site and surrounding area is not considered suitable to support nesting GOEA.

Burrowing Owl

The BUOW is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows. BUOW spend a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. They feed primarily on insects such as grasshoppers, June beetles and moths, but will also take small rodents, birds, and reptiles. They are active

during the day and night, but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31.

The BUOW is not listed under the State or federal ESA, but is considered both a State and federal SSC. The BUOW is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California FGC (FGC #3513 & #3503.5).

> *Findings*: There are no BUOW occurrences documented in the project area. The nearest documented occurrences are three miles west of the Project site. The assessment survey was structured, in part, to detect BUOW. The survey consisted of walking transects spaced to provide 100% visual coverage of the project site, including an approximately 500-foot buffer area around the Project site. The result of the survey was that no evidence of BUOW was found in the survey area. No BUOW individuals or sign including pellets, feathers or white wash were observed.
>
> Per the definition provided in the *2012 CDFG Staff Report on Burrowing Owl Mitigation*, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey." Therefore, although the Project site does contain friable soils, it would not be considered suitable for BUOW because the it is mostly bare and no appropriately sized burrows or burrow surrogates were detected within the Project site or adjacent areas.

No sensitive plants were observed during survey and are addressed in the Plant Species Observed list and Table 1 (located at the end of this document).

Jurisdictional Delineation

There is a blueline stream course mapped by the USGS National Hydrography Dataset (NHD) that was historically mapped on the eastern edge of the Project site. The current site conditions have resulted in a realignment of flows further east to the very eastern edge of the site (Figure 6). The desert dry wash flows from the south to the north. The visual character of the drainage is difficult to define as flows enter the site due to a road, but the drainage pattern become clearer as the flows exit the site. Once the flows leave the site they fan out and become sheet flow across the desert in a northwest direction.

Waters of the U.S.

The USACE has authority to permit the discharge of dredged or fill material in waters of the U.S. under Section 404 CWA. WoUS are defined as: "All waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters" (Section 404 of the CWA; 33 CFR 328.3 (a). CWA jurisdiction exists over the following:

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

The drainage feature onsite does not meet the definition of WoUS due to the lack of a significant nexus to a TNW as the concentrated flow with a definable ordinary highwater mark (OHWM) fans out into sheet flows with no definable OHWM.

Wetlands

No hydrophitic vegetation, hydric soils and/or wetland hydrology, are present within the Project site. Therefore, no wetlands were identified during the survey.

State Lake/Streambed

The unnamed drainage feature would likely be considered a CDFW jurisdictional feature due to the presence of a definable bed with apparent flow line. This feature, however, is outside of any areas of disturbance.

CONCLUSIONS AND RECOMMENDATIONS

Sensitive Biological Resources

No State- and/or federally-listed threatened or endangered species or otherwise sensitive species were observed on site during the field surveys and due to the lack of suitable habitat on site, and none are expected to occur. The Project site is completely within an unvegetated area. Further investigation is not warranted or required.

There is habitat adjacent to the Project site that is suitable to support nesting birds. Since the Project site is devoid of vegetation, nesting birds would not be impacted.

Jurisdictional Waters

The drainage feature located on the far eastern edge of the Project site may be subject to the Fish and Game Code under the jurisdictions of the California Department of Fish and Wildlife. There are no planned operations within this jurisdictional area and no permanent or temporary impacts to jurisdictional features are expected. Therefore, no permits or authorizations will be required. Should future impacts occur to this feature, a notification to the CDFW would be prudent and warranted.

Please do not hesitate to contact me at 909-915-5900 should you have any questions or require further information.

Sincerely,

Shay Lawrey, President
Ecologist/Regulatory Specialist

Attachments:

Plant Species Observed List
Table 1. Database Queries (CNDDB, IPAC, CNPSEI) Results
Figures 1-6
Site Photos 1-10

PLANT SPECIES OBSERVED

Latin Name	Common name	Growth form	Status	Family
Yucca schidigera	Mohave yucca	Tree	native	Agavaceae
Yucca brevifolia	Joshua tree	Tree	native	Agavaceae
Ericameria pinifolia	Pine bush	Shrub	native	Asteraceae
Eriophyllum wallacei	Wallace eriophyllum	Annual herb	native	Asteraceae
Encelia actoni	Acton encelia	Shrub	native	Asteraceae
Eriophyllum pringlei	Pringle eriophyllum	Annual herb	native	Asteraceae
Chaenactis stevioides	Esteve pincushion	Annual herb	native	Asteraceae
Lasthenia gracilis	Needle goldfields	Annual herb	native	Asteraceae
Rafinesquia neomexicana	Desert chicory	Annual herb	native	Asteraceae
Chaenactis fremontii	Fremont pincushion	Annual herb	native	Asteraceae
Ericameria linearifolia	Interior goldenbush	Shrub	native	Asteraceae
Stylocline micropoides	Desert nest straw	Annual herb	native	Asteraceae
Stylocline psilocarphoides	Peck's stylocline	Annual herb	native	Asteraceae
Lactuca serriola	Prickly lettuce	Annual herb	invasive non-native	Asteraceae
Ambrosia dumosa	Burro weed	Shrub	native	Asteraceae
Perityle emoryi	Emory's rock daisy	Annual herb	native	Asteraceae
Gutierrezia microcephala	Sticky snakeweed	Shrub (stem succulent)	native	Asteraceae
Ericameria nauseosa	Rubber rabbitbrush	Shrub	native	Asteraceae
Gutierrezia sarothrae	Matchweed	Shrub	native	Asteraceae
Tetradymia stenolepis	Narrow scaled felt thorn	Shrub	native	Asteraceae
Layia glandulosa	White layia	Annual herb	native	Asteraceae
Logfia filaginoides	California cottonrose	Annual herb	native	Asteraceae
Malacothrix glabrata	Desert dandelion	Annual herb	native	Asteraceae
Xylorhiza tortifolia	Mojave woodyaster	Perennial herb	native	Asteraceae
Malacothrix coulteri	Snake's head	Annual herb	native	Asteraceae
Uropappus lindleyi	Silver puffs	Annual herb	native	Asteraceae
Brickellia desertorum	Desert brickellia	Shrub	native	Asteraceae
Cryptantha barbigera	Bearded cryptantha	Annual herb	native	Boraginaceae
Emmenanthe penduliflora	Whispering bells	Annual herb	native	Boraginaceae
Pectocarya heterocarpa	Chuckwalla pectocarya	Annual herb	native	Boraginaceae
Plagiobothrys arizonicus	Arizona popcorn flower	Annual herb	native	Boraginaceae
Cryptantha angustifolia	Narrow leaved forget me not	Annual herb	native	Boraginaceae

Latin Name	Common name	Growth form	Status	Family
Cryptantha circumscissa	Western forget me not	Annual herb	native	Boraginaceae
Cryptantha micrantha	Purple root cryptantha	Annual herb	native	Boraginaceae
Amsinckia tessellata	Devil's lettuce	Annual herb	native	Boraginaceae
Phacelia fremontii	Fremont's phacelia	Annual herb	native	Boraginaceae
Phacelia distans	Common phacelia	Annual herb	native	Boraginaceae
Cryptantha maritima	Guadalupe island cryptantha	Annual herb	native	Boraginaceae
Cryptantha pterocarya	Winged nut forget me not	Annual herb	native	Boraginaceae
Phacelia tanacetifolia	Tansy leafed phacelia	Annual herb	native	Boraginaceae
Phacelia crenulata	Notch leaved phacelia	Annual herb	native	Boraginaceae
Phacelia cryptantha	Small flowered phacelia	Annual herb	native	Boraginaceae
Brassica nigra	Black mustard	Annual herb	invasive non-native	Brassicaceae
Brassica tournefortii	Mustard	Annual herb	invasive non-native	Brassicaceae
Descurainia pinnata	Yellow tansy mustard	Annual herb	native	Brassicaceae
Lepidium lasiocarpum	Shaggyfruit pepperweed	Annual herb	native	Brassicaceae
Hirschfeldia incana	Mustard	Perennial herb	invasive non-native	Brassicaceae
Caulanthus cooperi	Cooper caulanthus	Annual herb	native	Brassicaceae
Caulanthus lasiophyllus	California mustard	Annual herb	native	Brassicaceae
Thysanocarpus laciniatus	Narrow leaved lacepod	Annual herb	native	Brassicaceae
Sisymbrium altissimum	Tumble mustard	Annual herb	non-native	Brassicaceae
Mammillaria tetrancistra	Common fish hook cactus	Shrub (stem succulent)	native	Cactaceae
Cylindropuntia ramosissima	Branched pencil cholla	Shrub (stem succulent)	native	Cactaceae
Opuntia basilaris var. basilaris	Beavertail cactus	Shrub (stem succulent)	native	Cactaceae
Echinocereus engelmannii	Calico cactus	Shrub (stem succulent)	native	Cactaceae
Echinocactus polycephalus	Cottontop cactus	Shrub (stem succulent)	native	Cactaceae
Cylindropuntia echinocarpa	Silver cholla	Shrub (stem succulent)	native	Cactaceae
Krascheninnikovia lanata	Winter fat	Shrub	native	Chenopodiaceae
Atriplex canescens	Hoary saltbush	Shrub	native	Chenopodiaceae
Grayia spinosa	Hop sage	Shrub	native	Chenopodiaceae
Crassula connata	Sand pygmy weed	Annual herb	native	Crassulaceae

Latin Name	Common name	Growth form	Status	Family
Ephedra viridis	Green ephedra	Shrub	native	Ephedraceae
Ephedra nevadensis	Nevada ephedra	Shrub	native	Ephedraceae
Lupinus odoratus	Mojave lupine	Annual herb	native	Fabaceae
Psorothamnus arborescens	Mojave indigo bush	Shrub	native	Fabaceae
Acmispon strigosus	Strigose lotus	Annual herb	native	Fabaceae
Lupinus sparsiflorus	Coulter's lupine	Annual herb	native	Fabaceae
Lupinus bicolor	Lupine	Annual, Perennial herb	native	Fabaceae
Astragalus didymocarpus	Dwarf white milk vetch	Annual herb	native	Fabaceae
Lupinus concinnus	Bajada lupine	Annual herb	native	Fabaceae
taxon	common	lifeform	status	Family
Erodium cicutarium	Coastal heron's bill	Annual herb	invasive non-native	Geraniaceae
Salvia carduacea	Thistle sage	Annual herb	native	Lamiaceae
Salvia dorrii	Dorr's sage	Shrub	native	Lamiaceae
Calochortus kennedyi	Desert mariposa	Perennial herb	native	Liliaceae
Mentzelia albicaulis	White stemmed blazing star	Annual herb	native	Loasaceae
Mentzelia veatchiana	Veatch's blazing star	Annual herb	native	Loasaceae
Mirabilis laevis	Desert wishbone bush	Perennial herb	native	Nyctaginaceae
Chylismia claviformis	Clavate fruited primrose	Annual, Perennial herb	native	Onagraceae
Camissoniopsis pallida	Pale yellow sun cup	Annual herb	native	Onagraceae
Castilleja chromosa	Desert paintbrush	Perennial herb	native	Orobanchaceae
Eschscholzia minutiflora	Coville s poppy	Annual herb	native	Papaveraceae
Stipa speciosa	Desert needle grass	Perennial grass	native	Poaceae
Elymus elymoides	Squirrel tail grass	Perennial grass	native	Poaceae
Bromus madritensis	Foxtail chess, foxtail brome	Annual grass	non-native	Poaceae
Melica imperfecta	Coast range melic	Perennial grass	native	Poaceae
Eragrostis pectinacea	Tufted lovegrass	Annual grass	native	Poaceae
Schismus barbatus	Old han schismus	Annual grass	invasive non-native	Poaceae
Gilia latiflora	Broad flowered gilia	Annual herb	native	Polemoniaceae
Gilia sinuata	Cinder gilia	Annual herb	native	Polemoniaceae
Gilia tenuiflora	Slender flowered gilia	Annual herb	native	Polemoniaceae
Linanthus/Leptosiphon sp		Annual herb	native	Polemoniaceae
Loeseliastrum matthewsii	Desert calico	Annual herb	native	Polemoniaceae
Langloisia setosissima	Lilac sunbonnet	Annual herb	native	Polemoniaceae
Gilia stellata	Star gilia	Annual herb	native	Polemoniaceae
Eriogonum maculatum	Angle stermed buckwheat	Annual herb	native	Polygonaceae

Latin Name	Common name	Growth form	Status	Family
Eriogonum fasciculatum	California buckwheat	Shrub	native	Polygonaceae
Chorizanthe brevicornu	Brittle spine flower	Annual herb	native	Polygonaceae
Pterostegia drymarioides	Fairy mist	Annual herb	native	Polygonaceae
Eriogonum inflatum	Desert trumpet	Perennial herb	native	Polygonaceae
Delphinium parishii	Parish's larkspur	Perennial herb	native	Ranunculaceae
Prunus fasciculata	Desert almond	Shrub	native	Rosaceae
Coleogyne ramosissima	Black brush	Shrub	native	Rosaceae
Thamnosma montana	Turpentine broom	Shrub	native	Rutaceae
Lycium andersonii	Anderson thornbush	Shrub	native	Solanaceae
Dichelostemma capitatum	Blue dicks	Perennial herb	native	Themidaceae
Larrea tridentata	Creosote bush	Shrub	native	Zygophyllaceae

Table 1. Database Queries (CNDDB, IPAC, CNPSEI) Results

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Plants				
Acanthoscyphus parishii var. *goodmaniana*	Cushenbury oxytheca	Endangered/None	Pinyon and juniper woodland. On limestone talus and rocky slopes. 1400-2350 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site and below known elevational range. Species not found on site during surveys.
Astragalus albens	Cushenbury milk-vetch	Endangered / None	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Sandy or stony flats, rocky hillsides, canyon washes, & fans, on carbonate or mixed granitic-calcareous debris. 1185-1950 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site and below known elevational range. Species not found on site during surveys.
Astragalus bernardinus	San Bernardino milk-vetch	None/None	Joshua tree woodland, pinyon and juniper woodland. Granitic or carbonate substrates. 290-2290 m.	Low probability of occurrence. Lucerne sandy loam is granitic but nearest occurrence and the western most for the species is 27.25 km by air ESE. Species not found on site during surveys.
Boechera dispar	pinyon rockcress	None/None	Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub. Granitic, gravelly slopes & mesas. Often under desert shrubs which support it as it grows. 1005-2805 m.	Low probability of occurrence. Lucerne sandy loam is granitic and the nearest occurrence and the western most for the species is <5 km by air SW. Species not found on site during surveys.
Boechera shockleyi	Shockley's rockcress	None/None	Pinyon and juniper woodland. On ridges, rocky outcrops and openings on limestone or quartzite. 875-2515 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site. Species not found on site during surveys.
Calochortus striatus	alkali mariposa-lily	None/None	Chaparral, chenopod scrub, Mojavean desert scrub, meadows and seeps. Alkaline meadows and ephemeral washes. 70-1600m.	Low to no probability of occurrence. No alkaline meadows and ephemeral washes on site. Species not found on site during surveys.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Canbya candida	white pygmy-poppy	None/None	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Gravelly, sandy, granitic places. 600-1460 m	Moderate probability of occurrence. Several known occurrences are ≤ 10 km by air. Species not found on site during surveys.
Cymopterus multinervatus	purple-nerve cymopterus	None/None	Mojavean desert scrub, pinyon and juniper woodland. Sandy or gravelly places. 765-2195 m.	Moderate probability of occurrence. Appropriate habitat on site, nearest occurrence is 17.25 km ENE by air. Species not found on site during surveys.
Diplacus mohavensis	Mojave monkeyflower	None/None	Joshua tree woodland, Mojavean desert scrub. Dry sandy or rocky washes along the Mojave River. 660-1270 m.	Low to no probability of occurrence. No Dry sandy or rocky washes on site and not along the Mojave river. Species not found on site during surveys.
Elymus salina	Salina Pass wild-rye	None/None	Pinon & juniper woodlands. Rocky sites. 880-2865 m.	Moderate probability of occurrence. Marginal habitat on site, nearest occurrence is 18.5 km ENE by air. Species not found on site during surveys.
Erigeron parishii	Parish's daisy	Threatened/None	Mojavean desert scrub, pinyon and juniper woodland. Often on carbonate limestone mountain slopes often associated with drainages. Sometimes on grainite. 1050-2245 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site and at lowest known species elevational range. Species not found on site during surveys.
Eriogonum ovalifolium var. *vineum*	Cushenbury buckwheat	Endangered	Mojavean desert scrub, pinyon and juniper woodland, Joshua tree woodland. Limestone mountain slopes. Dry, usually rocky places. 1430-2440 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site and below known species elevational range. Species not found on site during surveys.
Menodora spinescens var. *mohavensis*	Mojave menodora	None/None	Mojavean desert scrub. Rocky hillsides, canyons. Andesite gravel. 700-1405 m.	Moderate probability of occurrence. Marginal habitat on site, nearest occurrence is >50 km NNE by air. Species not found on site during surveys.
Mentzelia tridentata	creamy blazing star	None/None	Mojavean desert scrub 545-1100 m.	Moderate probability of occurrence. Marginal habitat on site, nearest occurrence is >13.33 km NE by air. Species not found on site during surveys.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Pediomelum castoreum	Beaver Dam breadroot	None/None	Joshua tree woodland, Mojavean desert scrub. Sandy soils washes and roadcuts. 605-1485 m.	Moderate probability of occurrence. Appropriate habitat on site, nearest occurrence is >12.75 km SW by air. Species not found on site during surveys.
Phacelia parishii	Parish's phacelia	None/None	Mojavean desert scrub, playas. Alkaline flats and slopes or on clay soils. 540-875 m.	Low to no probability of occurrence. No alkaline habitat or clay soils on site and above elevational distribution of the species. Species not found on site during surveys.
Plagiobothrys parishii	Parish's popcornflower	None/None	Great Basin scrub, Joshua tree woodland. Alkaline soils mesic sites. 750-1400 m.	Low to no probability of occurrence. No alkaline habitat on site. Nearest occurrence is 17.25 km ENE. Species not found on site during surveys.
Polygala intermontana	intermountain milkwort	None/None	Pinyon and juniper woodland 940-3080 m.	Moderate probability of occurrence. Appropriate habitat on site, nearest occurrence is >30 km E by air. Species not found on site during surveys.
Puccinellia parishii	Parish's alkali grass	None/None	Meadows and seeps. Alkali springs and seeps in deserts. 700-1000 m.	Low to no probability of occurrence. No alkaline mesic habitat on site and above elevational distribution of the species. Species not found on site during surveys.
Puccinellia simplex	California alkali grass	None/None	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins. 1-915 m.	Low to no probability of occurrence. No alkaline mesic habitat on site and above elevational distribution of the species. Species not found on site during surveys.
Rosa woodsii var. *glabrata*	Cushenbury rose	None/None	Mojavean desert scrub. Springs. 1095-1220 m.	Low to no probability of occurrence. No spring habitat on site. Species not found on site during surveys.
Saltugilia latimeri	Latimer's woodland-gilia	None/None	Chaparral, Mojavean desert scrub, pinyon and juniper woodland. Rocky or sandy substrate; sometimes in washes, sometimes limestone. 120-2200 m.	Moderate probability of occurrence. Appropriate habitat on site, nearest occurrence is 17.25 km ENE by air. Species not found on site during surveys.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Sidalcea neomexicana	salt spring checkerbloom	None/None	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3-2380 m	Low to no probability of occurrence. No alkaline mesic habitat on site. Species not found on site during surveys.
Birds				
Aquila chrysaetos	golden eagle	BLM Sensitive, CDFW Fully Protected, USFWS Birds of Conservation Concern	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, pinyon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland.	No suitable habitat for nesting, but some potentially suitable foraging habitat in the adjacent areas. This species was not observed during survey. Probability of occurrence is low.
Athene cunicularia	burrowing owl	none/none	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	No burrows were found on site and soils are not easily friable. Potential to occur is low.
Gymnogyps californianus	California condor	Endangered/Fully Protected	Semi-arid mountain ranges surrounding the southern San Joaquin Valley	Outside of species current range. Species is absent.
Falco mexicanus	prairie falcon	USFWS Birds of Conservation Concern	Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland	Potentially suitable foraging habitat in adjacent areas. Species was not observed during survey.
Empidonax traillii extimus	Southwestern willow flycatcher	Endangered/Endangered	Riparian woodland with multiple canopy layers and slow flowing waters	No riparian habitat occurs on site for this riprian obligate species.. Potential to occur is low.
Toxostoma lecontei	Le Conte's thrasher	CDFW Species of Special Concern, USFWS Birds of Conservation Concern	Desert wash, Mojavean desert scrub, Sonoran desert scrub, open desert	Suitable habitat in adjacent areas. Occurrence potential is moderate.
Vireo bellii pusillus	least Bell's vireo	Endangered/Endangered	Riparian scrub, riparian forest	No riparian habitat occurs on site for this riprian obligate species.. Potential to occur is low.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Mammals				
Antrozous pallidus	pallid bat	none/none	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland	Potentially suitable habitat in adjacent areas. Species was not observed during survey. Occurrence potential is moderate in the adjacent areas.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	none/none	Chaparral | Coastal scrub	Potentially suitable habitat in adjacent areas. Species was not observed during survey. Occurrence potential is moderate in the adjacent areas.
Corynorhinus townsendii	Townsend's big-eared bat	BLM Sensitive, CDFW Species of Special Concern,, USFS Sensitive, WBWG High Priority	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland.	Potentially suitable habitat in adjacent areas. Species was not observed during survey. Occurrence potential is moderate in the adjacent areas.
Xerospermophilus mohavensis	Mohave ground squirrel	None/Threatened	Chenopod scrub, Joshua tree woodland, Mojavean desert scrub, open desert scrub, sandy to gravelly soils.	Outside of species current range. Previous records to the north are from a population thought to be extripated. Potentially suitable habitat in adjacent areas. Occurrence potential is low in the adjacent areas.
Reptiles				
Gopherus agassizii	desert tortoise	Threatened/Threatened	Joshua tree woodland, Mojavean desert scrub, Sonoran desert scrub with friable soils	Potentially suitable habitat in adjacent areas. No evidence of this species was observed during survey. Occurrence potential is low to moderate in the adjacent areas.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Anaxyrus californicus	arroyo toad	Endangered/None	Slow moving streams with sandy soil	Required habitat does not exist on site, including upland winter habitat. Species is absent.
Phrynosoma blainvillii	coast horned lizard	none/none	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland	Potentially suitable habitat in adjacent areas. Species was not observed during survey. Occurrence potential is moderate in the adjacent areas.
Fish				
Siphateles bicolor mohavensis	Mohave tui chub	Endangered/Endangered	Aquatic, Artificial flowing waters, Artificial standing waters with deep pools and vegetation, endemic to Mojave River basin	Required habitat does not exist on site. Species is absent.

Coding and Terms

E = Endangered T = Threatened C = Candidate FP = Fully Protected SSC = Species of Special Concern R = Rare

State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code.

State Fully Protected: Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Global Rankings (Species or Natural Community Level):

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure – Common; widespread and abundant.

Subspecies Level: Taxa which are subspecies or varieties receive a taxon rank (T-rank**)** attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa.* The T-rank refers only to the global condition of ssp. *phaea*.

State Ranking:

S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.
S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.
S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.
S5 = Secure – Common, widespread, and abundant in the State.

California Rare Plant Rankings (CNPS List):

1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
1B = Plants rare, threatened, or endangered in California and elsewhere.
2A = Plants presumed extirpated in California, but common elsewhere.
2B = Plants rare, threatened, or endangered in California, but more common elsewhere.
3 = Plants about which more information is needed; a review list.
4 = Plants of limited distribution; a watch list.

Threat Ranks:

.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

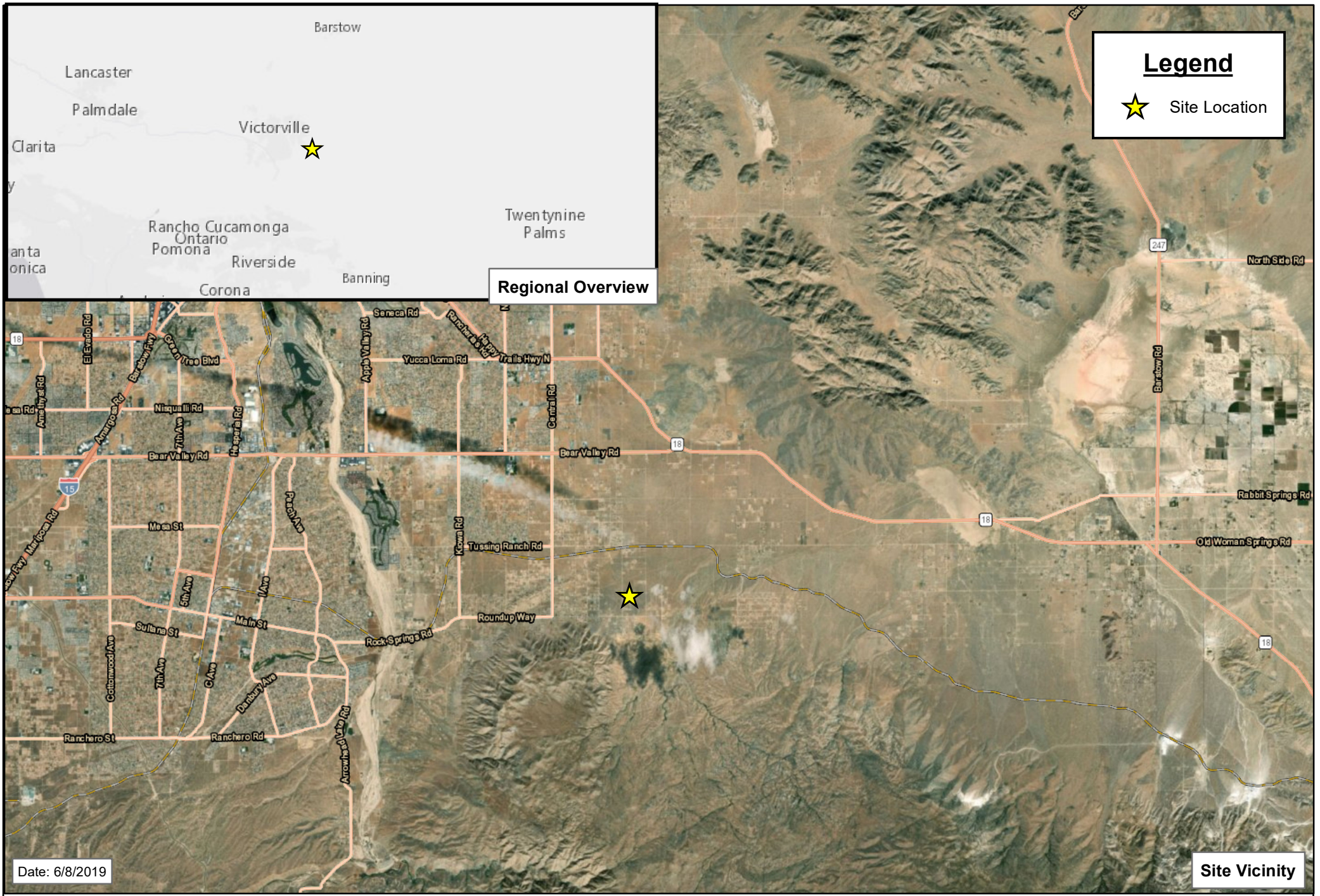


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Figure 1 - Regional Overview Site Vicinity

Ocotillo Borrow Pit

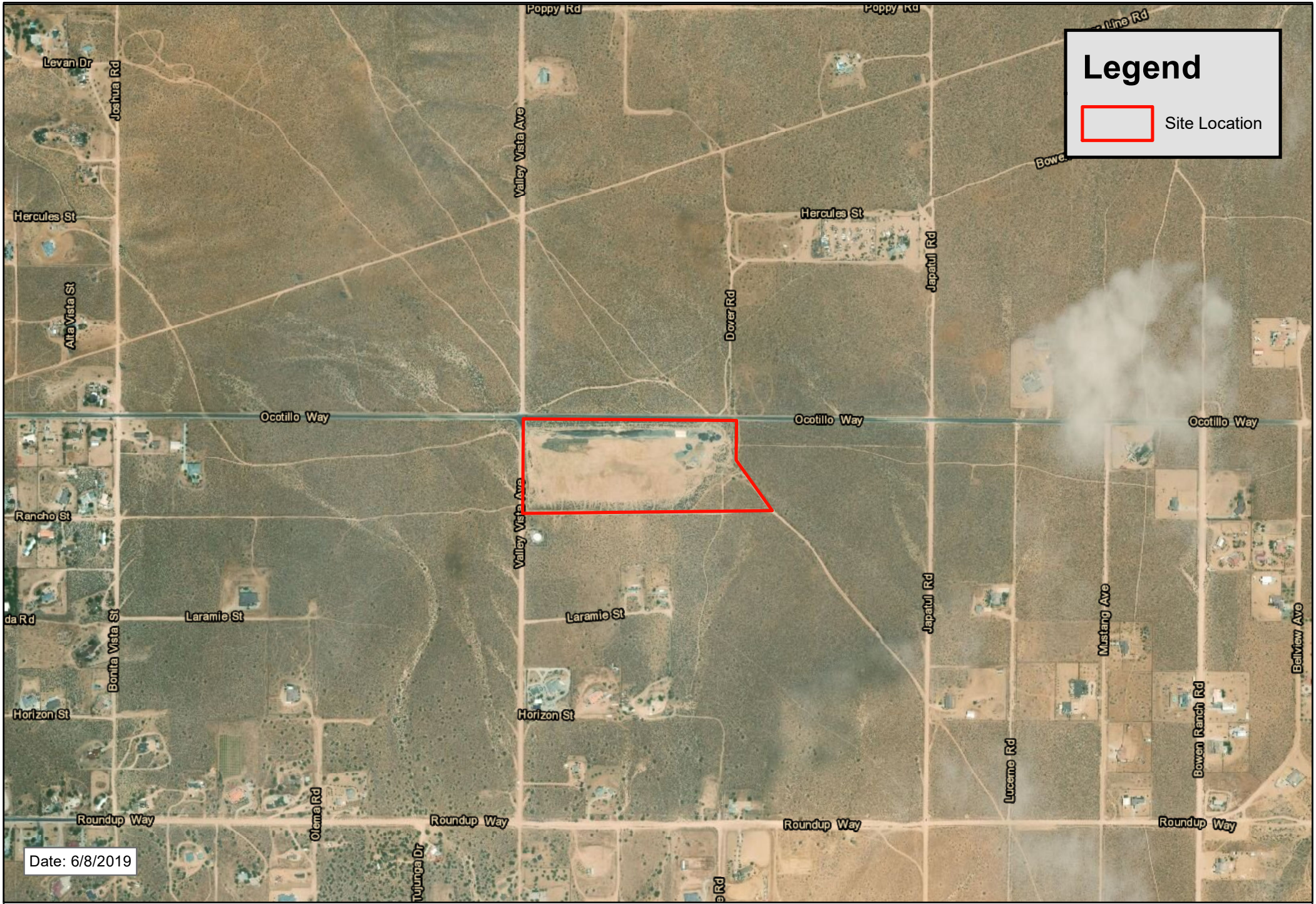

Figure 2
Site Location

Ocotillo Borrow Pit

0 0.0275 0.055 0.11 0.165 0.22 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

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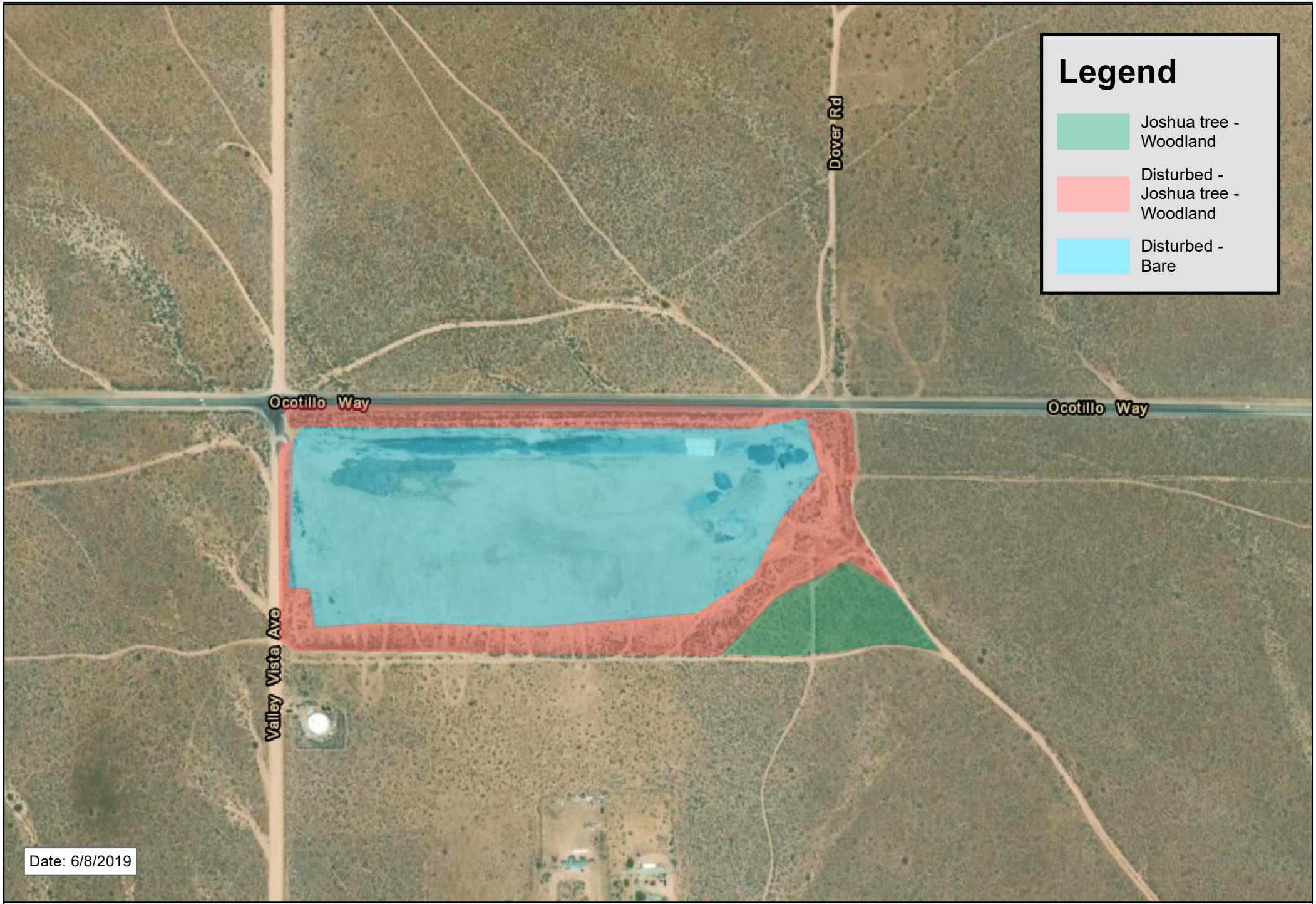
1 inch = 295 feet

Figure 3

Soils

Ocotillo Borrow Pit



0 0.0275 0.055 0.11 0.165 0.22 Miles

Imagery Date: 8/6/2017

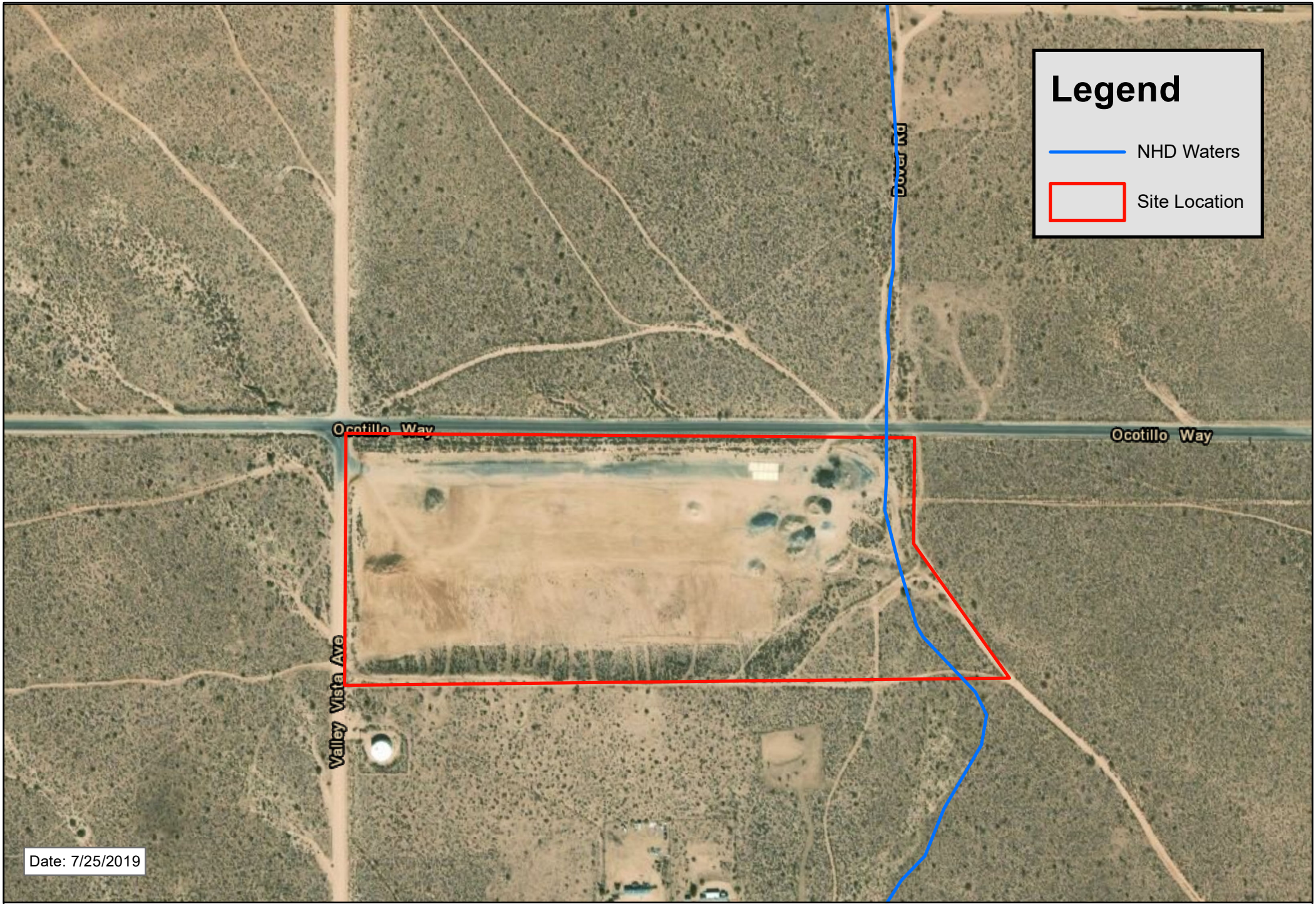
Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

JERICHO SYSTEMS INCORPORATED

1 inch = 295 feet

Figure 4
Vegetation Disturbance Map

Ocotillo Borrow Pit



0 0.0275 0.055 0.11 0.165 0.22 Miles

Imagery Date: 8/6/2017

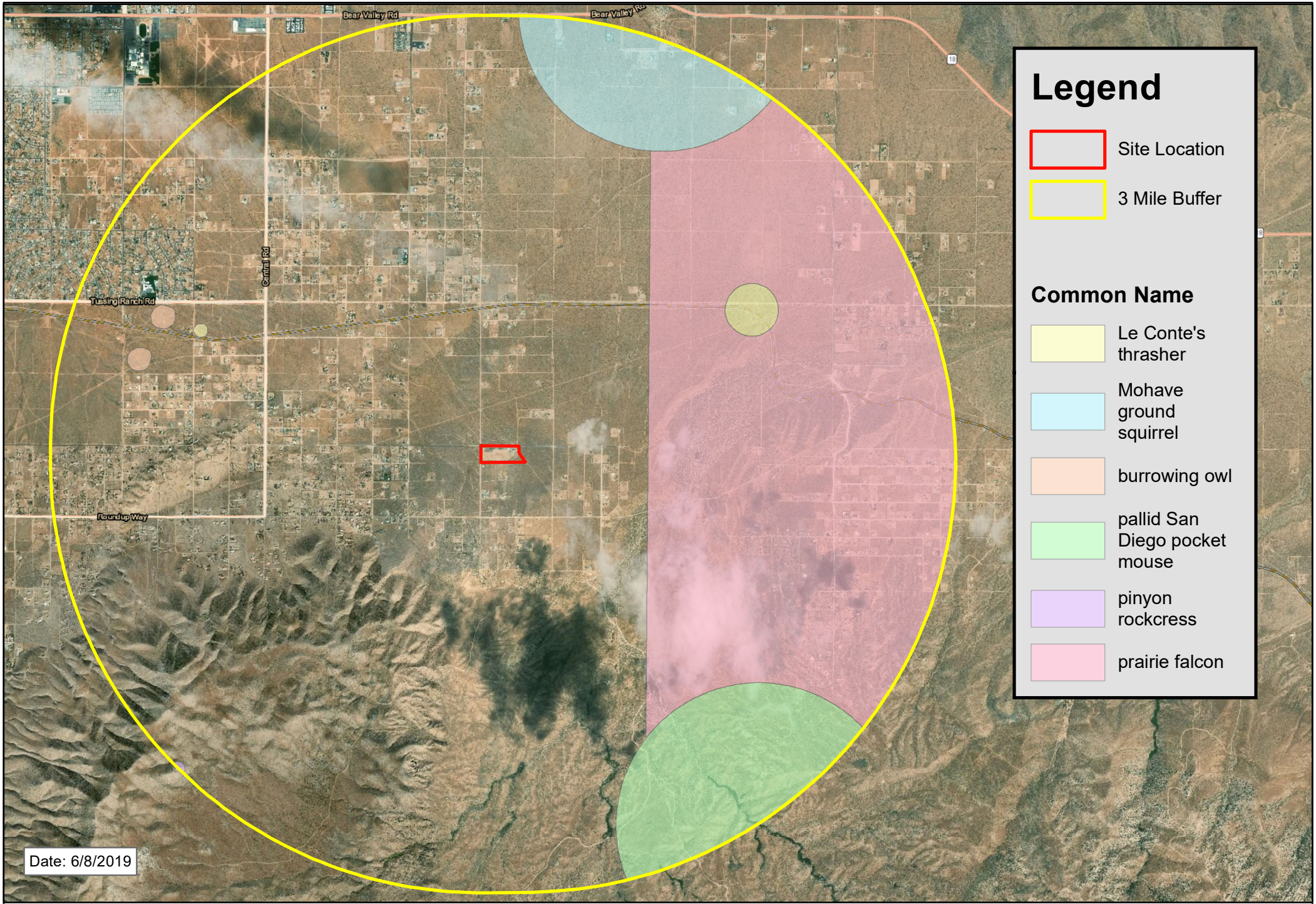
Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

JERICHO SYSTEMS INCORPORATED

1 inch = 295 feet

Figure 5
National Hydrography Dataset (NHD)
Streams and Waterbodies

Ocotillo Borrow Pit



0 0.425 0.85 1.7 2.55 3.4 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

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1 inch = 4,424 feet

Figure 6
CNDDB 3 Mile

Ocotillo Borrow Pit

Ocotillo Borrow Pit Site Photos – April 2019

	**Photo 1.** Looking west from eastern Site boundary.
	**Photo 2.** Looking west down northern Site boundary along Ocotillo Way.

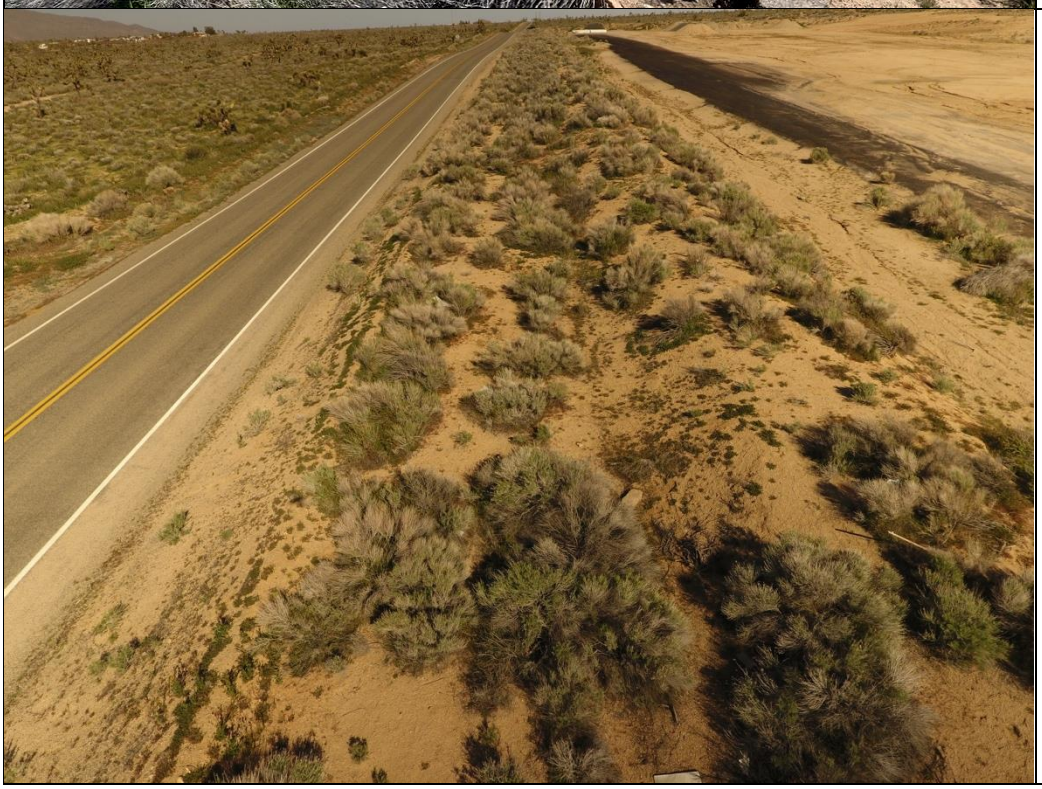
	**Photo 3.** Looking south along eastern Site boundary.
	**Photo 4.** Aerial view looking down east northern Site boundary along Ocotillo Way.

	**Photo 5.** Aerial view looking south down western Site boundary along Valley Vista Ave from intersection with Ocotillo Way.
	**Photo 6.** Aerial view looking northeast from southwest corner of Site.

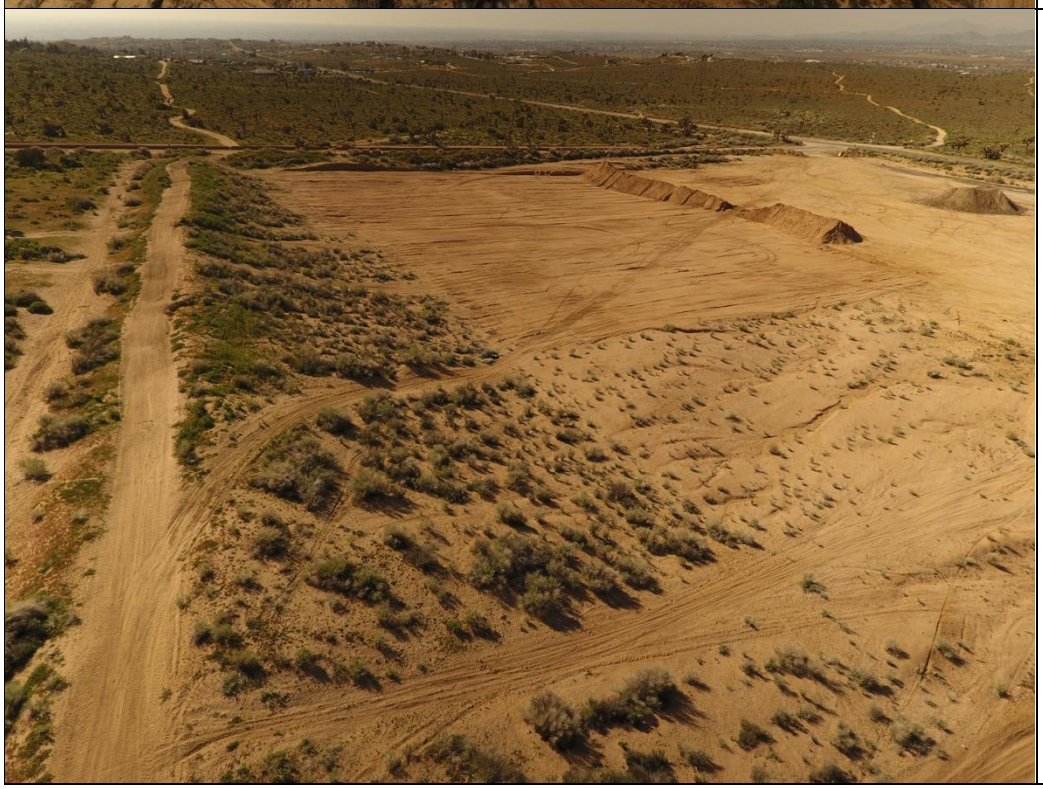
	**Photo 7.** Aerial view looking east along southern Site boundary from Valley Vista Ave.
	**Photo 8.** Aerial view looking northwest from southern Site boundary.

	**Photo 9.** Aerial view looking east along southern Site boundary towards southeast corner of Site.
	**Photo 10.** Aerial view looking northwest from southeast corner of Site.

Revegetation Plan
For the Ocotillo Quarry

Unincorporated Area of San Bernardino County, California
USGS –*Apple Valley South* Quadrangle,
North ½ of Section 24 of Township 4 North, Range 3 West.

Prepared for:

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

Prepared August 2019

Prepared by:

Jericho Systems, Inc.
47 1st Street, Suite 1
Redlands, CA 92373-4601

Certification

Jericho Systems, Inc.
47 1st Street, Suite 1
Redlands, CA 92373-4601
(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 Repot 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.

_____
Shay Lawrey, Ecologist/Regulatory Specialist

Table of Contents

1 Introduction

On behalf of Lilburn Corporation, Jericho Systems, Inc. (Jericho) gathered the baseline plant community information necessary to prepare a revegetation plan, per Section 3705 (*Performance Standards for Revegetation*) of the California State Mining and Geology Board's Surface Mining and Reclamation Act (SMARA) requirements for a property owned by the County of San Bernardino Department of Public Works and referred to as the Ocotillo Quarry Project (proposed Project).

The general project vicinity consists of rural housing and undeveloped open space. Habitat surrounding the Project site consists primarily of *Yucca brevifolia* woodland alliance (Joshua tree woodland). The Project site itself is largely devoid of vegetation with some native and non-native species colonizing the edges, stockpiles and other unused areas. The southeast corner of the Project site is largely undisturbed, with small patches of moderate disturbed areas along the eastern portion.

The goal of the revegetation plan 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, in the event that such a revegetation program is needed. Reclamation of any vegetated areas would commence immediately upon termination of mining. This Revegetation.

For this Revegetation Plan, baseline vegetation data was collected within the vegetated areas surrounding the project site.

This Revegetation Plan considered the requirements set forth in Section 3705 (*Performance Standards for Revegetation*) of the California State Mining and Geology Board's Surface Mining and Reclamation Act (SMARA) which are as follows:

a) *A vegetative cover suitable for the proposed end use and capable of self-regeneration without continued dependence on irrigation, soil amendments or fertilizer shall be established on disturbed land unless an artificially maintained landscape is consistent with the approved reclamation plan. Vegetative cover or density, and species-richness shall be, where appropriate, sufficient to stabilize the surface against effects of long-term erosion and shall be similar to naturally occurring habitats in the surrounding area. The vegetative density, cover and species richness of naturally occurring habitats shall be documented in baseline studies carried out prior to the initiation of mining activities. However, for areas that will not be reclaimed to prior conditions, the use of data from reference areas in lieu of baseline site data is permissible.*

b) *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.*

c) *Where surface mining activities result in compaction of the soil, ripping, disking, or other means shall be used in areas to be revegetated to eliminate compaction and to establish a suitable root zone in preparation for planting.*

d) *Prior to closure, all access roads, haul roads, and other traffic routes to be reclaimed shall be stripped of any remaining roadbase materials, prepared in accordance with subsection 3705(g),*

covered with suitable growth media or topsoil, and revegetated. When it is not necessary to remove roadbase materials for revegetative purposes, lead agencies may set a different standard as specified in section 3700(b) of this Article.

e) Soil analysis shall be required to determine the presence or absence of elements essential for plant growth and to determine those soluble elements that may be toxic to plants, if the soil has been chemically altered or if the growth media consists of other than the native topsoil. If soil analysis suggests that fertility levels or soil constituents are inadequate to successfully implement the revegetative program, fertilizer or other soil amendments may be incorporated into the soil. When native plant materials are used, preference shall be given to slow-release fertilizers, including mineral and organic materials that mimic natural sources, and shall be added in amounts similar to those found in reference soils under natural vegetation of the type being reclaimed.

f) Temporary access for exploration or other short-term uses on arid lands shall not disrupt the soil surface except where necessary to gain safe access. Barriers shall be installed when necessary to gain safe access. Barriers shall be installed when necessary to prevent unauthorized vehicular traffic from interfering with the reclamation of temporary access routes.

g) Native plant species shall be used for revegetation, except when introduced species are necessary to meet the end uses specified in the approved reclamation plan. Areas to be developed for industrial, commercial, or residential use shall be revegetated for the interim period, as necessary, to control erosion. In this circumstance, non-native plant species may be used if they are not noxious weeds and if they are species known not to displace native species in the area.

h) Planting shall be conducted during the most favorable period of the year for plant establishment.

i) Soil stabilizing practices shall be used where necessary to control erosion and for successful plant establishment. Irrigation may be used when necessary to establish vegetation.

j) If irrigation is used, the operator must demonstrate that the vegetation has been self-sustaining without irrigation for a minimum of two years prior to release of the financial assurances by the lead agency, unless an artificially maintained landscape is consistent with the approved end use.

k) Noxious weeds shall be managed:

(1) when they threaten the success of the proposed revegetation;

(2) to prevent spreading to nearby areas; and

(3) to eliminate fire hazard.

l) Protection measures, such as fencing of revegetated areas and/or the placement of cages over individual plants, shall be used in areas where grazing, trampling, herbivory, or other causes threaten the success of the proposed revegetation. Fencing shall be maintained until revegetation efforts are successfully completed and the lead agency authorizes removal.

m) Success of revegetation shall be judged based upon the effectiveness of the vegetation for the approved end use, and by comparing the quantified measures of vegetative cover, density, and species-richness of the reclaimed mined-lands to similar parameters of naturally occurring vegetation in the area. Either baseline data or data from nearby reference areas may be used as the standard for comparison. Quantitative standards for success and the location(s) of the reference area(s) shall be set forth in the approved reclamation plan. Comparisons shall be made

until performance standards are met provided that, during the last two years, there has been no human intervention, including, for example, irrigation, fertilization, or weeding. Standards for success shall be based on expected local recovery rates. Valid sampling techniques for measuring success shall be specified in the approved reclamation plan. Sample sizes must be sufficient to produce at least an 80 percent confidence level. There are standard statistical methods in commonly available literature for determining an 80 percent confidence level on a site-by-site basis.

1.1 Project Location

The Project site is located approximately 3.25 miles south of Highway 18, 4.3 miles east of the Mojave River and is bordered by Ocotillo Way to the north, Japatul Road to the east, vacant land to the south and Valley Vista Avenue to the west (Figures 1 and 2). The Project site can be found on the *Apple Valley South* U.S. Geological Survey (USGS) 7.5-minute series quadrangle within the north ½ of Section 24 of Township 4 North, Range 3 West (Figures 1&2).

1.2 Project Description

The 20-acre Ocotillo site is nearly 100 percent disturbed, graded and well defined, with Ocotillo Way on north, Valley Vista on west and dirt roads along the south and east. The entire site will be utilized over the next 100 years for aggregate mining purposes.

2 Environmental Setting

The project site is situated near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The Apple Valley area is subject to both seasonal and annual variations in temperature and precipitation. Average annual maximum temperatures peak at 96.5 degrees Fahrenheit (° F) in July and fall to an average annual minimum temperature of 32.0° F in December and January. Average annual precipitation is greatest from November through March and reaches a peak in February (1.4 inches). Precipitation is lowest in the month of June (0.09 inches). Annual precipitation averages 8.4 inches. The topography of the local landscape is a slight slope to the north. The Project area is relatively flat with steep ~25-foot slopes on the eastern, southern and northern portions of the Project site as a result of historical excavation and removal. Elevation on site ranges from approximately 3,369 feet above mean sea level (amsl) in the southeastern portion of the site, to 3,414 feet amsl in the northwesternmost portion of the site.

Hydrologically, the Project site is located within the upper Mojave watershed and soils on site are solely comprised of Lucerne sandy loam, 2 to 5 percent slopes (Figure 3).

The general project vicinity consists of rural housing and undeveloped open space. Habitat surrounding the Project site consists primarily of *Yucca brevifolia* woodland alliance (Joshua tree woodland). The Project site itself is largely devoid of vegetation with some native and non-native species colonizing the edges, stockpiles and other unused areas. The southeast corner of the Project site is largely undisturbed, with small patches of moderate disturbed areas along the eastern portion (Figure 4).

2.1 Existing Vegetation

The Project site consists almost entirely of undeveloped open space, occupying mostly flat to gently sloped terrain. The topography of the site is mostly uniform throughout. Joshua Tree woodland dominates undisturbed areas with disturbed areas being either bare or populated by a subset of species that occur nearby. The vast majority of the Project site is disturbed and void of vegetation with small pockets and edge vegetation adjacent to the Project site. (Figure 4).

The habitat in the areas containing vegetation (patches, edge and adjacent) consists primarily of *Yucca brevifolia* Woodland Alliance (Joshua Tree Woodland). The tree canopy of the community contains only two species and is co-dominated by *Y. brevifolia* and *Y. schirdigera* (Mojave yucca). The shrub canopy is diverse with 21 species with *Ambrosia salsola* (Burrobrush), *Ephedra nevadensis* (Nevada ephedra), *Hesperoyucca whipplei* (Chaparral yucca), and *Salvia dorrii* (Dorr's sage) being the most common. Fifty-one herbaceous species were found, including four non-natives species.

The baseline inventory of flora was conducted on April 3, 4 & 16 and May 16, 2019 by Jericho Systems, Inc., botanist C.J. Fotheringham PhD. The census survey was conducted within the all vegetated areas on site and adjacent to the Project site. The purpose of the plant inventory was to determine species diversity and to develop the necessary components for a successful revegetation plan. Please refer to the attached Site Photographs for a representation of conditions on site and within the surrounding habitat. A complete list of observed plant species is included as Appendix A.

2.2 Method for Collecting Baseline Vegetation

Methodology used to collect data needed to establish revegetation criteria was based on California Native Plant Society guidelines (CNPS, 2019) and modified based on Keeley and Fotheringham, (2005) (Appendix A). Accordingly, a 20m x 50m plot was randomly established and subdivided into 10m x 10m subplots to assess shrub density, percentage of the ground surface covered by plant canopies (%GSC) and species dominance. For herbaceous density cover and dominance three 64 m^2 plots were established and subdivided into 9 plots ranging from 0.5 to 32m^2 . The sample unit area consisted of the southeast corner of the property where relatively undisturbed vegetation occurred. A total of three (3) 64m^2 plots and one 1000m^2 plots within the undisturbed area of the sample unit were surveyed to provide baseline data needed to determine seed and seedling types and to establish the success criteria for future revegetation efforts, if needed.

2.3 Baseline Survey Results

The plant community identified within the sample areas is Joshua tree woodland based on 2.2% GSC of *Yucca brevifolia* (Photo 1). The shrub layer canopy accounted for ~40% of %GSC and is dominated by Burrobrush (*Ambrosia salsola*). Three non-native species, *Erodium cicutarium* (Coastal heron's bill), *Bromus madritensis* (Foxtail brome), *Schismus barbatus* (Old han schismus) account for ~68% of the %GSC. The native herbaceous layer accounted for 12.5% GSC with *Phacelia fremontii* (Fremont's phacelia), *Mentzelia veatchiana* (Veatch's blazing star), and *Amsinckia tessellata* (Devil's lettuce) accounting for the majority of %GSC in this group.

Throughout the project area, absolute shrub cover is open. Average absolute shrub cover within the sample area measured approximately 30-40% GSC. Average shrub density measured at 2015ac; and an average of 4.2 shrub species was observed to occur per 100 m^2 plot. Native herbaceous species

Please refer to Table 1 below for shrub density per acre within the undisturbed portion of project area. Table 1 also represents tree and herbaceous species densities.

Average shrub density measured 4.2 shrubs per 100 m^2 plot. A total of eight (8) shrub species were observed to occur within the sample areas. Please refer to Table 1 (below) for shrub density per acre within the undisturbed portion of project area.

Table 1.
Plant Species Density

Tree					
Latin Name	**Common Name**	**%GSC**	**Density (# 100m^2)**	**Density (# m^2)**	**Seed Despersability**
Yucca schidigera	Mohave yucca	2.2	0.20		moderate
Yucca brevifolia	Joshua tree	2.2	0.40		moderate
Shrub					
Ambrosia salsola	Burrobrush	15.81	10.20		high
Cylindropuntia echinocarpa	Silver cholla	0.61	0.20		moderate
Cylindropuntia ramosissima	Branched pencil cholla	5.2	0.50		moderate
Ephedra nevadensis	Nevada ephedra	5.4	9.20		low
Ericameria nauseosa	Rubber rabbitbrush	1.67	3.70		high
Eriogonum fasciculatum	California buckwheat	1.03	1.80		low
Hesperoyucca whipplei	Chaparral yucca	5.2	0.80		moderate
Lycium andersonii	Anderson thornbush	0.61	0.80		high
Herb					
Amsinckia tessellata	Devil's lettuce	3.09		2.41	low
Cryptantha maritima	Guadalupe island cryptantha	0.01		0.01	low
Cryptantha pterocarya	Winged nut forget me not	0.01		0.06	low
Lasthenia gracilis	Needle goldfields	0.02		0.43	low
Logfia filaginoides	California cottonrose	0.02		0.06	low
Mentzelia veatchiana	Veatch's blazing star	3.72		8.37	low
Pectocarya heterocarpa	Chuckwalla pectocarya	1.81		4.03	moderate
Phacelia fremontii	Fremont's phacelia	4.04		6.2	low
Phacelia tanacetifolia	Tansy leafed phacelia	0.06		0.01	low

Shrub diversity was 4.2 species per 100 m^2 plot while herbaceous species diversity averaged 3.2 species per m^2

3 Revegetation

If required, 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. In the event that future changes to the currently proposed project footprint should occur that would impact adjacent habitat, all impacted areas currently consisting of white bursage scrub associated vegetation would be reclaimed (Figure 4). Success criteria and revegetation strategies were designed specifically to meet the needs of the vegetative community and environmental conditions adjacent the project site.

3.1 Soil Salvage

The top 12 inches of topsoil within areas of white bursage scrub habitat that are impacted shall be salvaged and stockpiled for restoration. 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 privately-owned 300-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.

3.2 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.

3.3 Site Preparation

Upon termination of mining activities, the surfaces to be revegetated would be returned to their original land contours. 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 random “islands” up to one-foot thick 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.

3.4 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 anticipated winter precipitation events, 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.

3.5 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).

3.6 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. 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.

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 consists 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.

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

3.7 Seeding Methods and Rates

The revegetation area(s) 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 habitat occurring in the immediate Project vicinity. The recommended seed mix and seeding rate 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.

Specific methods and species may be revised in future years if appropriate and practical, as results of the test plot studies or other desert revegetation results become available. At the present time, initial recommendations are given as a guide for test plots. As portions of the site are mined to a finished grade, the finished areas will be prepared for revegetation. The prepared areas will be covered with available stockpiled surface material either uniformly if enough surface material available or in "islands" and seeded with the recommended seeds and seeding rates taking into account site plant observations and S & S Seeds recommendations and seed availability and costs. Seeding will be undertaken in the fall before the onset of the winter rains.

Table 4.
Recommended Seed Mix and Rates

Latin Name	Common Name	Life Form	Pure Live Seed Lbs/Acre
Ambrosia salsola	Burrobrush	shrub	1.5
Cylindropuntia echinocarpa	Silver cholla	shrub	1.0
Cylindropuntia ramosissima	Branched pencil cholla	shrub	0.5
Ephedra nevadensis	Nevada ephedra	shrub	1.0
Ericameria nauseosa	Rubber rabbitbrush	shrub	1.0
Eriogonum fasciculatum	California buckwheat	shrub	0.5
Hesperoyucca whipplei	Chaparral yucca	shrub	0.2
Phacelia fremontii	Fremont's phacelia	annual herb	1.0
Mentzelia veatchiana	Veatch's blazing star	annual herb	0.2
Logfia filaginoides	California cottonrose	annual herb	0.5
	Total		**7.4**

per recommendations given by S & S Seeds (pers. comm. June 9, 2019).

3.8 Schedule of Revegetation

Seeding of the revegetation area(s) 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 late fall generally, prior to anticipated winter precipitation events that typically occur between November and March in the project area. 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.

3.9 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."*

Test plots would include surface ripping/no seeding (control plot); surface ripping and seeding as described above with the recommended seed mixture. Additional tests would 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 any areas of the proposed project where native habitat is disturbed. 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 Project site would measure success at 45% of the baseline cover, 45% of the baseline density, and 40% of the baseline species diversity within the shrub canopy, five years after reclamation.

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 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.

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

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

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 any revegetation efforts and submit Annual Maintenance and Monitoring reports to Inyo County. Annual reports are due by December 31st of each year.

5 Conclusion

Upon termination of mining activities, any surfaces to be revegetated would be returned to their original land contours and revegetation surfaces would be scarified to create conditions optimal for seeding. Any revegetation areas will be covered with available surface materials in "islands" 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 Ocotillo Quarry Project site would measure success at 45% of the baseline cover, 45% of the baseline density, and 40% of the baseline species diversity, five years after reclamation. The baseline data showed that the average absolute shrub cover was approximately 30-40% GSC. The baseline data showed the average shrub density measured at 2,015 shrubs per acre; and an average shrub density measured 4.2 shrubs per 100 m^2 plot. A total of eight (8) shrub species were observed to occur within the sample areas. Accordingly, successful revegetation in the revegetation area would be achieved at approximately 17% cover by native shrub species, an approximate density of 906 shrubs per acre and a species diversity of three shrub species per acre. No areas will be allowed to have more than 10 percent non-native invasive species ground cover.

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.

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FIGURES

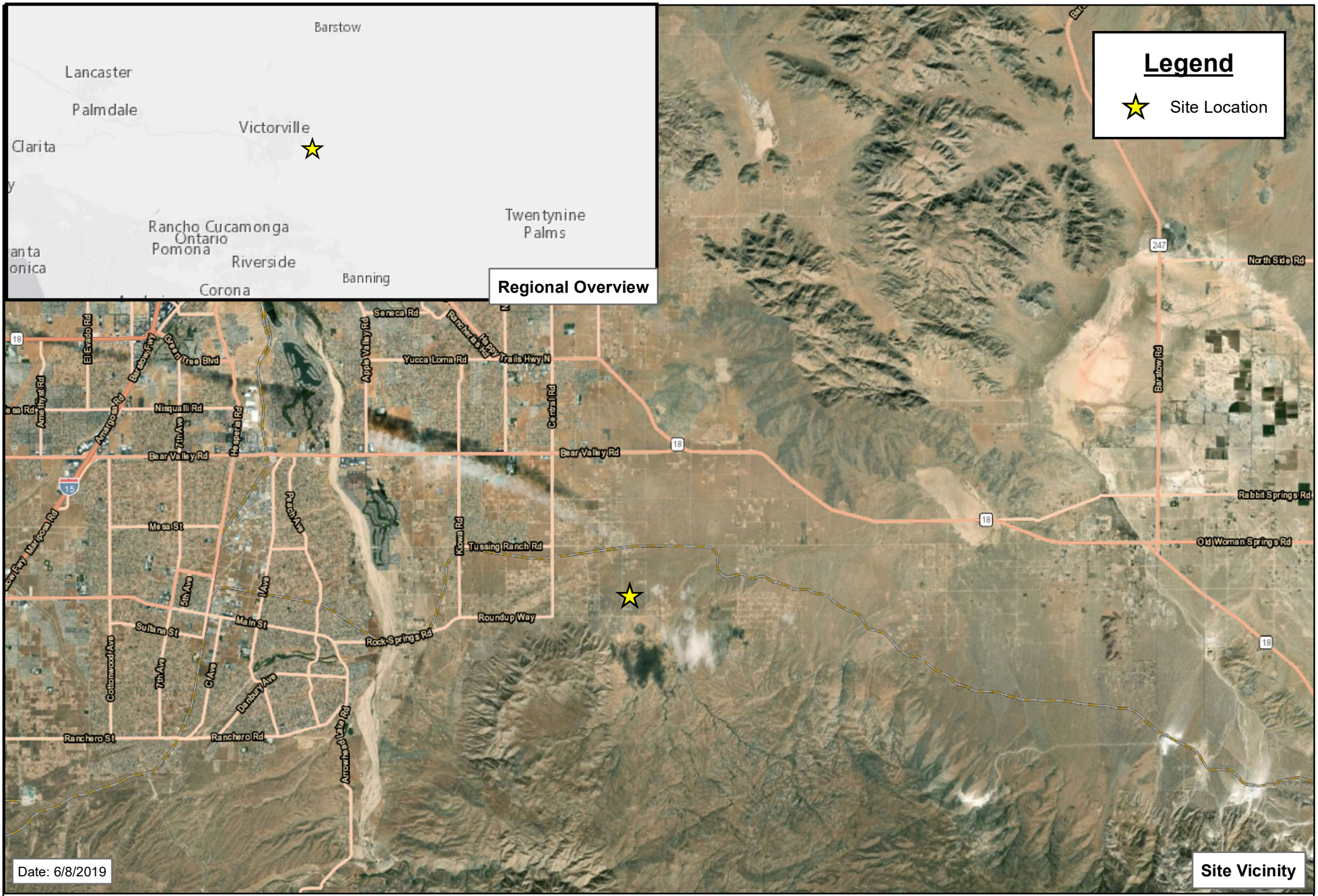

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Figure 1 - Regional Overview Site Vicinity

Ocotillo Quarry

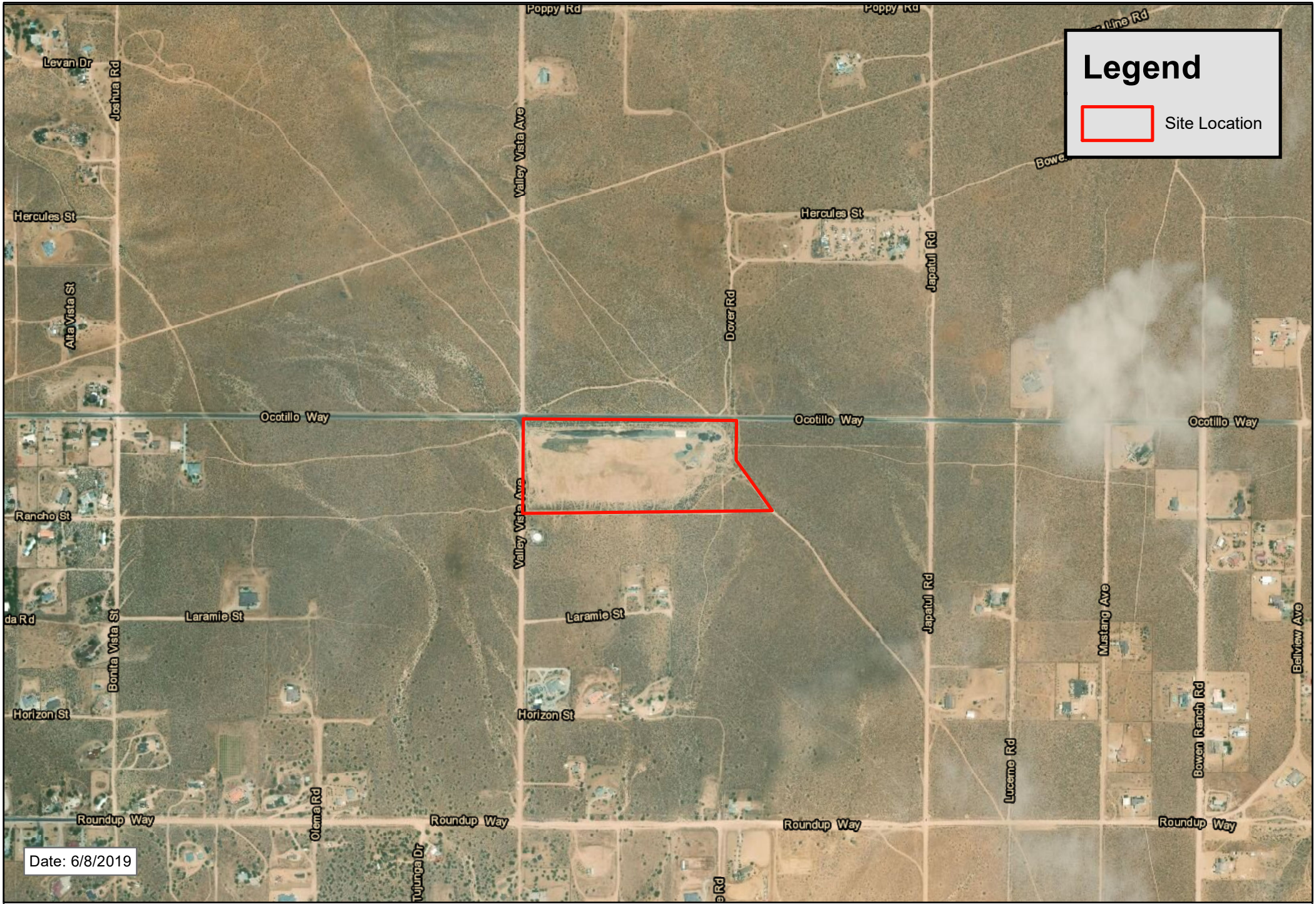

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Figure 2
Site Location

Ocotillo Quarry

0 0.0275 0.055 0.11 0.165 0.22 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

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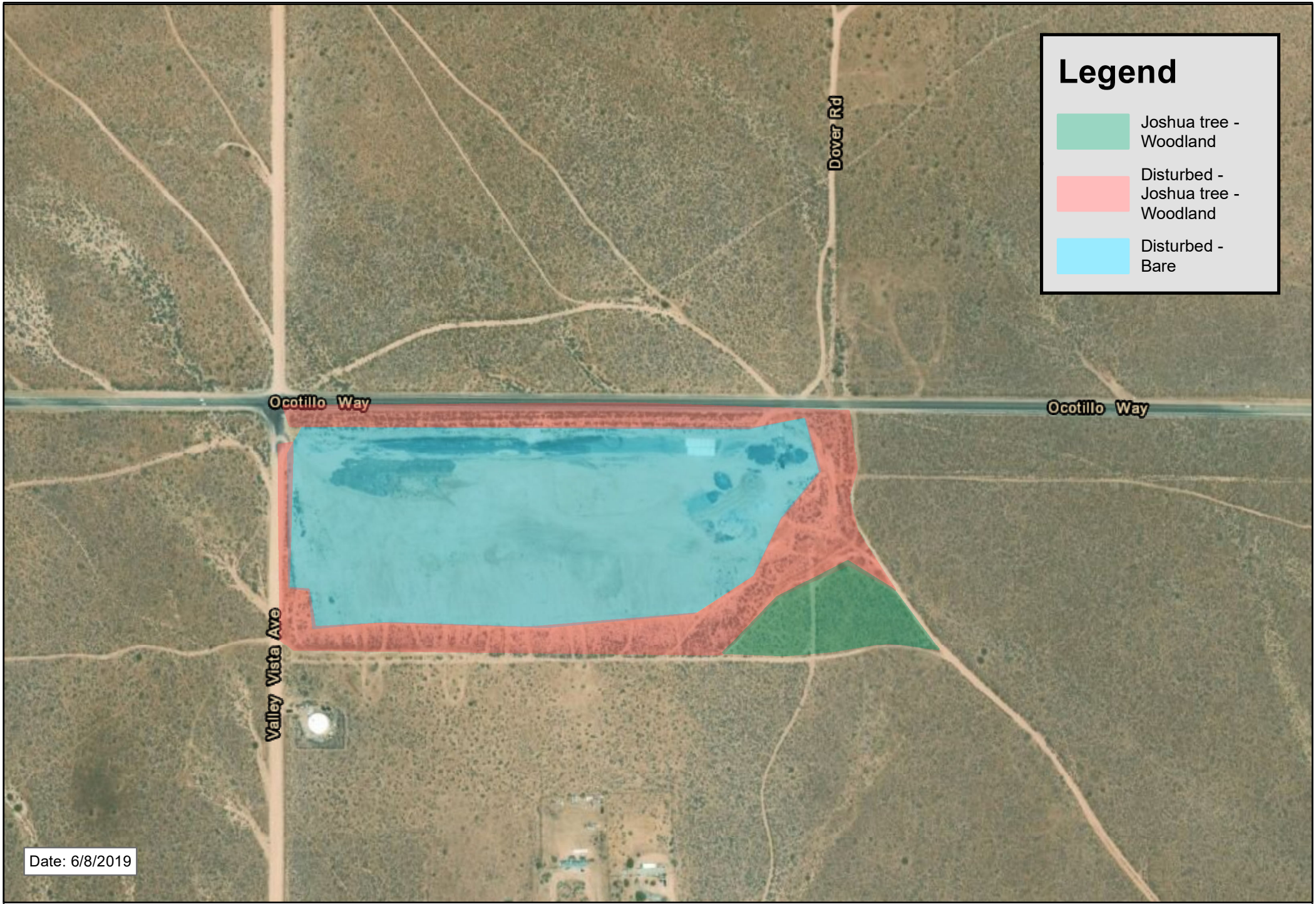
1 inch = 295 feet

Figure 3
Soils

Ocotillo Quarry



0 0.0275 0.055 0.11 0.165 0.22 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

1 inch = 295 feet

Figure 4
Vegetation Disturbance Map

Ocotillo Quarry

SITE PHOTOGRAPHS

Ocotillo Quarry Site Photos – April 2019

Photo 1. Looking west from eastern Site boundary.

Photo 2. Looking west down northern Site boundary along Ocotillo Way.

	**Photo 3.** Looking south along eastern Site boundary.
	**Photo 4.** Aerial view looking down east northern Site boundary along Ocotillo Way.

	**Photo 5.** Aerial view looking south down western Site boundary along Valley Vista Ave from intersection with Ocotillo Way.
	**Photo 6.** Aerial view looking northeast from southwest corner of Site.

	**Photo 7.** Aerial view looking east along southern Site boundary from Valley Vista Ave.
	**Photo 8.** Aerial view looking northwest from southern Site boundary.

	**Photo 9.** Aerial view looking east along southern Site boundary towards southeast corner of Site.
	**Photo 10.** Aerial view looking northwest from southeast corner of Site.

Floral Species Observed

PLANT SPECIES OBSERVED OCOTILLO QUARRY

Latin Name	Common name	Growth form	Status	Family
Yucca schidigera	Mohave yucca	Tree	native	Agavaceae
Yucca brevifolia	Joshua tree	Tree	native	Agavaceae
Ericameria pinifolia	Pine bush	Shrub	native	Asteraceae
Eriophyllum wallacei	Wallace eriophyllum	Annual herb	native	Asteraceae
Encelia actoni	Acton encelia	Shrub	native	Asteraceae
Eriophyllum pringlei	Pringle eriophyllum	Annual herb	native	Asteraceae
Chaenactis stevioides	Esteve pincushion	Annual herb	native	Asteraceae
Lasthenia gracilis	Needle goldfields	Annual herb	native	Asteraceae
Rafinesquia neomexicana	Desert chicory	Annual herb	native	Asteraceae
Chaenactis fremontii	Fremont pincushion	Annual herb	native	Asteraceae
Ericameria linearifolia	Interior goldenbush	Shrub	native	Asteraceae
Stylocline micropoides	Desert nest straw	Annual herb	native	Asteraceae
Stylocline psilocarphoides	Peck's stylocline	Annual herb	native	Asteraceae
Lactuca serriola	Prickly lettuce	Annual herb	invasive non-native	Asteraceae
Ambrosia dumosa	Burro weed	Shrub	native	Asteraceae
Perityle emoryi	Emory's rock daisy	Annual herb	native	Asteraceae
Gutierrezia microcephala	Sticky snakeweed	Shrub (stem succulent)	native	Asteraceae
Ericameria nauseosa	Rubber rabbitbrush	Shrub	native	Asteraceae
Gutierrezia sarothrae	Matchweed	Shrub	native	Asteraceae
Tetradymia stenolepis	Narrow scaled felt thorn	Shrub	native	Asteraceae
Layia glandulosa	White layia	Annual herb	native	Asteraceae
Logfia filaginoides	California cottonrose	Annual herb	native	Asteraceae
Malacothrix glabrata	Desert dandelion	Annual herb	native	Asteraceae
Xylorhiza tortifolia	Mojave woodyaster	Perennial herb	native	Asteraceae
Malacothrix coulteri	Snake's head	Annual herb	native	Asteraceae
Uropappus lindleyi	Silver puffs	Annual herb	native	Asteraceae
Brickellia desertorum	Desert brickellia	Shrub	native	Asteraceae
Cryptantha barbigera	Bearded cryptantha	Annual herb	native	Boraginaceae
Emmenanthe penduliflora	Whispering bells	Annual herb	native	Boraginaceae
Pectocarya heterocarpa	Chuckwalla pectocarya	Annual herb	native	Boraginaceae
Plagiobothrys arizonicus	Arizona popcorn	Annual herb	native	Boraginaceae

Latin Name	Common name	Growth form	Status	Family
	flower			
Cryptantha angustifolia	Narrow leaved forget me not	Annual herb	native	Boraginaceae
Cryptantha circumscissa	Western forget me not	Annual herb	native	Boraginaceae
Cryptantha micrantha	Purple root cryptantha	Annual herb	native	Boraginaceae
Amsinckia tessellata	Devil's lettuce	Annual herb	native	Boraginaceae
Phacelia fremontii	Fremont's phacelia	Annual herb	native	Boraginaceae
Phacelia distans	Common phacelia	Annual herb	native	Boraginaceae
Cryptantha maritima	Guadalupe island cryptantha	Annual herb	native	Boraginaceae
Cryptantha pterocarya	Winged nut forget me not	Annual herb	native	Boraginaceae
Phacelia tanacetifolia	Tansy leafed phacelia	Annual herb	native	Boraginaceae
Phacelia crenulata	Notch leaved phacelia	Annual herb	native	Boraginaceae
Phacelia cryptantha	Small flowered phacelia	Annual herb	native	Boraginaceae
Brassica nigra	Black mustard	Annual herb	invasive non-native	Brassicaceae
Brassica tournefortii	Mustard	Annual herb	invasive non-native	Brassicaceae
Descurainia pinnata	Yellow tansy mustard	Annual herb	native	Brassicaceae
Lepidium lasiocarpum	Shaggyfruit pepperweed	Annual herb	native	Brassicaceae
Hirschfeldia incana	Mustard	Perennial herb	invasive non-native	Brassicaceae
Caulanthus cooperi	Cooper caulanthus	Annual herb	native	Brassicaceae
Caulanthus lasiophyllus	California mustard	Annual herb	native	Brassicaceae
Thysanocarpus laciniatus	Narrow leaved lacepod	Annual herb	native	Brassicaceae
Sisymbrium altissimum	Tumble mustard	Annual herb	non-native	Brassicaceae
Mammillaria tetrancistra	Common fish hook cactus	Shrub (stem succulent)	native	Cactaceae
Cylindropuntia ramosissima	Branched pencil cholla	Shrub (stem succulent)	native	Cactaceae
Opuntia basilaris var. basilaris	Beavertail cactus	Shrub (stem succulent)	native	Cactaceae
Echinocereus engelmannii	Calico cactus	Shrub (stem succulent)	native	Cactaceae
Echinocactus polycephalus	Cottontop cactus	Shrub (stem	native	Cactaceae

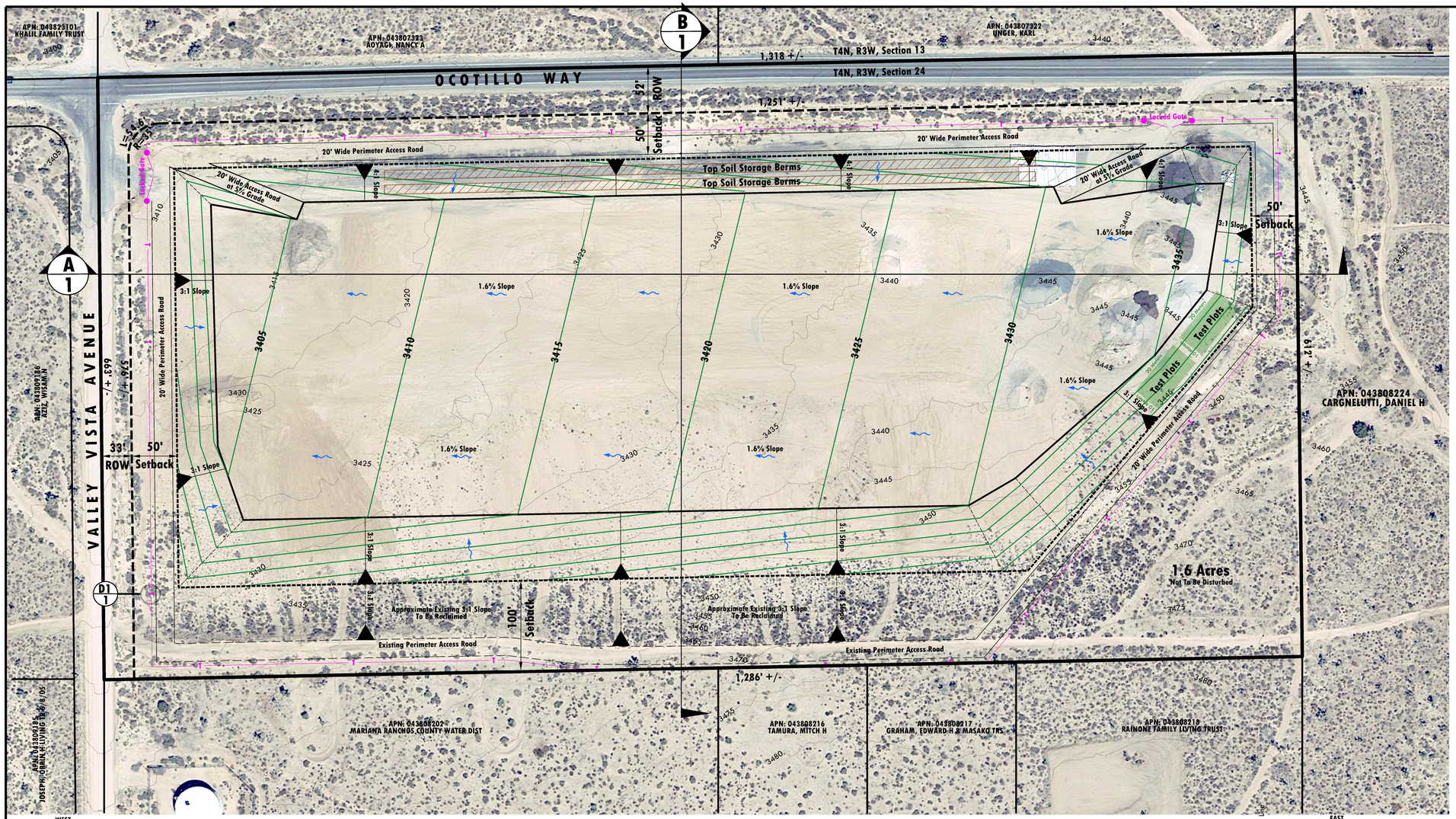
Latin Name	Common name	Growth form	Status	Family
		succulent)		
Cylindropuntia echinocarpa	Silver cholla	Shrub (stem succulent)	native	Cactaceae
Krascheninnikovia lanata	Winter fat	Shrub	native	Chenopodiaceae
Atriplex canescens	Hoary saltbush	Shrub	native	Chenopodiaceae
Grayia spinosa	Hop sage	Shrub	native	Chenopodiaceae
Crassula connata	Sand pygmy weed	Annual herb	native	Crassulaceae
Ephedra viridis	Green ephedra	Shrub	native	Ephedraceae
Ephedra nevadensis	Nevada ephedra	Shrub	native	Ephedraceae
Lupinus odoratus	Mojave lupine	Annual herb	native	Fabaceae
Psorothamnus arborescens	Mojave indigo bush	Shrub	native	Fabaceae
Acmispon strigosus	Strigose lotus	Annual herb	native	Fabaceae
Lupinus sparsiflorus	Coulter's lupine	Annual herb	native	Fabaceae
Lupinus bicolor	Lupine	Annual, Perennial herb	native	Fabaceae
Astragalus didymocarpus	Dwarf white milk vetch	Annual herb	native	Fabaceae
Lupinus concinnus	Bajada lupine	Annual herb	native	Fabaceae
taxon	common	lifeform	status	Family
Erodium cicutarium	Coastal heron's bill	Annual herb	invasive non-native	Geraniaceae
Salvia carduacea	Thistle sage	Annual herb	native	Lamiaceae
Salvia dorrii	Dorr's sage	Shrub	native	Lamiaceae
Calochortus kennedyi	Desert mariposa	Perennial herb	native	Liliaceae
Mentzelia albicaulis	White stemmed blazing star	Annual herb	native	Loasaceae
Mentzelia veatchiana	Veatch's blazing star	Annual herb	native	Loasaceae
Mirabilis laevis	Desert wishbone bush	Perennial herb	native	Nyctaginaceae
Chylismia claviformis	Clavate fruited primrose	Annual, Perennial herb	native	Onagraceae
Camissoniopsis pallida	Pale yellow sun cup	Annual herb	native	Onagraceae
Castilleja chromosa	Desert paintbrush	Perennial herb	native	Orobanchaceae
Eschscholzia minutiflora	Coville s poppy	Annual herb	native	Papaveraceae
Stipa speciosa	Desert needle grass	Perennial grass	native	Poaceae
Elymus elymoides	Squirrel tail grass	Perennial grass	native	Poaceae
Bromus madritensis	Foxtail chess, foxtail brome	Annual grass	non-native	Poaceae
Melica imperfecta	Coast range melic	Perennial grass	native	Poaceae
Eragrostis pectinacea	Tufted lovegrass	Annual grass	native	Poaceae
Schismus barbatus	Old han schismus	Annual grass	invasive non-native	Poaceae
Gilia latiflora	Broad flowered	Annual herb	native	Polemoniaceae

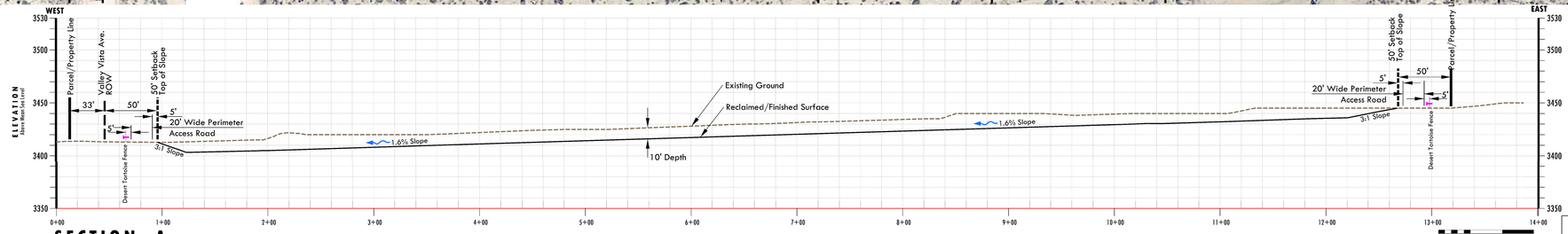
Latin Name	Common name	Growth form	Status	Family
	gilia			
Gilia sinuata	Cinder gilia	Annual herb	native	Polemoniaceae
Gilia tenuiflora	Slender flowered gilia	Annual herb	native	Polemoniaceae
Linanthus/Leptosiphon sp		Annual herb	native	Polemoniaceae
Loeseliastrum matthewsii	Desert calico	Annual herb	native	Polemoniaceae
Langloisia setosissima	Lilac sunbonnet	Annual herb	native	Polemoniaceae
Gilia stellata	Star gilia	Annual herb	native	Polemoniaceae
Eriogonum maculatum	Angle stermed buckwheat	Annual herb	native	Polygonaceae
Eriogonum fasciculatum	California buckwheat	Shrub	native	Polygonaceae
Chorizanthe brevicornu	Brittle spine flower	Annual herb	native	Polygonaceae
Pterostegia drymarioides	Fairy mist	Annual herb	native	Polygonaceae
Eriogonum inflatum	Desert trumpet	Perennial herb	native	Polygonaceae
Delphinium parishii	Parish's larkspur	Perennial herb	native	Ranunculaceae
Prunus fasciculata	Desert almond	Shrub	native	Rosaceae
Coleogyne ramosissima	Black brush	Shrub	native	Rosaceae
Thamnosma montana	Turpentine broom	Shrub	native	Rutaceae
Lycium andersonii	Anderson thornbush	Shrub	native	Solanaceae
Dichelostemma capitatum	Blue dicks	Perennial herb	native	Themidaceae
Larrea tridentata	Creosote bush	Shrub	native	Zygophyllaceae

Methodology Literature

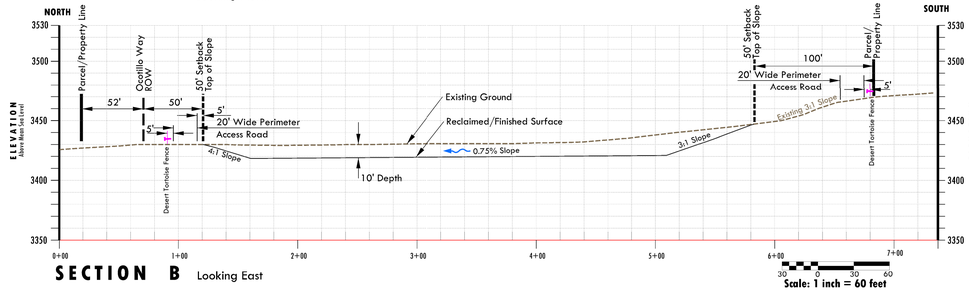
APPENDIX 2
HISTORICAL/ ARCHAEOLOGICAL RESOURCES SURVEY REPORT, SEPTEMBER 2019
(NOT AVAILABLE FOR PUBLIC REVIEW)

APPENDIX 3
PALEONTOLOGICAL RESOURCES ASSESSMENT REPORT, SEPTEMBER 2019
(NOT AVAILABLE FOR PUBLIC REVIEW)

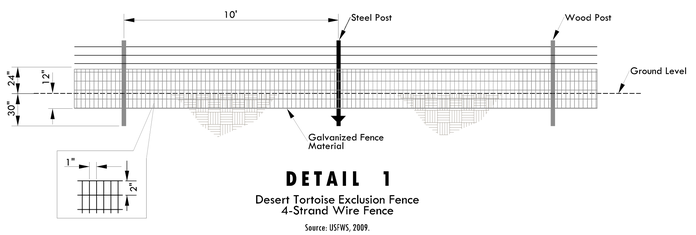




SECTION A Looking North



SECTION B Looking East



DETAIL 1
Desert Tortoise Exclusion Fence
4-Strand Wire Fence
Source: USFWS, 2009.

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
- Top Soil Storage Berms as Needed 5' High Maximum and Clearly Identified. (Water Sprayed and/or Covered with Larger Material to Limit Erosion
- D1 / 1 — Typical Detail Number Found on Sheet
- A / 1 — Typical Section Found on Sheet

MINING NOTES

Mine: Ocotillo Borrow Pit

Mineral: Construction aggregates

Mine Operator: San Bernardino County:
Department of Public Works
825 E. Third Street
San Bernardino, CA 92415
(909) 387-8040
Brendon Biggs; bbiggs@dpw.sbcounty.gov

Land Owner: San Bernardino County:
Department of Public Works
825 E. Third Street
San Bernardino, CA 92415
(909) 387-8040
Brendon Biggs; bbiggs@dpw.sbcounty.gov

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: Operator; Lilburn Corporation

Date of Map: October 2019

Utilities
Water: Water Truck
Sewage disposal: Portable toilets
Electric: Not proposed
Gas: Not proposed
Telephone: Mobile phones

Land Use District

Project Site: Rural Living (RL) – 30 acres per residence

The surrounding land uses are as follows:

North RL; Ocotillo Road and vacant desert open space.
South RL; Water Tank, Single-family residences and vacant desert land.
East RL; Vacant desert land.
West RL; Valley Vista Avenue and vacant desert land.

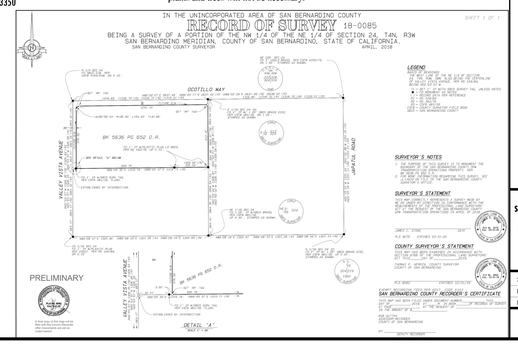
Legal Description

A.P.N.: 0438-082-01
Acres: 20

Section 24, T4N, R3W, San Bernardino Base and Meridian, in the County of San Bernardino, State of California.

Signage (Public Safety)
A perimeter 4-wire fence with desert tortoise fencing attached will be constructed around the site with locked gates. During operations, a foreman and/or employees will be on-site. 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
Site is entirely disturbed, therefore, preconstruction surveys and salvaging of protected plants and trees will not be necessary.



Prepared By: LILBURN CORPORATION
1905 Business Center Drive San Bernardino, CA 92408
909.890.1818 Fax 909.890.1899

No	Date	By	Revision Description

N

30 0 30 60

Scale: 1 inch = 60 feet

Map Prepared By: Lilburn Corporation (TAG)
Projection: CA SPCS, Zone 5, NAD83 Feet.
Contour Interval = 1 Feet
Topography: County of San Bernardino/2018
Surveyor: County of San Bernardino/2018
Aerial Date: 2018

MINE PLAN

Ocotillo Way and Valley Vista Avenue, Lucerne Valley, California

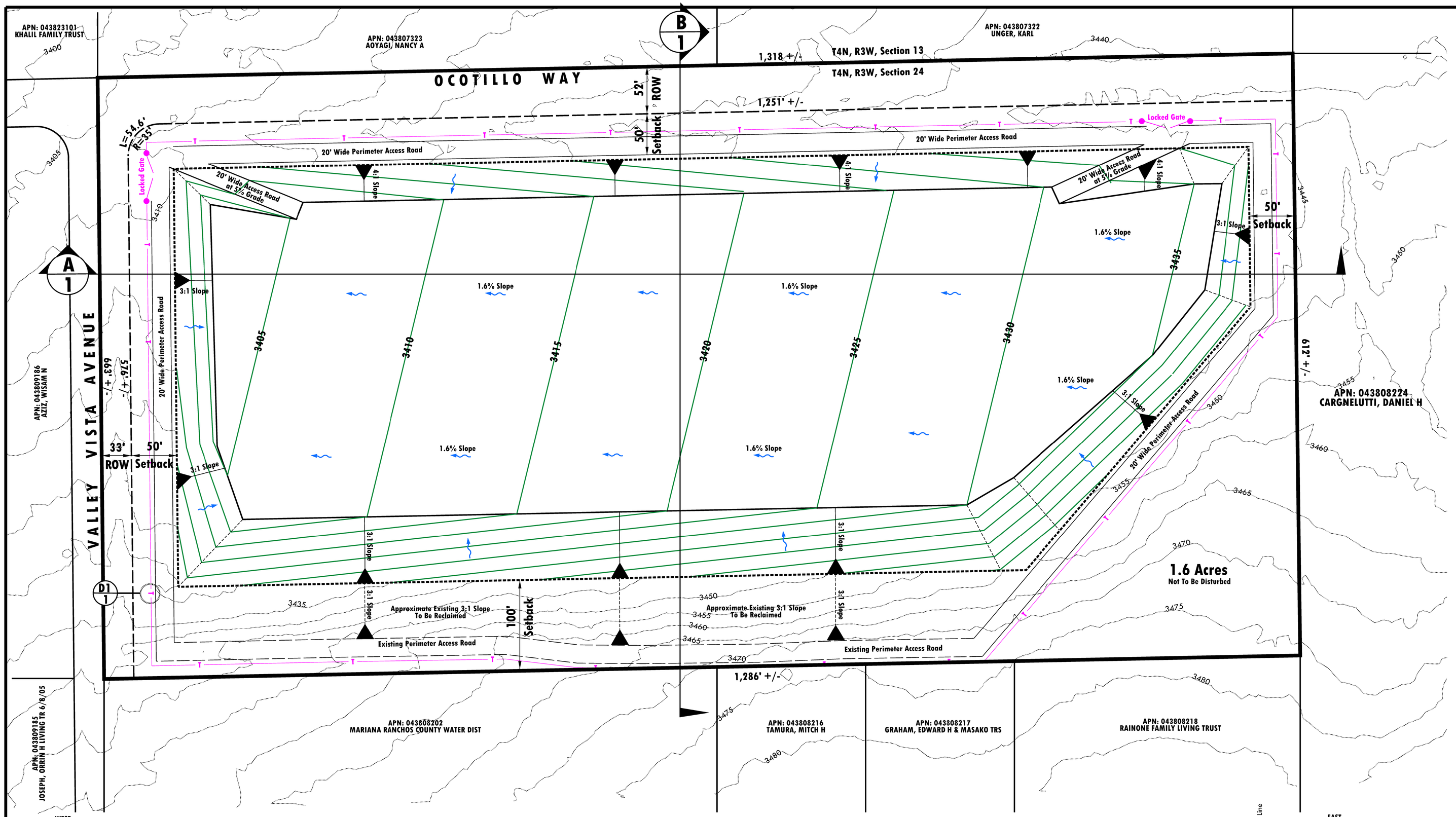
COUNTY of SAN BERNARDINO, CALIFORNIA

SHEET INDEX

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

Scale: 1"=60'
Done: 10/2019 (TAG)
DGN: Sht1of2 CSB-Ocotillo Mine Plan.dgn

Sheet **1** of **2**



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
- Top Soil Storage Berms as Needed 5' High Maximum and Clearly Identified. (Water Sprayed and/or Covered with Larger Material to Limit Erosion
- D1 / 1 — Typical Detail Number Found on Sheet
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RECLAMATION NOTES

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Mineral: Construction aggregates

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San Bernardino, CA 92415
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East RL; Vacant desert land.
West RL; Valley Vista Avenue and vacant desert land.

Legal Description

A.P.N.: 0438-082-01
Acres: 20

Section 24, T4N, R3W, San Bernardino Base and Meridian, in the County of San Bernardino, State of California.

Reclaimed End Use: Open space/habitat 9.8 acres (6.2 acres setbacks and 3.6 acres of slopes to be reclaimed; County Service Yard 8.1 acres, ROWs 2 acres..

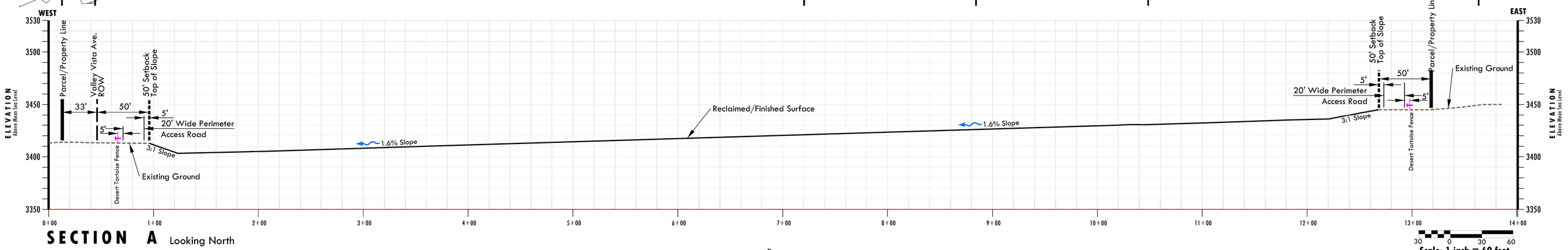
Reclamation/Revegetation Plan
At the completion of mining activities, the site will be used as a County Service Yard. The quarry floor will be used for equipment storage and equipment staging area for local maintenance activities. Slopes are to be reclaimed. All quarry fencing and gates will remain in place to prevent unauthorized access.

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 will be revegetated. Revegetation activities will generally commence in late fall to early spring to correspond with the rainy season of the area. The recontoured slopes will be seeded or hydro-seeded with the recommended seed mix below.

Recommended Seed Mix
Ocotillo Borrow Pit

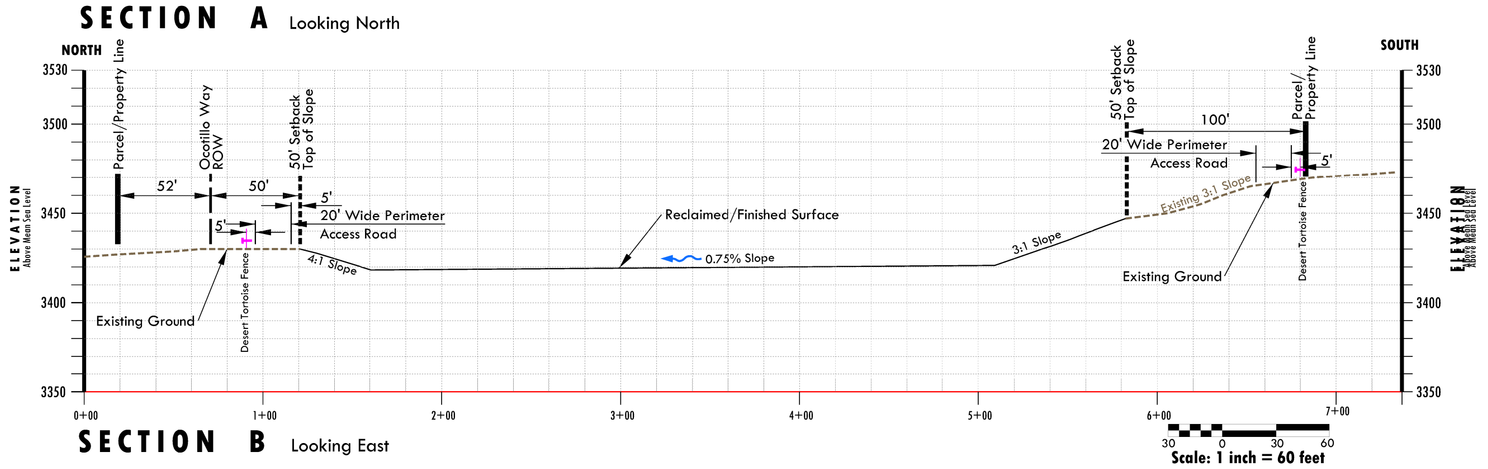
Species	Life Form	Pure Live Seed Lbs/Acre
Ambrosia salsola	shrub	1.5
Cylindropuntia echinocarpa	shrub	1.0
Cylindropuntia ramosissima	shrub	0.5
Ephedra nevadensis	shrub	1.0
Ericameria nauseosa	shrub	1.0
Eriogonum fasciculatum	shrub	0.5
Hesperoyucca whipplei	shrub	0.2
Phacelia fremontii	annual herb	1.0
Mentzelia veatchiana	annual herb	0.2
Logfia filaginoides	annual herb	0.5

Source: S&S Seeds, Jericho Systems, August 2019.



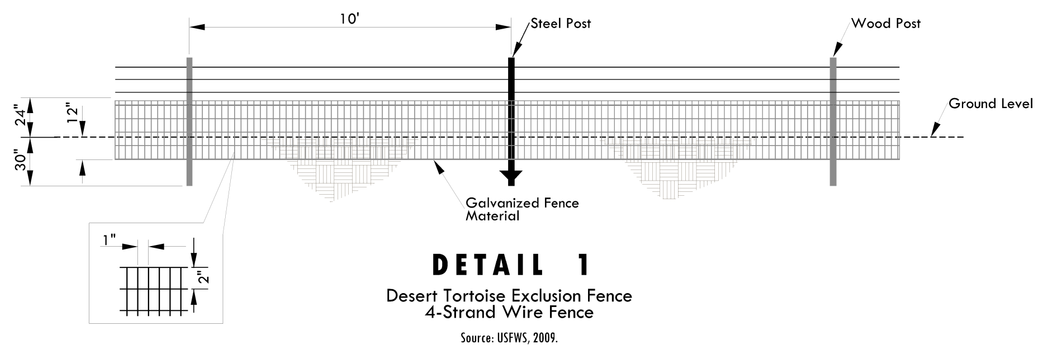
SECTION A Looking North

Scale: 1 inch = 60 feet



SECTION B Looking East

Scale: 1 inch = 60 feet



DETAIL 1
Desert Tortoise Exclusion Fence
4-Strand Wire Fence

Source: USFWS, 2009.

1905 Business Center Drive, San Bernardino, CA 92408
909.890.1818 Fax 909.890.1809
LILBURN CORPORATION

No.	By	Revision Description	Date

Prepared By:

N

30 0 30 60

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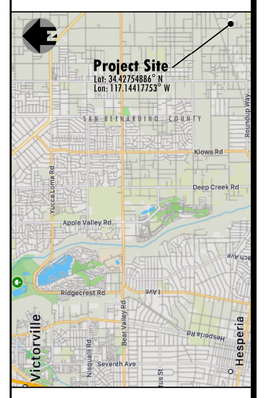

RECLAMATION PLAN

Ocotillo Way and Valley Vista Avenue, Lucerne Valley, California

COUNTY of SAN BERNARDINO, CALIFORNIA

SHEET INDEX

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1	Mine Plan and Cross Sections
2	Reclamation Plan and Cross Sections

Scale: 1"=60'
Date: 10/2019 (TAG)
DGN: Sht2of2 CSB-Ocotillo Rec Plan.dgn

Sheet 2 of 2

EXHIBIT B

Conditions of Approval

CONDITIONS OF APPROVAL

OCOTILLO BORROW PIT

Mining Conditional Use Permit Action and Reclamation Plan 2020M-03
County of San Bernardino Public Works

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 2020M-03 for the Ocotillo Borrow Pit; an 11.7 acre surface mining operation on County owned land. The project proposes to mine up to 1,000 yards of fill material per year.

2. Project Location: APN 0438-082-010, N 1/2 NW 1/4 NE 1/4 SEC 24 TP 4N R 3W, 20 Acres, Southeast corner of Ocotillo Way and Valley Vista Avenue

3. Effective Dates: The Mining CUP approval (Project Number PROJ-2020-00014) for Mining and Reclamation Plan 2020M-03 shall be effective for 100 years through December 31, 2120 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 Ocotillo Borrow Pit Mine Reclamation Plan prepared by Lilburn Corporation, dated May 2020, 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 Ocotillo Borrow Pit Mining CUP and Reclamation Plan 2020M-03 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 2020M-03.

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 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 Mine Reclamation Plan 2020M-03 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 Department of 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 2020M-03 and for the Mining CUP. The Financial Assurance shall identify the County of San Bernardino and the California Department of Conservation as the beneficiaries.

    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 2020M-03.

    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 2020M-03 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 PROJ-2020-00014. 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 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 Corner 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 – 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. *Cultural Resources - CR 1: If historical/archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall cease and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) shall be contacted immediately to evaluate the find(s). If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted and will be reported to the County.*

36. *Cultural Resources – CR-2: Should human remains and/or cremations be encountered during any earthmoving activities, all work shall stop immediately in the area in which the find(s) are present (suggested 100-ft radius area around the remains and project personnel will be excluded from the area and no photographs will be permitted), and the County of San Bernardino Coroner will be notified. The County of San Bernardino and the Project Proponent shall also be called and informed of the discovery. The Coroner will determine if the bones are historic/archaeological or a modern legal case. The Coroner will immediately contact the Native American Heritage Commission (NAHC) in the event that remains are determined to be human and of Native American origin, in accordance with California Public Resources Code Section 5097.98.*

    All discovered human remains shall be treated with respect and dignity. California state law (California Health & Safety Code 7050.5) and federal law and regulations ([Archaeological Resources Protection Act (ARPA) 16 USC 470 & 43 CFR 7], [Native American Graves Protection & Repatriation Act (NAGPRA)25 USC 3001 & 43 CFR 10] and [Public Lands, Interior 43 CFR 8365.1-7]) require a defined protocol if human remains are discovered in the State of California regardless if the remains are modern or archaeological.

37. *Geology and Soils – GS-1: In order to prevent inadvertent impacts on paleontological resources, when project impacts reach the depth of 15 feet below the current ground surface, further paleontological evaluation of the sediments underneath will become necessary. Therefore, mining activities shall not exceed 15 feet in depth without additional evaluation.*

38. *Tribal Cultural Resources – TCR- 1: Appropriate consulting Tribe(s) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input within 48 hours with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2018), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with consulting Tribe(s), and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents consulting Tribe(s) for the remainder of the project, should Tribe(s) elect to place a monitor on-site at the Tribe's cost.*

As necessary, and in accordance with Project-Specific consultations conducted with the NAHC and various Tribal entities in association with AB52, SB18, and/or any other legal guidelines relating to Native American consultations, the specific language noted in CR-1 and CR-2 may change to reflect Project-Specific needs and requirements.

39. *Tribal Cultural Resources – TCR-2: If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to CR-2 and State Health and Safety Code §7050.5 and that code shall be enforced for the duration of the project.*

40. *Tribal Cultural Resources – TCR-3: Only the NAHC Designated MLD Tribal representative shall make all future decisions regarding the treatment of human remains of Native American origin within the response times outlined below. The MLD shall determine the disposition and treatment of Native American human remains and any associated grave goods following Native American Graves Protection and Repatriation Act (NAGPRA) protocols, and what constitutes "appropriate dignity" as that term is used in the applicable statutes and in the Tribe's customs and traditions.*

    The MLD or his/her designee shall complete an inspection and provide written recommendations to the DPW and the landowner (if different than the DPW) within forty-eight (48) hours of being granted access to the site. If the descendant does not make recommendations within 48 hours, the landowner shall re-inter the remains in a secure area of the property where there will be no further disturbance. Should the landowner not accept the descendant's recommendations, either the owner or the MLD may request mediation by NAHC. According to the California Health and Safety Code, six (6) or more human burials at one (1) location constitute a cemetery (Section 8100), and willful disturbance of human remains in a cemetery is a felony (Section 7052).

41. *Tribal Cultural Resources – TCR-3: Any and all archaeological/cultural documents as related to documented tribal cultural resources created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be disseminated to appropriate consulting Tribe(s) in the form of an un-redacted report (containing DPR forms). The Lead Agency and/or applicant shall, in good faith, consult with the appropriate Tribe(s) until construction completion of the project and completion of any measures imposed to protect resources.*

42. 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.

43. 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.

SAN BERNARDINO COUNTY MUSEUM – Earth Sciences Division (909) 798-8616

44. 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.

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

45. Noise Levels: Noise level shall be maintained at or below County Standards, Development Code Section 83.01.080. For information, please call EHS at 1-800-442-2283.

46. Preliminary Acoustical Information: Submit preliminary acoustical information demonstrating that the proposed project maintains noise levels at or below San Bernardino County Noise Standard(s), San Bernardino Development Code Section 83.01.080. The purpose is to evaluate potential future on-site and/or adjacent off-site noise sources. If the preliminary information cannot demonstrate compliance to noise standards, a project specific acoustical analysis shall be required. Submit information/analysis to the DEHS for review and approval. For information and acoustical checklist, contact DEHS at 1-800-442-2283.

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

47. 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).

48. 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;

        b. 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

49. 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.

CEQA Mitigation Measures shown in italics

- 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.

50. Operations: Extraction and processing operations shall proceed in accordance with the Mining CUP and Reclamation Plan 2020M-03 Conditions of Approval. Soil extraction, stockpiling and transport will adhere to the mining operations outlined in the Mine Reclamation Plan.

51. 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).

52. Blasting: Blasting is not a part of this permit approval. No blasting shall occur, and no explosives shall be stored onsite.

53. Ore Processing: The borrow pit material will be loaded directly into trucks for transport to construction sites.

54. Designated Haul Roads: Haul roads shall be limited to those designated on the Mine Plan.

55. Slopes: In accordance with the Mine Reclamation Plan 2020M-03 prepared by Lilburn Corporation dated May 2020, 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 shall be no steeper than the design inclination 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.

56. 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 seedings, and surface ripping and seedings per 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.

    - 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.

57. 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.

58. 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.

59. 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

60. 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.

61. 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.

62. 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.

63. 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.

64. 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.

65. 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

66. 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.

67. Barriers/Signage: Safety barriers and signage per MSHA requirements shall be maintained around the mined slopes.

68. 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_{10} emissions, and be limited in height to 35 feet.

69. 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.
70. 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.

71. Product Stockpiles: Product stockpile heights shall be maintained 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).

72. 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.

73. 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.

74. 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 July 24, 2019. The seed mix will be applied based on the identified seeding methods and rates as shown in the Revegetation Plan.

75. Revegetation Annual Monitoring: The project biologist will document the progress of the revegetation effort at the Ocotillo Borrow Pit site and submit Annual Maintenance and Monitoring reports to Land Use Services upon request or as necessary.

76. 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.

77. 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

78. Noise Operations: Noise levels shall be maintained at or below County Standards, SBCC Section 83.01.080.

79. Refuse Storage and Disposal: All refuse generated at the premises shall at all times be stored in approved containers and shall be placed in a manner so that environmental public health nuisances are minimized. All refuse not containing garbage shall be removed from the premises at least 1 time per week, or as often as necessary to minimize public health nuisances. Refuse containing garbage shall be removed from the premises at least 2 times per week, or as often if necessary to minimize public health nuisances, by a permitted hauler to an approved solid waste facility in conformance with San Bernardino County Code Chapter 8, Section 33.0830 et. seq. For information, please call EHS/LEA at: 1-800-442-2283.

80. Sewage Disposal: Method of sewage disposal shall be EHS approved onsite wastewater treatment system (OWTS).

81. Vector Control Requirement*:* The project area has a high probability of containing vectors. EHS Vector Control Section will determine the need for vector survey and any required control programs. A vector clearance letter shall be submitted to EHS/Land Use. For information, contact Vector Control at (800) 442-2283.

82. Water Service Verification Letter: Applicant shall procure a verification letter from the water service provider. This letter shall state whether or not water connection and service shall be made available to the project by the water provider. This letter shall reference the File Index Number and Assessor's Parcel Number(s). For projects with current active water connections, a copy of water bill with project address may suffice. For information, contact the Water Section at 1-800-442-2283.

83. 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

84. 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.

85. 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.

86. 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.

87. 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.

88. 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.

EXHIBIT C

Biological Report

47 1st Street, Suite 1
Redlands, CA 92373-4601
(909) 307-5633

July 24, 2019

Cheryl A. Tubbs
Lilburn Corporation
1905 Business Center Drive
San Bernardino, CA 92408

RE: Biological Resources Assessment and Jurisdictional Delineation
Ocotillo Borrow Pit -Unincorporated Area of San Bernardino County, California
USGS –Apple Valley South Quadrangle, north ½ of Section 24 of Township 4 North, Range 3 West.

Dear Ms. Tubbs,

On behalf of Lilburn Corporation, Jericho Systems, Inc. (Jericho) conducted a general biological resources assessment (BRA). habitat suitability assessments, and Jurisdictional Delineation (JD) of existing conditions at property owned by the County of San Bernardino Department of Public Works and referred to as the Ocotillo Borrow Pit Project (Proposed project). The Project site is located approximately 3.25 miles south of Highway 18, 4.3 miles east of the Mojave River and is bordered by Ocotillo Way to the north, Japatul Road to the east, vacant land to the south and Valley Vista Avenue to the west (Figures 1 and 2). The Project site can be found on the *Apple Valley South* U.S. Geological Survey (USGS) 7.5-minute series quadrangle within the north ½ of Section 24 of Township 4 North, Range 3 West.

This report is designed to address potential effects of the proposed Project to designated Critical Habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA), or species designated as sensitive by the California Department of Fish and Wildlife (CDFW), or the California Native Plant Society (CNPS).

Attention was focused on sensitive species known to occur locally including the State- and federally-listed as threatened desert tortoise (*Gopherus agassizii*) [DT] and the State-listed as threatened Mohave ground squirrel (*Xerospermophilus mohavensis*) [MGS] as well as burrowing owl (*Athene cunicularia*) [BUOW] which is a State and federal Species of Special Concern (SSC). This report also addresses resources protected under the Migratory Bird Treaty Act; federal Clean Water Act (CWA) regulated by the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) respectively; and Section 1602 of the California Fish and Game Code (FCG) administered by the CDFW.

In addition to the BRA and habitat assessments, Jericho biologists Shay Lawrey, CJ Fotheringham, Christian Nordal and Todd White conducted a JD of the project site. The purpose of the JD is to determine the extent of State and federal jurisdictional waters within the project area potentially subject to regulation by the USACE under Section 404 of the CWA, RWQCB under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and CDFW under Section 1602 of the FGC, respectively.

ENVIRONMENTAL SETTING

The project site is situated near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The Apple Valley area is subject to both seasonal and annual variations in temperature and precipitation. Average annual maximum temperatures peak at 96.5 degrees Fahrenheit (° F) in July and fall to an average annual minimum temperature of 32.0° F in December and January. Average annual precipitation is greatest from November through March and reaches a peak in February (1.4 inches). Precipitation is lowest in the month of June (0.09 inches). Annual precipitation averages 8.4 inches. The topography of the local landscape is a slight slope to the north. The Project area is relatively flat with steep ~25-foot slopes on the eastern, southern and northern portions of the Project site as a result of historical excavation and removal. Elevation on site ranges from approximately 3,369 feet above mean sea level (amsl) in the southeastern portion of the site, to 3,414 feet amsl in the northwesternmost portion of the site.

Hydrologically, the Project site is located within the upper Mojave watershed and soils on site are solely comprised of Lucerne sandy loam, 2 to 5 percent slopes (Figure 3).

The general project vicinity consists of rural housing, and undeveloped open space. Habitat surrounding the Project site consists primarily of *Yucca brevifolia* woodland alliance (Joshua tree woodland). The Project site itself is largely devoid of vegetation with some native and non-native species colonizing the edges, stockpiles and other unused areas. The southeast corner of the Project site is largely undisturbed, with small patches of moderate disturbed areas along the eastern portion (Figure 4).

METHODS

As stated above, the objective of this document is to determine whether the Project site supports special status or otherwise sensitive species and/or their habitats, and to address the potential effects associated with the Proposed project on those resources. The species and habitats addressed in this document are based on database information and field investigation.

Prior to conducting the field study, species and habitat information was gathered from the reports related to the specific project and relevant databases for the *Apple Vallley South, Fifteenmile Valley, and Lucerne Valley* USGS quadrangles to determine which species and/or habitats would be expected to occur on site. The Project site is situated in the central western portion of the *Apple Valley South* quad. The site's similar elevation ecology and proximity to the *Fifteenmile Valley and Lucerne Valley* to the site lead to their inclusion in the review. These databases contain records of reported occurrences of State- and federally-listed species or otherwise sensitive species and habitats that may occur within the vicinity of the project site. These sources include:

- U.S. Fish and Wildlife (USFWS) threatened and endangered species occurrence GIS overlay;
- USFWS Information for Planning and Consultation System (IPaC);
- California Natural Diversity Database (CNDDB) *Rarefind 5*);
- CNDDB Biogeographic Information and Observation System (BIOS);
- California Native Plant Society Electronic Inventory (CNPSEI) database;
- Calflora Database;
- USDA Natural Resources Conservation Service (NRCS) Web Soil Survey;
- USFWS National Wetland Inventory;
- Environmental Protection Agency (EPA) Water Program "My Waters" data layers
- USFWS Designated Critical Habitat Maps
- Mohave Ground squirrel Range maps

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

Jericho biologists Shay Lawrey, CJ Fotheringham, Christian Nordal, and Todd White conducted a biological resources assessment of the project area on April 3, 4 & 18, 2019. Each biologist has advanced degrees in biology and several years of survey experience throughout San Bernardino County and southern California.

The surveyors conducted the systematic and comprehensive surveys during calm weather, between the hours of 6 a.m. and 3 p.m. Weather conditions during the surveys consisted of clear skies to overcast with temperatures ranging from 62 degrees Fahrenheit (° F) to 76° F and light wind <5 mph. The survey area encompassed the entire Project site and included 100 percent coverage of the site with plots spaced ≥ 10 meters apart. A surrounding 500-foot buffer area surrounding the site was also surveyed for species diversity and discovery of rare species.

Wildlife species were detected during field surveys by sight, calls, tracks, scat, or other sign. In addition to species observed, expected wildlife usage of the site was determined per known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The focus of the faunal species surveys was to identify potential habitat for special status wildlife within the project area. Disturbance characteristics and all animal sign encountered on the site are recorded in the results section of this report.

The site was also evaluated for the presence of jurisdictional waters, i.e. waters of the U.S. as regulated by the USACE and RWQCB, and/or streambed and associated riparian habitat as regulated by the CDFW. Evaluation of potential federal jurisdiction followed the regulations set forth in 33CFR part 328 and the USACE guidance documents and evaluation of potential State jurisdiction followed guidance in the Fish and Game Code and A Review of Stream Processes and Forms in Dryland Watersheds (CDFW, 2010).

RESULTS

Existing Biological and Physical Conditions

The Project site consists almost entirely of undeveloped open space, occupying mostly flat to gently sloped terrain. The topography of the site is mostly uniform throughout. Joshua Tree woodland dominates undisturbed areas with disturbed areas being either bare or populated by a subset of species that occur nearby. Most of the Project site is disturbed. Disturbances on site are primarily due to the mining and staging operations that have been associated with San Bernardino road projects and include unpaved roads, removal of materials, and material stockpiles (Figure 4).

The habitat on the Project site consists primarily of *Yucca brevifolia* Woodland Alliance (Joshua Tree Woodland). The tree canopy of the community contains only two species and is co-dominated by *Y. brevifolia* and *Y. schirdigera* (Mojave yucca). The shrub canopy is diverse with 21 species with *Ambrosia salsola* (Burrobrush), *Ephedra nevadensis* (Nevada ephedra), *Hesperoyucca whipplei* (Chaparral yucca), and *Salvia dorrii* (Dorr's sage) being the most common. Fifty-one herbaceous species were found, including four non-natives species.

Wildlife

No amphibian species were observed or otherwise detected within the project area and none are expected to occur. The only reptile species observed within the project area was western side-blotched lizard (*Uta*

stansburiana elegans), desert spiny lizard *(Sceloporus magister*), Western Whiptail Lizard (*Aspidoscelis tigris*), and Red Racer (*Coluber flagellum piceus*). Other common reptile species expected to occur within the Project area include Panamint rattlesnake (*Crotalus stephensi*), California kingsnake (*Lampropeltis californiae*) and gopher snake (*Pituophis catenifer deserticola*). Avian species observed in the project area include greater roadrunner, red-tailed hawk, American kestrel, prarie falcon, turkey vulture, common raven, and rock wren. Identification of mammals within the project area was generally determined by physical evidence rather than direct visual identification. This is because 1) many of the mammal species that potentially occur onsite are nocturnal and would not have been active during the survey and 2) no mammal trapping was performed. The only mammal species observed was black-tailed jackrabbit (*Lepus californicus*). Other common species expected to occur within the project area include coyote (*Canis latrans*), Merriams' kangaroo rat (*Dipodomys merriami*), and desert cottontail (*Sylvilagus audubonii*).

Special Status Species and Habitats

According to the database queries, 38 sensitive species (23 plants and 15 animals) have been documented in the *Apple Valley South, Fifteenmile Valley, Lucerne Valley,* and *Hesperia* USGS 7.5-minute series quadrangles. This list of sensitive species includes any State- and/or federally-listed threatened or endangered species, CDFW designated Species of Special Concern (SSC), and otherwise Special Animals. "Special Animals" is a general term that refers to all the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species." The CDFW considers the taxa on this list to be those of greatest conservation need.

Table 1, located at the end of this document, represents a compiled list of results from the IPaC, CNDDB and CNPSEI databases of species which have been documented within three miles of the Project site and/or have the potential to occur based on potentially suitable habitat adjacent to, or within, the Project site (Figure 5). Table 1 also provides a potential to occur assessment based on the field investigation and surveyor's knowledge of the species and local ecology and considers the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements relative to the current site conditions and species' range.

No State- and/or federally-listed threatened or endangered species, or other sensitive species were observed on site during the field surveys. However, there is some potentially suitable habitat in the undisturbed areas of the Project site and in the adjacent undisturbed habitat for some of the sensitive species identified in the literature review (Table 1). Therefore, habitat suitability assessments were conducted within the Project area for golden eagle (*Aquila chrysaetos*) [GOEA], DT, BUOW, and MGS.

Desert Tortoise

The desert tortoise is a State- and federally-listed threatened species. Throughout its range, it is threatened by habitat loss, domestic grazing, predation, collections, and increased mortality rates. The desert tortoise is typically found in creosote bush scrub. They are most often found on level or sloped ground where the substrate is firm but not too rocky. Tortoise burrows are typically found at the base of shrubs, in the sides of washes and in hillsides. Because a single tortoise may have many burrows distributed throughout its home range, it is not possible to predict exact numbers of individuals on a site based upon burrow numbers.

In 1992 the BLM issued the *California Statewide Desert Tortoise Management Policy* which included categorizing habitat into three levels of classification. The management goal for Category I areas is to maintain stable, viable populations and to increase the population where possible. The management goal

for Category II areas is to maintain stable, viable populations. The management goal for Category III areas is to limit population declines to the extent feasible. In April 1993, the BLM amended the CDCA plan to delineate these three categories of desert tortoise habitat on public lands. With the adoption of the West Mojave Plan (BLM 2005), all lands that are outside Desert Wildlife Management Areas are characterized as Category 3 Habitat, which is the lowest priority management area for viable populations of the desert tortoise.

> *Findings*: Per the CNDDB, the nearest documented desert tortoise occurrence (2006) is approximately 5 miles northwest of the Project site. There are no desert tortoise occurrences documented in the project area and there is no suitable habitat for this species within the Project site. However, some of the surrounding area adjacent to the Project site does contain habitat potentially suitable to support desert tortoise.
>
> Per the USFWS desert tortoise Critical Habitat overlay, the project site is not within any USFWS designated desert tortoise Critical Habitat. Furthermore, the Project site is not within a BLM designated Desert Wildlife Management Area (USFWS 2011). Therefore, the habitat surrounding the site would be characterized as Category 3 Habitat, per the BLM categorization of desert tortoise habitat on public lands.
>
> The site surveys were structured, in part, to detect desert tortoise. The survey consisted of walking transects spaced approximately 10 meters apart to provide 100% visual coverage of the Project site, as well as an approximately 500-foot buffer area surrounding the site. The result of the survey was that no evidence of desert tortoise was found in the survey area. No desert tortoise individuals or sign including burrows or scat were observed. Therefore, desert tortoise are considered absent from the Project site.

Mohave Ground Squirrel

The MGS is a State-listed threatened species. This small, grayish, diurnal ground squirrel is endemic to two million hectares in the western Mojave Desert. It typically inhabits sandy soils of alkali sink and creosote bush scrub habitat. The Mohave ground squirrel forages on leaves and seeds and aestivate/hibernate for long periods of the year. Plants documented as forage for this species include: fiddleneck (*Amsinckia tessellata*), allscale (*Atriplex canescens* and *A. polycarpa*), desert holly (*A. hymenelytra*), coreopsis (*Coreopsis* sp.), spiny hopsage (*Grayia spinosa*), winterfat (*Krascheninnikovia lanata*), wolfberry (*Lycium andersonii*), Joshua tree (*Yucca brevifolia*) and the seeds of Joshua tree. It is suspected that Mohave ground squirrel forage on the plant species with the highest water content available at the time.

They emerge from hibernation in February and begin pair bonding and mating during March. If rainfall is adequate, MGS will reproduce. If rainfall levels do not provide sufficient rainfall to support significant annual plant growth, then MGS will merely forage on herbaceous perennials and shrubs in order to gain enough body mass to survive another prolonged period of dormancy and will not reproduce in that year. The adult males can enter dormancy as early as late May. Juveniles will remain above-ground until August in order to gain sufficient fat reserves prior to entering dormancy.

MGS occur in the western half of the Mojave Desert. Its historical range encompasses an area between Antelope Valley and Lucerne Valley, in the south. However, MGS occurrences in the southern portion of its range are very rare. The northern limits of the range are near Owens Dry Lakebed, in the north, and through China Lake Naval Weapons Station and Fort Irwin Military Base, in the east. The eastern limits extend to Barstow and south along the Mojave River. The western limits loosely follow Highway 14 and the foothills of the southern Sierra Nevada escarpment. MGS are dormant in the fall and winter months.

Findings: Although a focused MGS trapping survey was not performed, Jericho conducted a Mohave ground squirrel habitat suitability assessment of the Project site and adjacent habitat. The habitat assessment included a pedestrian field assessment, review of reported occurrences of the MGS in the region (CNDDB 2019), and adherence to CDFW's criteria for assessing potential impacts to the Mohave ground squirrel. The criteria questions are as follows:

1. *Is the site within the range of the Mohave ground squirrel?;*
2. *Is there native habitat with a relatively diverse shrub component?; and*
3. *Is the site surrounded by development and therefore isolated from potentially occupied habitat?*

The Project site occurs outside the established current range for this species and no further discussion or investigation is warranted. Previously documented occurrences are north of the Project site and were recorded in the 1920's. This species is likely extirpated from the local vicinity and is likely the reason for exclusion from the current range maps. MGS are considered absent from the Project site and adjacent areas.

Golden Eagle

The GOEA is a CDFW Fully Protected species. GOEA are found throughout North America, but are more common in western North America (CDFW 2017). Habitat typically consists of rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops (Polite and Pratt 1990). GOEA build large platform nests, typically on cliffs and in large trees in open areas of rugged, open habitats with canyons and escarpments (Polite and Pratt 1990). Threats include loss of foraging areas, loss of nesting habitat, pesticide poisoning, lead poisoning and collision with man-made structures such as wind turbines (CDFW 2019).

Raptors and all migratory bird species, whether listed or not, receive protection under the Migratory Bird Treaty Act (MBTA) of 1918. The MBTA prohibits individuals to kill, take, possess or sell any migratory bird, or bird parts (including nests and eggs) except in accordance with regulations prescribed by the Secretary of the Interior Department (16 U. S. Code 7035). 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 California FGC, Section 2503.57. No take is allowed under these provisions except through the approval of the agencies or their designated representatives.

Findings: Although the local vicinity surrounding the Project site likely provides suitable foraging habitat for GOEA, there are no tall trees or cliffside habitat present that could provide potential GOEA nest sites. Furthermore, no GOEA were observed within the project area during the site surveys. Given the level of disturbance from the existing site conditions and the general lack of suitable nest sites within the immediate project vicinity, the Project site and surrounding area is not considered suitable to support nesting GOEA.

Burrowing Owl

The BUOW is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows. BUOW spend a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. They feed primarily on insects such as grasshoppers, June beetles and moths, but will also take small rodents, birds, and reptiles. They are active

during the day and night, but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31.

The BUOW is not listed under the State or federal ESA, but is considered both a State and federal SSC. The BUOW is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California FGC (FGC #3513 & #3503.5).

> *Findings*: There are no BUOW occurrences documented in the project area. The nearest documented occurrences are three miles west of the Project site. The assessment survey was structured, in part, to detect BUOW. The survey consisted of walking transects spaced to provide 100% visual coverage of the project site, including an approximately 500-foot buffer area around the Project site. The result of the survey was that no evidence of BUOW was found in the survey area. No BUOW individuals or sign including pellets, feathers or white wash were observed.
>
> Per the definition provided in the *2012 CDFG Staff Report on Burrowing Owl Mitigation*, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey." Therefore, although the Project site does contain friable soils, it would not be considered suitable for BUOW because the it is mostly bare and no appropriately sized burrows or burrow surrogates were detected within the Project site or adjacent areas.

No sensitive plants were observed during survey and are addressed in the Plant Species Observed list and Table 1 (located at the end of this document).

Jurisdictional Delineation

There is a blueline stream course mapped by the USGS National Hydrography Dataset (NHD) that was historically mapped on the eastern edge of the Project site. The current site conditions have resulted in a realignment of flows further east to the very eastern edge of the site (Figure 6). The desert dry wash flows from the south to the north. The visual character of the drainage is difficult to define as flows enter the site due to a road, but the drainage pattern become clearer as the flows exit the site. Once the flows leave the site they fan out and become sheet flow across the desert in a northwest direction.

Waters of the U.S.

The USACE has authority to permit the discharge of dredged or fill material in waters of the U.S. under Section 404 CWA. WoUS are defined as: "All waters used in interstate or foreign commerce; all interstate waters including interstate wetlands; all other waters such as intrastate lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, where the use, degradation, or destruction of which could affect interstate commerce; impoundments of these waters; tributaries of these waters; or wetlands adjacent to these waters" (Section 404 of the CWA; 33 CFR 328.3 (a). CWA jurisdiction exists over the following:

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

The drainage feature onsite does not meet the definition of WoUS due to the lack of a significant nexus to a TNW as the concentrated flow with a definable ordinary highwater mark (OHWM) fans out into sheet flows with no definable OHWM.

Wetlands

No hydrophitic vegetation, hydric soils and/or wetland hydrology, are present within the Project site. Therefore, no wetlands were identified during the survey.

State Lake/Streambed

The unnamed drainage feature would likely be considered a CDFW jurisdictional feature due to the presence of a definable bed with apparent flow line. This feature, however, is outside of any areas of disturbance.

CONCLUSIONS AND RECOMMENDATIONS

Sensitive Biological Resources

No State- and/or federally-listed threatened or endangered species or otherwise sensitive species were observed on site during the field surveys and due to the lack of suitable habitat on site, and none are expected to occur. The Project site is completely within an unvegetated area. Further investigation is not warranted or required.

There is habitat adjacent to the Project site that is suitable to support nesting birds. Since the Project site is devoid of vegetation, nesting birds would not be impacted.

Jurisdictional Waters

The drainage feature located on the far eastern edge of the Project site may be subject to the Fish and Game Code under the jurisdictions of the California Department of Fish and Wildlife. There are no planned operations within this jurisdictional area and no permanent or temporary impacts to jurisdictional features are expected. Therefore, no permits or authorizations will be required. Should future impacts occur to this feature, a notification to the CDFW would be prudent and warranted.

Please do not hesitate to contact me at 909-915-5900 should you have any questions or require further information.

Sincerely,

Shay Lawrey, President
Ecologist/Regulatory Specialist

Attachments:

Plant Species Observed List
Table 1. Database Queries (CNDDB, IPAC, CNPSEI) Results
Figures 1-6
Site Photos 1-10

PLANT SPECIES OBSERVED

Latin Name	Common name	Growth form	Status	Family
Yucca schidigera	Mohave yucca	Tree	native	Agavaceae
Yucca brevifolia	Joshua tree	Tree	native	Agavaceae
Ericameria pinifolia	Pine bush	Shrub	native	Asteraceae
Eriophyllum wallacei	Wallace eriophyllum	Annual herb	native	Asteraceae
Encelia actoni	Acton encelia	Shrub	native	Asteraceae
Eriophyllum pringlei	Pringle eriophyllum	Annual herb	native	Asteraceae
Chaenactis stevioides	Esteve pincushion	Annual herb	native	Asteraceae
Lasthenia gracilis	Needle goldfields	Annual herb	native	Asteraceae
Rafinesquia neomexicana	Desert chicory	Annual herb	native	Asteraceae
Chaenactis fremontii	Fremont pincushion	Annual herb	native	Asteraceae
Ericameria linearifolia	Interior goldenbush	Shrub	native	Asteraceae
Stylocline micropoides	Desert nest straw	Annual herb	native	Asteraceae
Stylocline psilocarphoides	Peck's stylocline	Annual herb	native	Asteraceae
Lactuca serriola	Prickly lettuce	Annual herb	invasive non-native	Asteraceae
Ambrosia dumosa	Burro weed	Shrub	native	Asteraceae
Perityle emoryi	Emory's rock daisy	Annual herb	native	Asteraceae
Gutierrezia microcephala	Sticky snakeweed	Shrub (stem succulent)	native	Asteraceae
Ericameria nauseosa	Rubber rabbitbrush	Shrub	native	Asteraceae
Gutierrezia sarothrae	Matchweed	Shrub	native	Asteraceae
Tetradymia stenolepis	Narrow scaled felt thorn	Shrub	native	Asteraceae
Layia glandulosa	White layia	Annual herb	native	Asteraceae
Logfia filaginoides	California cottonrose	Annual herb	native	Asteraceae
Malacothrix glabrata	Desert dandelion	Annual herb	native	Asteraceae
Xylorhiza tortifolia	Mojave woodyaster	Perennial herb	native	Asteraceae
Malacothrix coulteri	Snake's head	Annual herb	native	Asteraceae
Uropappus lindleyi	Silver puffs	Annual herb	native	Asteraceae
Brickellia desertorum	Desert brickellia	Shrub	native	Asteraceae
Cryptantha barbigera	Bearded cryptantha	Annual herb	native	Boraginaceae
Emmenanthe penduliflora	Whispering bells	Annual herb	native	Boraginaceae
Pectocarya heterocarpa	Chuckwalla pectocarya	Annual herb	native	Boraginaceae
Plagiobothrys arizonicus	Arizona popcorn flower	Annual herb	native	Boraginaceae
Cryptantha angustifolia	Narrow leaved forget me not	Annual herb	native	Boraginaceae

Latin Name	Common name	Growth form	Status	Family
Cryptantha circumscissa	Western forget me not	Annual herb	native	Boraginaceae
Cryptantha micrantha	Purple root cryptantha	Annual herb	native	Boraginaceae
Amsinckia tessellata	Devil's lettuce	Annual herb	native	Boraginaceae
Phacelia fremontii	Fremont's phacelia	Annual herb	native	Boraginaceae
Phacelia distans	Common phacelia	Annual herb	native	Boraginaceae
Cryptantha maritima	Guadalupe island cryptantha	Annual herb	native	Boraginaceae
Cryptantha pterocarya	Winged nut forget me not	Annual herb	native	Boraginaceae
Phacelia tanacetifolia	Tansy leafed phacelia	Annual herb	native	Boraginaceae
Phacelia crenulata	Notch leaved phacelia	Annual herb	native	Boraginaceae
Phacelia cryptantha	Small flowered phacelia	Annual herb	native	Boraginaceae
Brassica nigra	Black mustard	Annual herb	invasive non-native	Brassicaceae
Brassica tournefortii	Mustard	Annual herb	invasive non-native	Brassicaceae
Descurainia pinnata	Yellow tansy mustard	Annual herb	native	Brassicaceae
Lepidium lasiocarpum	Shaggyfruit pepperweed	Annual herb	native	Brassicaceae
Hirschfeldia incana	Mustard	Perennial herb	invasive non-native	Brassicaceae
Caulanthus cooperi	Cooper caulanthus	Annual herb	native	Brassicaceae
Caulanthus lasiophyllus	California mustard	Annual herb	native	Brassicaceae
Thysanocarpus laciniatus	Narrow leaved lacepod	Annual herb	native	Brassicaceae
Sisymbrium altissimum	Tumble mustard	Annual herb	non-native	Brassicaceae
Mammillaria tetrancistra	Common fish hook cactus	Shrub (stem succulent)	native	Cactaceae
Cylindropuntia ramosissima	Branched pencil cholla	Shrub (stem succulent)	native	Cactaceae
Opuntia basilaris var. basilaris	Beavertail cactus	Shrub (stem succulent)	native	Cactaceae
Echinocereus engelmannii	Calico cactus	Shrub (stem succulent)	native	Cactaceae
Echinocactus polycephalus	Cottontop cactus	Shrub (stem succulent)	native	Cactaceae
Cylindropuntia echinocarpa	Silver cholla	Shrub (stem succulent)	native	Cactaceae
Krascheninnikovia lanata	Winter fat	Shrub	native	Chenopodiaceae
Atriplex canescens	Hoary saltbush	Shrub	native	Chenopodiaceae
Grayia spinosa	Hop sage	Shrub	native	Chenopodiaceae
Crassula connata	Sand pygmy weed	Annual herb	native	Crassulaceae

Latin Name	Common name	Growth form	Status	Family
Ephedra viridis	Green ephedra	Shrub	native	Ephedraceae
Ephedra nevadensis	Nevada ephedra	Shrub	native	Ephedraceae
Lupinus odoratus	Mojave lupine	Annual herb	native	Fabaceae
Psorothamnus arborescens	Mojave indigo bush	Shrub	native	Fabaceae
Acmispon strigosus	Strigose lotus	Annual herb	native	Fabaceae
Lupinus sparsiflorus	Coulter's lupine	Annual herb	native	Fabaceae
Lupinus bicolor	Lupine	Annual, Perennial herb	native	Fabaceae
Astragalus didymocarpus	Dwarf white milk vetch	Annual herb	native	Fabaceae
Lupinus concinnus	Bajada lupine	Annual herb	native	Fabaceae
taxon	common	lifeform	status	Family
Erodium cicutarium	Coastal heron's bill	Annual herb	invasive non-native	Geraniaceae
Salvia carduacea	Thistle sage	Annual herb	native	Lamiaceae
Salvia dorrii	Dorr's sage	Shrub	native	Lamiaceae
Calochortus kennedyi	Desert mariposa	Perennial herb	native	Liliaceae
Mentzelia albicaulis	White stemmed blazing star	Annual herb	native	Loasaceae
Mentzelia veatchiana	Veatch's blazing star	Annual herb	native	Loasaceae
Mirabilis laevis	Desert wishbone bush	Perennial herb	native	Nyctaginaceae
Chylismia claviformis	Clavate fruited primrose	Annual, Perennial herb	native	Onagraceae
Camissoniopsis pallida	Pale yellow sun cup	Annual herb	native	Onagraceae
Castilleja chromosa	Desert paintbrush	Perennial herb	native	Orobanchaceae
Eschscholzia minutiflora	Coville s poppy	Annual herb	native	Papaveraceae
Stipa speciosa	Desert needle grass	Perennial grass	native	Poaceae
Elymus elymoides	Squirrel tail grass	Perennial grass	native	Poaceae
Bromus madritensis	Foxtail chess, foxtail brome	Annual grass	non-native	Poaceae
Melica imperfecta	Coast range melic	Perennial grass	native	Poaceae
Eragrostis pectinacea	Tufted lovegrass	Annual grass	native	Poaceae
Schismus barbatus	Old han schismus	Annual grass	invasive non-native	Poaceae
Gilia latiflora	Broad flowered gilia	Annual herb	native	Polemoniaceae
Gilia sinuata	Cinder gilia	Annual herb	native	Polemoniaceae
Gilia tenuiflora	Slender flowered gilia	Annual herb	native	Polemoniaceae
Linanthus/Leptosiphon sp		Annual herb	native	Polemoniaceae
Loeseliastrum matthewsii	Desert calico	Annual herb	native	Polemoniaceae
Langloisia setosissima	Lilac sunbonnet	Annual herb	native	Polemoniaceae
Gilia stellata	Star gilia	Annual herb	native	Polemoniaceae
Eriogonum maculatum	Angle stermed buckwheat	Annual herb	native	Polygonaceae

Latin Name	Common name	Growth form	Status	Family
Eriogonum fasciculatum	California buckwheat	Shrub	native	Polygonaceae
Chorizanthe brevicornu	Brittle spine flower	Annual herb	native	Polygonaceae
Pterostegia drymarioides	Fairy mist	Annual herb	native	Polygonaceae
Eriogonum inflatum	Desert trumpet	Perennial herb	native	Polygonaceae
Delphinium parishii	Parish's larkspur	Perennial herb	native	Ranunculaceae
Prunus fasciculata	Desert almond	Shrub	native	Rosaceae
Coleogyne ramosissima	Black brush	Shrub	native	Rosaceae
Thamnosma montana	Turpentine broom	Shrub	native	Rutaceae
Lycium andersonii	Anderson thornbush	Shrub	native	Solanaceae
Dichelostemma capitatum	Blue dicks	Perennial herb	native	Themidaceae
Larrea tridentata	Creosote bush	Shrub	native	Zygophyllaceae

Table 1. Database Queries (CNDDB, IPAC, CNPSEI) Results

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Plants				
Acanthoscyphus parishii var. *goodmaniana*	Cushenbury oxytheca	Endangered/None	Pinyon and juniper woodland. On limestone talus and rocky slopes. 1400-2350 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site and below known elevational range. Species not found on site during surveys.
Astragalus albens	Cushenbury milk-vetch	Endangered / None	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Sandy or stony flats, rocky hillsides, canyon washes, & fans, on carbonate or mixed granitic-calcareous debris. 1185-1950 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site and below known elevational range. Species not found on site during surveys.
Astragalus bernardinus	San Bernardino milk-vetch	None/None	Joshua tree woodland, pinyon and juniper woodland. Granitic or carbonate substrates. 290-2290 m.	Low probability of occurrence. Lucerne sandy loam is granitic but nearest occurrence and the western most for the species is 27.25 km by air ESE. Species not found on site during surveys.
Boechera dispar	pinyon rockcress	None/None	Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub. Granitic, gravelly slopes & mesas. Often under desert shrubs which support it as it grows. 1005-2805 m.	Low probability of occurrence. Lucerne sandy loam is granitic and the nearest occurrence and the western most for the species is <5 km by air SW. Species not found on site during surveys.
Boechera shockleyi	Shockley's rockcress	None/None	Pinyon and juniper woodland. On ridges, rocky outcrops and openings on limestone or quartzite. 875-2515 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site. Species not found on site during surveys.
Calochortus striatus	alkali mariposa-lily	None/None	Chaparral, chenopod scrub, Mojavean desert scrub, meadows and seeps. Alkaline meadows and ephemeral washes. 70-1600m.	Low to no probability of occurrence. No alkaline meadows and ephemeral washes on site. Species not found on site during surveys.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Canbya candida	white pygmy-poppy	None/None	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Gravelly, sandy, granitic places. 600-1460 m	Moderate probability of occurrence. Several known occurrences are ≤ 10 km by air. Species not found on site during surveys.
Cymopterus multinervatus	purple-nerve cymopterus	None/None	Mojavean desert scrub, pinyon and juniper woodland. Sandy or gravelly places. 765-2195 m.	Moderate probability of occurrence. Appropriate habitat on site, nearest occurrence is 17.25 km ENE by air. Species not found on site during surveys.
Diplacus mohavensis	Mojave monkeyflower	None/None	Joshua tree woodland, Mojavean desert scrub. Dry sandy or rocky washes along the Mojave River. 660-1270 m.	Low to no probability of occurrence. No Dry sandy or rocky washes on site and not along the Mojave river. Species not found on site during surveys.
Elymus salina	Salina Pass wild-rye	None/None	Pinon & juniper woodlands. Rocky sites. 880-2865 m.	Moderate probability of occurrence. Marginal habitat on site, nearest occurrence is 18.5 km ENE by air. Species not found on site during surveys.
Erigeron parishii	Parish's daisy	Threatened/None	Mojavean desert scrub, pinyon and juniper woodland. Often on carbonate limestone mountain slopes often associated with drainages. Sometimes on grainite. 1050-2245 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site and at lowest known species elevational range. Species not found on site during surveys.
Eriogonum ovalifolium var. *vineum*	Cushenbury buckwheat	Endangered	Mojavean desert scrub, pinyon and juniper woodland, Joshua tree woodland. Limestone mountain slopes. Dry, usually rocky places. 1430-2440 m.	Low to no probability of occurrence. No carbonate/limestone soil habitat on site and below known species elevational range. Species not found on site during surveys.
Menodora spinescens var. *mohavensis*	Mojave menodora	None/None	Mojavean desert scrub. Rocky hillsides, canyons. Andesite gravel. 700-1405 m.	Moderate probability of occurrence. Marginal habitat on site, nearest occurrence is >50 km NNE by air. Species not found on site during surveys.
Mentzelia tridentata	creamy blazing star	None/None	Mojavean desert scrub 545-1100 m.	Moderate probability of occurrence. Marginal habitat on site, nearest occurrence is >13.33 km NE by air. Species not found on site during surveys.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Pediomelum castoreum	Beaver Dam breadroot	None/None	Joshua tree woodland, Mojavean desert scrub. Sandy soils washes and roadcuts. 605-1485 m.	Moderate probability of occurrence. Appropriate habitat on site, nearest occurrence is >12.75 km SW by air. Species not found on site during surveys.
Phacelia parishii	Parish's phacelia	None/None	Mojavean desert scrub, playas. Alkaline flats and slopes or on clay soils. 540-875 m.	Low to no probability of occurrence. No alkaline habitat or clay soils on site and above elevational distribution of the species. Species not found on site during surveys.
Plagiobothrys parishii	Parish's popcornflower	None/None	Great Basin scrub, Joshua tree woodland. Alkaline soils mesic sites. 750-1400 m.	Low to no probability of occurrence. No alkaline habitat on site. Nearest occurrence is 17.25 km ENE. Species not found on site during surveys.
Polygala intermontana	intermountain milkwort	None/None	Pinyon and juniper woodland 940-3080 m.	Moderate probability of occurrence. Appropriate habitat on site, nearest occurrence is >30 km E by air. Species not found on site during surveys.
Puccinellia parishii	Parish's alkali grass	None/None	Meadows and seeps. Alkali springs and seeps in deserts. 700-1000 m.	Low to no probability of occurrence. No alkaline mesic habitat on site and above elevational distribution of the species. Species not found on site during surveys.
Puccinellia simplex	California alkali grass	None/None	Meadows and seeps, chenopod scrub, valley and foothill grasslands, vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins. 1-915 m.	Low to no probability of occurrence. No alkaline mesic habitat on site and above elevational distribution of the species. Species not found on site during surveys.
Rosa woodsii var. *glabrata*	Cushenbury rose	None/None	Mojavean desert scrub. Springs. 1095-1220 m.	Low to no probability of occurrence. No spring habitat on site. Species not found on site during surveys.
Saltugilia latimeri	Latimer's woodland-gilia	None/None	Chaparral, Mojavean desert scrub, pinyon and juniper woodland. Rocky or sandy substrate; sometimes in washes, sometimes limestone. 120-2200 m.	Moderate probability of occurrence. Appropriate habitat on site, nearest occurrence is 17.25 km ENE by air. Species not found on site during surveys.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Sidalcea neomexicana	salt spring checkerbloom	None/None	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 3-2380 m	Low to no probability of occurrence. No alkaline mesic habitat on site. Species not found on site during surveys.
Birds				
Aquila chrysaetos	golden eagle	BLM Sensitive, CDFW Fully Protected, USFWS Birds of Conservation Concern	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, pinyon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland.	No suitable habitat for nesting, but some potentially suitable foraging habitat in the adjacent areas. This species was not observed during survey. Probability of occurrence is low.
Athene cunicularia	burrowing owl	none/none	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	No burrows were found on site and soils are not easily friable. Potential to occur is low.
Gymnogyps californianus	California condor	Endangered/Fully Protected	Semi-arid mountain ranges surrounding the southern San Joaquin Valley	Outside of species current range. Species is absent.
Falco mexicanus	prairie falcon	USFWS Birds of Conservation Concern	Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland	Potentially suitable foraging habitat in adjacent areas. Species was not observed during survey.
Empidonax traillii extimus	Southwestern willow flycatcher	Endangered/Endangered	Riparian woodland with multiple canopy layers and slow flowing waters	No riparian habitat occurs on site for this riprian obligate species.. Potential to occur is low.
Toxostoma lecontei	Le Conte's thrasher	CDFW Species of Special Concern, USFWS Birds of Conservation Concern	Desert wash, Mojavean desert scrub, Sonoran desert scrub, open desert	Suitable habitat in adjacent areas. Occurrence potential is moderate.
Vireo bellii pusillus	least Bell's vireo	Endangered/Endangered	Riparian scrub, riparian forest	No riparian habitat occurs on site for this riprian obligate species.. Potential to occur is low.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Mammals				
Antrozous pallidus	pallid bat	none/none	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland	Potentially suitable habitat in adjacent areas. Species was not observed during survey. Occurrence potential is moderate in the adjacent areas.
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	none/none	Chaparral | Coastal scrub	Potentially suitable habitat in adjacent areas. Species was not observed during survey. Occurrence potential is moderate in the adjacent areas.
Corynorhinus townsendii	Townsend's big-eared bat	BLM Sensitive, CDFW Species of Special Concern,, USFS Sensitive, WBWG High Priority	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland.	Potentially suitable habitat in adjacent areas. Species was not observed during survey. Occurrence potential is moderate in the adjacent areas.
Xerospermophilus mohavensis	Mohave ground squirrel	None/Threatened	Chenopod scrub, Joshua tree woodland, Mojavean desert scrub, open desert scrub, sandy to gravelly soils.	Outside of species current range. Previous records to the north are from a population thought to be extripated. Potentially suitable habitat in adjacent areas. Occurrence potential is low in the adjacent areas.
Reptiles				
Gopherus agassizii	desert tortoise	Threatened/Threatened	Joshua tree woodland, Mojavean desert scrub, Sonoran desert scrub with friable soils	Potentially suitable habitat in adjacent areas. No evidence of this species was observed during survey. Occurrence potential is low to moderate in the adjacent areas.

Scientific Name	Common Name	Federal/State Ranking	Habitat	Potential to Occur
Anaxyrus californicus	arroyo toad	Endangered/None	Slow moving streams with sandy soil	Required habitat does not exist on site, including upland winter habitat. Species is absent.
Phrynosoma blainvillii	coast horned lizard	none/none	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland	Potentially suitable habitat in adjacent areas. Species was not observed during survey. Occurrence potential is moderate in the adjacent areas.
Fish				
Siphateles bicolor mohavensis	Mohave tui chub	Endangered/Endangered	Aquatic, Artificial flowing waters, Artificial standing waters with deep pools and vegetation, endemic to Mojave River basin	Required habitat does not exist on site. Species is absent.

Coding and Terms

E = Endangered T = Threatened C = Candidate FP = Fully Protected SSC = Species of Special Concern R = Rare

State Species of Special Concern: An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code.

State Fully Protected: Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Global Rankings (Species or Natural Community Level):

G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure – Common; widespread and abundant.

Subspecies Level: Taxa which are subspecies or varieties receive a taxon rank (T-rank**)** attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa.* The T-rank refers only to the global condition of ssp. *phaea*.

State Ranking:

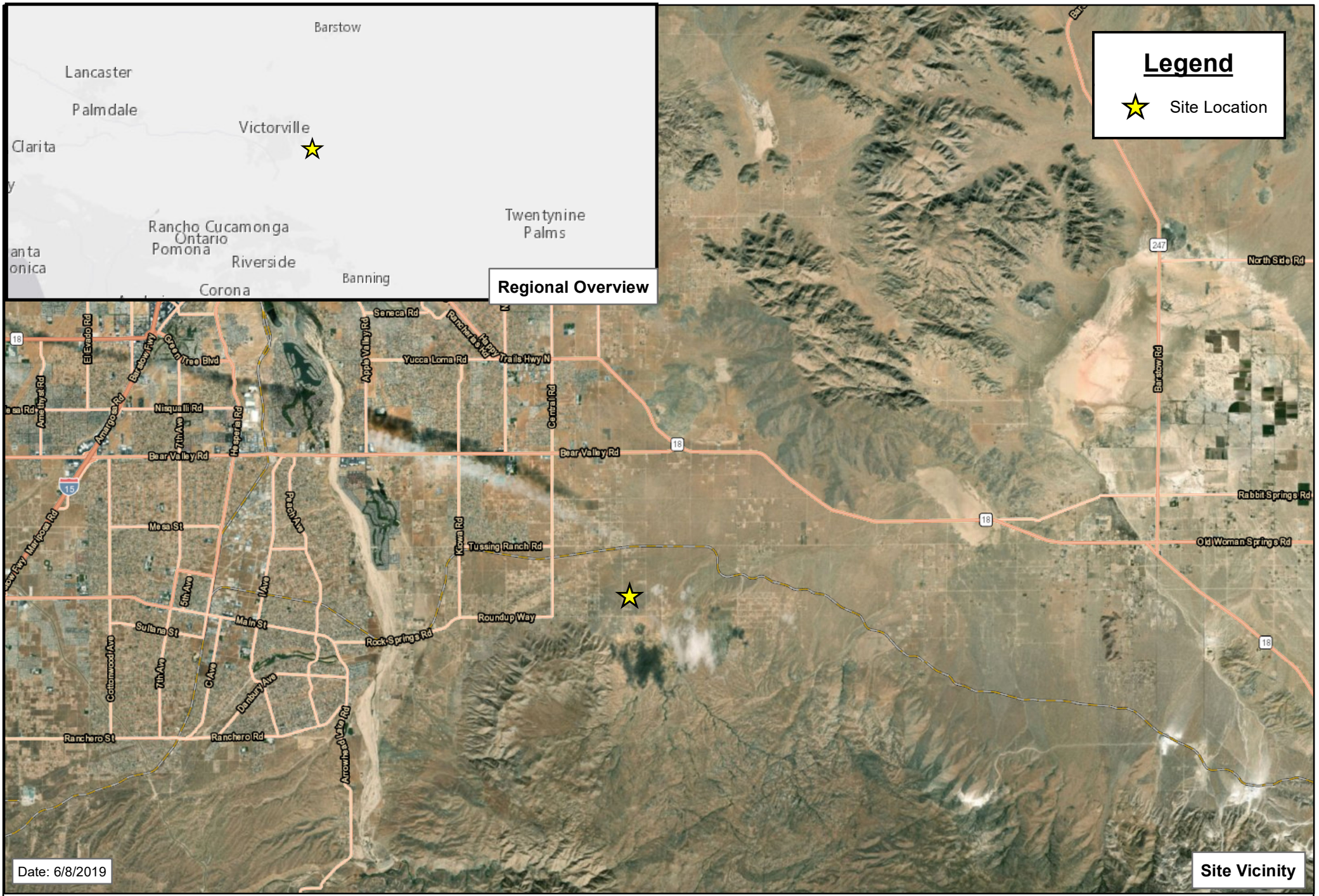
S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.
S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.
S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.
S5 = Secure – Common, widespread, and abundant in the State.

California Rare Plant Rankings (CNPS List):

1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
1B = Plants rare, threatened, or endangered in California and elsewhere.
2A = Plants presumed extirpated in California, but common elsewhere.
2B = Plants rare, threatened, or endangered in California, but more common elsewhere.
3 = Plants about which more information is needed; a review list.
4 = Plants of limited distribution; a watch list.

Threat Ranks:

.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)



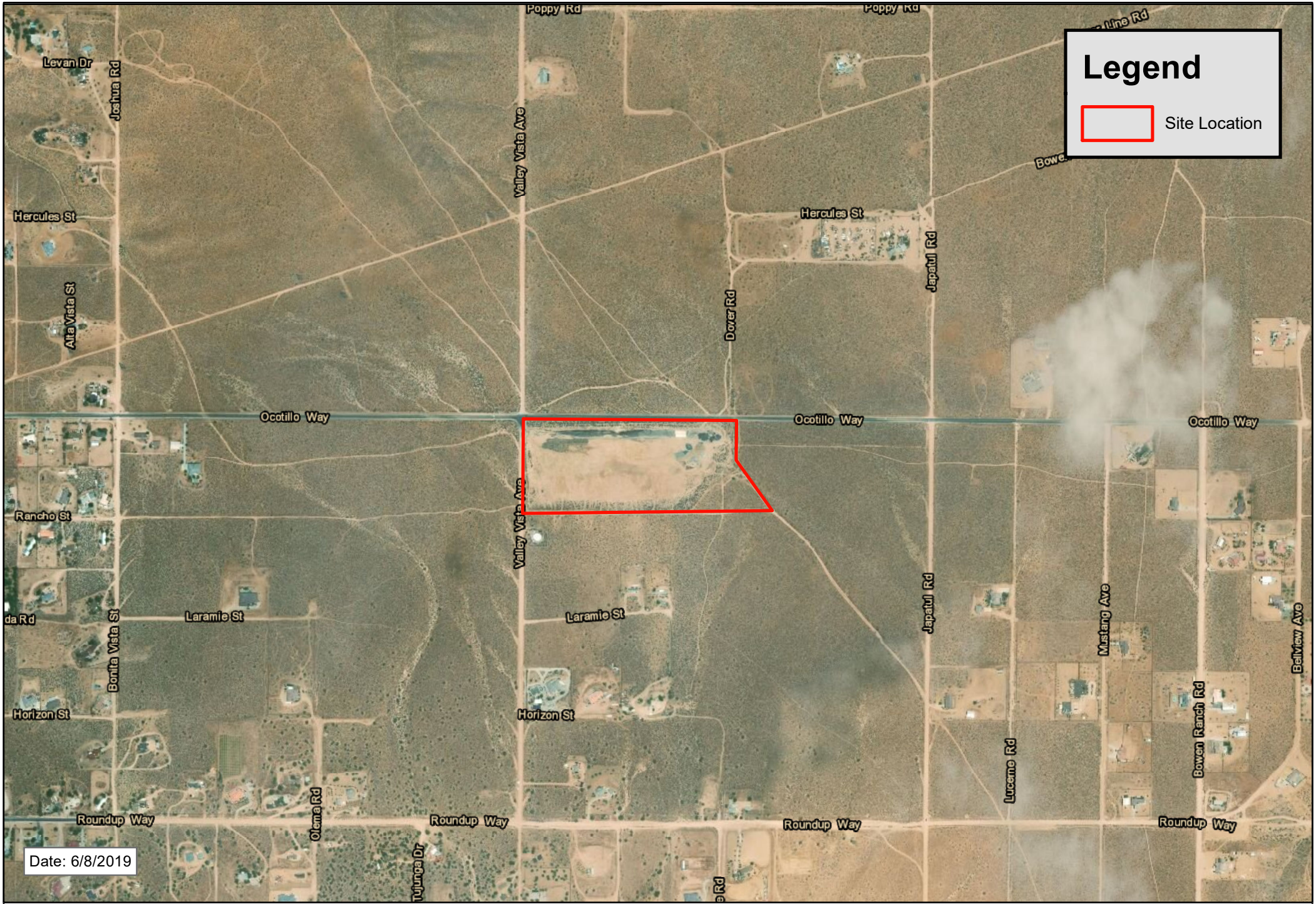
0 1.5 3 6 9 12 Miles

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,

JERICHO SYSTEMS INCORPORATED

Figure 1 - Regional Overview Site Vicinity

Ocotillo Borrow Pit



JERICHO SYSTEMS INCORPORATED

Figure 2
Site Location

Ocotillo Borrow Pit

0 0.0275 0.055 0.11 0.165 0.22 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

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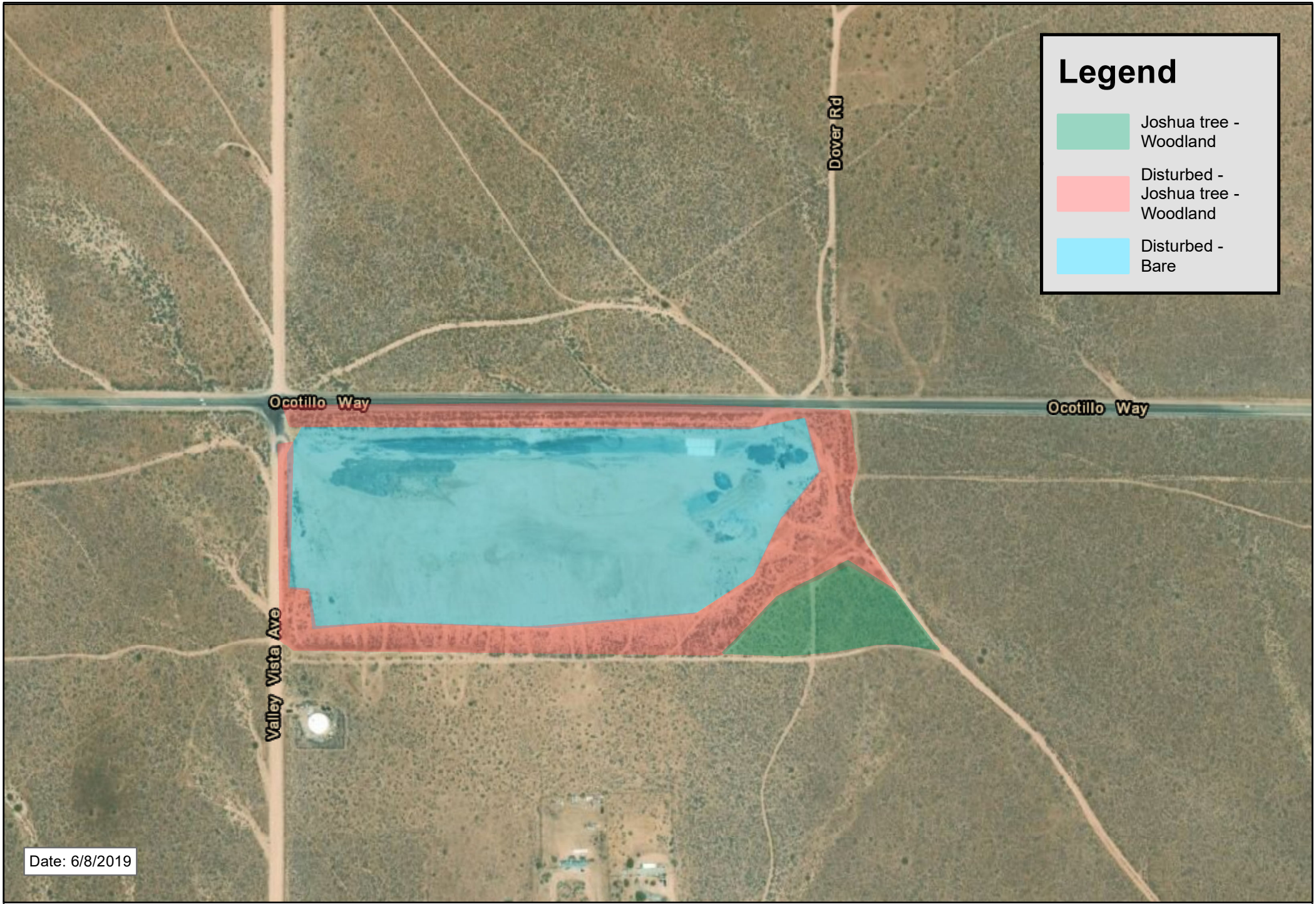
1 inch = 295 feet

Figure 3
Soils

Ocotillo Borrow Pit



0 0.0275 0.055 0.11 0.165 0.22 Miles

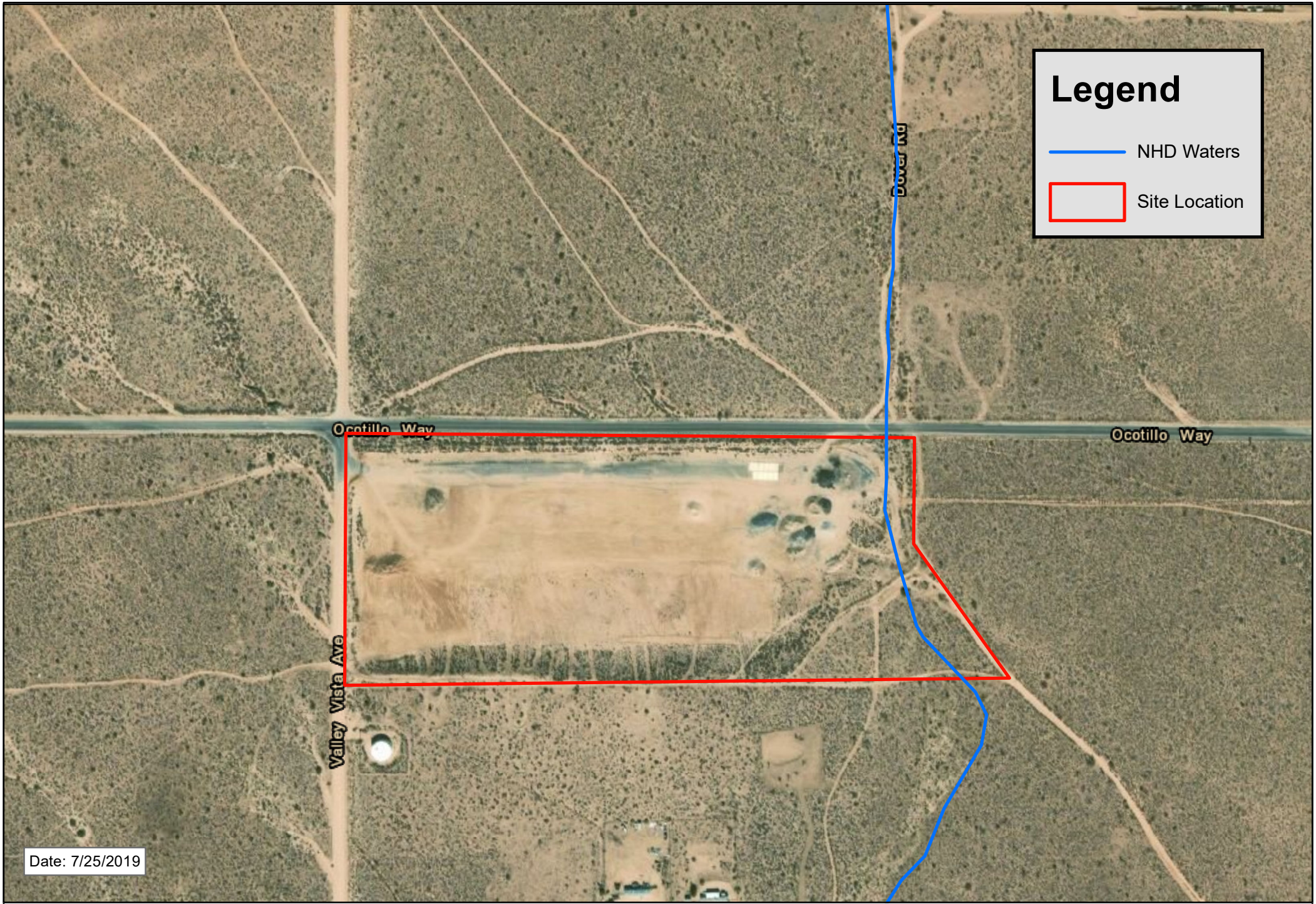
Imagery Date: 8/6/2017

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

1 inch = 295 feet

Figure 4
Vegetation Disturbance Map

Ocotillo Borrow Pit



0 0.0275 0.055 0.11 0.165 0.22 Miles

Imagery Date: 8/6/2017

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,

JERICHO SYSTEMS INCORPORATED

1 inch = 295 feet

Figure 5
National Hydrography Dataset (NHD)
Streams and Waterbodies

Ocotillo Borrow Pit

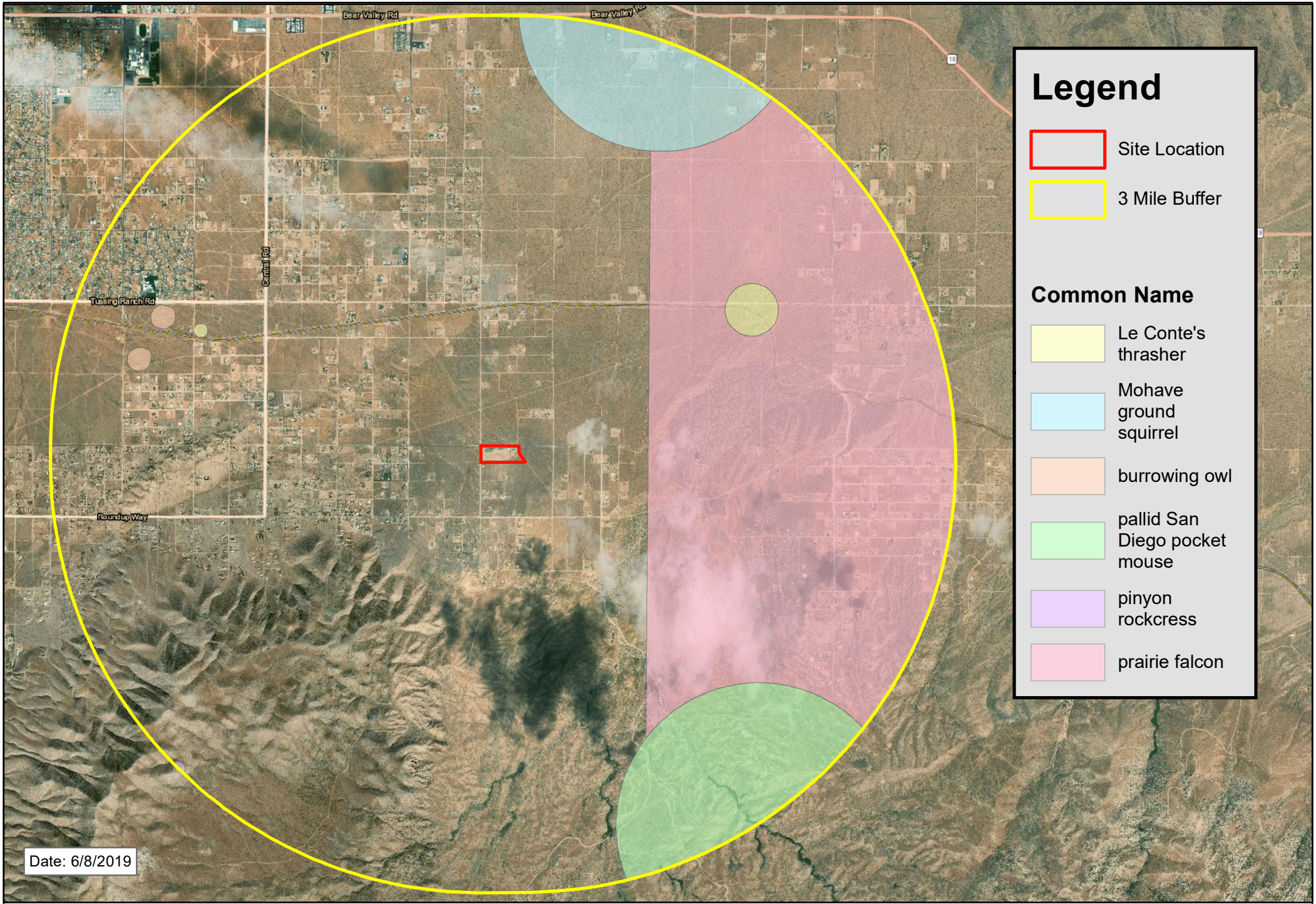


Figure 6
CNDDB 3 Mile

Ocotillo Borrow Pit

Ocotillo Borrow Pit Site Photos – April 2019

	**Photo 1.** Looking west from eastern Site boundary.
	**Photo 2.** Looking west down northern Site boundary along Ocotillo Way.

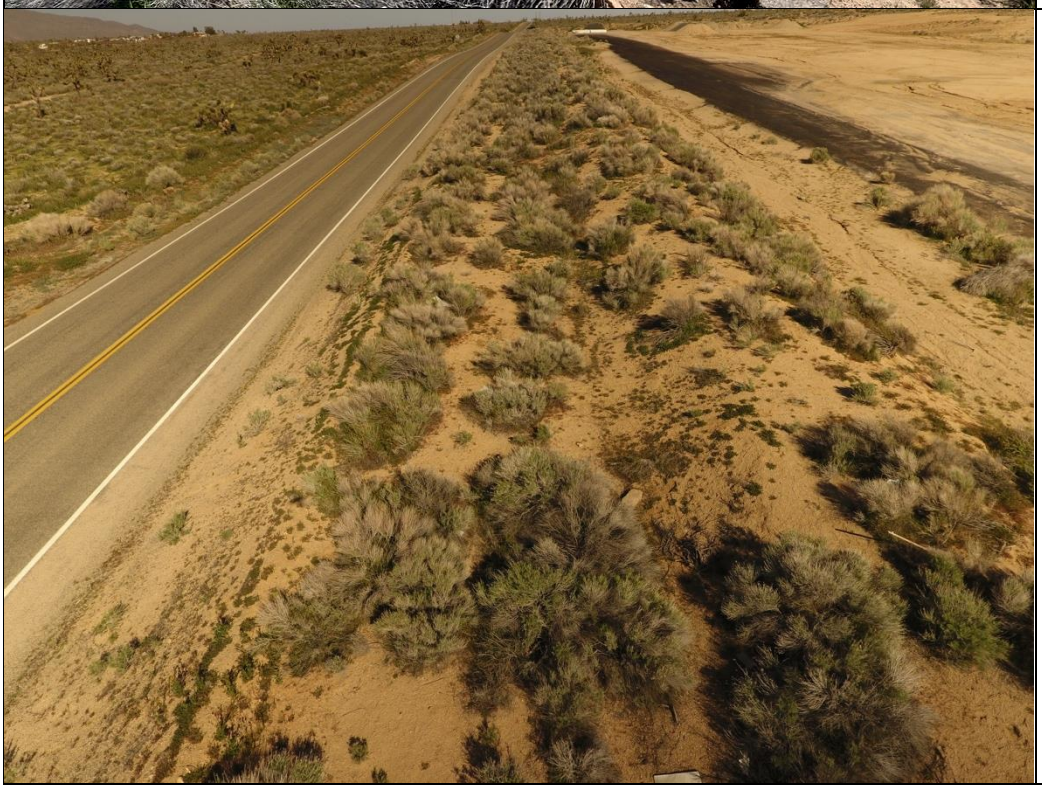
	**Photo 3.** Looking south along eastern Site boundary.
	**Photo 4.** Aerial view looking down east northern Site boundary along Ocotillo Way.

	**Photo 5.** Aerial view looking south down western Site boundary along Valley Vista Ave from intersection with Ocotillo Way.
	**Photo 6.** Aerial view looking northeast from southwest corner of Site.

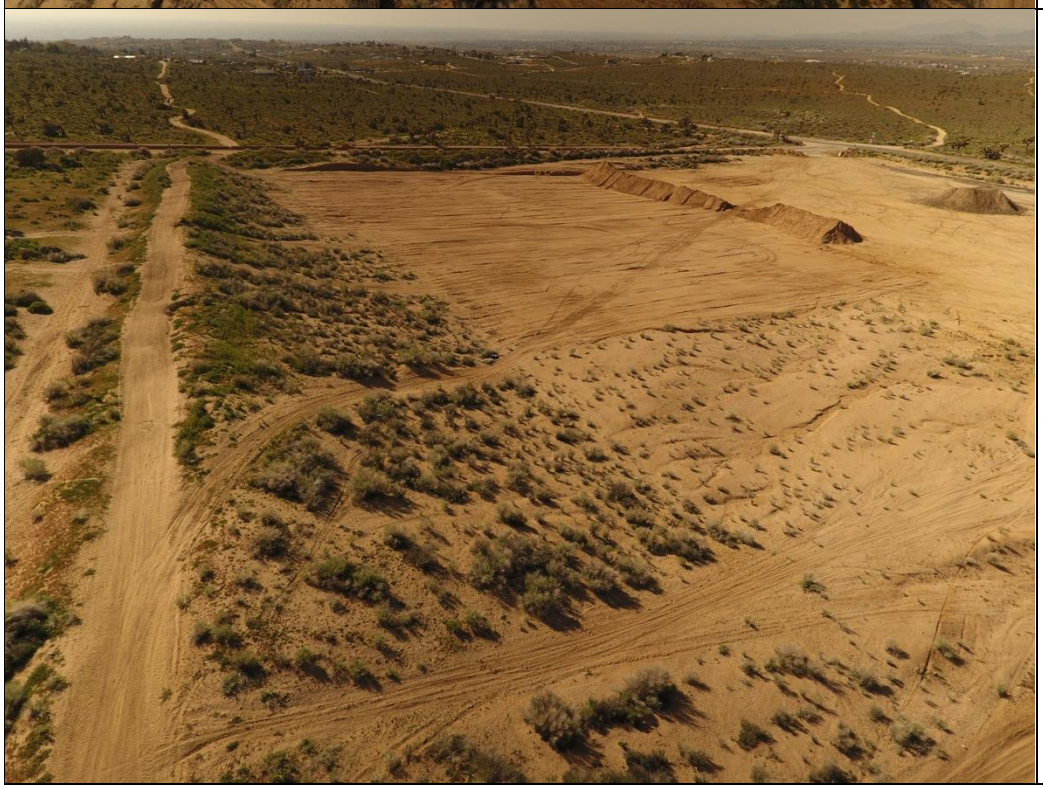
	**Photo 7.** Aerial view looking east along southern Site boundary from Valley Vista Ave.
	**Photo 8.** Aerial view looking northwest from southern Site boundary.

	**Photo 9.** Aerial view looking east along southern Site boundary towards southeast corner of Site.
	**Photo 10.** Aerial view looking northwest from southeast corner of Site.

EXHIBIT D

Findings

FINDINGS: MINING CONDITIONAL USE PERMIT

MINING CONDITIONAL USE PERMIT (MINING CUP) AND RECLAMATION PLAN 2020M-03 TO PERMIT MINERAL EXTRACTION ON 11.7 ACRES OF A 20 ACRE PARCEL FOR A ONE-HUNDRED (100) YEAR OPERATING PERIOD (Project). (PROJECT NUMBER PROJ-2020-00014;APN: 0438-082-010)

The following Chapter 85.06.040 Mining 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 Conditional Use Permit:

1. **THE SITE FOR THE PROPOSED BORROW PIT 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 20-acre parcel is of adequate size and shape to accommodate the 11.7-acre borrow pit and operations, including equipment and trucking. The minimum setback requirements for the Apple Valley / Rural Living (AV/ RL) zoning district in the Desert Region is 25 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 Ocotillo Way and Valley Vista Avenue, which are public unimproved roads. The material will be transported to various areas throughout the County to facilitate the repair of County roadways.

3. **THE PROPOSED USE WILL NOT HAVE A SUBSTANTIAL ADVERSE EFFECT ON ABUTTING PROPERTIES OR THE ALLOWED USE OF THE ABUTTING PROPERTIES, WHICH MEANS THE USE WILL NOT GENERATE EXCESSIVE NOISE, TRAFFIC, VIBRATION, LIGHTING, GLARE, OR OTHER DISTURBANCES.**

   As described in #1 above, minimum setback requirements for the Apple Valley / Rural Living (AV/RL) zoning district in the Desert Region is 25 feet from the property line. As described in #2 above, access roads have been established to permit workers to enter the site from Ocotillo Way and Valley Vista Avenue. 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 Rural Living District are to preserve open space. This Project is a temporary use of a 20-acre, County-owned parcel of land that will remain a maintenance yard and open space habitat upon Project competition. Use of the site for fill material extraction allows a measure of beneficial use while maintaining the site's open space value.

LAND USE ELEMENT: RURAL LIVING (RL) LAND USE ZONING DISTRICT

Applicable site-specific policies for the Rural Living (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 mineral extraction and other 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 no infrastructure facilities 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 Rural Living (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.

FINDINGS: RECLAMATION PLAN

A Reclamation Plan to permit temporary excavation of the borrow pit to provide fill material for roadway repairs (Project Number **PROJ-2020-00014;** APN: **0438-082-010**).

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 CO"MPLIES WITH THE CALIFORNIA SURFACE MINING AND RECLAMATION ACT OF 1975, ("SMARA") (PUBLIC RESOURCES CODE SECTIONS 2772-2773) AND ANY OTHER APPLICABLE PROVISIONS.**

   The 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 (DMR).

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 DMR.

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.**

   A Mitigated Declaration was prepared in compliance with CEQA and all Mitigated Measures identified in the MND 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 that 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 WILL BE 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 Apple Valley, Rural Living Land Use Zoning District 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 May 28, 2020, to DMR in response to its April 20, 2020, review of the Ocotillo 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 November 19, 2020. Each concern expressed by DMR has been addressed and/or incorporated into the revised Reclamation Plan.

FINDINGS: CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

8. **THE PROJECT WILL NOT HAVE A SIGNIFICANT ADVERSE IMPACT ON THE ENVIRONMENT, SUBJECT TO IMPLEMENTATION OF THE PROPOSED CONDITIONS OF APPROVAL AND MITIGATION MEASURES.**

   There is no substantial evidence that the Project will have a significant effect on the environment because an Initial Study has been completed for the proposed Project and it is determined, on the basis of staff's independent evaluation, that the Project will not have a significant adverse impact on the environment with the implementation of all the conditions of approval and environmental mitigation measures. The proposed Mitigated Negative Declaration for this Project reflects the County's independent judgment in making this decision. Therefore, adoption of a Mitigated Negative Declaration is recommended.

EXHIBIT E

Initial Study / Mitigated Negative Declaration

Initial Study/Mitigated Negative Declaration
County of San Bernardino Department of Public Works

Ocotillo Borrow Pit

Lead Agency:

County of San Bernardino Land Use Services

385 N. Arrowhead Ave.,
San Bernardino, CA 92415

Technical assistance provided by:

Lilburn Corporation

1905 Business Center Drive
San Bernardino, CA 92408

June 2020

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TABLES

FIGURES

SECTION 1 – INTRODUCTION

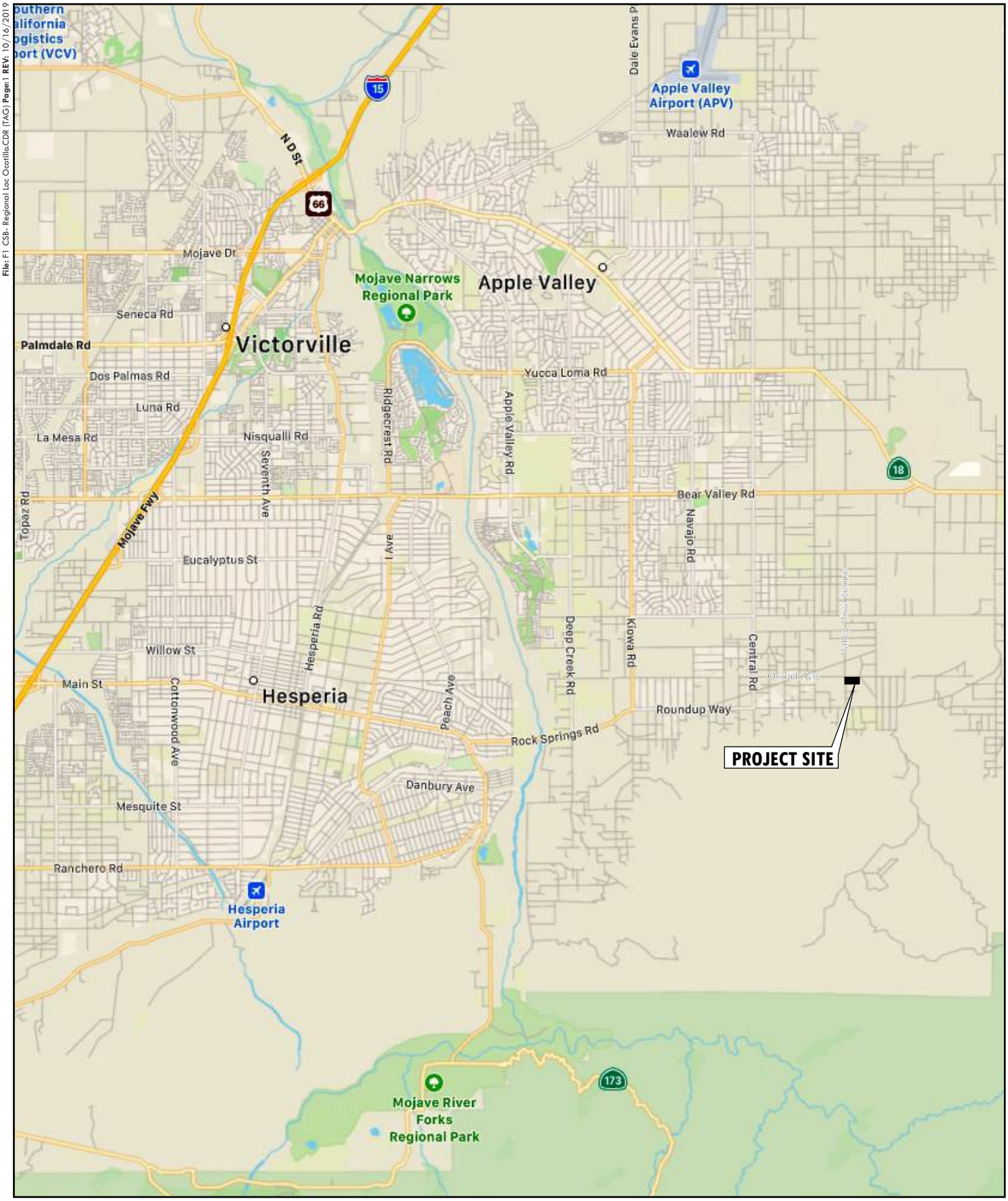
The County of San Bernardino Department of Public Works (DPW) is submitting a Conditional Use Permit (CUP) application and Mining Reclamation Plan application- PROJ-2020-00014- to the County Land Use Services Department for the existing Ocotillo Borrow Pit. This application is to allow for the mining of up to 1,000 cubic yards (cy) of material annually for maintenance and/or emergency repairs that may be required primarily following storm events affecting roads, culverts, and other DPW sites.

The Project Site is located at the southeast corner of Ocotillo Way and Valley Vista Avenue, southeast of the Town of Apple Valley (see Figure 1 - Regional Map). The County-owned parcel is approximately 20 acres (APN 0438-082-01) and is located in Section 24, Township 4 North, Range 3 West, SBBM (see Figure 2 - Vicinity Map). Access to the site is from Ocotillo Way, a paved public road. The Project Site has previously been disturbances primarily due to the minor material removal and staging operations that have been associated with maintenance and emergency repair of San Bernardino road projects including unpaved roads, removal of materials, and material stockpiles. The Proposed Project will allow for the continued use of local construction material to reduce transportation costs and fuel usage from transporting material from more distant material sources. The material will be transported to DPW Sites for annual maintenance and/or emergency repairs. The site is mostly disturbed by past grading and material storage uses and has been used by the DPW for such activities since the 1960s.

Project Purpose and Need:

The purpose of the application is to permit the Ocotillo Borrow Pit for a 100-year period to continue providing general fill material for various DPW sites for annual maintenance and/or emergency repairs. DPW is proposing to excavate up to a depth of 15 feet with 3 horizontal to 1 vertical slopes (3H:1V) or 18° slopes to annually remove up to 1,000 cy of borrow material for a mining period of 100 years. The reclaimed end use of the Project Site is proposed to be a DWP material maintenance and storage yard.

File: F1 CSB- Regional Loc Ocotillo.CDR (TAG) Page: 1 REV: 10/16/2019



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Source: Lilburn Corp., 10/2020 (TAG).

LILBURN CORPORATION

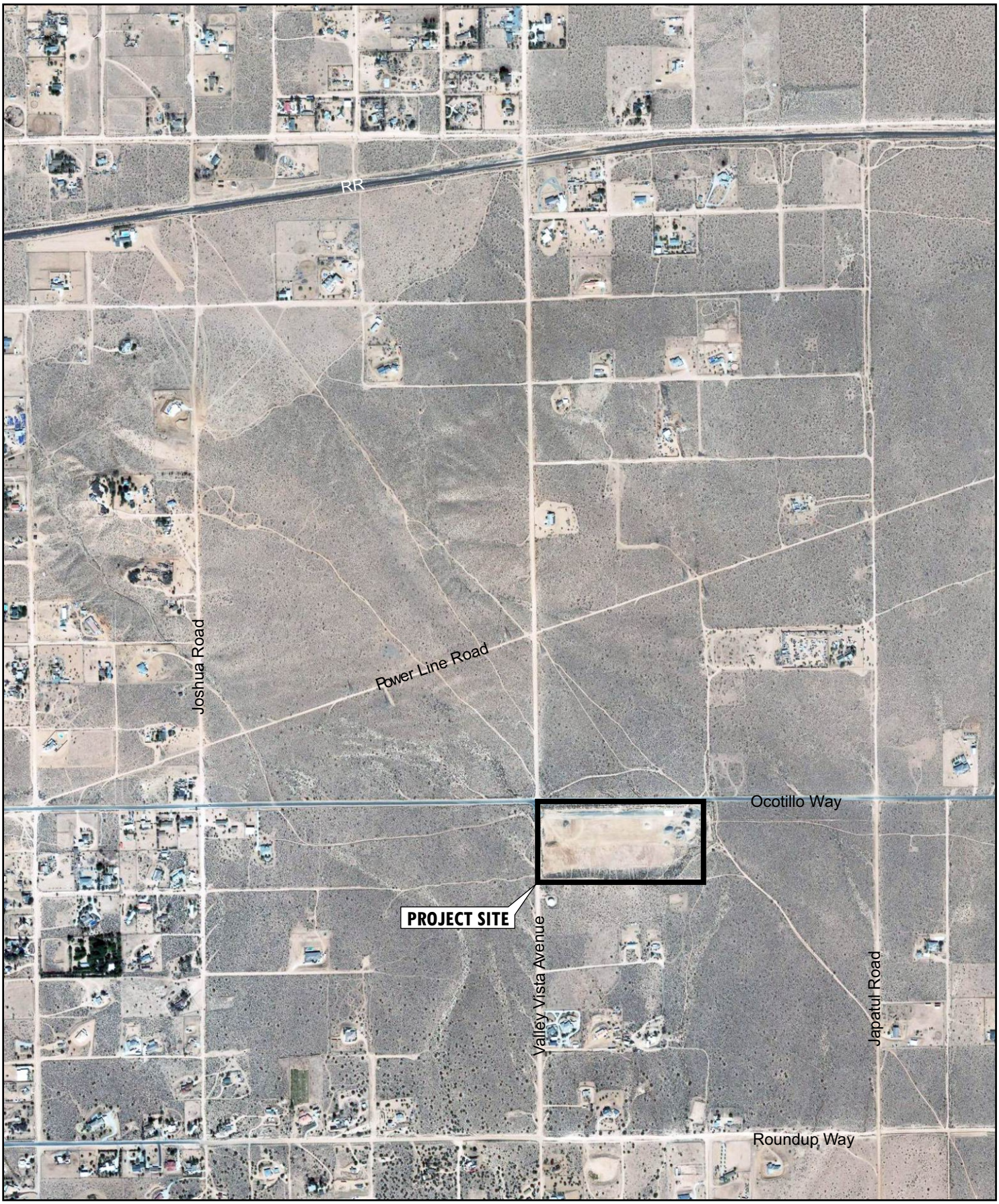
REGIONAL LOCATION

OCOTILLO BORROW PIT

County of San Bernardino, California

FIGURE 1

File: F1 CSB- Regional Loc Ocotillo.CDR (TAG) Page:1 REV: 10/16/2019



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Source: Lilburn Corp., 10/2020 (TAG).

LILBURN CORPORATION

PROJECT VICINITY

OCOTILLO BORROW PIT

County of San Bernardino, California

FIGURE 2

SECTION 2 – REGULATORY FRAMEWORK

The County of San Bernardino Department of Public Works has identified that the Ocotillo Borrow Pit Project meets the California Environmental Quality Act (CEQA) Guidelines Section 15378 definition of a Project. CEQA Guidelines Section 15378 defines a Project as the following:

"Project" means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment.

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000-21177), this Initial Study has been prepared to determine potentially significant impacts upon the environment resulting from the construction, operation and maintenance of the Ocotillo Borrow Pit Project (hereinafter referred to as the "Project" or "proposed Project"). In accordance with Section 15063 of the State *CEQA Guidelines*, this Initial Study is a preliminary analysis prepared by the County of San Bernardino Department of Public Works as Lead Agency to inform the Lead Agency decision makers, other affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

Initial Study Organization

This Initial Study is organized as follows:

Introduction: Provides the regulatory context for the review along a brief summary of the CEQA process.

Project Information: Provides fundamental Project information, such as the Project description, Project location and figures.

Lead Agency Determination: Identifies environmental factors potentially affected by the Project and identifies the Lead Agency's determination based on the initial evaluation.

Mitigated Negative Declaration: Prepared when a determination can be made that no significant environmental effects will occur because revisions to the Project have been made or mitigation measures will be implemented which will reduce all potentially significant impacts to less than significant levels.

Evaluating Environmental Impacts: Provides the parameters the District uses when determining level of impact.

CEQA Checklist: Provides an environmental checklist and accompanying analysis for responding to checklist questions.

References: Include a list of references and various resources utilized in preparing the analysis.

SECTION 3 – DETAILED PROJECT DESCRIPTION

Mining Operations

With approval of the Mine Plan, mining operations would continue over a period of up to 100 years beginning in early 2020 and extending until the end of 2119. Specifics of the Mine Plan are shown in Figure 3. 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).

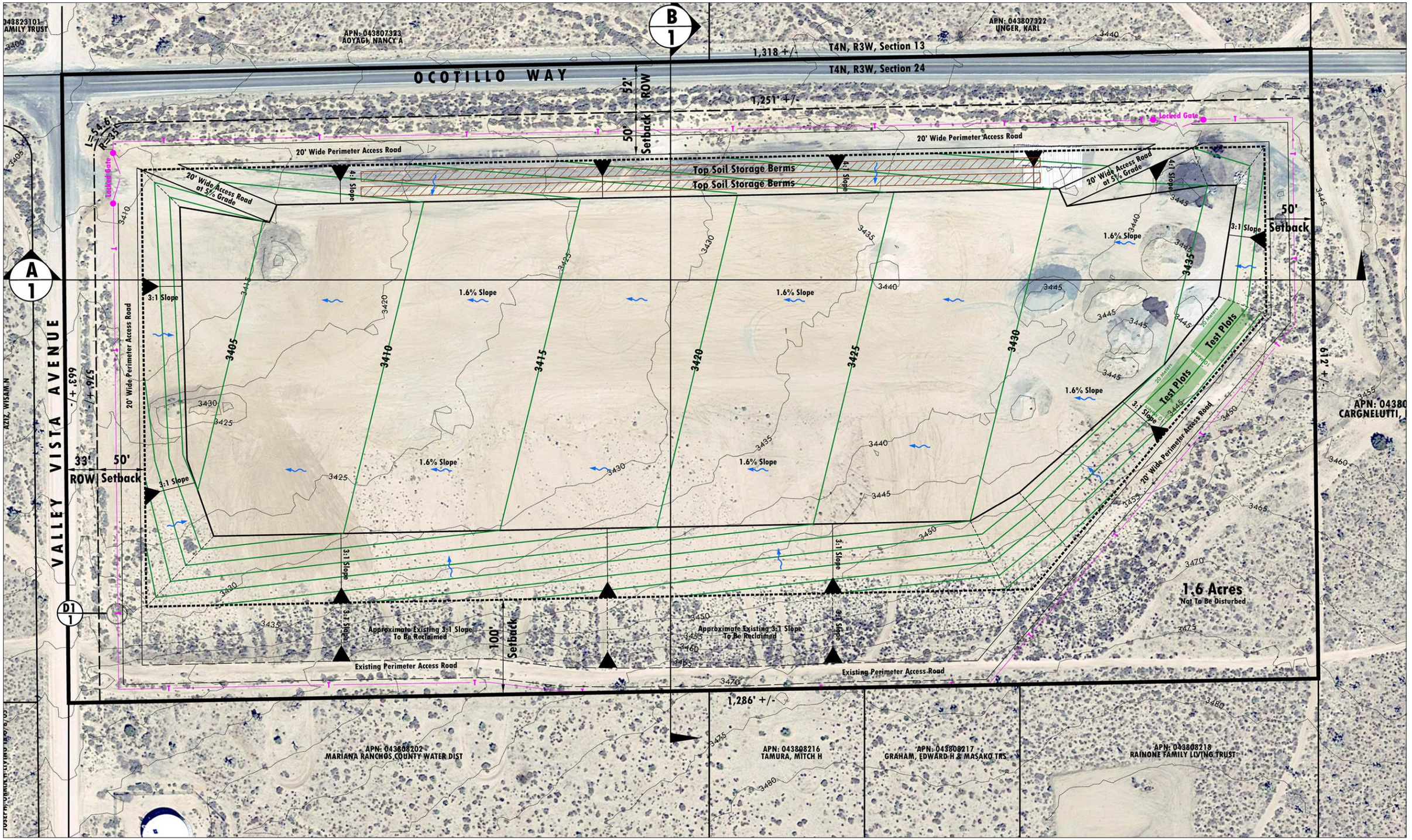
Mining will take place on approximately 11.7 acres of the 20-acre parcel. 50-foot wide setbacks will be established on the west, south, and east side of the property. The north side of the site will setback 52 feet from the centerline for the road right-of-way and an additional 50 feet from the south edge of the right-of-way or approximately 102 feet. Much of the setbacks are vegetated. In addition, the undisturbed southeast corner consisting of approximately 2 acres will be avoided. The setbacks total approximately 6.2 acres. An estimated 1,000 cy annually would be excavated on an intermittent basis over the course of 100 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 truck trailers with capacity of up to approximately 10 to 25 cy (typical). A complete list of the typical equipment to be used on-site and for transport to various sites within the vicinity 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.

Slopes of 3H:1V to depths of up to 15 feet will be produced from excavation of the pit. The top of the pit will range from 2,480 feet above mean sea level (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 26 feet in width located on the north sides of the pit to allow direct access to Ocotillo Way. Once off the Project Site, the street-legal transport trucks will utilize Ocotillo Way.

Truck traffic is anticipated at a rate of about 50 loads per year based on street-legal 20 cy trucks and DPW project demand.

The trucks will travel on Ocotillo Way to DPW projects. 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 on a regular basis and more frequently as needed during windy conditions. Water used for dust control shall be obtained from a local water supplier via a water truck (source of water attached to application). Un-surfaced haul roads and access roads will also have dust controlled with or covered with road base material as needed.



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Feet

Source: Lilburn Corp., 10/2020 (TAG).

LILBURN CORPORATION

LEGEND

- Property Line
- Top of Slope
- Proposed Contour
- Desert Tortoise Fence

MINE PLAN

OCOTILLO BORROW PIT

County of San Bernardino, California

FIGURE 3

Table 1
Mobile Mine and Transport Equipment (Typical)

Equipment Type	Typical Number	Hours/day	Purpose
Dozer	1	4	Excavate and loosen material. Access construction and maintenance.
2-5 Axle Dump/Haul Truck	2	4	Transportation of material.
Excavator	1	4	Excavate and load material into trucks.
Loader	1	4	Excavate and load material into trucks.
Water Truck	1	4	Water for dust control on mining areas, haul roads, and stockpiles.

Source: DPW July 2019
Note that equipment listed is typical and makes and models will vary.

Site operations will be conducted as needed intermittently primarily from 5:30 am until 8 pm, up to 6 days per week. Occasionally operations may be conducted up to 7 days per week depending on construction and road maintenance needs. All refuse shall be disposed of into approved trash bins and removed by the operator or a commercial vendor. Portable toilets will be used on-site when in operation and serviced by a commercial vendor. Bottled water will be provided to employees for a supply of drinking water as needed.

Mine Waste

Although the Project Site has been 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 or storage 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 Project Site following standard regulations. No used fluids will be stored on-site.

Ore Processing

The borrow pit material will be loaded directly into trucks for transport to DWP Sites. 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.

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 4,000 gallons of water a day (6 to 20 days a year) may be used for dust suppression activities. The 4,000-gallon water truck will fill at Mojave Water Agency designated hydrant. It is not

anticipated that there will be any excess water from the wetting-down procedure; therefore, no recycling is required or planned. The County has a memorandum of understanding (MOU) with the Mojave Water Agency.

Erosion and Sedimentation Control

DPW is required to comply 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 as applicable:

- 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 25 feet. There are no drainage or run-off channels that will be affected by the pit. Principally only direct precipitation may affect the Project 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 3H:1V to reduce possible slope erosion and runoff channeling down the slopes. There will no run-off from the site to adjacent properties. 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 annually during mine inspections, any final slopes 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 points and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations.

Blasting

There will be no blasting on this Project Site, therefore, no explosives will be used or stored on-site.

Reclamation Plan

The intent of the California Surface Mining and Reclamation Act of 1975 as amended (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."

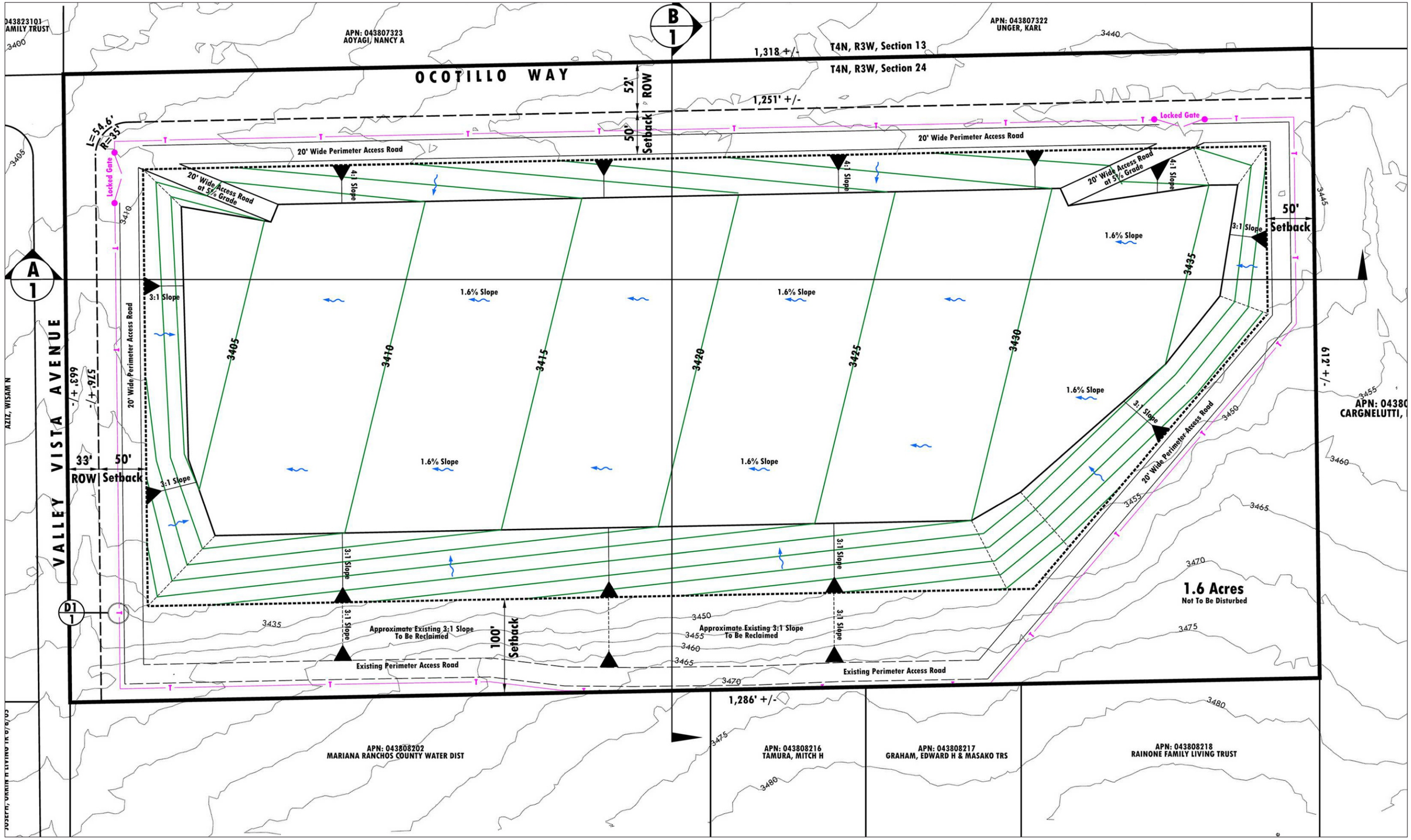
The objectives of the Reclamation Plan are to:

- 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 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 partially backfilled or recontoured to 3H:1V. Fill material will be excess material pushed up onto slopes to create 3H:1V contouring. 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 one 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.

Equipment Staging Areas

Equipment storage and parking area will be within the east portion of the excavated area. A complete list of the typical equipment to be used on-site and for transport to various sites within the vicinity is included in Table 1, above. 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 BMPs will be implemented. All used fluids will be removed from the equipment and from the Project Site following standard regulations. No used fluids will be stored on-site. 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.



0 90 Feet

Source: Lilburn Corp., 10/2020 (TAG).

LILBURN CORPORATION

LEGEND

- Property Line
- Top of Slope
- Proposed Contour
- Desert Tortoise Fence
- Existing Contour

RECLAMATION PLAN

OCOTILLO BORROW PIT

County of San Bernardino, California

FIGURE 4

Operation 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 landowner.

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 Plan 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.

Project Design Features

All equipment and debris will be removed from the Project Site upon project completion. Public access to the Project Site will be restricted by a 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 one-foot high and two 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 Project Site.

SECTION 4 – ENVIRONMENTAL CHECKLIST FORM

1. Project Title: Ocotillo Borrow Pit

2. Lead Agency Name: County of San Bernardino Land Use Services

Address: 385 N. Arrowhead Ave.,
San Bernardino, CA 92415

3. Contact Person: Steven Valdez, Senior Planner

4. Project Location: Apple Valley Sphere of Influence, San Bernardino County, APN 0438-082-01

Topographic Quad (USGS 7.5"): Apple Valley South
Topographic Quad: T4N, R3W, Sections 24
Coordinates
Latitude/Longitude: 34°25'38.75" N, 117°8'39.16" W

Site Access: Access to the Project Site will be from Ocotillo Way, an existing paved public road.

5. Project Sponsor: County of San Bernardino Department of Public Works

Name and Address: 825 East Third Street, Room 123
San Bernardino, CA 92415
Nancy Sansonetti, AICP: Nancy.Sansonetti@dpw.sbcounty.gov
909-387-8109

6. General Plan/Zoning Designation: Apple Valley/Rural Living (AV/RL)

7. Project Description Summary:

San Bernardino County, Department of Public Works (DPW) is submitting an application for a Mine Reclamation Plan for the Ocotillo Borrow Pit. The purpose of this application is to permit the Ocotillo Borrow Pit for a 100-year period to provide general fill material for various DPW Sites for annual maintenance and/or emergencies. DPW is proposing to excavate up to a depth of 15 feet with 3 horizontal to 1 vertical slopes (3H:1V) or 18° slopes to remove up to 1,000 cubic yards (cy) a year for a mining period of 100 years. The reclaimed end use of the Project Site is proposed to be a DPW material maintenance and storage yard.

Details of the Project are further discussed in Section 3.

8. Environmental/Existing Site Conditions:

The Project Site consists almost entirely of undeveloped, but disturbed, open space. Joshua Tree woodland dominates undisturbed areas with disturbed areas being either bare or populated by a subset of species that occur nearby. Disturbances on-site are primarily due to the minor material removal and staging operations that have been associated with maintenance and emergency repair of San Bernardino road projects including unpaved roads, removal of materials, and material stockpiles. Hydrologically, the Project Site is within the Upper Mojave watershed and the soils on-site are solely comprised of Lucerne sandy loam. The Project Site topography is relatively uniform throughout with steep 25-foot slopes on the eastern, southern, and northern portions of the Project Site as a result of historical excavation and removal. Elevation on-site ranges from approximately 3,369 feet above mean sea level (amsl) in the southeastern portion of the Project Site, to 3,414 feet amsl in the northwesternmost portion of the site.

9. Surrounding land uses and setting:

The Project Site is located near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The general project vicinity consists of rural housing and undeveloped open space. Habitat surrounding the Project Site consists primarily Joshua tree woodland. The surrounding land uses are as follows:

North	AV/RL; Ocotillo Way and vacant desert open space.
South	AV/RL; Water Tank, Single-family residences and vacant desert land.
East	AV/RL; Vacant desert land.
West	AV/RL; Valley Vista Avenue and vacant desert land.

10. Other public agencies whose approval is required:

Federal:

None.

State Agencies:

Compliance with Statewide NPDES Program through Preparation and Implementation of a Storm Water Pollution Prevention Plan (SWPPP).

City/County Agencies:

SMARA Mine and Reclamation Plan

Financing Approval or Participation Agreements: (i.e. Federal Funding? Grant Funding? JPA Agreement?)

None.

11. Have California Native American tribes traditionally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation?

Yes, consultation was requested and completed. See Tribal Cultural Resources section for details.

12. Lead Agency Discretionary Actions:

Mining Conditional Use Permit

Reclamation Plan

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact requiring mitigation to be reduced to a level that is less than significant as indicated in the checklist on the following pages.

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

LEAD AGENCY DETERMINATION

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

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

Signature: Steven A. Valdez (Steven Valdez , Planner) — Date: June 4, 2020

Signature: (David Prusch , Supervising Planner) — Date:

1. AESTHETICS

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

(Check ☐ if project is located within a view-shed of any Scenic Route listed in the General Plan):

Environmental Setting

The Project Site is located in the desert region of western San Bernardino County within a rural area with primarily undeveloped desert land in the vicinity.

Impact Analysis

a) Have a substantial adverse effect on a scenic vista?

No Impact. The Project Site is not located within a scenic vista recognized by the County General Plan. Therefore, the Proposed Project would not have a substantial adverse effect on a scenic vista. No impacts are identified or are anticipated, and no mitigation measures are required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. Goal OS 5 of the County General Plan states that the County will maintain and enhance the visual character of scenic routes in the County. However, the Project Site is not located adjacent to or within the vicinity of a designated State Scenic Highway. The nearest officially designated State Scenic Highway, as identified by the California Department of Transportation State Scenic Highway Program (2019), is a portion of State Route 38 which is located approximately 28 miles southeast of the Project Site. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

c) Substantially degrade an existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an

urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant. Impacts to visual resources are based on changes to the existing character of the landscape, viewer sensitivity, and the number of viewers that may view the project activities. The level of change associated with the Proposed Project is considered to be low as the Proposed Project has been disturbed since the 1960s and is an acceptable use within the AV/RL zone as demonstrated by Table 82-7, Allowed Land uses and Permit Requirements for Residential Land Use Zoning Districts, of the San Bernardino County Development Code. Furthermore, following the completion of mining, reclamation shall take place in order to reshape mining features and revegetate disturbed areas to minimize aesthetic impacts. With implementation of the proposed Reclamation Plan and adherence to San Bernardino County Development Code, impacts are considered temporary and less than significant. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant. The Proposed Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area as no permanent new light sources are proposed. No lighting is proposed, however, in the event temporary lighting is needed, the operator shall comply with the requirements outlined by County Development Code Section 83.07.040, Glare and Outdoor Lighting – Mountain & Desert Regions. This includes fully shielding lights as required to preclude light pollution or light trespass on adjacent property, other property (directly or reflected), and members of the public on adjacent roads. With adherence to existing regulations, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Aesthetics Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

2. AGRICULTURE AND FORESTRY RESOURCES

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

(Check ☐ if project is located in the Important Farmlands Overlay):

Environmental Setting

The Project Site is located is in an unincorporated area within the County Apple Valley/Rural Living (AV/RL) land use zoning district. Agricultural, Resource, and Open Space uses are permitted within this land use zoning district. The Project Site consists almost entirely of undeveloped, but disturbed, open space. Disturbances on-site are primarily due to the minor material removal and staging operations that have been associated with

maintenance and emergency repair of San Bernardino road projects including unpaved roads, removal of materials, and material stockpiles.

Impact Analysis

a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance is identified on-site or on adjacent parcels as demonstrated by the Department of Conservation's California Important Farmland Finder. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact. The Proposed Project is a conditionally acceptable use within the AV/RL zone as demonstrated by Table 82-7, Allowed Land Uses and Permit Requirements for Residential Land Use Zoning Districts, of the San Bernardino County Development Code. Additionally, the Project Site is recognized as "Non-Enrolled Land" as identified in the latest San Bernardino County Williamson Act Map (FY 2015/2016) prepared by the California Department of Conservation's Division of Land Resource Protection. As such, the Proposed Project does not conflict with existing zoning for agricultural use or a Williamson Act contract. No impacts are identified or are anticipated, and no mitigation measures are required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The Project Site and surrounding area do not occur within forest land, timberland, or timberland zoned production. Impacts to these resource lands would not result with implementation of the Proposed Project. No impacts are identified or are anticipated, and no mitigation measures are required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The Project Site does not support forest land and implementation of the Proposed Project would not convert forest land to non-forest use. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Less than Significant. Agricultural uses are permitted within the AV/RL zone as stated within Table 82-7 of the San Bernardino County Development Code. However, as previously stated, the Proposed Project is also a conditionally acceptable use within the AV/RL zone. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Agriculture and Forestry Services Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

3. AIR QUALITY

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

(Discuss conformity with the South Coast Air Quality Management Plan, if applicable):

Environmental Setting

The Project Site is located in the Mojave Desert Air Basin (MDAB). The MDAB encompasses the desert portion of San Bernardino County. The MDAQMD has jurisdiction over air quality issues and regulations within the City of Needles that includes the Project Site. To assist local agencies in determining if a project's emissions could pose a significant threat to air quality, the MDAQMD has prepared the California Environmental Quality Act (CEQA) and Federal Conformity Guideline (August 2016). The air and dust emissions from the construction and operational use of the Proposed Project were evaluated and compared to the MDAQMD air quality thresholds to determine significance.

Air emissions from the Proposed Project are subject to federal, State and local rules and regulations implemented through provisions of the federal Clean Air Act, California Clean Air Act, and the rules and regulations of the California Air Resources Board (CARB) and MDAQMD. The federal Clean Air Act and California Clean Air Act were established in an effort to assure that acceptable levels of air quality are maintained. These levels are based upon health-related exposure limits and are referred to as National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS). The ambient air quality standards establish maximum allowable concentrations of specific pollutants in the atmosphere and characterize the amount of exposure deemed safe for the public. Areas that meet the standards are designated attainment and if found to be in violation of primary standards are designated as nonattainment areas.

The United States Environmental Protection Agency (EPA) and the CARB have designated portions of the District as nonattainment for a variety of pollutants, and some of those designations have an associated classification. Table 2 lists these designations and classifications. The MDAQMD has adopted attainment plans for a variety of nonattainment pollutants.

Table 2
State and Federal Air Quality
Designations and Classifications

Ambient Air Quality Standard	Status
Eight-hour Ozone (Federal 70 ppb (2015))	Expected Non-attainment; to be determined.
Ozone (State)	Non-attainment; classified Moderate
PM_{10} (24-hour Federal)	Non-attainment; classified Moderate (portion of MDAQMD in Riverside County is unclassifiable/attainment)
$PM_{2.5}$ (Annual Federal)	Unclassified/attainment
$PM_{2.5}$ (24-hour Federal)	Unclassified/attainment
$PM_{2.5}$ (State)	Non-attainment (portion of MDAQMD outside of Western Mojave Desert Ozone Non-attainment Area is unclassified/attainment)
PM_{10} (State)	Non-attainment
Carbon Monoxide (State and Federal)	Unclassifiable/Attainment
Nitrogen Dioxide (State and Federal)	Unclassifiable/Attainment
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Unclassifiable/Attainment
Particulate Sulfate (State)	Attainment
Hydrogen Sulfide (State)	Unclassified (Searles Valley Planning Area is non-attainment)
Visibility Reducing Particles (State)	Unclassified

Source: MDAQMD CEQA and Federal Conformity Guidelines, August 2016

Impact Analysis

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less than Significant. The Proposed Project is a conditionally acceptable use within the AV/RL zone as demonstrated by Table 82-7, Allowed Land uses and Permit Requirements for Residential Land Use Zoning Districts, of the San Bernardino County Development Code. The Project Site is within the MDAB and under the jurisdiction of the MDAQMD. The MDAQMD is responsible for updating the Air Quality Management Plan (AQMP). The AQMP was developed for the primary purpose of controlling emissions to maintain all federal and state ambient air standards for the district. The Proposed Project would not significantly increase local air pollutant emissions and therefore would not conflict with or obstruct implementation of the AQMP. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant. The Project Site has previously been used for minor material removal and staging operations that have been associated with San Bernardino road projects including unpaved roads, removal of materials, and material stockpiles. The Proposed Project will allow for the continued use of local construction material to reduce transportation of material from more distant sites. Mining of the site typically occurs with one loader, one excavator, and a dozer to break, move, and load material directly into single trailer or double trailers trucks with capacities of up to approximately 10 to 25 cy (typical). Additionally, a water truck will be utilized for dust control on mining areas, haul roads, and stockpiles**.** Exhaust or criteria pollutants will be produced from the mobile equipment. Dust will be produced from mining and revegetation, and vehicular travel on gravel/dirt access

roads. Operations will be required to comply with the existing MDAQMD regulations for mobile equipment and fugitive dust control.

The MDAQMD has established the following significant daily emissions thresholds for determining whether the impacts from a proposed project would be considered significant per CEQA:

Carbon Monoxide (CO)	548 lbs/day
Oxides of Nitrogen (NO_X)	137 lbs/day
Reactive Organic Gasses (ROG)	137 lbs/day
Oxides of Sulfur (SO_X)	137 lbs/day
Particulate Matter (PM_{10})	82 lbs/day
Particulate Matter ($PM_{2.5}$)	65 lbs/day

Operational emissions for the Proposed Project's mobile equipment were estimated utilizing South Coast AQMD Off-Road Source Emission Factors for the 2020 operational year. Table 3 provides the estimated emissions for the planned operations in comparison to MDAQMD thresholds.

Table 3
Operational Emissions Summary
(Pounds Per Day)

Source/Phase	ROG	NO_X	CO	PM_{10}	$PM_{2.5}$
Loader	0.30	1.90	1.76	0.09	0.09
Water Truck	0.23	1.41	1.40	0.06	0.05
Excavator	0.29	1.62	2.05	0.07	0.07
Dozer	0.85	6.31	3.20	0.25	0.23
2-5 Axle Dump/Haul Trucks	0.74	5.20	3.54	0.20	0.19
Totals	**2.41**	**20.84**	**13.40**	**0.68**	**0.62**
MDAQMD Threshold	137	137	548	82	65
Significant	**No**	**No**	**No**	**No**	**No**

Emission Sources: Off-Road Mobile Source Emission Factors (Scenario Year 2020)

As shown above, the anticipated operational emissions are less than the MDAQMD thresholds and would be considered less than significant. Compliance with MDAQMD rules and CARB Off-Road Diesel Vehicle regulations are listed below and are included in the estimated emissions in Table 3.

Upon completion of mining, all disturbed slopes will be reclaimed and revegetated within one year. Reclamation activities would require minor earthmoving, and other activities typically associated with final grading and revegetation. Reclamation emissions would be substantially less than the mining operations and would not exceed MDAQMD thresholds.

Compliance with MDAQMD Rules 402 and 403

Although the Proposed Project does not exceed MDAQMD thresholds, the Applicant is required to comply with applicable MDAQMD Rules 402 for nuisance and 403 for fugitive dust control. This would include, but not be limited to the following:

1. The Project Proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.

2. The Project Proponent shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site. Portions of the site that are actively being used shall be watered to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.

3. The Project Proponent shall ensure that disturbed areas are treated to prevent erosion.

4. The Project Proponent shall ensure that mining and revegetation activities are suspended when winds exceed 25 miles per hour.

Although the Proposed Project would not exceed MDAQMD thresholds for exhaust emissions during operations, the Applicant would be required to implement the following conditions as required by MDAQMD:

5. All equipment used for mining and revegetation must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.

6. The operator shall comply with all existing and future CARB and MDAQMD Off-Road Diesel Vehicle Regulations related to diesel-fueled trucks, 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.

MDAQMD rules for diesel emissions from equipment and trucks are embedded in the compliance for all diesel fueled engines, trucks, and equipment with the statewide CARB Off-Road Diesel Vehicle regulations. These measures will be implemented by CARB in phases with new rules imposed on existing and new diesel-fueled engines.

The project area is within the Mojave Desert PM_{10} Planning Area and the Western Desert Ozone non-attainment area. The State Implementation Plan (SIP) identifies sources of PM_{10} emissions and control measures to reduce emissions. The EPA requires the application of reasonable available control technology (RACT) to stationary emission sources and reasonable available control measures (RACM) to mobile sources. These will be incorporated through compliance with rules and regulations described above. As such, with compliance with existing rules and regulations, the Proposed Project would not violate any air quality standards or contribute to an existing or projected air quality violation. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant. The MDAQMD CEQA and Federal Conformity Guidelines (August 2016) describes sensitive receptors as being residences, schools, daycare centers, playgrounds and medical facilities. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using MDAQMD significance thresholds:

- Any industrial project within 1000 feet;
- A distribution center (40 or more tucks per day) within 1000 feet;
- A major transportation project (50,000) or more vehicles per day) within 1000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- A gasoline dispensing facility within 300 feet.

Ocotillo Borrow Pit has been mined since the 1960s to provide general fill material for various DPW Sites for annual maintenance and/or emergencies. DPW is proposing to remove up to 1,000 cubic yards (cy) of fill material a year. No changes from existing conditions are proposed. Furthermore, the modeling results (as shown in Table 3) indicate that development of the Proposed Project is not anticipated to exceed MDAQMD emissions thresholds. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

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

No Impact. Ocotillo Borrow Pit has been mined since the 1960s to provide general fill material for various DPW Sites for annual maintenance and/or emergencies. DPW is proposing to remove up to 1,000 cubic yards (cy) of fill material a year. No changes from existing conditions are proposed. Furthermore, the modeling results (as shown in Table 3) indicate that development of the Proposed Project is not anticipated to exceed MDAQMD emissions thresholds. Temporary generation of objectionable oil and diesel fuel odors associated with the use of heavy equipment may occur during mining and reclamation activities however, impacts are anticipated to be negligible as demonstrated. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Air Quality Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

4. BIOLOGICAL RESOURCES

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

☐ Check if project is located in the Biological Resources Overlay or Contains habitat for any species listed in the California Natural Diversity Database

Environmental Setting

In July 2019, Jericho Systems Incorporated (Jericho) prepared a Biological Resources Assessment (BRA) and Jurisdictional Delineation (JD) for the Proposed Project (available at the County offices for review). Jericho describes the Project Site as consisting almost entirely of undeveloped, but disturbed, open space. Joshua Tree woodland dominates undisturbed areas with disturbed areas being either bare or populated by a subset of species that occur nearby. Disturbances on-site are primarily due to the minor material removal and staging operations at the site that have been associated with San Bernardino County road projects since the 1960's.

The habitat in vicinity of the Project Site consists primarily of *Yucca brevifolia* Woodland Alliance (Joshua Tree Woodland). The tree canopy of the community contains only two species and is co-dominated by *Y. brevifolia* and *Y. schirdigera* (Mojave yucca). The shrub canopy is diverse with 21 species with *Ambrosia salsola* (Burrobrush), *Ephedra nevadensis* (Nevada ephedra), *Hesperoyucca whipplei* (Chaparral yucca), and *Salvia dorri*i (Dorr's sage) being the most common. Fifty-one herbaceous species were found, including four non-natives species.

Impact Analysis

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant. Jericho obtained data regarding biological resources through field investigations and review of databases containing records of reported occurrences of State- and federally-listed species or otherwise sensitive species and habitats that may occur within the vicinity of the Project Site. These databases include the California Natural Diversity Database (CNDDB), California Native Plant Society Electronic Inventory (CNPSEI) databases, and the Calflora Database, among others. The database searches identified 38 sensitive species (23 plants and 15 animals) within the Apple Valley South, Fifteenmile Valley, and Hesperia USGS 7.5-minute series quadrangles.

No State- and/or federally listed threatened or endangered species, or other sensitive species were observed on-site during the field surveys; however, Jericho noted that there is some potentially suitable habitat in the undisturbed areas of the Project Site and in the adjacent undisturbed habitat for various sensitive species identified in the literature review. As such, habitat suitability assessments were conducted within the Project Site for golden eagle (*Aquila chrysaetos*) [GOEA], desert tortoise (DT), burrowing owl (BUOW), and Mohave ground squirrel (MGS). As a result of the habitat suitability assessments Jericho concluded that the Project Site is not considered suitable for any of these species. In addition, no sensitive plants were observed during the survey. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact. As stated by the JD performed by Jericho, there is a blueline stream course mapped by the USGS National Hydrography Dataset (NHD) that was historically mapped on the eastern edge of the Project Site. The current site conditions have resulted in a realignment of flows further east to the very eastern edge of the site. The desert dry wash flows from the south to the north. The visual character of the drainage is difficult to define as flows enter the site due to a road, but the drainage pattern become clearer as the flows exit the site. Once the flows leave the site they fan out and become sheet flow across the desert in a northwest direction. Furthermore, no amphibian species were observed or otherwise detected within the project area and none are expected to occur. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant. As concluded by Jericho, no hydrophitic vegetation, hydric soils and/or wetland hydrology are present within the Project Site. The drainage feature located on the far eastern edge of the Project Site may be subject to the Fish and Game Code under the jurisdiction of the California Department of Fish and Wildlife (CDFW). The feature, however, does not meet the definition of Waters of the U.S. due to the lack of a significant nexus to a traditional navigable water and therefore there would be no U.S. Army Corps of Engineers jurisdiction. There are no planned operations within this area and no permanent or temporary impacts to State or federal jurisdictional features are expected. Therefore, no permits or authorizations will be required. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. As concluded by Jericho, habitat conditions on-site are not suitable for DT or BUOW. Additionally, the Project Site occurs outside the established current range for MGS. Although the local vicinity surrounding the Project Site likely provides suitable foraging habitat for GOEA, there are no tall trees or cliffside habitat present that could provide potential GOEA nest sites. No GOEA were observed within the project area during the site surveys. Given the level of disturbance from the existing site conditions and the general lack of suitable nest sites within the immediate project vicinity, the Project Site and surrounding area is not considered suitable to support nesting GOEA. The Project Site does not contain any habitat that would support migratory fish species. Therefore, the Proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors. No impacts are identified or are anticipated, and no mitigation measures are required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. As concluded by Jericho Systems, the Project Site is predominately devoid of vegetation and consists almost entirely of undeveloped open space. Most of the Project Site is disturbed due to mining and staging operations and no trees that would be required to be preserved are located on-site. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. As demonstrated by the CDFW's California Natural Community Conservation Plans map (April 2019), the Proposed Project is located within the Town of Apple Valley's Multi-Species Habitat Conservation Plan/Natural Community Conservation Plan (MSHCP/NCCP). However, as of May 18, 2020 the Apple Valley MSHCP/NCCP has not yet been adopted (https://www.applevalley.org/services/planning-division/multi-species-habitat-conservation-plan). Therefore, the Proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures

N/A

Biological Resources Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

5. CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?		X		
b) Cause a substantial adverse change I the significance of an archaeological resource pursuant to §15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

(Check if project is located in the Cultural ☐ overlays or cite results of cultural resource review)

Environmental Setting

In October 2019, CRM TECH prepared a Historical/Archaeological Resources Survey Report for the Proposed Project (available at the County offices for review). Historic maps and aerial photographs show that the only man-made feature known to be present within the survey area during the historic period was a small segment of Van Dusen Road. Historically, Van Dusen Road approached the survey area from the west but entered the Project Site from the north, crossing the northeast corner of the parcel. Geologic maps of the project vicinity identify the surface sediments in and near the Project Site as alluvial-fan deposits of late Holocene age, consistent with the typical valley floor deposits. CRM TECH received historical/archaeological resources records search results from San Bernardino County Archaeologist Jesse Yorck, M.A., who conducted the records search on December 20, 2018, at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System. Jesse Yorck also provided CRM TECH with a written response to the County's inquiry from the State of California Native American Heritage Commission (NAHC), which includes the results of a records search in the commission's Sacred Lands File. Additionally, CRM TECH geologist Harry M. Quinn conducted geoarchaeological analysis to assess the Project Site's potential for the deposition and preservation of subsurface cultural deposits from the prehistoric period.

Impact Analysis

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less than Significant with Mitigation Incorporated. According to SCCIC records, the project area had not previously been surveyed for cultural resources; however, a linear site of historical origin, referred to as site 36-004276, was previously recorded as crossing the northeast corner of the Project Site. Site 36-004276 consists of the entire course of the 1860s Van Dusen Road from the Victor Valley to the gold mines in the San Bernardino Mountains, parts of which remain in use today on the northern slope of the mountains as Bowen Ranch Road and Coxey Road. As an important early road to the San Bernardino Mountains, Van Dusen Road was officially designated California Point of Historical Interest (CPHI) No. SBr-017 in 1973. In addition, SCCIC records show a total of 10 previous studies on various tracts of land and linear features within the one-mile scope of the records search, all of them dating to 2010 or earlier. None of these studies identified any other cultural resources within the Project Site or within the scope of the records search.

Geologic maps of the project vicinity identify the surface sediments in and near the Project Site as alluvial-fan deposits of late Holocene age, consistent with the typical valley floor deposits. Geospatial analyses of known prehistoric sites in inland southern California suggest that longer-term residential settlements of the Native population were more likely to occur in sheltered areas near the base of hills and/or on elevated terraces, hills,

and finger ridges near permanent or reliable sources of water, while the level, unprotected valley floor was used mainly for resource procurement, travel, and occasional camping during these activities. This is corroborated by the ethnographic literature that finds foothills to be preferred settlement environment for the Serrano people.

Based on this settlement pattern, the general location of the Project Site would not have provided a favorable setting for permanent or long-term habitation by the aboriginal population during prehistoric times. Furthermore, nearly the entire Project Site has been disturbed by past mining activities, and much of the original surface and near-surface soils have been removed. As a result, the Project Site appears to be low in sensitivity for buried deposits of intact, potentially significant archaeological remains of prehistoric or early historic origin.

Historic maps and aerial photographs consulted by CRM TECH show that the only man-made feature known to be present within the survey area during the historic period was a small segment of Van Dusen Road (Site 36-004276). Historically, Van Dusen Road approached the survey area from the west but entered the Project Site from the north, crossing the northeast corner of the parcel in a northwest-southeast direction. Sometime between 1952 and 1969, however, the roughly 250-foot-long segment of Van Dusen Road within the Project Site boundaries was completely destroyed when large-scale mechanical earth-moving activities began on the property. Since then, the earth-moving activities have expanded to cover almost the entire Project Site.

On March 27, 2019, CRM TECH field director Daniel Ballester and project archaeologists Michael Richards and Hunter O'Donnell carried out an intensive-level field survey of the Project Site by walking a series of parallel north-south transects spaced 15 meters (approximately 50 feet) apart. In this way, the entire Project Site was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic period. The field survey produced completely negative results for potential cultural resources, and no buildings, structures, objects, sites, features, or artifact deposits of prehistoric or historical origin were encountered on the property. As anticipated, no physical remnants of the historic Van Dusen Road (Site 36-004276) were found within the Project Site. Several modern dirt roads and tracks have been created near the former alignment of Van Dusen Road, but none of these was present prior to 1995.

In summary, an approximately 250-foot-long segment of Site 36-004276, representing the 1860s Van Dusen Road, was previously recorded as crossing the northeast corner of the Project Site. As an officially designated California Point of Historical Interest (No. SBr-017), Site 36-004276 meets CEQA's definition of a "historical resource" in the category of "presumptive historical resources". However, the portion of Site 36-004276 within the project boundaries no longer exists today, having been destroyed sometime between 1952 and 1969. Therefore, CRM TECH has concluded that the Proposed Project has no potential to cause a substantial adverse change in the significance or integrity of this "historical resource". Although CRM TECH concludes that no "historical resources" will be impacted by the Proposed Project, the possibility of discovering a significant unanticipated find remains. As such, Mitigation Measure CR-1, defined below, shall be implemented to ensure that less than significant impacts to historical and/or archaeological resources occur.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant with Mitigation Incorporated. See response to (a), above.

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

Less than Significant with Mitigation Incorporated. Mining activities could potentially disturb human remains interred outside of a formal cemetery. Thus, the potential exists that human remains may be unearthed during

implementation of the Proposed Project. Therefore, Mitigation Measure CR-2, defined below, shall be implemented to ensure that less than significant impacts regarding human remains occur.

Mitigation Measures:

CR-1 If historical/archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall cease and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) shall be contacted immediately to evaluate the find(s). If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted and will be reported to the County.

CR-2 Should human remains and/or cremations be encountered during any earthmoving activities, all work shall stop immediately in the area in which the find(s) are present (suggested 100-ft radius area around the remains and project personnel will be excluded from the area and no photographs will be permitted), and the County of San Bernardino Coroner will be notified. The County of San Bernardino and the Project Proponent shall also be called and informed of the discovery. The Coroner will determine if the bones are historic/archaeological or a modern legal case. The Coroner will immediately contact the Native American Heritage Commission (NAHC) in the event that remains are determined to be human and of Native American origin, in accordance with California Public Resources Code Section 5097.98.

All discovered human remains shall be treated with respect and dignity. California state law (California Health & Safety Code 7050.5) and federal law and regulations ([Archaeological Resources Protection Act (ARPA) 16 USC 470 & 43 CFR 7], [Native American Graves Protection & Repatriation Act (NAGPRA) 25 USC 3001 & 43 CFR 10] and [Public Lands, Interior 43 CFR 8365.1-7]) require a defined protocol if human remains are discovered in the State of California regardless if the remains are modern or archaeological.

Cultural Resources Impact Conclusions:

Possible significant adverse impacts have been identified or are anticipated and therefore Mitigation Measures CR-1 and CR-2 are required as conditions of project approval to reduce these impacts to a level below significant.

6. ENERGY

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

Environmental Setting

California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration [EIA] 2018). California consumed 292,039 gigawatt-hours (GWh) of electricity and 2,110,829 million cubic feet of natural gas in 2017 (California Energy Commission [CEC] 2019; EIA 2018). In addition, Californians consume approximately 18.9 billion gallons of motor vehicle fuels per year (Federal Highway Administration 2019). The single largest end-use sector for energy consumption in California is transportation (39.8 percent), followed by industry (23.7 percent), commercial (18.9 percent), and residential (17.7 percent) (EIA 2018).

Most of California's electricity is generated in-state with approximately 30 percent imported from the Northwest and Southwest in 2017. In addition, approximately 30 percent of California's electricity supply comes from renewable energy sources such as wind, solar photovoltaic, geothermal, and biomass (CEC 2018). Adopted on September 10, 2018, SB 100 accelerates the State's Renewables Portfolio Standards Program by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

To reduce statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from in-state refineries. Gasoline is the most used transportation fuel in California with 15.5 billion gallons sold in 2017 and is used by light-duty cars, pickup trucks, and sport utility vehicles (California Department of Tax and Fee Administration 2018). Diesel is the second most used fuel in California with 4.2 billion gallons sold in 2015 and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles (CEC 2016). Both gasoline and diesel are primarily petroleum-based, and their consumption releases greenhouse gas (GHG) emissions, including CO2 and NOX. The transportation sector is the single largest source of GHG emissions in California, accounting for 41 percent of all inventoried emissions in 2016 (California Air Resources Board [CARB] 2018).

Building Energy Efficiency Standards

The California Energy Conservation and Development Commission (California Energy Commission) adopted Title 24, Part 6, of the California Code of Regulations; energy Conservation Standards for new residential and nonresidential buildings in June 1977 and standards are updated every three years. Title 24 ensures building designs conserve energy by requiring the use of new energy efficiency technologies and methods into new developments. Currently, the California Energy Commission (CEC) Title 24 2016 Building Energy Efficiency Standards are in effect; however, the updated 2019 Building Energy Efficiency Standards will take effect on January 1, 2020. The 2019 Building Energy Efficiency Standards states that nonresidential buildings will use about 30 percent less energy compared to the 2016 standards due mainly to lighting upgrades.
Senate Bill 350

Senate Bill (SB) 350 (de Leon) was signed into law in October 2015 and established new clean energy, clean air, and greenhouse gas reduction goals for 2030. SB 350 establishes periodic increases to the California Renewables Portfolio Standard (RPS) Program with the target to increase the amount of electricity generated per year from eligible renewable energy resources to an amount that equals at least 33% of the total electricity sold annually to retail customers, by December 31, 2020. The SB 350 specifically calls for the quantities of eligible renewable energy resources to be procured for all other compliance periods reflecting reasonable progress in each of the intervening years to ensure that the procurement of electricity products from eligible renewable energy resources achieves 40 percent by December 31, 2024, 45 percent by December 31, 2027, and 50 percent by December 31, 2030.

Senate Bill 100

Senate Bill 100 (SB 100) was signed into law September 2018 and increased the goal of the California RPS Program to achieve at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045. SB 100 also includes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Impact Analysis

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?

Less Than Significant. The Proposed Project is anticipated to produce truck traffic at a rate of approximately 50 loads per year based on street-legal 20 cubic yard trucks and DPW project demand (1,000 cy per year). The Proposed Project will provide construction material to various roads, culverts, and other DPW sites in the region, thereby reducing the energy and fuel consumption that would occur if material was transported from more distant material sources. Therefore, the Proposed Project is not anticipated to result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy sources during project operation. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. As stated above, the Proposed Project is anticipated to produce truck traffic at a rate of about 50 loads per year based on street-legal 20 cubic yard trucks and DPW project demand. As such, the minimal number of trips anticipated to be produced by the Proposed Project is considered negligible. Additionally, the Proposed Project would not require implementation of new or expanded electric power or natural gas facilities. Therefore, the Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Energy Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

7. GEOLOGY AND SOILS

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

(Check if project is located in the Geologic Hazards ☐ or Paleontological Resources ☐ Overlay District):

Environmental Setting

The Project Site is situated near the northern edge of the San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The topography of the local landscape is a slight slope to the north. The Project Site is relatively flat with steep approximately 25-foot slopes on the eastern, southern, and northern portions of the Project Site as a result of historical material excavation and removal. Elevation on-site ranges from approximately 3,369 feet amsl in the southeastern portion of the site to 3,414 feet amsl in the northwestern portion of the site.

Impact Analysis

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

ii. Strong seismic ground shaking?

iii. Seismic related ground failure, including liquefaction?

iv. Landslides?

i) **Less than Significant.** The Project Site is not located within, or in the immediate vicinity of, an Alquist Priolo Earthquake Fault Zone as demonstrated by San Bernardino County Geologic Hazard Overlay Map FH07 C – Apple Valley South. The Alquist Priolo Earthquake Fault located nearest to the Project Site is the Ord Mountains Fault, also known as the North Frontal Fault Zone of the San Bernardino Mountains, which is located approximately three miles southwest of the Project Site. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

ii) **Less Than Significant**. Seismic ground shaking is influenced by the proximity of the site to an earthquake fault, the intensity of the seismic event, and the underlying soil composition. The Project Site has supported past mining and staging operations and does not contain habitable structures and no such structures are proposed. As such, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

iii) **No Impact**. The Project Site is not located in an area susceptible to liquefaction as demonstrated by San Bernardino County Geologic Hazard Overlay Map FH07 C – Apple Valley South. Therefore, no impact is identified or anticipated, and no mitigation measures are required.

iv) **No Impact**. The Project Site is not located in an area susceptible to landslides as demonstrated by San Bernardino County Geologic Hazard Overlay Map FH07 C – Apple Valley South. Therefore, no impact is identified or anticipated, and no mitigation measures are required.

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

Less than Significant. The Project Proponent is required to comply with the Statewide NPDES and will prepare and implement a SWPPP including applicable BMPs. The control of drainage, erosion, and sedimentation of the mine site will primarily involve the following primary BMPs as applicable:

- 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.

Final revegetation will be used for the long-term control of erosion. Furthermore, access points and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations. With implementation of a SWPPP and associated BMPs, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant. The Project Site is not located in an area susceptible to landslides or liquefaction as demonstrated by San Bernardino County Geologic Hazard Overlay Map FH07 C – Apple Valley South. Although the Project Site's susceptibility to lateral spreading and subsidence is unknown at this time, reclamation of the mine will be undertaken at the completion of mining operations. Any over-steepened slopes will be partially backfilled or recontoured to 3H:1V. Fill material will be excess material used to create slopes of 3H:1V. The fill will be compacted by tracking the dozer over the slope to achieve necessary compaction consistent with final end use of DWP material maintenance and storage yard. Furthermore, the Proposed Project does not include construction of habitable structures or permanent facilities; therefore, implementation would not expose people or structures to substantial risks due to unstable soil. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. The Proposed Project does not include construction of habitable structures or permanent facilities; therefore, implementation would not expose people or structures to substantial risks due to expansive soils. No impacts are identified or are anticipated, and no mitigation measures are required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. Septic tanks and/or alternative wastewater systems are not proposed as part of the Proposed Project. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation. :

On October 18, 2019 CRM Tech prepared a Paleontological Resources Assessment Report which is available for review at County offices. In summary, sources consulted during the study agreed as to the type of soils present at the project location but disagreed on their age. Therefore, CRM conducted a field survey and subsequent trenching. The field survey of the project area found no surface manifestations of paleontological resources within the project area but confirmed the surface soils profile as sandy alluvial deposits.

The Western Science Center has assessed the alluvial fan sediments that make up the entire project area as having a high potential to contain significant, nonrenewable vertebrate fossil remains and recommends monitoring of all earth-moving activities associated with the project (Radford 2019). Alluvial fans tend to be made up of coarse-grained materials that are often considered detrimental to the preservation of fossil remains. The sediments tend to be coarser near the source and decrease in coarseness further away from the source. At this locality, the alluvial fan sediments appear to have originated from decomposing granitic bedrock in the nearby Ord Mountains, less than a mile to the south.

Both the San Bernardino County Museum and the Natural History Museum of Los Angeles County consider the coarser alluvial sediments on the surface in the project area to be low in paleontological sensitivity but the older

alluvium at some unknown depth beneath the surface, which may be finer-grained, to be much more sensitive (Cortez 2019; McLeod 2019).

The 2019 testing excavation encountered no buried paleontological resources and revealed a fairly uniform subsurface soil profile to the depth of at least 15 feet below the current ground surface, characterized by well-sorted, medium- to coarse-grained alluvial sand, non-bedded, and a gradual increase in clay content with the depth. The non-bedded and well-sorted nature of these soils indicates a slow and consistent deposition throughout the Holocene Epoch, with no evidence of dynamic flows or uplifting. The uniformity of the soils encountered in the trenches is an indicator that they are Holocene in age despite the conflicting geological mapping. Therefore, CRM TECH proposed quarry operations may continue without monitoring within the project area to a depth at 15 feet in depth without encountering any paleontologically sensitive sediments. Therefore, with implementation of a maximum of 15 feet depth no impacts are identified and impacts would be less than significant level.

Mitigation Measure:

GS-1 In order to prevent inadvertent impacts on paleontological resources, when project impacts reach the depth of 15 feet below the current ground surface, further paleontological evaluation of the sediments underneath will become necessary. Therefore, mining activities shall not exceed 15 feet in depth without additional evaluation.

Geology and Soils Impact Conclusions:

Possible significant adverse impacts have been identified or are anticipated and therefore Mitigation Measure GS-1 is required as conditions of project approval to reduce these impacts to a level below significant.
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8. GREENHOUSE GAS EMISSIONS

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

Background

According to CEQA Guidelines section 15064.4, when making a determination of the significance of greenhouse gas emissions, the "lead agency shall have discretion to determine, in the context of a particular project, whether to (1) quantity greenhouse gas emissions resulting from a project and/or (2) rely on a qualitative analysis or performance based standards. Moreover, CEQA Guidelines section 15064.7(c) provides that "a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts" on the condition that "the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

San Bernardino County GHG Reduction Plan

In September 2011, the County adopted a Greenhouse Gas Emissions (GHG) Reduction Plan (September 2011) (GHG Plan). The GHG Plan presents a comprehensive set of actions to reduce the County's internal and external GHG emissions to 15% below current levels (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 will implement 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 metric tons of CO_2 equivalent ($MTCO_2e$) 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. Note that the MDAQMD has an annual threshold of 100,000 tons of CO_2e per year.

Impact Analysis

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant. Per CEQA guidelines, new project emissions are treated as standard emissions, and air quality impacts are evaluated for significance on an air basin or even at a neighborhood level. Greenhouse gas emissions are treated differently, in that the perspective is global, not local. Therefore, emissions for certain types of projects might not necessarily be considered as new emissions if the project is primarily population driven. Many gases make up the group of pollutants that are believed to contribute to global climate change. However, three gases are currently evaluated carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). SCAQMD provides guidance methods and/or Emission Factors. MDAQMD allows the use of this methodology.

A threshold of 3,000 $MTCO_2e$ per year has been adopted by the County as potentially significant to global warming. Utilizing the SCAQMD's Off-Road Mobile Source Emission Factors (2019), annual operation GHG emissions amount to approximately 1.58 $MTCO_2e$ per day or 578.49 $MTCO_2e$ per year based on a worst case of 4 hours/day operation on up to 365 days per year (see Table 4).

Table 4
Greenhouse Gas Emissions

Equipment	CO_2	CH_4*
Loader (lbs/day)	436	0.03
Water Truck (lbs/day)	488	0.02
Excavator (lbs/day)	480	0.03
Dozer (lbs/day)	956	0.08
Dump/Haul Trucks (lbs/day)	1,128	0.07
Total Per Year ($MTCO_2e$)	577.48	1.01
$MTCO_2e$ per Year	**578.49**	
County Threshold ($MTCO_2e$)	3,000	
Significant	**No**	

Emission Sources: SCAQMD Off-Road Mobile Source Emission Factors (Scenario Year 2020)
Note: Assumes 365 working days/year.
*CH_4 has a Global Warming Potential of 28 as provided by IPCC's 2013 Working Group I

The Project Site has previously been used for minor material removal and staging operations that have been associated with San Bernardino road projects including unpaved roads, removal of materials, and material stockpiles. The Proposed Project will allow for the continued use of local construction material rather than transporting material from more distant sites. As demonstrated, operations would not exceed the County's GHG thresholds. Therefore, the Proposed Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Required Conditions

The project emissions are less than significant; however, the applicant will be required to implement GHG reduction performance standards. The GHG reducing performance standards were developed by the County to improve the energy efficiency, water conservation, vehicle trip reduction potential, and other GHG reducing impacts from all new development approved within the unincorporated portions of San Bernardino County. As such, the following Performance Standards establish the minimum level of compliance that development must meet to assist in meeting the 2020 GHG reduction target identified in the in the County GHG Emissions Reduction Plan. These Performance Standards apply to all Projects, including those that emit less than 3,000 MTCO2e per year, and will be included as Conditions of Approval for development projects.

The following are the Performance Standards (Conditions of Approval) that are applicable to the Project:

1. *The "developer" shall submit for review and obtain approval from County Planning of a signed letter agreeing to include as a condition of all construction contracts/subcontracts requirements to reduce GHG emissions and submitting documentation of compliance. The developer/construction contractors shall do the following:*

a) Select construction equipment based on low GHG emissions factors and high-energy efficiency.

b) All construction equipment engines shall be properly tuned and maintained in accordance with the manufacturers specifications prior to arriving on site and throughout construction duration.

c) All construction equipment (including electric generators) shall be shut off by work crews when not in use and shall not idle for more than 5 minutes.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant. See response to (a), above.

Mitigation Measures:

N/A

Greenhouse Gas Emissions Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

9. HAZARDS AND HAZARDOUS MATERIALS

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

Environmental Setting

The Project Site is located near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The general project vicinity consists of rural housing and undeveloped open space. Most of the Project Site is disturbed due to previous mining and staging operations that have been associated with San Bernardino road projects and include unpaved roads, removal of materials, and material stockpiles.

Impact Analysis

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant. 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 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.

Furthermore, borrow pit material will be loaded directly into trucks for transport to DWP Sites. No crushing or screening or any process plant facilities are utilized on-site. Therefore, there is no need for on-site diesel-powered electricity or commercial power, and no fuel tanks will be placed on-site. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant. As stated above, no fluids and no fuel tanks will be placed on-site. Furthermore, the Proposed Project does not include blasting and, therefore, no explosives will be used or stored on-site. As such, the Proposed Project is not anticipated to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The school located nearest to the Project Site is Mariana Academy, which is located approximately 2.5 miles northwest of the Project Site in the Town of Apple Valley. Furthermore, no schools are known to be proposed within one-quarter mile of the Project Site. Therefore, the Proposed Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within on-quarter mile of an existing or proposed school. No impacts are identified or are anticipated, and no mitigation measures are required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Project Site was not found on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 by the California Department of Toxic Substances Control's EnviroStor data management system as reviewed on August 29, 2019. The operator would comply with all applicable federal and state safety rules and regulations regarding hazardous materials. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. According to San Bernardino County Hazard Overlay Map FH07 B – Apple Valley South, the Project Site is not within an Airport Safety Review Area. The nearest public airport is the Hesperia Airport, located approximately 10 miles southwest of the Project Site. Therefore, implementation of the Proposed Project would not result in a safety hazard related to airport land uses for people residing or working in the area. No impacts are identified or are anticipated, and no mitigation measures are required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. Activities associated with the Proposed Project would not impede existing emergency response plans for the Project Site and/or other land uses in the project vicinity. Vehicles and stationary equipment would

be staged off public roads and would not block emergency access routes. Therefore, implementation of the Proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. No impacts are identified or are anticipated, and no mitigation measures would occur.

g) Expose people or structure, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less than Significant. According to San Bernardino County Hazard Overlay Map FH07 B – Apple Valley South, the Project Site is within Fire Safety Area 2 (FS2). As described by the San Bernardino County Development Code, FS2 includes those lands just to the north and east of the FS1 area in the mountain-desert interface. These areas have gentle to moderate sloping terrain and contain light to moderate fuel loading. These areas are periodically subject to high wind conditions that have the potential of dramatically spreading wildland fires. As such, the Project Proponent shall adhere to all applicable sections of Chapter 82.13, Fire Safety (FS) Overlay, of the San Bernardino County Development Code. Additionally, the Proposed Project does not include construction of habitable structures or permanent facilities and, therefore, implementation would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measure:

N/A

Hazards and Hazardous Materials Impact Conclusions:

No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

10. HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?				X
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?				
I. Result in substantial erosion or siltation on – or off-site;			X	
II. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on – or off-site;			X	
III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X

Environmental Setting

The Project Site is situated near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. Hydrologically, the Project Site is located within the upper Mojave watershed. 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.

Impact Analysis

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

No Impact. Groundwater is anticipated to flow northwest and west generally mimicking surface topography. According to State Water Board Groundwater Ambient Assessment Program (GAMA), groundwater is recorded at a depth greater than 350 feet below ground surface (bgs) in the vicinity of the project. The Project Site is to be excavated to a depth not to exceed 15 feet, which is not anticipated to impact the water table. No wastewater will be generated as a result of operations. As such, the Proposed Project will not violate any water quality

standards or waste discharge requirements or otherwise substantially degrade surface or groundwater. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant. 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 4,000 gallons of water a day (6 to 20 days a year) may be used for dust suppression activities. The 4,000-gallon water truck will fill at Mojave Water Agency designated hydrant. It is not anticipated that there will be any excess water from the wetting-down procedure; therefore, no recycling is required or planned. The County has a memorandum of understanding (MOU) with the Mojave Water Agency. As such, the Proposed Project is not anticipated to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable management of the Mojave basin. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would?

I. Result in substantial erosion or siltation on – or off-site;

II. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site;

III. Create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional resources of polluted runoff; or

I. **Less than Significant.** The Project Site slopes gently about 2% from the northwest to the south and southeast by about 25 feet. There are no drainage or run-off channels that will be affected by the borrow pit. The pit is designed with a 2% natural grade slope toward the southeast to collect any run-off from the pit or the slopes (refer to Figure 3); the grade differential 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 no storm water run-off 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 will be backfilled. Any water retained within the pit will not impact adjacent properties or local roads.

After each major storm event, any final slopes will be visually inspected to determine if any substantial erosion is evident such as sheet, rill or gully erosion. Erosion and sediment will be controlled by utilizing applicable BMPs which will be constructed and modified based on actual conditions as operations progress. In addition, a SWPPP would be implemented to control runoff and sedimentation from project disturbance. Furthermore, final revegetation will be used for the long-term control of erosion. Access points and mined surfaces will be water sprayed as necessary to reduce wind erosion during operations. Therefore, the Proposed Project will not substantially alter the existing drainage pattern that would result in substantial erosion or siltation or runoff on- or off-site. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

II. **Less than Significant.** The Proposed Project will not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site. There are no drainage or run-off channels that will be affected by the borrow pit. The pit is designed with a 2% natural grade slope toward the southeast to collect any run-off from the pit or the slopes (refer to Figure 3); the grade differential 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 no storm water run-off from the site. All precipitation will be collected within the borrow pit and allowed to evaporate or percolate.

III. **Less than Significant.** As stated above, the slopes are designed at 3H:1V that would reduce possible slope erosion and runoff channeling down the slopes. There will no storm water runoff leaving the site. All precipitation will be collected within the borrow pit and allowed to evaporate or percolate. Therefore, the Proposed Project is not anticipated to create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. As shown by San Bernardino County Hazard Overlay Map FH07 B – Apple Valley South, the Project Site is not located within Flood Plain Safety (FP) Overlay District or within a dam inundation area. Tsunamis are large waves generated in open bodies of water by fault displacement of major ground movement. Due to the inland location of the Project Site, tsunamis are not considered to be a risk. Seiches are standing waves generated in enclosed bodies of water in response to ground shaking. The Project Site is not located in the immediate vicinity of a known large body of water or water storage facility and therefore impacts from potential seiches are not anticipated. Therefore, the Proposed Project is not anticipated to risk release of pollutants due to project inundation. No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Hydrology and Water Quality Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

11. LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Environmental Setting

The Project Site is located in the desert region of western San Bernardino County in the Apple Valley Sphere of Influence within the Apple Valley/Rural Living (AV/RL) land use zoning district.

Impact Analysis

a) Physically divide an established community?

No Impact. The Proposed Project Application is to permit the existing Ocotillo Borrow Pit for a 100-year period to continue providing general fill material as needed for various annual maintenance and/or emergency repairs to DPW roadway facilities. The Proposed Project is a conditionally acceptable use within the AV/RL zone as demonstrated by Table 82-7, Allowed Land Uses and Permit Requirements for Residential Land Use Zoning Districts, of the San Bernardino County Development Code. The general project vicinity consists of rural housing and undeveloped open space. There would be no change in existing conditions and therefore, the Proposed Project would not physically divide an established community. No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. Ocotillo Borrow Pit has been mined since the 1960s to provide general fill material for various DPW Sites for annual maintenance and/or emergencies. DPW is proposing to remove up to 1,000 cubic yards (cy) of fill material a year. No changes from existing conditions are proposed. The Proposed Project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project as the project is consistent with all applicable land use policies and regulations of the No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Land Use and Planning Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

12. MINERAL RESOURCES

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

Environmental Setting

The Proposed Project is located within the Town of Apple Valley Sphere of Influence within the County of San Bernardino. As stated in the Apple Valley General Plan, important mineral resources that occur in the Apple Valley area are aggregate and limestone, both of which are used in the manufacturing of cement. Current sources of aggregates and limestone are for the most part located within the Town's Sphere of Influence and are found adjacent to the Mojave River floodplain or within the mountain ranges in the region.

Impact Analysis

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less than Significant. The Proposed Project is an application to continue providing general fill material for maintenance and/or emergency repairs required primarily following storm events at various San Bernardino County DPW roadway facilities. The Proposed Project would result in adding to the availability of a known mineral resource that is of value to the region and residents. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Less than Significant. The Project Site is not designated as a mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan, however the borrow pit has been used since the 1960's for providing excavated material for roadway repairs and maintenance and a location for stockpiling materials demolished by or needed for roadway repairs. The fill material is generally used for annual maintenance and/or emergency repairs required primarily following storm events. Therefore, implementation of the Proposed Project would result in a beneficial effect regarding availability of mineral resources. As such, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Mineral Resources Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

13. NOISE

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

Environmental Setting

The Project Site is located near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The general project vicinity consists of rural housing and undeveloped open space.

Impact Analysis

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant. The Project Site is within a primarily undeveloped area consisting of open space and sparse rural development. The nearest sensitive receptors are the two single-family residences located approximately 0.1-mile south of the Project Site. Noise levels are currently affected only when the site is used for material borrow or stockpiling as maintenance and repairs are required. These events has typically occurred on an occasional basis and are considered to be temporary. Noise is produced from the on-site equipment and trucks. Operations would be required to conform to applicable noise control regulations as outlined in Section 83.01.080, Noise, of the San Bernardino County Development Code. Therefore, with adherence to the Development Code, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Generation of excessive groundborne vibration of groundborne noise levels?

Less than Significant. As stated, the Project Site is within a primarily undeveloped area consisting of open space and sparse rural development. The nearest sensitive receptors are the two single-family residences located approximately 0.1-mile south of the Project Site. Groundborne vibration is typically produces during temporary operations is required to conform to applicable vibration control regulations as outlined in Section 83.01.090, Vibration, of the San Bernardino County Development Code. There are no known occurrences of complaints being filed during or as a result of prior operations. Therefore, with adherence to the Development Code, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. According to San Bernardino County Hazard Overlay Map FH07 B – Apple Valley South, the Project Site is not within an airport land use plan. The Project Site is not within two miles of public airport or public use airport, or within the vicinity of a private airstrip as the airport nearest to the site is Lake Arrowhead Airport, which is approximately 8.5 miles south of the Project Site. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Noise Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

14. POPULATION AND HOUSING

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

Environmental Setting

The Project Site is located near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The general project vicinity consists of rural housing and undeveloped open space.

Impact Analysis

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less than Significant. . The existing borrow pit at the Project Site is used by County staff and/or contractors for the excavation of or stockpiling of materials used in roadway maintenance and repairs. The Proposed Project does not result in an increase in operations, only the length of the borrow pit's permitted term. No new population growth would result as employment would not be increased. Therefore implementation of the Proposed Project would not induce substantial growth in the area. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project Site is an existing borrow pit and there is no housing on-site. The Proposed Project would not displace substantial numbers of existing people or housing units or require the construction of replacement housing. No impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Population and Housing Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

15. PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?			X	
ii. Police protection?			X	
iii. Schools?			X	
iv. Recreation/Parks?			X	
v. Other public facilities?			X	

Environmental Setting

The Project Site is located near the northern edge of San Bernardino foothills within the Town of Apple Valley's Sphere of Influence. The general project vicinity consists of rural housing and undeveloped open space.

Impact Analysis

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection, Police protection, Schools, Recreation/Parks, Other public facilities?

i. Fire Protection

Less than Significant. As stated by the Apple Valley General Plan, the Apple Valley Fire Protection District (AVFPD) serves the Town of Apple Valley as well as other high desert communities, including those portions of unincorporated San Bernardino County that are within its approximately 206-square mile service area. The AVFPD maintains a mutual aid agreement with the City of Victorville Fire Department, San Bernardino County Fire Department, and the Bureau of Land Management. The mutual aid agreements provide a mechanism for coordinated strategic and facilities planning between fire departments in the region to actively support one another regardless of geographic or jurisdictional boundaries. The closest AVFPD Station to the Project Site is Fire Station 335 located at 2160 Tussing Ranch Road, approximately 2.5 miles northwest of the Project Site. The Proposed Project would receive adequate fire protection services and would not result in the need for new or physically altered fire protection facilities; there is no planned increase in existing site operations. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

ii. Police Protection

Less than Significant. As stated by the Apple Valley General Plan, police services are provided to the Town of Apple Valley through a contractual agreement with the San Bernardino County Sheriff's Department. The Sheriff's Department assigns staff to the Apple Valley Police Department within the

approximately 72 square miles that are encompassed by the Town's corporate limits. The Sheriff's Department also serves unincorporated areas in the vicinity of Apple Valley, including the Town's Sphere of Influence. The Proposed Project would receive adequate police protection services as there is no planned increase in existing site operations. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

iii. Schools

Less than Significant. The Proposed Project would not create a direct demand for public school services as the Proposed Project does not include any type of residential use or other land use, or an increase in employment that may induce population growth. As such, the development would not generate any new school-aged children requiring public education. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

iv. Parks

Less than Significant. The Proposed Project does not include any type of residential use or other land use or increase in employment that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

v. Other Public Facilities

Less than Significant. The Proposed Project is not expected to result in a demand for other public facilities/services, such as libraries, community recreation centers, and/or animal shelter. Implementation of the Proposed Project would not adversely affect other public facilities or require the construction of new or modified facilities. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Public Services Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

16. RECREATION

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

Environmental Setting

The Project Site is located near the northern edge of San Bernardino foothills within the Town of Apple Valley's Sphere of Influence. The general project vicinity consists of rural housing and undeveloped open space.

Impact Analysis

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. No residential use or other land use or change in employment that may generate a population that would increase the use of existing neighborhood and regional parks or other recreational facilities in the vicinity is proposed. Accordingly, implementation of the Proposed Project would not result in the increased use or substantial physical deterioration of an existing neighborhood or regional park. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The Proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Recreation Impact Conclusions:

No impacts are identified or are anticipated, and no mitigation measures are required.

17. TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?				X
d) Result in inadequate emergency access?				X

Environmental Setting

The Project Site is located southeast corner of Ocotillo Way and Valley Vista Avenue, southeast of the Town of Apple Valley. Access to the site will be from existing Ocotillo Way, a paved public road.

Impact Analysis

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

Less than Significant. Ocotillo Borrow Pit has been mined since the 1960s to provide general fill material for various DPW Sites for annual maintenance and/or emergencies. DPW is proposing to remove up to 1,000 cubic yards (cy) of fill material a year (approximately 50 loads per year based on street-legal 20 cubic yard trucks). No changes from existing conditions are proposed. Access to the site will continue to be from existing Ocotillo Way, which is designated as a Major Highway by the San Bernardino County General Plan Circulation and Transportation Element. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant. The Proposed Project would not increase the current level of operations in terms of Vehicle Miles Traveled (VMTs); the current County roads in the region of the site would continue to be maintained and repaired as necessary. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

No Impact. The Proposed Project does not involve any road development or design features that could substantially increase hazards due to a geometric design feature or incompatible uses. The Project Site will continue to be accessed via Ocotillo Way, which is designated as a Major Highway by the San Bernardino County General Plan Circulation and Transportation Element. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

d) *Result in inadequate emergency access?*

No Impact. Activities associated with the Proposed Project would not impede existing emergency response plans for the Project Site and/or other land uses in the project vicinity. Vehicles and equipment used in excavation and stockpiling activities would continue to be staged on the Project Site as necessary and would not block emergency access routes. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Transportation Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

18. TRIBAL CULTURAL RESOURCES

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

Regulatory Setting

Effective July 1, 2015, Assembly Bill 52 (AB 52) amended CEQA to require that: 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include Tribal Cultural Resources (TCRs), the potential significance of project impacts, type of environmental document that should be prepared, and possible mitigation measures and project alternatives.

Pursuant to AB 52, Section 21073 of the Public Resources Code defines California Native American tribes as "a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004." This includes both federally and non-federally recognized tribes.
Section 21074(a) of the Public Resource Code defines TCRs for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

    a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or

    b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or

    c. a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria a and b also meet the definition of a historical resource under CEQA, a TCR may also require additional consideration as a historical resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their tribal cultural resources and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

Summary of AB 52 Consultation

On October 22, 2018, the County of San Bernardino initiated environmental review under CEQA for the Proposed Project. On October 22, 2018, the County of San Bernardino Department of Public Works sent project notification letters to the following California Native American tribes, which had previously submitted general consultation request letters pursuant to 21080.3.1(d) of the Public Resources Code:

- San Manuel Band of Mission Indians
- Twentynine Palms Band of Mission Indians

Each recipient was provided a brief description of the Proposed Project and its location, the lead agency contact information, and a notification that the tribe has 30 days to request consultation. The 30-day response period concluded on November 22, 2018.

Below is a summary of responses received by the County of San Bernardino Department of Public Works and subsequent consultation actions and results:

- Twenty-Nine Palms Band of Mission Indians: November 20, 2018; No known Tribal cultural resources on site. Tribe requested copies of cultural resources report prior to concluding consultation. Cultural Resources report forwarded to Tribe on November 4, 2019. Consultation closed.
- San Manuel Band of Mission Indians: November 19, 2018; No known Tribal cultural resources on site. Tribe requested incidental find language be added to conditions of approval. Copies of cultural resources report were also forwarded to the Tribe on November 4, 2019. Consultation closed.

San Manuel Band of Mission Indians requested incidental finds measures be added to the Proposed Project. Specific measure language was agreed upon on November 19, 2018 (Mitigation Measures TCR-1 through TCR-4 below) and consultation was closed.

Environmental Setting

In accordance with the Historical/Archaeological Resources Survey Report, San Bernardino County Archaeologist Jesse Yorck, M.A., provided CRM TECH with a written response to the County's inquiry from the State of California Native American Heritage Commission (NAHC), which includes the results of a records search in the commission's Sacred Lands File. After reviewing the NAHC's response, CRM TECH contacted a total of five Native American representatives in the region in writing on March 22, 2019, for additional information on potential Native American cultural resources in the project vicinity.

Impact Analysis

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Less than Significant with Mitigation Incorporated. As concluded in Section 5(a), above, the Historical/Archaeological Resources Survey Report concluded that no "historical resources" are anticipated to be impacted by the Proposed Project. However, the possibility of discovering a significant unanticipated find remains and therefore Mitigation Measure CR-1 and Mitigation Measure CR-2 shall be implemented to ensure that less than significant impacts to potential historical resources occur. No additional mitigation measures are required.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?

Less Than Significant With Mitigation Incorporated.

No TCRs were identified within the project area during AB 52 consultation. The Proposed Project would not result in significant impacts to known TCRs. However, as a result of AB 52 consultation the Tribes identified a potential for the discovery of unknown TCRs during construction, which may result in a significant impact if such resources are found and affected. Impacts to unknown TCRs would be less than significant with the implementation of Mitigation Measures TCR-1 through TCR-4.

As stated above, CRM TECH submitted a written request to the State of California NAHC for a records search in the commission's Sacred Lands File. Following the NAHC's recommendations and previously established protocol, CRM TECH further contacted a total of five tribal organizations in writing on March 22, 2019, for additional information on potential Native American cultural resources in the project vicinity. For some of the tribes, the designated spokespersons on cultural resources issues were contacted in lieu of the individuals recommended by the NAHC, as requested by tribal government staff in the past. The five tribal representatives contacted during this study are listed below:

- Matthew Leivas, Director, Chemehuevi Cultural Center, Chemehuevi Indian Tribe;
- Travis Armstrong, Tribal Historic Preservation Officer, Morongo Band of Mission Indians;
- Donna Yocum, Chairperson, San Fernando Band of Mission Indians;
- Lee Clauss, Director of Cultural Resources, San Manuel Band of Mission Indians;
- Mark Cochrane, Chairperson, Serrano Nation of Mission Indians.

As of the time of preparation of the CRM TECH report, two of the five tribes have responded to the inquiry. In an e-mail dated March 26, 2019, Jessica Mauck, Cultural Resources Analyst for the San Manuel Band, stated that the tribe has concluded its consultation on the Proposed Project with the County in light of the existing ground disturbance within the survey area. Nevertheless, the tribe has requested a copy of CRM TECH's report upon completion. In an e-mail sent on April 24, 2019, Travis Armstrong indicated that the Morongo Band has no additional information to provide at this time but may provide other information to the County during future consultations.

As stated in Section 5, above, the Proposed Project will not cause a substantial adverse change in the significance or integrity of Site 36-004276, the only "historical resource" or potential "historical resources" encountered within or partially within the Project Site, and the geoarchaeological analysis suggests that the project location is low in sensitivity for archaeological remains of prehistoric or early historic origin in buried deposits. No significant adverse impacts are identified or anticipated, and no mitigation measures are required.

Mitigation Measures

TCR-1 Appropriate consulting Tribe(s) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input within 48 hours with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2018), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with consulting Tribe(s), and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents consulting Tribe(s) for the remainder of the project, should Tribe(s) elect to place a monitor on-site at the Tribe's cost.

As necessary, and in accordance with Project-Specific consultations conducted with the NAHC and various Tribal entities in association with AB52, SB18, and/or any other legal guidelines relating to Native American consultations, the specific language noted in CR-1 and CR-2 may change to reflect Project-Specific needs and requirements.

TCR-2 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to CR-2 and State Health and Safety Code §7050.5 and that code shall be enforced for the duration of the project.

TCR-3 Only the NAHC Designated MLD Tribal representative shall make all future decisions regarding the treatment of human remains of Native American origin within the response times outlined below. The MLD shall determine the disposition and treatment of Native American human remains and any associated grave goods following Native American Graves Protection and Repatriation Act (NAGPRA) protocols, and what constitutes "appropriate dignity" as that term is used in the applicable statutes and in the Tribe's customs and traditions.

The MLD or his/her designee shall complete an inspection and provide written recommendations to the DPW and the landowner (if different than the DPW) within forty-eight (48) hours of being granted access to the site. If the descendant does not make recommendations within 48 hours, the landowner shall re-inter the remains in a secure area of the property where there will be no further disturbance. Should the landowner not accept the descendant's recommendations, either the owner or the MLD may request mediation by NAHC. According to the California Health and Safety Code, six (6) or more human burials at one (1) location constitute a cemetery (Section 8100), and willful disturbance of human remains in a cemetery is a felony (Section 7052).

TCR-4 Any and all archaeological/cultural documents as related to documented tribal cultural resources created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be disseminated to appropriate consulting Tribe(s) in the form of an un-redacted report (containing DPR forms). The Lead Agency and/or applicant shall, in good faith, consult with the appropriate Tribe(s) until construction completion of the project and completion of any measures imposed to protect resources.

Tribal Cultural Resources Conclusions

With implementation of the above listed measures, less than significant impacts would occur.

19. UTILITIES AND SERVICE SYSTEMS

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

Environmental Setting

The Project Site is located near the northern edge of San Bernardino foothills within the Town of Apple Valley's Sphere of Influence. The general project vicinity consists of rural housing and undeveloped open space.

Impact Analysis

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact. There are no public or private utilities that currently serve the Project Site or that would be required for continued operation of the borrow pit. The Proposed Project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, no impacts are identified or are anticipated, and no mitigation measures are required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. 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 4,000 gallons of water/day (6 to 20 days/year) may be used for dust suppression activities. The 4,000-gallon water truck will as necessary at a Mojave Water Agency designated hydrant. The County has a Memorandum of Understanding (MOU) with the Mojave Water Agency. Bottled water will be provided to

employees for a supply of drinking water as needed. Therefore, no new or expanded entitlements would be needed. No impacts are identified or are anticipated, and no mitigation measures are required.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. See response to (a), above. Furthermore, portable toilets will be used on-site and serviced by a commercial vendor. No impacts are identified or are anticipated, and no mitigation measures are required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. All refuse shall be disposed of in approved trash bins and removed by the County or a commercial vendor as necessary. No impacts are identified or are anticipated, and no mitigation measures are required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. See response to (d), above.

Mitigation Measures

N/A

Utilities and Service Systems Impact Conclusions

No impacts are identified or are anticipated, and no mitigation measures are required.

20. WILDFIRE

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

Environmental Setting

The Project Site is located near the northern edge of San Bernardino foothills 5.5 miles southeast of the Town of Apple Valley in the Mojave Desert. The general project vicinity consists of rural housing and undeveloped open space

Impact Analysis

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. Activities associated with the Proposed Project would not impede existing emergency response plans for the Project Site and/or other land uses in the project vicinity. Vehicles and stationary equipment used for material excavation and stockpiling operations would continue to be staged at the Project Site and would not block emergency access routes. Therefore, implementation of the Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. No impacts are identified or are anticipated, and no mitigation measures would occur.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less than Significant. According to San Bernardino County Hazard Overlay Map FH07 B – Apple Valley South, the Project Site is within Fire Safety Area 2 (FS2). As described by the San Bernardino County Development Code, FS2 includes those lands just to the north and east of the FS1 area in the mountain-desert interface. These areas have gentle to moderate sloping terrain and contain light to moderate fuel loading. These areas are periodically subject to high wind conditions that have the potential of dramatically spreading wildland fires. As such, the Project Proponent shall adhere to all applicable sections of Chapter 82.13, Fire Safety (FS) Overlay, of the San Bernardino County Development Code. Additionally, the Proposed Project does not include

construction of habitable structures or permanent facilities and, therefore, implementation would not expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The Proposed Project will not require the construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities. Therefore, the Proposed Project is not anticipated to require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary ongoing impacts to the environment. No impacts are identified or are anticipated, and no mitigation measures are required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less than Significant. As identified by San Bernardino County Geologic Hazard Overlay Map FH07 C – Apple Valley South, the Project Site is not located in an area likely to become unstable as a result of on- or off-site landslide. As shown by San Bernardino County Hazard Overlay Map FH07 B – Apple Valley South, the Project Site is not located within Flood Plain Safety (FP) Overlay District or within a dam inundation area, however, the Project Site is within FS2. As described by the San Bernardino County Development Code, FS2 areas have gentle to moderate sloping terrain and contain light to moderate fuel loading. These areas are periodically subject to high wind conditions that have the potential of dramatically spreading wildland fires. As such, the Project Proponent shall adhere to all applicable sections of Chapter 82.13, Fire Safety (FS) Overlay, of the San Bernardino County Development Code. Additionally, the Proposed Project does not include construction of habitable structures or permanent facilities and, therefore, implementation would not expose people or structures to significant risks. No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

Mitigation Measures:

N/A

Wildfire Impact Conclusions:

No significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

21. MANDATORY FINDINGS OF SIGNIFICANCE

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

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact. The results of the Initial Study show that there are less than significant impacts to Biological Resources anticipated and potentially significant impacts to Cultural Resources. These impacts will be reduced to less than significant levels after incorporation of mitigation measures and compliance with existing rules and regulations. Therefore, the Proposed Project will not substantially degrade the quality of the environment and impacts to habitat, wildlife populations, plant and animal communities, rare and endangered species or important examples of the major periods of California history or prehistory; no additional mitigation is warranted.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact. Cumulative impacts are defined as two or more individual affects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period. The CEQA Guidelines, Section 15130 (a) and (b), states:

(a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Impacts associated with the Proposed Project would not be considered individually adverse or unfavorable. The Proposed Project is a conditionally acceptable use identified in and previously evaluated as part of the San Bernardino County General Plan and EIR. No cumulative impacts are identified or are anticipated, and no mitigation measures are required.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant. Implementation of the existing rules and regulations, conditions from permit approvals and the mitigation measures identified in this Initial Study Checklist would result in a less than significant impact. There would be no substantial adverse effects on human beings, either directly or indirectly. No additional mitigation measures are required.

SECTION 5 – SUMMARY OF MITIGATION MEASURES

The following mitigation measures were identified to reduce impacts to less than significant:

CULTURAL RESOURCES:

CR-1 If historical/archaeological resources are encountered during ground-disturbing activities, work in the immediate area shall cease and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service [NPS] 1983) shall be contacted immediately to evaluate the find(s). If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted and will be reported to the County.

CR-2 Should human remains and/or cremations be encountered during any earthmoving activities, all work shall stop immediately in the area in which the find(s) are present (suggested 100-ft radius area around the remains and project personnel will be excluded from the area and no photographs will be permitted), and the County of San Bernardino Coroner will be notified. The County of San Bernardino and the Project Proponent shall also be called and informed of the discovery. The Coroner will determine if the bones are historic/archaeological or a modern legal case. The Coroner will immediately contact the Native American Heritage Commission (NAHC) in the event that remains are determined to be human and of Native American origin, in accordance with California Public Resources Code Section 5097.98.

All discovered human remains shall be treated with respect and dignity. California state law (California Health & Safety Code 7050.5) and federal law and regulations ([Archaeological Resources Protection Act (ARPA) 16 USC 470 & 43 CFR 7], [Native American Graves Protection & Repatriation Act (NAGPRA) 25 USC 3001 & 43 CFR 10] and [Public Lands, Interior 43 CFR 8365.1-7]) require a defined protocol if human remains are discovered in the State of California regardless if the remains are modern or archaeological.

GEOLOGY AND SOILS:

GS-1 In order to prevent inadvertent impacts on paleontological resources, when project impacts reach the depth of 15 feet below the current ground surface, further paleontological evaluation of the sediments underneath will become necessary. Therefore, mining activities shall not exceed 15 feet in depth without additional evaluation.

TRIBAL CULTURAL RESOURCES:

TCR-1 Appropriate consulting Tribe(s) shall be contacted, as detailed in CR-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input within 48 hours with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2018), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with consulting Tribe(s), and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents consulting Tribe(s) for the remainder of the project, should Tribe(s) elect to place a monitor on-site at the Tribe's cost.

As necessary, and in accordance with Project-Specific consultations conducted with the NAHC and various Tribal entities in association with AB52, SB18, and/or any other legal guidelines relating to Native American consultations, the specific language noted in CR-1 and CR-2 may change to reflect Project-Specific needs and requirements.

TCR-2 If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to CR-2 and State Health and Safety Code §7050.5 and that code shall be enforced for the duration of the project.

TCR-3 Only the NAHC Designated MLD Tribal representative shall make all future decisions regarding the treatment of human remains of Native American origin within the response times outlined below. The MLD shall determine the disposition and treatment of Native American human remains and any associated grave goods following Native American Graves Protection and Repatriation Act (NAGPRA) protocols, and what constitutes "appropriate dignity" as that term is used in the applicable statutes and in the Tribe's customs and traditions.

The MLD or his/her designee shall complete an inspection and provide written recommendations to the DPW and the landowner (if different than the DPW) within forty-eight (48) hours of being granted access to the site. If the descendant does not make recommendations within 48 hours, the landowner shall re-inter the remains in a secure area of the property where there will be no further disturbance. Should the landowner not accept the descendant's recommendations, either the owner or the MLD may request mediation by NAHC. According to the California Health and Safety Code, six (6) or more human burials at one (1) location constitute a cemetery (Section 8100), and willful disturbance of human remains in a cemetery is a felony (Section 7052).

TCR-4 Any and all archaeological/cultural documents as related to documented tribal cultural resources created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be disseminated to appropriate consulting Tribe(s) in the form of an un-redacted report (containing DPR forms). The Lead Agency and/or applicant shall, in good faith, consult with the appropriate Tribe(s) until construction completion of the project and completion of any measures imposed to protect resources.

SECTION 6 – REFERENCES

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EXHIBIT F

Response to Comments

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

July 17, 2020

Steven Valdez
Contract Planner
County of San Bernardino
385 North Arrowhead Avenue, First Floor
San Bernardino, California 92415-0187

Ocotillo Borrow Pit (Project)
MITIGATED NEGATIVE DECLARATION (MND)
SCH# 2020069012

Dear Mr. Valdez:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the County of San Bernardino for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code..

PROJECT DESCRIPTION SUMMARY

Proponent: County of San Bernardino Department of Public Works (DPW)

Objective: The objective of the Project is to continue providing general fill material for various DPW sites for annual maintenance and/or emergency repairs. DPW is proposing to excavate up to a depth of 15 feet in order to annually remove up to 1,000 cubic yards of borrow material for a mining period of 100 years on approximately 20 acres.

Location: In the southeast corner of Ocotillo Way and Valley Vista Avenue; APN: 0438-082-01, Southeast of the Town of Apple, County of San Bernardino, State of California, San Bernardino Meridian, Section 24, Township 4N, Range 3W

Timeframe: 100 years

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the County of San Bernardino in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, CDFW concludes that a Mitigated Negative Declaration is appropriate for the Project.

I. Mitigation Measure or Alternative and Related Impact Shortcoming

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?

COMMENT 1: BIO-X, Special Status Plant Species

Section IV, Page 25

Issue: The MND lacks analysis of potential impacts to special status plant species. A biological report was provided and mentioned the potential for 23 listed or special status plant species, but the MND does not include measures for them. As Joshua Tree woodlands may support a variety of special status species (CNDDB, 2020; CNPS, 2020), CDFW has concerns sensitive plant species are present.

Specific impact: A botanical field survey to identify all plants to the taxonomic level necessary to determine rarity and listing status was not performed. The MND lacks analysis of potential impact, and avoidance, minimization, and mitigation measures for special status plant species.

Why impact would occur: Botanical field surveys should be conducted during times of year when plants are evident and identifiable (i.e. flowering or fruiting), which may warrant multiple surveys during the season to capture floristic diversity (CDFW, 2018). Habitats, such as Joshua Tree woodlands that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline conditions for purposes of impact assessment (CDFW, 2018).

Evidence impact would be significant: Sensitive plant species are listed under CESA as threatened, or endangered, or proposed or candidates for listing; designated as rare under the Native Plant Protection Act; or plants that otherwise meet the definition of rare, threatened, or endangered species under CEQA. Plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B generally meet the criteria of a CESA-listed species and should be considered as an endangered, rare or threatened species for the purposes of CEQA analysis. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Fish and Game Code Sections 1900–1913 includes provisions that prohibit the take of endangered and rare plants from the wild and a salvage requirement for landowners.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

Mitigation Measure 1:

To minimize significant impacts: To ensure that Project impacts to biological resources are fully analyzed, CDFW recommends the DPW require a thorough floristic-based assessment of special status plants and natural communities. The assessment should be performed by a qualified biologist following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW, March 2018*)* or most recent version.

- https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline=1

Note that CDFW generally considers biological field assessments for rare plants valid for a period of up to three years. Should any special status plants be present, CDFW recommends the inclusion of the following mitigation measure:

MM-X: Special Status Plant Species. Should any CESA-listed plant species be present at the Project site, the Project Proponent shall obtain an incidental take permit for those species prior to the start of Project activities. Should any special status plants or natural communities be present in the Project area, a qualified biologist shall develop species specific avoidance, minimization, and mitigation measures to ensure there is no net reduction in the size or viability of the local population.

COMMENT 2: BIO-X, Burrowing Owl

Section IV, Page 25

Issue: CDFW appreciates the DPW's inclusion of an initial survey to identify the presence of burrowing owls, a Species of Special Concern. However, CDFW has concerns that the initial survey was not thorough enough to determine no presence, as burrowing owls have been mapped within 3 miles from the Project site (CNDBB 2020).

Additionally, there is no measure in place to address avoidance, minimization, or mitigation measures.

Specific impact: Project-related activities have potential to take burrowing owl individuals and their nests and may result in loss of burrowing owl habitat.

Why impact would occur: Potentially significant impacts to burrowing owls are not mitigated to the extent feasible.

Evidence impact would be significant: Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code Section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill." Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, and satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and

compete for available burrows (CDFG, 2012). Eviction of burrowing owls is a potentially significant impact under CEQA

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Mitigation Measure 2:

To minimize significant impacts: CDFW recommends including the following new measure in the environmental document:

MM-X: Burrowing Owl. Pre-construction Burrowing Owl Survey. Burrowing owl surveys shall be conducted by a qualified biologist at least 14 days prior to any Project activities, at any time of year. Surveys shall be completed following the recommendations and guidelines provided within the Staff Report on Burrowing Owl Mitigation (CDFG, March 2012) or most recent version by a qualified biologist. If an active burrowing owl burrow is detected within any Project disturbance area, or within a 500-foot buffer of the disturbance area, a 300- foot radius buffer zone surrounding the burrow shall be flagged, and no impacts to soils or vegetation or noise levels above 65 dBA shall be permitted while the burrow remains active or occupied. Disturbance-free buffers may be modified based on site-specific conditions in consultation with CDFW. The qualified biologist shall monitor active burrows daily and will increase buffer sizes as needed if owls show signs of disturbance. If active burrowing owl burrows are located within any work area and impact cannot be avoided, a qualified biologist shall submit a burrowing owl exclusion plan to CDFW for review and approval. The burrowing owl exclusion plan shall include permanent compensatory mitigation consistent with the recommendations in the Staff Report on Burrowing Owl Mitigation such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. Passive relocation shall take place outside the nesting season (1 February to 31 August).

COMMENT 3: BIO-X, Desert Tortoise

Section IV, Page 25

Issue: CDFW appreciates the DPW inclusion of an initial survey for desert tortoise, a threatened species. However, there is no measure in place to address avoidance, minimization, or mitigation measures should desert tortoise enter the Project site during the life of the Project.

Specific impact: Project activities have the potential to take desert tortoise, a CESA-listed species.

Why impact would occur: The MND does not ensure a qualified biologist, experienced in locating desert tortoise individuals in all life stages and their sign, completed the survey following CDFW approved protocols. Additionally, should desert tortoise presence be confirmed, during surveys or within the 100-year timeframe, the MND lacks avoidance, minimization and mitigation to avoid take.

Evidence impact would be significant: Desert tortoise is a CESA-listed species. Take (hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) is prohibited unless authorized by state law (Fish and Game Code, §§ 2080 & 2085).

Mitigation Measure 3:

To minimize significant impacts: If the Project, including the Project construction or any Project-related activity during the life of the Project, results in take of CESA listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation through an incidental take permit (ITP). CDFW recommends adding the following measure:

MM BIO-X: Desert Tortoise Surveys. A qualified biologist shall conduct a protocol level presence or absence survey no more than 14 days prior to initiating Project activities in accordance with the survey methodology described in U.S. Fish and Wildlife Service Desert Tortoise (Mojave Population) Field Manual. In addition, the survey shall utilize perpendicular survey routes and 100-percent visual coverage of the Project area and 50-foot buffer zone for desert tortoise and their sign. If the survey confirms absence, a qualified biological monitor shall remain on-site during all Project activities to confirm desert tortoise do not enter the Project site. If the survey confirms presence, the Project Proponent shall obtain an ITP for desert tortoise prior to the start of Project activities. If the biological monitor during the life of the Project encounters a desert tortoise, work shall be suspended, and the Project Proponent shall obtain an ITP for the species prior to the restarting Project activities.

Focused surveys should be conducted for desert tortoises following this approved CDFW protocol:
https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=174633&inline

- CDFW recommends DPW condition the environmental document to include on-site worker education about any sensitive wildlife species that may occur in the area

- Additionally, CDFW requests to be contacted immediately should sensitive wildlife species be present in the Project area.

II. Editorial Comments and/or Suggestions

CDFW also recommends DPW include the following mitigation measures should trenches be exposed to prevent potential impacts to biological resources:

MM-X: Escape Ramp in Trench. At the end of each work day, the Biological Monitor(s) shall place an escape ramp at each end of the open trench to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degree.

MM-X: Trench inspections and monitoring. A biological monitor should be present before, during and after ground disturbing activities. Additionally, inactive and active trenches should be surveyed (3) times a day for sensitive wildlife; before activities begin, after lunch and after activities have ceased for the day. If sensitive or protected wildlife are encountered during these surveys CDFW should be notified immediately.

MM-X: On-site Education. A qualified biologist shall conduct an education program for all persons employed or otherwise working on the Project site prior to performing any work on-site. The program shall consist of a presentation that includes a discussion of the biology of the habitats and species that may be present at the site. The qualified biologist shall also include as part of the education program information about the distribution and habitat needs of any special status species that may be present, legal protections for those species, penalties for violations, and mitigation measures. Education should include but not be limited to desert tortoise, burrowing owl, special status plant species, and nesting birds. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on-site.

Lastly, CDFW would like to note the Fish and Game Commission has received a petition to list Western Joshua Tree (Yucca brevifolia) as a threatened species under CESA. It is expected the Fish and Game Commission may make a decision in August 2020. CDFW recommends DPW review the listing status prior to finalizing the MND as it may affect the legality of the MND. If the Project, including the Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation through an ITP.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist the County of San Bernardino Department of Public Works in identifying and mitigating Project impacts on biological resources. Questions regarding this letter or further coordination should be directed to Julia Karo, Environmental Scientist at Julia.Karo@Wildlife.ca.gov.

Sincerely,

DocuSigned by:
Scott Wilson
8091B1A9242F49C...

Scott Wilson
Environmental Program Manager

ec: Office of Planning and Research, State Clearinghouse, Sacramento

Attachment 1

REFERENCES

California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Website https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline)

ATTACHMENT 1

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure compliance with mitigation measures during project implementation. Mitigation measures must be implemented within the time periods indicated in the table below.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Implementation Schedule, and Responsible Party for implementing the mitigation measure. The Mitigation Measure column summarizes the mitigation requirements. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure.

Mitigation Measure	Implementation Schedule	Responsible Party
MM BIO-X: Desert Tortoise Surveys. A qualified biologist shall conduct a protocol level presence or absence survey no more than 14 days prior to initiating Project activities in accordance with procedures described in Chapter 6 of the US Fish and Wildlife Service Desert Tortoise (Mojave Population) Field Manual. In addition, the survey shall utilize perpendicular survey routes and 100-percent visual coverage of the Project area and 50-foot buffer zone for desert tortoise and their sign. If the survey confirms absence, a qualified biological monitor shall remain on-site during all Project activities to confirm desert tortoise do not enter the Project site. If the survey confirms presence, the Project Proponent shall obtain an ITP for desert tortoise prior to the start of Project activities. If the biological monitor during the life of the Project encounters a desert tortoise, work shall be suspended, and the Project Proponent	Before commencing ground- or vegetation-disturbing activities/Entire Project	Project Proponent

shall obtain an ITP for the species prior to the restarting Project activities		
MM BIO-X: Pre-construction Burrowing Owl Survey. Burrowing owl surveys shall be conducted at least 14 days prior to any Project activities, at any time of year. Surveys shall be completed following the recommendations and guidelines provided within the *Staff Report on Burrowing Owl Mitigation* (CDFG, March 2012) or most recent version by a qualified biologist. If an active burrowing owl burrow is detected within any Project disturbance area, or within a 500-foot buffer of the disturbance area, a 300- foot radius buffer zone surrounding the burrow shall be flagged, and no impacts to soils or vegetation or noise levels above 65 dBA shall be permitted while the burrow remains active or occupied. Disturbance-free buffers may be modified based on site-specific conditions in consultation with CDFW. The qualified biologist shall monitor active burrows daily and will increase buffer sizes as needed if owls show signs of disturbance. If active burrowing owl burrows are located within any work area, a qualified biologist shall submit a burrowing owl exclusion plan to CDFW for review and approval. The burrowing owl exclusion plan shall include permanent compensatory mitigation consistent with the recommendations in the *Staff Report on Burrowing Owl Mitigation* such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. Passive relocation shall take place outside the nesting season (1 February to 31 August).	Before commencing ground- or vegetation-disturbing activities/Entire Project	Project Proponent
MM BIO-X: Special Status Plant Species. Should any CESA-listed plant species be present at the Project site, the Project Proponent shall obtain an incidental take permit for those species prior to the start of Project activities. Should any special status plants or natural communities be present in the Project Area, a qualified biologist shall develop species specific avoidance, minimization, and mitigation measures to ensure	Before commencing ground- or vegetation-disturbing activities	Project Proponent

there is no net reduction in the size or viability of the local population.		
MM BIO-X: Escape Ramp in Trench**.** At the end of each work day, the Biological Monitor(s) shall place an escape ramp at each end of the open trench to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degree.	Entire Project	Project Proponent
MM BIO-X: On-site Education. A qualified biologist shall conduct an education program for all persons employed or otherwise working on the Project site prior to performing any work on-site. The program shall consist of a presentation that includes a discussion of the biology of the habitats and species that may be present at the site. The qualified biologist shall also include as part of the education program information about the distribution and habitat needs of any special status species that may be present, legal protections for those species, penalties for violations, and mitigation measures. Education should include but not be limited to desert tortoise, burrowing owl, special status plant species, and nesting birds. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work on-site.	Before commencing ground- or vegetation-disturbing activities/Entire Project	Project Proponent

July 9, 2020

Mr. Steven Valdez
Senior Planner
San Bernardino County
385 N. Arrowhead Avenue, First Floor
San Bernardino, CA 92415

Transmitted via email: steven.valdez@lus.sbcounty.gov

SUBJECT: Initial Study/Mitigated Negative Declaration, County of San Bernardino Department of Public Works; Ocotillo Borrow Pit; State Clearinghouse (SCH) No. 2020069012

Dear Mr. Valdez:

The Department of Conservation's Division of Mine Reclamation (Division) appreciates the opportunity to participate in the environmental review process for the Ocotillo Borrow Pit (SCH No. 2020069012). The project as described in the Initial Study/Mitigated Negative Declaration (IS/MND) includes the following elements:

- Permit the Ocotillo Borrow Pit for a 100-year period
- Provide general fill material for various Department of Public Works (DPW) sites for annual maintenance
- Excavate up to a depth of 15 feet and remove up to 1,000 cubic yards (cy) a year

The Division has review and backstop responsibilities associated with lead agency implementation of the Surface Mining and Reclamation Act of 1975 (SMARA; Public Resources Code Section 2710 et seq.). SMARA provides a comprehensive surface mining and reclamation policy to assure that:

- Adverse environmental effects of surface mining operations are prevented or minimized and mined lands are reclaimed to a usable condition which is ready adaptable for alternative land uses
- Production and conservation of minerals are encouraged, while giving consideration to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment
- Residual hazards to the public health and safety are eliminated

The Division's primary focus is on existing surface mining operations and the return of those mined lands to a usable and safe condition; however, the Division also addresses

issues related to abandoned legacy mines. Division staff currently is reviewing the reclamation plan that has been proposed for this project.

Division staff has reviewed the IS/MND pursuant to the California Environmental Quality Act (CEQA) and State CEQA Guidelines and offers the following comments:

Baseline

1) Division staff questions the baseline identified for this Project. Given previous disturbance by the applicant, Division staff recommends that the appropriate baseline for this project is Joshua Tree woodland, which occurs on 1.6 acres of the Project Site and on the undisturbed surrounding area. For example, the IS/MND states that the Project Site has previously been disturbed primarily for "material removal and staging operations associated with maintenance and emergency repair of San Bernardino road projects … the site is mostly disturbed by past grading and material storage uses and has been used by the DPW for such activities since the 1960s." (IS/MND Page 1)

   In addition, as stated on page 25: "Joshua Tree woodland dominates undisturbed area being either bare or populated by the subset of species that occur nearby…. [T]he habitat in vicinity of the Project Site consists primarily of *Yucca brevifolia* Woodland Alliance. [T]he tree canopy of the community contains only two species and is co-dominated by *Y. brevifolia* and *Y. schirdigera* (Mojave yucca). The shrub canopy is diverse with 21 species with *Ambrosia salsola* (Burrobush), *Ephedra nevadensis* (Nevada ephedra), *Hesperoyucca whipplei* (Chaparral yucca), and *Salvia dorri* (Dorr's sage) being the most common. Fifty-one herbaceous species were found, including four non-natives [sic] species."

2) Additionally, Page 26 states, "[T]here is a blueline stream course mapped by the USGS National Hydrography Dataset (NHD) that was historically mapped on the eastern edge of the Project Site. The current site conditions have resulted in a realignment of the flows further east to the very eastern edge of the site."

   As the term "current site conditions" seems to refer to disturbance by the DPW to remove materials, the pre-disturbance state should also be the baseline for this feature (blueline stream course).

Biological Resources Mitigation Measures

3) It is unclear why no mitigation measures are listed for Biological Resources, given the location of the Project in Joshua Tree woodland habitat, the site use history for the past 60 years, and the project duration is 100 years from approval of the Reclamation Plan.

   Additionally, the Biological Resources Assessment (2019; Jericho Systems) for this project indicates that there is potentially suitable habitat for the desert tortoise in areas adjacent to the site. The BRA identified that the Project Site is within 5 miles

of documented occurrence of a desert tortoise. Division staff recommend that mitigation measures be considered for the Joshua Tree and desert tortoise.

4) Western Joshua Tree (*Yucca brevifolia*) is currently under consideration by the California Fish and Game Commission (Commission) as a potential candidate for listing under the California Endangered Species Act. The California Department of Fish and Wildlife has submitted its evaluation, and the item is scheduled to be considered at their August 19-20, 2020 meeting. Should the Commission recommend the species for candidacy, then this project may need to conduct further analysis, as candidate species are afforded protection from take during their candidacy period.

Please include the Division on the distribution list for this project and send the Division any subsequent project documents (e.g., hearing notices or supplemental environmental documents), as well as a copy of the final IS/MND at the following email: DMR-Submittals@conservation.ca.gov.

If you have any questions, please contact me at (916) 323-9198.

Sincerely,

DocuSigned by:
Carol E. Atkins
73ECCB6738194DA...

Carol E. Atkins, Manager
Environmental Services Unit

ec: State Clearinghouse (state.clearinghouse@opr.ca.gov)
Department of Conservation, Office of Legislative and Regulatory Affairs (OLRA@conservation.ca.gov)
CDFW Region 6 – Mojave Desert (Julia.Karo@wildlife.ca.gov)

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SAN BERNARDINO COUNTY

Land Use Services Department
Mining

Terri Rahhal
Director

October 19, 2020

Carol E. Atkins
Department of Conservation
Division of Mine Reclamation
801 K Street MS 09-06
Sacramento, CA 95814

RE: THIRTY (30) DAY ADVANCE NOTICE OF INTENT TO RECOMMEND APPROVAL OF THE COUNTY OF SAN BERNARDINO, DEPARTMENT OF PUBLIC WORKS' (DPW) REQUEST FOR OF A MINING CONDITIONAL USE PERMIT AND RECLAMANTION PLAN FOR THE PROPOSED OCOTILLO BORROW PIT. APN: 0438-082-01; PROJECT NUMBER: PROJ-2020-00014

Dear Ms. Atkins:

Pursuant to Public Resources Code Section 2772.1, the County of San Bernardino's Planning Division is hereby providing advance notice to the Division of Mine Reclamation (DMR) of staff's intent to recommend approval of the County of San Bernardino Department of Public Works' Ocotillo Borrow Pit on an 11.7-acre site with an estimated termination date of December 2120, or 100 years from the approval date. The Planning Commission Hearing on this matter is tentatively scheduled for **November 19, 2020.**

Planning staff has considered the comments offered by DMR in the letter dated **July 10th, 2020**, and appreciates the opportunity to present responses that will facilitate approval of the proposed Mining Conditional Use Permit and Reclamation Plan for the Ocotillo Borrow Pit operation. The final text and maps will be completed upon approval, incorporating final revisions and additions per DMR's comments and incorporate the following responses and/or conditions imposed by the Planning Division prior to allowing any new mining disturbance. Staff is confident that the County responses address DMR's comments.

Jurisdictional Considerations
(Refer to PRC Section 2771)

General Considerations
(Refer to PRC Sections 2770, 2772, 2773, and 2776 and CCR Sections 3502, 3709, and 3713)

1. **Comment 1- The contents chart required pursuant to PRC Section 2772(b) was included in the RP submittal. However, the page and section numbers identifying where contents meet SMARA requirements is inaccurate, often referencing incorrect pages and sections within the RP. Additionally, the Revegetation Plan that appears to fulfill some of the SMARA requirements for RPs are not referenced in the contents chart. The**

Division recommends the County revise the contents chart to accurately reflect where contents meet the requirements of SMARA.

Response: Recommended changes have been made. Chart has been revised accordingly.

2. **Comment 2 - PRC Section 2772(c)(3) states the RP shall include "…the proposed dates for the initiation and termination of the surface mining operation." The RP (Page 2) estimates the operating life of the surface mine to be one hundred years from County approval; the Revegetation Plan (Page 3) indicates that the surface mining operation will be for 50 years. The RP and the Revegetation Plan need to be consistent. The Division recommends that the RP and Revegetation Plan be revised to be consistent with one another on the matter of termination date. Additionally, the Division recommends that the Revegetation Plan be revised to satisfy a 100-year mining plan.**

   Response: Recommended changes have been made. Reports have been revised so they are consistent with the 100-year time span.

3. **Comment 3 - PRC Section 2772(c)(8) states that the RP shall include "[A] description of the manner in which reclamation, adequate for the proposed use of potential uses, will be accomplished, including…[A] description of the manner in which affected streambed channels and streambanks will be rehabilitated to a condition that minimizes erosion and sedimentation. This feature was presented in the Biological Resources Assessment (BRA; 2019; Jericho Systems; Page 7), but not carried forward into the RP; the BRA states:**

   "There is a blueline stream course mapped by the USGS National Hydrography Dataset (NHD) that was historically mapped on the eastern edge of the Project site. The current site conditions have resulted in a realignment of flows further east to the very eastern edge of the site…. The desert dry wash flows from the south to the north. The visual character of the drainage is difficult to define as flows enter the site due to a road, but the drainage pattern become clearer as the flows exit the site. Once the flows leave the site they fan out and become sheet flow across the desert in a northwest direction."

   The Division recommends the RP be revised to include information on rehabilitation of the blue line stream on the site to comply with SMARA statutes.

   Response: The proposed operation will not include disturbance within the drainage. According to the biology study, the dry lakebed does not meet the definition of WoUS due to the isolated nature of Lucerne Valley and is not subject to the CWA. No hydrophytic vegetation, hydric soils and/or wetlands hydrology are present within the Project site. Therefore, no wetlands were identified during the survey. Regarding State Lake/Streambed jurisdictional concerns: the dry lakebed at the terminus of flow is subject to the California FGC Section 1600 regulations that fall under the jurisdiction of the CDFW, but the project will not encroach into the limits of a waterbody that would require a Lake or Streambed Alteration Agreement.

Geology and Geotechnical Considerations
(Refer to PRC Sections 2772 and 2773 and CCR Sections 3502 and 3704)

4. **Comment 4 - Upon approval, the RP maps submitted to satisfy SMARA Section 2772(c)(5) must be signed and stamped by the designated person in responsible charge of civil engineering for the project to ensure compliance with State Business and Professions Code.**

   Response: The maps do not need to be stamped by a civil engineer as no structural or building plans are proposed. However, the site was surveyed, and that survey was used to create the planning document. The surveyed stamp is provided.

Hydrology and Water Quality Considerations
(Refer to PRC Sections 2770, 2772 and 2773 and CCR Sections 3502, 3503, 3706, 3710, and 3712)

5. **Comment 5 - CCR section 3706(f) requires that the stream diversions be constructed in accordance with a stream and lake alteration agreement between the operator and the California Department of Fish and Wildlife (CDFW). The Division recommends that the applicant should consult with the CDFW to determine if applicable permits are required. Any permit requirements or mitigation measures as they relate to reclamation should be incorporated by reference into the RP.**

   Response: The proposed operation will not include disturbance within the drainage. Regarding State Lake/Streambed jurisdictional concerns: The dry streambed would be subject to the California FGC Section 1600 regulations that fall under the jurisdiction of the CDFW, but the project will not encroach into the limits of this waterbody that would require a Lake or Streambed Alteration Agreement.

Revegetation Considerations
(Refer to PRC Section 2773 and CCR Sections 3503 and 3705)

6. **Comment 6 - CCR Section 3705 (a) states that "…Vegetative cover or density, and species-richness shall be, where appropriate, sufficient to stabilize the surface against the effects of long-term erosion and shall be similar to naturally occurring habitats in the surrounding area. …for areas that will not be reclaimed to prior conditions, the use of data from reference areas in lieu of baseline site data is permissible."**

   - **Page 17 of the Reclamation Plan states planned use of banked seeds for revegetation.**

   - **Page 6 of the Revegetation Plan states, "Prior to topsoil salvage, any available vegetated soils onsite will be stockpiled in separate identified stockpiles for use a seed bank during revegetation."**

   - **Multiple pages within the Reclamation Plan and the Revegetation Plan discuss the disturbed nature of most of the site; however, maps indicate a portion of the site is undisturbed Joshua Tree woodland and that the surrounding area is undisturbed Joshua Tree woodland.**

The Division has concerns about relying on banked seeds to be viable after being stockpiled for 100 years. The Division recommends considering use of container plants for the shrubs as seed development into mature plants take considerable time in a desert environment. The Division also suggests including Joshua Tree (Yucca brevifolia) and Mojave Yucca (Yucca schidigera) in the revegetation effort, as the site includes undisturbed Joshua Tree woodland habitat in the southeast corner and this habitat dominates the surrounding area.

Response: Recommended changes have been made. The end use is a County Maintenance Yard. Reports have been revised to be consistent.

7. **Comment 7 - CCR Section 3705(k) states that "[N]oxious weeds shall be managed: (1) when they threaten the success of the proposed revegetation; (2) to prevent spreading to nearby areas; and (3) to eliminate fire hazard." The RP and the Revegetation Plan provided different success criteria for weed management/weed control:**
   - **The Reclamation Plan states on Page 18: "the purpose of the non-native invasive species control plan …"**
   - **The Reclamation Plan states on Page 19: "the occurrence of non-native invasive species on-site during 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 seed in revegetated areas…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. … shall be made in conjunction with revegetation monitoring."**

   - **The Revegetation Plan states on Page 7: "The occurrence of non-native invasive species on-site shall be monitored by visual inspection quarterly for the first year and then annually thereafter. ...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. Non-native vegetation will be removed using the most efficient method as determined by site conditions…[A]ll non-native invasive weeds will be removed before they produce seed or reach a height of 8 inches, whichever comes first…"**

   The Reclamation Plan and Revegetation Plan need to be revised to have consistent success criteria for weed control.

   Response: Recommended changes have been made. The Plan was revised to include additional language regarding weed control.

Topsoil Considerations
(Refer to CCR Sections 3503, 3704, 3705, and 3711)

8. **Comment 8 - CCR Section 3711(a) states that "[A]ll salvageable topsoil suitable for revegetation shall be removed as a separate layer…" The plan for topsoil salvage within the RP and the Revegetation Plan differ. The RP proposes "All identified topsoil, or at minimum the top six inches of surface soils and material, will be graded into stockpiles**

to preserve as much of the organic material and seeds as practicable…[a topsoil stockpile] approximately 3-acres at one-foot high …or approximately 4,840 cubic yards may be salvaged." In contrast, the Revegetation Plan lays out a different method of topsoil storage listed below:

- **"The top 12-inches of topsoil within areas of white bursage scrub habitat that are impacted shall be salvaged and stockpiled for restoration."**
- **"Any available vegetated soils onsite will be stockpiled in separate identified stockpiles for use as a seed bank during revegetation"**
- **"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 three 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."**

These documents should be revised to be consistent. Additionally, these statements imply that topsoil resources have not been mapped out. CCR Section 3711(b) requires that topsoil resources be mapped out prior to stripping so that performance standards may be developed.

Response: Recommended changes have been made. Reports have been revised to be consistent.

9. **Comment 9- The RP (Page 16) states, "…revegetation plan will implement a series of activities to revegetate portions of the site after completion of the mining operations." The proposed termination date for mining is 2120 or 100 years from the mine initiation date. Pursuant to CCR Section 3711(d), "Topsoil and suitable growth media shall be used to phase reclamation as soon as can be accommodated by the mining schedule presented in the approved reclamation plan following the mining of an area."**

   The Division recommends revising the RP to accommodate phased reclamation activities in concurrence with mining activities pursuant to CCR Section 3711(d).

   Response: The end use is a County Maintenance Yard. Therefore, only the slopes will be revegetatedwhen they attain final contoured elevations.

10. **Comment 10- Pursuant to CCR 3711(d) "…topsoil and suitable growth media stockpiles shall be planted with a vegetative cover or shall be protected by other equally effective measures to prevent water and wind erosion and to discourage weeds." The RP and the Revegetation Plan differ in their method for topsoil management. The RP (Page 17) states, "If the stockpiles are susceptible to wind erosion, there will be water sprayed to form a surface crust or covered with larger gravel materials." In contrast, the Revegetation Plan (Section 3.1) states, "Soil stockpiles will be clearly marked and stabilized with a breathable erosion control method such as jute netting."**

    These two documents are inconsistent and need to be revised. Additionally, the Division questions whether the use of jute netting will be protective over the 100-year mining period without maintenance.

Response: Recommended changes have been made. Reports have been revised to be consistent.

11. **Comment 11- The RP and the Revegetation Plan differ in their method of topsoil redistribution. The RP (Page 16) states, "Stockpiled surface material containing banked seeds will be spread out evenly over the site to a depth up to one-foot deep and seeded with commercial [sic] available native seeds." In contrast, the Revegetation Plan states that "Any available soils will be deposited in random "islands" up to one-foot thick and seeded." (Page 6) and "The prepared areas will be covered with available stockpiled surface materials either uniformly if enough surface material available or in "islands" and seeded with recommended seeds…" (Page 8).**

    As mentioned previously, the RP and Revegetation Plan need to be consistent; the documents need to be revised to be consistent. Additionally, CCR Section 3711(e) states, "Topsoil and suitable growth media shall be redistributed in a manner that results in a stable, uniform thickness consistent with the approved end use, site configuration, and drainage patterns." The RP and Revegetation Plans need to be revised to include uniform thickness of the topsoil distribution in accordance with SMARA regulations.

    Response: Recommended changes have been made. Reports have been revised to be consistent.

Wildlife Habitat Considerations
(Refer to PRC Sections 2772, 2772.1, and 2773 and CCR Section 3703*)*

12. **Comment 12- PRC Section 2773(a) states that the RP "shall be applicable to a specific piece of property … and establish site-specific criteria for evaluating compliance and PRC Section 2773(b) states that the standards approved by the State Mining and Geology Board on wildlife habitat "shall apply to each mining operation…"**

    Division staff recognize that the Western Joshua Tree (Yucca brevifolia) is currently under consideration by the California Fish and Game Commission (Commission) as a potential candidate for listing under the California Endangered Species Act (CESA). Should the Commission recommend the species for candidacy, Division staff recognize that this project may need to conduct further analysis to comply with the take protection afforded candidate species under CESA.

    Response: The Site is entirely disturbed. No new areas will be disturbed with approval. No additional Joshua Trees will be removed with continued mining.

Should you have any questions regarding this advance notice and response to comments, please feel free to call me direct at 909 387-4421.

Sincerely,

Steven A. Valdez

Steven Valdez, Senior Planner
SV

Attachment: DMR comments dated July 10th, 2020

cc: George H. Kenline, Environmental Compliance Manager
Nancy Sansonetti, Department of Public Works

April 20, 2020

Mr. Steven Valdez
Senior Planner
San Bernardino County
385 N. Arrowhead Avenue, First Floor
San Bernardino, CA 92415

Copy transmitted by email: steven.valdez@lus.sbcounty.gov

NOTICE OF INCOMPLETE RECLAMATION PLAN SUBMISSION
OCOTILLO BORROW PIT

The Department of Conservation's Division of Mine Reclamation (Division) received a Reclamation Plan (RP) for the proposed Ocotillo Borrow Pit submitted by San Bernardino County (County) on March 19, 2020. The County is the lead agency under the Surface Mining and Reclamation Act of 1975 (SMARA; Public Resources Code [PRC] Section 2710 et seq.). The Division determined that the submittal is incomplete pursuant to PRC Section 2772.1(b)(1):

> "An incomplete submission is one that does not meet the contents requirements of Section 2772, 2773, and 2773.3 and Article 1 (commencing with Section 3500) and Article 9 (commending with Section 3700) of Subchapter 1 of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations (CCR), as applicable."

Pursuant to PRC Section 2772.1(b)(3), the Division's time to prepare written comments regarding the RP will commence when the Division receives the following information:

1. Studies and methods to support development of practices and performance standards for topsoil salvage, management, and distribution as required by Section 2773(a) were not included in the RP submittal and must be submitted. These baseline studies are required to:
    - Identify and map topsoil resources prior to stripping, as well as map the location of the topsoil stock piles pursuant to CCR Section 3711(b)
    - Establish the need for test plots to determine the suitability of growth media for revegetation purposed pursuant to CCR Section 3711(b)
    - Establish soil salvage operations and phases of reclamation to minimize disturbed areas and achieve maximum revegetation success pursuant to CCR Section 3711(c)
    - Identify and protect topsoil and suitable growth media equally with effective measures to prevent water and wind erosion and to discourage weeds pursuant to CCR Section 3711(d)
    - Establish redistribution of topsoil and suitable growth media in a manner that results in a stable, uniform thickness consistent with the approved end use, site configuration, and drainage patterns pursuant to CCR Section 3711(e)

2. The reclamation maps and figures submitted to satisfy PRC section 2772(c)(5) are not referenced to an individual in responsible charge for civil engineering or surveying aspects of the project. Preparation, signing and sealing of interim and final documents constituting the practice of civil engineering or surveying must be conducted in compliance with Section 6735 of the Professional Engineers Act and Section 8761 of the Professional Land Surveyor's Act. To be considered complete, the reclamation maps and figures should be revised to reference the individuals in responsible charge of "clearly defined and accurately drawn property lines" and "existing topography and final topography."

Although not a requirement for completeness under PRC Section 2772.1(b)(1), for borrow pits operated by a lead agency, PRC Section 2770.1 requires:

> "For the purposes of a borrow pit surface mining operation that is owned or operated by a lead agency solely for use by that lead agency…[I]n addition to the requirements of Sections 2772 and 2773, the lead agency shall include in its reclamation plan maintenance measures that become effective when the borrow pit surface mining operation is idle. The maintenance measures shall maintain the site in compliance with this chapter while the borrow pit surface mining operation is idle."

The RP must include maintenance measures that become effective when the borrow pit surface mining operation is idle. The RP needs to include these maintenance measures.

If you have any questions on these comments please contact either of us at (916) 323-9198.

Sincerely,

DocuSigned by:
Carol E. Atkins
73ECCB6738194DA...

Carol E. Atkins, Manager
Environmental Services Unit

DocuSigned by:
Paul Fry
29D2BE549209416...

Paul Fry, P.G., Manager
Engineering and Geology Unit

cc (transmitted by email):

Nancy Sansonetti, County of San Bernardino, Department of Public Works

George Kenline, County of San Bernardino, Environmental Compliance Manager

August 12, 2020

Mr. Scott Wilson, Environmental Program Manager
Department of Fish and Wildlife
Inland Deserts Region
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764

Subject: Response to Initial Study/Mitigated Negative Declaration, County of San Bernardino Department of Public Works; Ocotillo Borrow Pit; State Clearinghouse (SCH) No. 2020069012

Dear Mr. Wilson,

This letter is in response to the comment letter received from the Department of Fish and Wildlife, Inland Deserts Region dated July 17, 2020 concerning the Initial Study/Mitigated Negative Declaration for the Mine Reclamation Plan (Plan) Submission of "Ocotillo Borrow Pit" which was submitted on March 19, 2020 to the San Bernardino County, Land Use Services Department. We have copied and pasted your comments followed by our response which either clarifies the question or states where the information can be found in the document.

Comment #1: BIO-X, Special Status Plant Species

Issue: The MND lacks analysis of potential impacts to special status plant species. A biological report was provided and mentioned the potential for 23 listed or special status plant species, but the MND does not include measures for them. As Joshua Tree woodlands may support a variety of special status species (CNDDB, 2020; CNPS, 2020), CDFW has concerns sensitive plant species are present.

Specific impact: A botanical field survey to identify all plants to the taxonomic level necessary to determine rarity and listing status was not performed. The MND lacks analysis of potential impact, and avoidance, minimization, and mitigation measures for special status plant species.

Why impact would occur: Botanical field surveys should be conducted during times of year when plants are evident and identifiable (i.e. flowering or fruiting), which may warrant multiple surveys during the season to capture floristic diversity (CDFW, 2018). Habitats, such as Joshua Tree woodlands that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline conditions for purposes of impact assessment (CDFW, 2018).

Evidence impact would be significant: Sensitive plant species are listed under CESA as threatened, or endangered, or proposed or candidates for listing; designated as rare under the Native Plant Protection Act; or plants that otherwise meet the definition of rare, threatened, or

endangered species under CEQA. Plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B generally meet the criteria of a CESA-listed species and should be considered as an endangered, rare or threatened species for the purposes of CEQA analysis. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Fish and Game Code Sections 1900–1913 includes provisions that prohibit the take of endangered and rare plants from the wild and a salvage requirement for landowners.

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Project Description and Related Impact Shortcoming)

Mitigation Measure 1:

To minimize significant impacts: To ensure that Project impacts to biological resources are fully analyzed, CDFW recommends the DPW require a thorough floristic-based assessment of special status plants and natural communities. The assessment should be performed by a qualified biologist following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, March 2018) or most recent version.

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline=1

Note that CDFW generally considers biological field assessments for rare plants valid for a period of up to three years. Should any special status plants be present, CDFW recommends the inclusion of the following mitigation measure:

MM-X: Special Status Plant Species. Should any CESA-listed plant species be present at the Project site, the Project Proponent shall obtain an incidental take permit for those species prior to the start of Project activities. Should any special status plants or natural communities be present in the Project area, a qualified biologist shall develop species specific avoidance, minimization, and mitigation measures to ensure there is no net reduction in the size or viability of the local population.

Response:

A Biological Resources Assessment (BRA) and Jurisdictional Delineation for Ocotillo Burrow was prepared on July 24, 2019 by Jericho Systems. According to the database queries, 38 sensitive species (23 plants and 15 animals) have been documented in the Apple Valley South, Fifteenmile Valley, Lucerne Valley, and Hesperia USGS 7.5-minute series quadrangles. However, no listed or sensitive plants were observed during survey and the probability of a sensitive plant species is addressed in the Plant Species Observed list and Table 1 of the BRA. In addition, the existing condition or baseline of the project site is mostly disturbed by past grading and material storage uses by the DPW since the 1960s. No undisturbed areas are proposed to be developed with this project. Those areas with some native vegetation are located in the setbacks or buffers and will not be disturbed. Therefore, the proposed project would not impact Special Status Plant Species.

Comment #2: BIO-X, Burrowing Owl

Section IV, Page 25

Issue: CDFW appreciates the DPW's inclusion of an initial survey to identify the presence of burrowing owls, a Species of Special Concern. However, CDFW has concerns that the initial survey was not thorough enough to determine no presence, as burrowing owls have been mapped within 3 miles from the Project site (CNDBB 2020).

Additionally, there is no measure in place to address avoidance, minimization, or mitigation measures.

Specific impact: Project-related activities have potential to take burrowing owl individuals and their nests and may result in loss of burrowing owl habitat.

Why impact would occur: Potentially significant impacts to burrowing owls are not mitigated to the extent feasible.

Evidence impact would be significant: Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code Section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill." Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, and satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation increase energetic costs, and introduce risks posed by having to find and compete for available burrows (CDFG, 2012). Eviction of burrowing owls is a potentially significant impact under CEQA

Recommended Potentially Feasible Mitigation Measure(s) (Regarding Mitigation Measure or Alternative and Related Impact Shortcoming)

Mitigation Measure 2:

To minimize significant impacts: CDFW recommends including the following new measure in the environmental document:

MM-X: Burrowing Owl. Pre-construction Burrowing Owl Survey. Burrowing owl surveys shall be conducted by a qualified biologist at least 14 days prior to any Project activities, at any time of year. Surveys shall be completed following the recommendations and guidelines provided within the Staff Report on Burrowing Owl Mitigation (CDFG, March 2012) or most recent version by a qualified biologist. If an active burrowing owl burrow is detected within any Project disturbance area, or within a 500-foot buffer of the disturbance area, a 300- foot radius buffer zone surrounding the burrow shall be flagged, and no impacts to soils or vegetation or noise levels above 65 dBA shall be permitted while the burrow remains active or occupied.

Disturbance-free buffers may be modified based on site-specific conditions in consultation with CDFW. The qualified biologist shall monitor active burrows daily and will increase buffer sizes as needed if owls show signs of disturbance. If active burrowing owl burrows are located within any work area and impact cannot be avoided, a qualified biologist shall submit a burrowing owl exclusion plan to CDFW for review and approval. The burrowing owl exclusion plan shall include permanent compensatory mitigation consistent with the recommendations in the Staff Report on Burrowing Owl Mitigation such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. Passive relocation shall take place outside the nesting season (1 February to 31 August).

Response:

Per the BRA, there are no BUOW occurrences documented in the project area. The nearest documented occurrences are three miles west of the Project site. The assessment survey was structured, in part, to detect BUOW. The survey consisted of walking transects spaced to provide 100% visual coverage of the project site, including an approximately 500-foot buffer area around the Project site. The result of the survey was that no evidence of BUOW was found in the survey area. No BUOW individuals or sign including pellets, feathers or whitewash were observed.

Per the definition provided in the 2012 CDFG Staff Report on Burrowing Owl Mitigation, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey." Therefore, although the Project site does contain friable soils, it would not be considered suitable for BUOW because the it is mostly barren and no appropriately sized burrows or burrow surrogates were detected within the Project site or adjacent areas.

Comment #3 : BIO-X, Desert Tortoise

Section IV, Page 25

Issue: CDFW appreciates the DPW inclusion of an initial survey for desert tortoise, a threatened species. However, there is no measure in place to address avoidance, minimization, or mitigation measures should desert tortoise enter the Project site during the life of the Project.

Specific impact: Project activities have the potential to take desert tortoise, a CESA-listed specie

Why impact would occur: The MND does not ensure a qualified biologist, experienced in locating desert tortoise individuals in all life stages and their sign, completed the survey following CDFW approved protocols. Additionally, should desert tortoise presence be confirmed, during surveys or within the 100-year timeframe, the MND lacks avoidance, minimization and mitigation to avoid take.

Evidence impact would be significant: Desert tortoise is a CESA-listed species. Take (hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) is prohibited unless authorized by state law (Fish and Game Code, §§ 2080 & 2085).

Mitigation Measure 3:

To minimize significant impacts: If the Project, including the Project construction or any Project-related activity during the life of the Project, results in take of CESA listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation through an incidental take permit (ITP). CDFW recommends adding the following measure:

MM BIO-X: Desert Tortoise Surveys. A qualified biologist shall conduct a protocol level presence or absence survey no more than 14 days prior to initiating Project activities in accordance with the survey methodology described in U.S. Fish and Wildlife Service Desert Tortoise (Mojave Population) Field Manual. In addition, the survey shall utilize perpendicular survey routes and 100-percent visual coverage of the Project area and 50-foot buffer zone for desert tortoise and their sign. If the survey confirms absence, a qualified biological monitor shall remain on-site during all Project activities to confirm desert tortoise do not enter the Project site. If the survey confirms presence, the Project Proponent shall obtain an ITP for desert tortoise prior to the start of Project activities. If the biological monitor during the life of the Project encounters a desert tortoise, work shall be suspended, and the Project Proponent shall obtain an ITP for the species prior to the restarting Project activities.

Focused surveys should be conducted for desert tortoises following this approved CDFW protocol: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=174633&inline

- *CDFW recommends DPW condition the environmental document to include on-site worker education about any sensitive wildlife species that may occur in the area*

- *Additionally, CDFW requests to be contacted immediately should sensitive wildlife species be present in the Project area.*

Response:

Per the BRA and the CNDDB, the nearest documented desert tortoise occurrence (2006) is approximately 5 miles northwest of the Project site. There are no desert tortoise occurrences documented in the project area and there is no suitable habitat for this species within the Project site.

Per the USFWS desert tortoise Critical Habitat overlay, the project site is not within any USFWS designated desert tortoise Critical Habitat. Furthermore, the Project site is not within a BLM designated Desert Wildlife Management Area (USFWS 2011). Therefore, the habitat surrounding the site would be characterized as Category 3 Habitat, per the BLM categorization of desert tortoise habitat on public lands.

The site surveys were structured, in part, to detect desert tortoise. The survey consisted of walking transects spaced approximately 10 meters apart to provide 100% visual coverage of the Project site, as well as an approximately 500-foot buffer area surrounding the site. The result of the survey was that no evidence of desert tortoise was found in the survey area. No desert tortoise individuals or sign including burrows or scat were observed. Therefore, desert tortoise are considered absent from the Project site and no further mitigation is required.

Comment #4: Editorial Comments and/or Suggestions

CDFW also recommends DPW include the following mitigation measures should trenches be exposed to prevent potential impacts to biological resources:

MM-X: Escape Ramp in Trench. At the end of each workday, the Biological Monitor(s) shall place an escape ramp at each end of the open trench to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degree.

MM-X: Trench inspections and monitoring. A biological monitor should be present before, during and after ground disturbing activities. Additionally, inactive and active trenches should be surveyed (3) times a day for sensitive wildlife; before activities begin, after lunch and after activities have ceased for the day. If sensitive or protected wildlife are encountered during these surveys CDFW should be notified immediately.

MM-X: On-site Education. A qualified biologist shall conduct an education program for all persons employed or otherwise working on the Project site prior to performing any work on-site. The program shall consist of a presentation that includes a discussion of the biology of the habitats and species that may be present at the site. The qualified biologist shall also include as part of the education program information about the distribution and habitat needs of any special status species that may be present, legal protections for those species, penalties for violations, and mitigation measures. Education should include but not be limited to desert tortoise, burrowing owl, special status plant species, and nesting birds. Interpretation shall be provided for non-English speaking workers, and the same instruction shall be provided for any new workers prior to their performing work onsite.

Response:

Comment Noted. However, the proposed operation will not include trench mining as it is a proposed shallow open pit borrow site. With that said, mitigation measures will be considered. However, the DPW implements standard desert tortoise protection measures on its activities including employee education in the desert areas of the County as well as ongoing training.

Comment #5

Lastly, CDFW would like to note the Fish and Game Commission has received a petition to list Western Joshua Tree (Yucca brevifolia) as a threatened species under CESA. It is expected the

Fish and Game Commission may make a decision in August 2020. CDFW recommends DPW review the listing status prior to finalizing the MND as it may affect the legality of the MND. If the Project, including the Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation through an ITP.

Response:

The Project site itself is largely disturbed and devoid of vegetation with some native and non-native species colonizing the edges, buffer areas, and other unused areas that will not be disturbed. No Joshua Trees are within the project area.

Comment #6

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDB_FieldSurveyForm.pdf. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp.

Response:

Comment noted, the BRA did utilize the CNDDB.

If you have any further questions and wish to discuss our resonses, please email or call me.

Thank you,

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