



Lake Street Storage Project

Appendix B

Habitat Assessment and Western Riverside County Multiple Species
Habitat Conservation Plan Consistency Analysis for the Lake Street
Storage Project, Soar Environmental Consulting, March 25, 2019



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**Habitat Assessment and
Western Riverside County Multiple Species Habitat
Conservation Plan Consistency Analysis
for the
Lake Street Storage Project**

Assessor Parcel Number 390-130-050

Lake Elsinore, California

November 18, 2017

(Amended March 25, 2019)



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1. Executive Summary

On November 3, 2017, Soar Environmental Consulting Wildlife Biologist, Rachel Simmons, visited the 14.44-acre Project site located at Assessor Parcel Number 390-130-050 in Lake Elsinore, California. Ms. Simmons conducted a thorough assessment of potential habitats within the site and determined the site does not contain suitable habitat for the following species listed in the Western Riverside County Multiple Species Habitat Conservation Program (MSHCP): Burrowing Owl, Criteria Area Species (thread-leaved brodiaea, Davidson's saltscale, Parish's brittlescale, smooth tarplant, round-leaved filaree, Coulter's goldfields, little mousetail), and Narrow Endemic Plant Species (Munz's onion, San Diego ambrosia, slender-horned spineflower, many-stemmed dudleya, spreading navarretia, California Orcutt grass, San Miguel savory, Hammitt's claycress, Wright's trichocoronis). The project site soil types consisted of Honcut sandy loam, Honcut loam, Temescal rocky loam, and Tujunga gravelly loamy sand. Due to these soils, the lack of vegetation, and current hydrology, no vernal pool habitat is present within the Project boundaries. Numerous rock piles along the perimeter and interior of the Project site provide potential nesting habitat for Rock Wrens (*Salpinctes obsoletus*), a species protected by the Migratory Bird Treaty Act. The conserved area immediately to the northeast of the Project site provides suitable habitat for nesting birds, including Least Bell's Vireo (*Vireo bellii pusillus*). The riverine habitat immediately south of the Project site is suitable for nesting birds and various riparian species. The Project site is consistent with the MSHCP Cell Criteria, as there is demonstrated connectivity between the land immediately surrounding it, and Cells 3853 and 3855. A list of recommendations for abiding by MSHCP guidelines for Urban/Wildlands interface is included in Section 7 of this report.

Table of Contents

1. Executive Summary.....	2
2. Introduction	4
3. Methods.....	6
4. Results.....	7
5. Habitat Assessment Conclusions	8
6. MSHCP Consistency Analysis	9
7. Recommendations	12

List of Figures

Figure 1 – Location Map.....	4
Figure 2 – Aerial Map.....	5
Figure 3 – Eastern Edge of Project Site	6
Figure 4 – Southern Border of Project Site	6
Figure 5 – MSHCP Cell Map.....	9
Figure 6 – MSHCP Cell Map.....	11
Figure 7 – Conserved Lands	12
Figure 8 – Rock pile/potential Rock Wren nesting habitat	13
Figure 9 – Temescal Wash	14

Addendum A – Lake Street Map and Grading Update

Addendum B – MSHCP Appendix C BMP Discussion

Addendum C – Post Final Mining Reclamation Analysis

Addendum D – Revised Fence and Wall Plan MSHCP Consistency Analysis

2. Introduction

Lake Street Properties, LP (Client) is proposing to construct a gas station, indoor RV storage unit, and self-storage facility (Project) in the city of Lake Elsinore, California, on the 14.44-acre site comprised of Assessor Parcel Number 390-130-050 (**Figures 1 and 2**). The gas station is proposed in the westernmost portion of the property, the indoor RV storage facility on the center of the property, and the self-storage facility is proposed on the easternmost portion of the property. The Project site was an active sand and gravel mine from approximately 1993 to 2005, and, an aggregate concrete and base processing site from 2005 until 2015. The property currently serves as a reclaimed mine site. As a result, the site is extensively graded and supports minimal plant and animal life. Ms. Simmons estimates that approximately 95-97% of the property is devoid of vegetation.

Figure 1 – Location Map

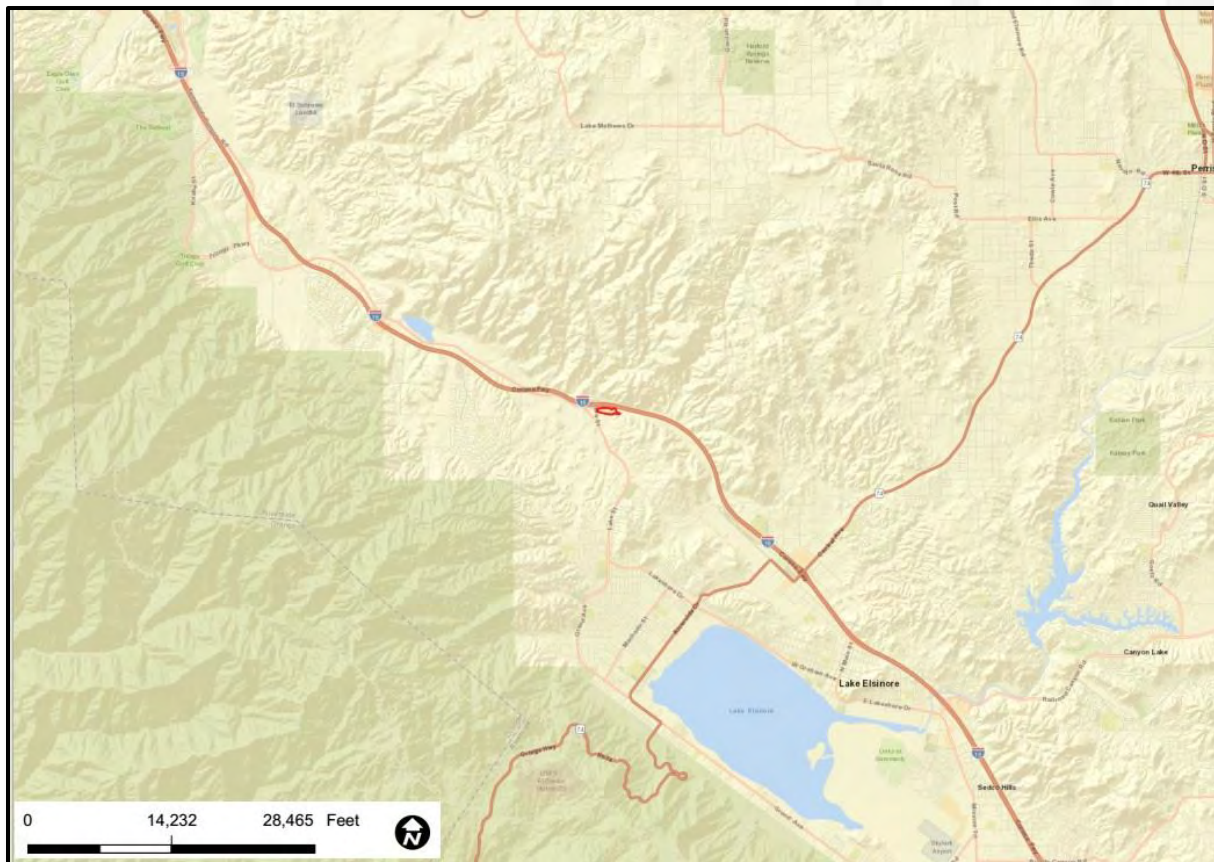


Figure 2 – Aerial Map



The Project site is intensely disturbed and predominantly consists of extensively graded coarse-grained alluvium soils. The habitat immediately surrounding the Project site is foothill grasslands, chaparral, riparian scrub, and ruderal. The dominant vegetation types identified along the perimeter and immediately outside the property boundaries are tumbleweed, willow (*Salix* spp.), eucalyptus (*Eucalyptus* spp.), tamarisk (*Tamarix* spp.), sacred datura (*Datura wrightii*), California buckwheat (*Eriogonum fasciculatum*), sunflower (*Helianthus* spp.), filaree (*Erodium* spp.), lettuce (*Lactuca* spp.), black mustard (*Brassica nigra*), and brome grass (*Bromus* spp.).

According to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the sensitive species likely to be located in the Project area are Burrowing Owl (*Athene cunicularia*), Criteria Area Species (thread-leaved brodiaea (*Brodiaea filifolia*), Davidson's saltscale (*Atriplex serenana* var. *davidsonii*), Parish's brittlescale (*Atriplex parishii*), smooth tarplant (*Centromadia pungens* spp. *laevis*), round-leaved filaree (*California macrophylla*), Coulter's goldfields (*Lasthenia glabrata* spp. *coulteri*), little mousetail (*Myosurus minimus* L.), and Narrow Endemic Plant Species (Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), slender-horned spineflower (*Dodecahema leptoceras*), many-stemmed dudleya (*Dudleya multicaulis*), spreading navarretia (*Navarretia fossalis*), California Orcutt grass (*Orcuttia californica*), San Miguel savory (*Satureja chandleri*), Hammitt's claycress (*Sibaropsis hammittii*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*)). Previous surveys have found Least Bell's Vireo (*Vireo bellii pusillus*) in Temescal Wash 1.9 miles upstream from the Project site.

Foothill grassland/chaparral habitat exists to east of the property boundary (Figure 3).

Figure 3 – Eastern Edge of Project Site



The Project site is bordered by foothill grasslands to the south and ruderal habitat immediately outside the property boundaries (**Figure 4**).

Figure 4 – Southern Border of Project Site



3. Methods

Ms. Simmons conducted the habitat assessment on November 3, 2017. To accurately assess the site, Ms. Simmons walked the perimeter boundary a total of three times and canvassed the interior from high vantage points along the property boundaries. While systematically walking the perimeter, Ms. Simmons

searched for signs of, and suitable habitat for, Burrowing Owl (BUOW), Criteria Area Species (thread-leaved brodiaea, Davidson's saltscale, Parish's brittlescale, smooth tarplant, round-leaved filaree, Coulter's goldfields, little mouseling), Narrow Endemic Plant Species (Munz's onion, San Diego ambrosia, slender-horned spineflower, many-stemmed dudleya, spreading navarretia, California Orcutt grass, San Miguel savory, Hammitt's claycress, Wright's trichocoronis), vernal pools and associated species, nesting bird habitat, and riverine/riparian species and habitat, in accordance with the MSHCP.

4. Results

Ms. Simmons conducted a systematic pedestrian survey for each of the species listed in the MSHCP with the potential to occur in the Project area. During the survey, no signs of BUOW nor suitable habitat for BUOW were observed. BUOW exhibit a strong preference for relatively flat or gently rolling, open grasslands with a high concentration of small mammal burrows, particularly those of California ground squirrels (*Otospermophilus beecheyi*). As previously mentioned, approximately 95-97% of the on-site habitat is intensely disturbed, supporting a minimal amount of flora and fauna. The graded Project is unsuitable for use by burrowing mammals such as California ground squirrels and BUOW. The habitat immediately surrounding the Project site, though vegetated and not as disturbed, is not ideal habitat for BUOW. The foothill grasslands to the north, west, and east are too steep for the species. The chaparral/grassland immediately to the south holds potential for BUOW; however, the dense vegetation renders it less than ideal. The potential for detecting BUOW in, or near the Project site, is very low.

No MSHCP Criteria Area Species (Thread-leaved brodiaea, Davidson's saltscale, Parish's brittlescale, Smooth tarplant, Round-leaved filaree, Coulter's goldfields, Little mouseling) were observed on, or surrounding the Project site. The on-site habitat does not have the potential to support any of these listed species due to its disturbed nature and coarse-grained soils (**Tables C-1 and C-2**). Additionally, the habitats immediately outside the property boundary are less than ideal due to their ruderal nature and the presence of invasive species such as Black mustard.

No Narrow Endemic Plant Species (Munz's onion, San Diego ambrosia, slender-horned spineflower, many-stemmed dudleya, spreading navarretia, California Orcutt grass, San Miguel savory, Hammitt's claycress, Wright's trichocoronis) were detected on, or surrounding the Project site. The on-site habitat does not have the potential to support any of these species, due to the absence of clay soils and because the site has been repeatedly disturbed for over 20 years. The habitats immediately outside the Project footprint are less than ideal for these species due to the absence of clay soils, their ruderal nature, and the presence of invasive species such as black mustard.

The potential for vernal pools and associated species is minimal to non-existent on the Project site due to the nature of the coarse-grained soil types, and the length of time that the property has been repeatedly disturbed. There is potential for vernal pools to exist immediately outside Project boundaries, however, during the survey, the wildlife biologist observed no signs of vernal pools, or ephemeral pools were observed.

The rock piles along the Project perimeter and interior are potential habitat for Rock Wren (*Salpinctes obsoletus*), which may nest in cavities and crevices in and among the rock piles. Two Rock Wrens were observed on-site during the survey. Other areas with potential for nesting birds falls outside Project boundaries. One such area is the Temescal Wash, which is located along the southern border of the

property. The presence of tree snags and various riparian plants offers suitable nesting habitat for riverine species, including House Wrens (*Troglodytes aedon*) and Bewick's Wrens (*Thryomanes bewickii*). Both wren species were detected during the survey. The conserved area on the northeast corner of the Project site bears tremendous nesting bird potential, as the vegetation is dense and is likely to provide ample food sources.

The potential for riverine/riparian species on the Project site does not exist as it is almost entirely devoid of vegetation from repeated grading and mining operations through the years. However, Temescal Wash, which runs along the southern border of the property, has the potential to support a multitude of riparian species in addition to nesting birds.

5. Habitat Assessment Conclusions

The Project site does not contain signs of, or suitable habitat for BUOW, Criteria Area Species (Thread-leaved brodiaea, Davidson's saltscale, Parish's brittlescale, Smooth tarplant, Round-leaved filaree, Coulter's goldfields, Little mousetail), and Narrow Endemic Plant Species (Munz's onion, San Diego ambrosia, slender-horned spineflower, many-stemmed dudleya, spreading navarretia, California Orcutt grass, San Miguel savory, Hammitt's claycress, Wright's trichocoronis), or vernal pools and associated species. Approximately 95-97% of the property has been graded repeatedly since 1983, thus rendering it highly inadequate for most plant and animal species in the vicinity. Due to the high degree of alteration and continued disturbance, the likelihood of any of the above listed sensitive species occupying the Project site is minimal to non-existent.

The Project site contains a number of rock piles along the perimeter and in various areas in the interior that hold the potential for nesting habitat for Rock Wrens, which are protected by the Migratory Bird Treaty Act. Two of these species were observed during the survey in and near rock piles. As its name implies, this species is often found near rocks and prefers to nest in cavities and crevices in and among rocks.

Temescal Wash, the riverine habitat immediately south of the Project site, is highly suitable for various nesting birds and other riparian species. During the survey, Ms. Simmons noted the presence of numerous tree snags with cavities that are highly suitable nesting sites for House Wrens and Bewick's Wrens, both of which were detected near the ephemeral stream bed. Temescal Wash also provides ample habitat for mammals, reptiles, amphibians, and various plant species.

On the northwest corner of the lot, just outside the property boundaries, Ms. Simmons observed a small grove of Eucalyptus trees with the potential to conceal nests of hawks and smaller birds.

The conserved area immediately northeast of the Project site is an excellent habitat area for nesting birds, mammals, reptiles, and amphibians. At least three different bird species known to nest in Riverside County were detected in this vicinity, along with at least one species of reptile, neither of which appear on the MSHCP list.

6. MSHCP Consistency Analysis

The Project site is located in Western Riverside County and is subject to the rules and regulations set forth in the MSHCP. The Project site is located the Elsinore Area Plan of the MSHCP, specifically within Subunit 1 – Estelle Mountain/Indian Canyon, Cell Group J, Cells 3751 and 3752 (Figure 5).

Figure 5 – MSHCP Cell Map



The focus of reserve assembly for these cells and cell groups is Proposed Core 1. Proposed Core 1 exists in two blocks, one east and one west of the I-15. The Project is located within the western block of Proposed Core 1. Connections are made from Proposed Core to Proposed Linkage 1, Proposed Linkage 2 (Alberhill Creek), Proposed Linkage 3, and Existing Core C (Lake Mathews/Estelle Mountain). Key planning species potentially located within Proposed Core 1 are Coastal California Gnatcatcher, Cactus Wren, Tricolored Blackbird, Southwestern Willow Flycatcher, Munz's onion, and many-stemmed dudleya.

The total target acreage for Proposed Core 1 is approximately 7,740 acres. The proposed Project meets the reserve assembly and cores/linkages connectivity goals for Proposed Core 1 by being consistent with the goals and objectives of its local Cell Group (Cell Group J of the Estelle Mountain/Indian Canyon Subunit of the Elsinore Area Plan). Project development will not impede the completion of Proposed Core 1, as

the conservation acreage goals for Cell Group J have already been met. Further discussion of how the Project meets the conservation goals for Cell Group J is discussed below.

The Project is located within Subunit 1, Estelle Mountain/Indian Canyon. The target acreage for Additional Reserve Lands within Subunit 1 is 4,100 to 6,030 acres. Planning species within Subunit 1 include Bell's Sage Sparrow, Coastal California Gnatcatcher, Cooper's Hawk, Least Bell's Vireo, Loggerhead Shrike, Mountain Quail, Southwestern Willow Flycatcher, White-tailed Kite, Yellow-breasted Chat, Yellow Warbler, bobcat, mountain lion, Stephen's kangaroo rat, many-stemmed dudleya, and Munz's onion. There are 10 Biological Issues and Considerations pertinent to Subunit 1, including:

1. *Provide connection between the Santa Ana Mountains, the Temescal Wash, and the foothills north of Lake Elsinore (Estelle Mountain, Sedco Hills); existing connections appear to be at Indian Canyon, Horsethief Canyon, and open upland areas southwest of Alberhill.*
2. *Conserve wetlands including Temescal Wash.*
3. *Conserve clay soils supporting many-stemmed dudleya and Munz's onion.*
4. *Conserve foraging habitat for raptors, providing a sage scrub-grassland ecotone.*
5. *Maintain Core Area for bobcat.*
6. *Maintain Core and Linkage Habitat for mountain lion east of I-15.*
7. *Maintain Core and Linkage Habitat for Stephens' kangaroo rat east of I-15.*
8. *Maintain Core and Linkage Habitat for Quino checkerspot butterfly.*
9. *Maintain connection to mountains to provide movement opportunities for Mountain Quail.*
10. *Conserve habitats for Coastal California Gnatcatcher and other coastal sage scrub and chaparral species.*

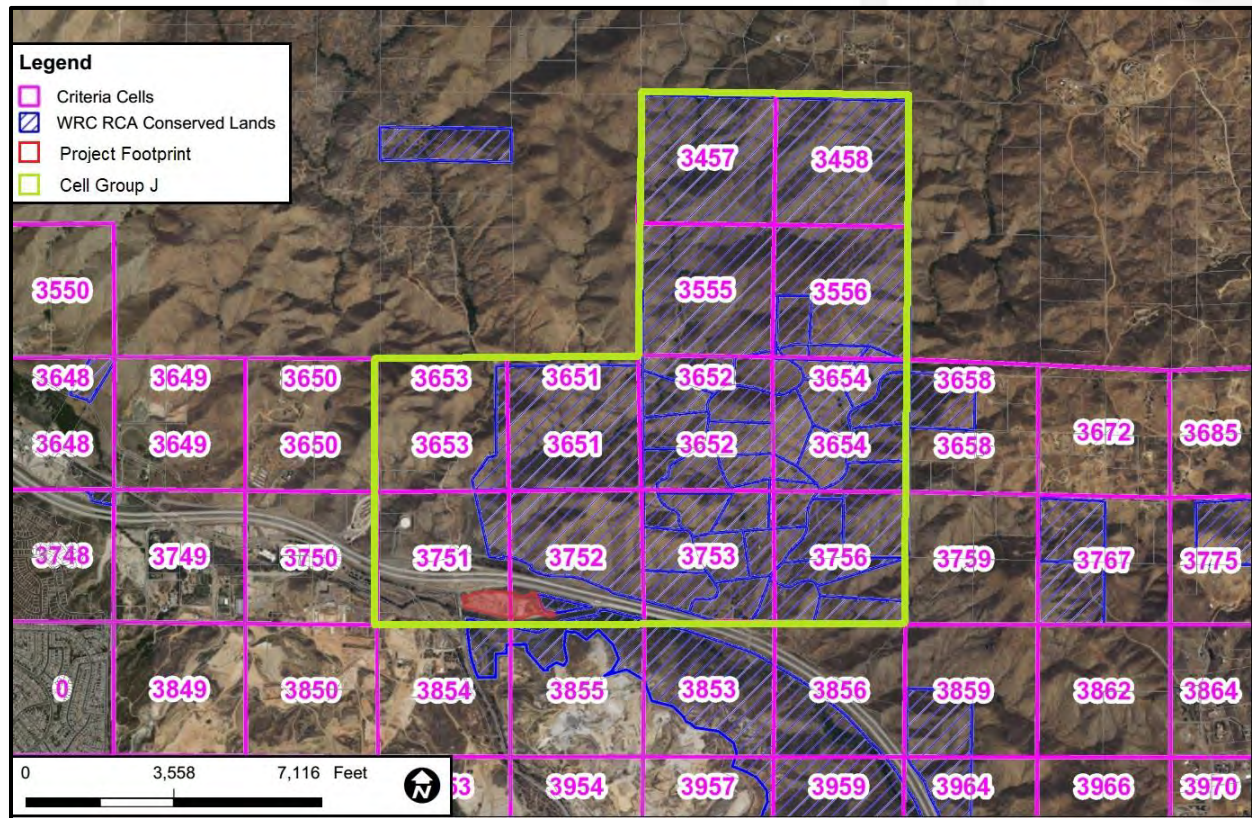
The proposed Project meets the connectivity and conservation goals for Subunits 1 and 2 by maintaining connectivity to Temescal Wash, and by providing no negative impacts to wetlands features within the Temescal Wash, located south of the Project site. The biological issues and considerations for Subunits 3 through 10 are not applicable as the Project site does not support suitable habitat for these referenced species. During the Habitat Assessment, the Soar Environmental biologist conducted specific surveys to determine the potential for the presence of Munz's onion and many-stemmed dudleya. The wildlife biologist reported that suitable habitat for each of these special-status species is not present within the Project site. Wildlife connectivity through the Project site has been heavily impacted by decades of continuous mining activities. The proposed Project would not provide further impacts to wildlife connectivity through the Site.

The MSHCP sets forth conservation criteria for each Cell Group within an area plan. The conservation criteria for Cell Group J states the following:

Conservation within this Cell Group will contribute to assembly of Proposed Core 1. Conservation within this Cell Group will focus on coastal sage scrub, chaparral, grassland, riparian scrub, woodland and forest habitat. Areas conserved within this Cell Group will be connected to upland habitat proposed for conservation in Cell #3853 and #3855, and Cell Group O all to the south, to coastal sage scrub habitat proposed for conservation in Cell Group L to the east, to riparian habitat proposed for conservation in Cell Group I to the west, and to existing PQP Lands to the north and west. Conservation within this Cell Group will range from 75%-85% of the Cell Group focusing in the western and northern portions of the Cell Group. (MSHCP, Section 3.3.3, Table 3-4)

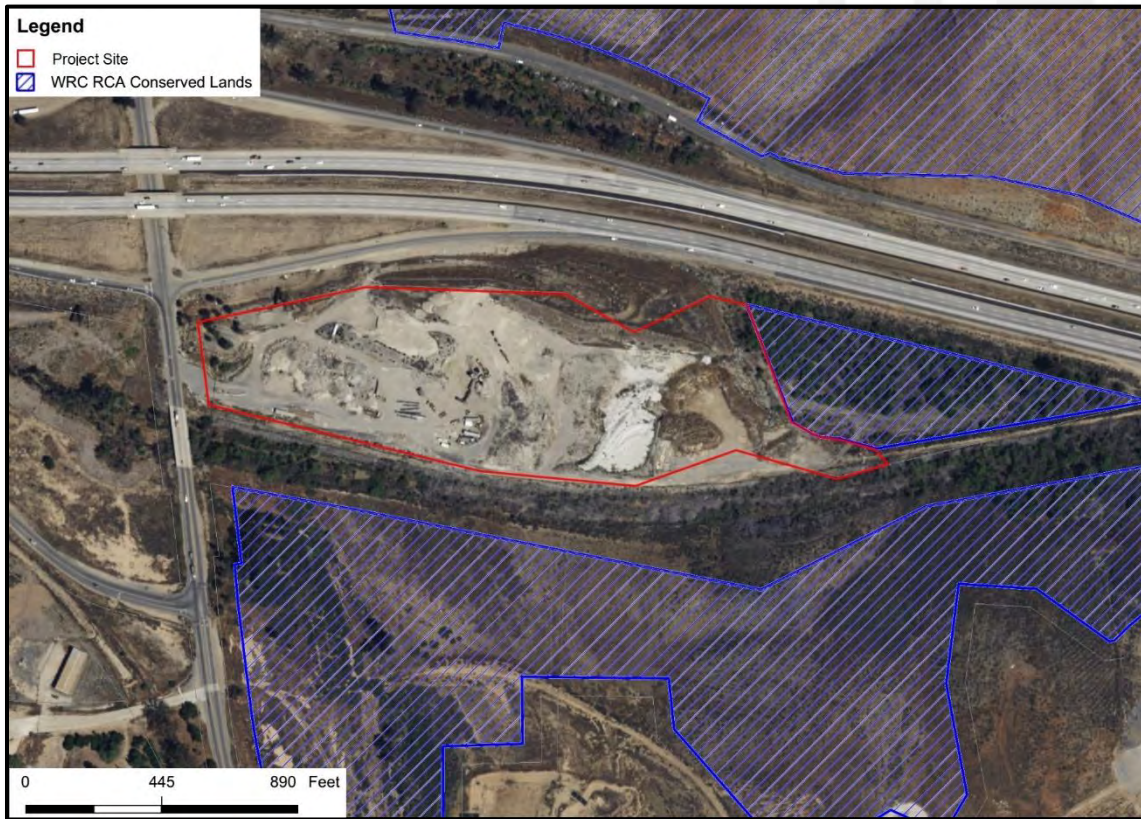
Cell Group J is comprised of 12 cells totaling 1,920 acres. In accordance with the cell criteria, conservation acreage totals range from 1,440 to 1,632 acres (75% to 85%), primarily in the western and northern portions of Cell Group J. At this time, approximately 1,593 acres (83%) of land within Cell Group J is conserved under the Western Riverside County Regional Conservation Authority (RCA) (**Figure 6**).

Figure 6 – MSHCP Cell Map



The Project site does not support the habitat types targeted for conservation within Cell Group J. RCA conserved lands immediately south of the Project site provide connectivity from Cell Group J to upland habitat in Cells #3853 and #3855. Other previously conserved lands within Cell Group J accomplish the majority of connectivity goals for this cell, including connecting to Cell Group O to the south, Cell Group L to the east, and existing Public/Quasi-Public lands to the north and west. The Project accomplishes the final connectivity goal of Cell Group J criteria by not impacting riparian habitat connectivity to Cell Group I to the west (**Figure 7**).

Figure 7 – Conserved Lands



The Project appears to be consistent with the MSHCP Cell Criteria, as the conservation acreage goals for Cell Group J have already been accomplished, and the Project does not conflict with the connectivity goals for Cell Group J.

In order to be fully consistent with the MSHCP, the Project must comply with all regulations set forth in Section 6.1.4, Land Use Guidelines Pertaining to Urban/Wildlands Interface, of the MSHCP. This is discussed in greater detail in Section 7 of this report.

7. Recommendations

Wildlife Exclusion

Exclusionary wildlife fencing should be erected and maintained around the Project perimeter to prevent entry of wildlife species that may become harmed or cause a delay in construction activities.

Rock Wrens

As previously mentioned, Rock Wrens were detected on the Project site in and near rock piles (**Figure 8**). As this species nests and finds refuge in and among rocks, the Soar Environmental Wildlife biologist recommends that all rock piles be surveyed by a qualified biologist prior to being disturbed, especially if the movement is taking place during the nesting season (February through September). If any active or potentially active nests are observed on-site, monitoring efforts should be undertaken to ensure that no

nests, eggs, juvenile, or adult birds are harmed. If active nests are located, construction activities in the vicinity should cease until a qualified biologist has determined that the young have fledged. It may be necessary to implement a buffer around nests until the biologist can ensure that the young have fledged. A qualified biologist must make this determination based on the birds' behaviors.

Figure 8 – Rock pile/potential Rock Wren nesting habitat



Nesting Birds

If construction activities are to commence at any time during the nesting season (February through September), pre-construction surveys should be performed by a qualified wildlife biologist to determine whether there are nesting birds in the Temescal Wash (**Figure 9**), in the eucalyptus trees immediately northwest of the Project site, or in the conserved area immediately northeast of the Project site. If nesting birds are located and it is determined that the nests are within 150 feet of Project-related construction activities, monitoring efforts should be undertaken to ensure that no nests are harmed or abandoned due to any disturbances stemming from Project activities. In some cases, it may be necessary to implement a buffer around active nests to protect the fledgling(s). A qualified biologist will make this determination based on the birds' behaviors.

Figure 9 – Temescal Wash



MSHCP Urban/Wildlands Interface Guidelines

As the Project is urban in nature and is located immediately west of RCA conserved lands, the Project must comply with all MSHCP Urban/Wildland Interface Guidelines as set forth in Section 6.1.4 of the MSHCP. Recommendations for complying with these guidelines are provided below.

Drainage

The Project should incorporate measures to ensure that the quality and quantity of runoff discharged offsite is not altered in an adverse way. Presently, the Project site drains to the west as sheet flow towards the Temescal Wash, though there is no discernable water course or channel. The proposed Project would incorporate measures required by the National Pollutant Discharge Elimination System, including the preparation of a Water Quality Management Plan and Storm Water Pollution Prevention Plan, to ensure that Best Management Practices (BMPs) are incorporated into the project activities to prevent negative impacts from stormwater to the MSHCP Conservation Area.

During-, and post-construction, the contractor will implement BMPs to control run-on and run-off, prevent erosion and sedimentation, and create a proper drainage design to ensure non-stormwater discharges do not occur, as described in measures and conditions of the SWPPP and any environmental water quality certification permits. The Qualified SWPPP Developer (QSD) should consult the Standard Best Management Practices outlined in Appendix C of the MSHCP. A more detailed discussion of the MSHCP Standard Best Management Practices is located in Addendum B of this report.

Toxics

Measures shall be incorporated to describe the use and storage of chemicals or bio-products on-site so they do not adversely affect wildlife species, habitat, or water quality, and do not negatively impact the MSHCP Conservation Area. Proper design of the gas station, propane distribution, and/or RV Storage facilities on the Project site shall comply with all federal, state, and local laws and permit regulations.

Lighting

Night lighting will be focused away from any MSHCP Conservation areas, and light shielding will be incorporated into the final Project design to ensure ambient light in the conserved areas is not increased.

Noise

The MSHCP states that wildlife within an MSHCP Conservation Area should not be subject to noise exceeding residential noise standards. The proposed storage facility is the closest structure to the conserved lands east of the Project site. Due to the proposed hours of operation, the nature of the type of activities that are anticipated to occur, and the Project's proximity to the I-15 freeway, no mitigation to reduce Project noise from normal operating business activities is anticipated. Any Project potential noise impacts will be analyzed during the Project California Environmental Quality Act approval process.

Invasives

All Project landscaping shall avoid the use of plants shown on MSHCP Table 6.2. These species will be excluded from landscape plans, and project landscaping will be maintained to prevent invasive plant species from taking root and going to seed on the proposed Project.

Barriers

The edges of the Project that are directly adjacent to the MSHCP Conservation Area shall include walls, fences, or other barriers to prevent unauthorized public access, domestic animal predation, illegal trespass, excessive noise, or dumping in the MSHCP Conservation Area. Barriers may include native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanism. The proposed Project will incorporate such barriers into the Project design.

Grading/Land Development

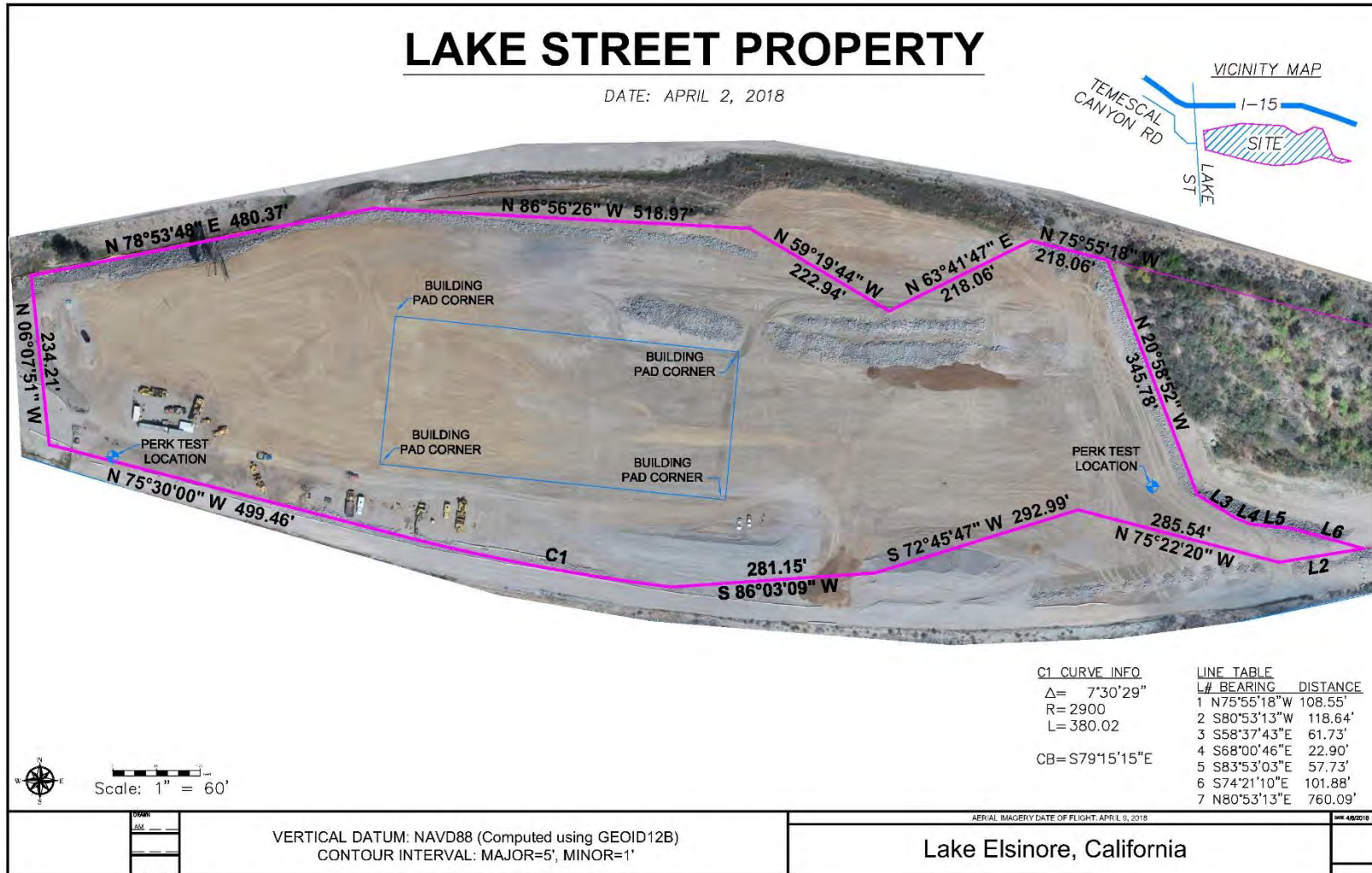
The MSHCP describes a requirement that manufactured slopes associated with the proposed site development shall not extend into the MSHCP Conservation Area. Site boundaries should be clearly marked in the field when grading the Project site near the conservation area to ensure no encroachment occurs. Figure A-1 of the attached habitat assessment also shows that manufactured slopes from the final mining reclamation activities do not extend into the MSHCP Conservation Area.

Addendum A – Lake Street Map and Grading Update

On April 16, 2018, the Client provided Soar Environmental with a revised map of the Project site showing all mining reclamation activities as complete. This revised map illustrates the finalized reclamation condition for the Project site with the property boundary in pink (**Figure A-1**). The Project boundary in the map below represents a minor boundary correction by a professional surveyor and is a slight modification to the approximate Project boundary as shown in Figure 2 of this report. Most importantly, the surveyed boundary shows that the Project does not encroach on the vegetated conservation area east of the Project location.

The proposed Project activities and potential impacts have not changed since Soar Environmental conducted this report for the Project site in November 2017. As such, all conclusions and recommendations described in this report remain the same. The proposed Project remains consistent with the MSHCP Cell Criteria, as the conservation acreage goals for Cell Group J have been met, and the Project does not conflict with the connectivity goals for Cell Group J. The Client should follow the Site-specific recommendations set forth by Soar Environmental in Section 7 of this report in order to remain consistent with the MSHCP and the Migratory Bird Treaty Act, including following the MSHCP Urban/Wildlands Interface Guidelines as set forth in Section 6.1.4 of the MSHCP.

Figure A-1 – Lake Street Final Mining Reclamation Map



Addendum B – MSHCP Appendix C BMP Discussion

Volume I, Appendix C of the MSHCP contains a list of 15 Standard BMPs recommended for ground disturbing projects occurring within the MSHCP. Each Standard BMP is listed below in italics, with project discussion and recommendations in plain text.

1. *A condition shall be placed on grading permits requiring a qualified biologist to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.*

In the event that a grading permit is required for the Project, a qualified biologist will prepare and implement a Worker Environmental Awareness Program (WEAP) to train all Project personnel prior to grading. The details of the training should be consistent with MSHCP Appendix C Standard BMP No. 1, the general provisions of the Endangered Species Act, include a detailed discussion of how to identify the potential special-status plant and animal species that may be encountered during ground disturbance and construction activities, and necessary actions to take if the species are observed on-site.

2. *Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.*

The RWQCB requires the creation and implementation of a Project-specific SWPPP prior to initial ground disturbance. The Project-specific SWPPP describes BMPs that will be implemented in pre-, during-, and post-construction phases. Examples of BMPs may include dust suppression BMPs, Low Impact Developments (LIDs) such as vegetated swales, and a spill response protocol. The SWPPP is a dynamic document that shall be amended when site conditions warrant changes to protect natural resources and prevent discharge of non-stormwater to neighboring parcels.

The Qualified Stormwater Developer (QSD) will develop and implement the SWPPP with site-specific BMPs to prevent/reduce the potential for erosion, sedimentation, and offsite discharge of non-stormwater in accordance with the Construction General Permit (CGP), National Pollutant Discharge Elimination System (NPDES) MS4 permit, and a 401 Water Quality Certification Permit (if applicable). The QSD will provide training to the contractor for performing regular site inspections, and for pre-, during-, and post-storm events to ensure that BMPs are functioning as intended.

3. *The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.*

The Project construction footprint will remain within the limits of the current property boundary. In accordance with measures and conditions of permits, site ingress/egress will be limited to the least impactful location. Soar Environmental recommends site access be limited to the existing property entrance and exit on Lake Street at the western end of the property. Trackout (riprap, rumble strips) will be installed to prevent tracking of sediment to public roadways.

4. *The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.*

Ground disturbance will be limited to the property boundary as shown in Figure A-1, and Project boundaries shall be clearly delineated with visible means (i.e. stakes, rope, flagging, snow fence, etc.). The contractor will adhere to the measures and conditions in all environmental permits to protect Jurisdictional Waters of the United States. Additionally, the Client may opt to install wildlife exclusionary fencing (WEF) around the Project perimeter to reduce the potential for accidental take of species that may enter the site during construction.

5. *Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.*

During the habitat assessment, no habitat for target species was observed within the Project Boundaries. The Project site does not contain stream channels, gravel bars, or streambanks. The coarse-grained soil onsite has insufficient clay/fines and does not allow standing water to persist in durations sufficient to support many of the target species. All Project-related construction activities will occur within the property boundaries as shown in Figure A-1 of this report. No equipment or personnel will work outside the clearly identified Project boundaries.

6. *Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.*

Ground disturbance activities that occur during the nesting season should be monitored by a qualified wildlife biologist. During the habitat assessment, no sensitive habitats were observed within the Project boundaries, including riparian habitat. Care will be taken to ensure that construction activities do not negatively impact potentially sensitive habitats or species surrounding the Project site. Construction equipment and personnel will be made aware of MSHCP Global Species Objective No. 7 as part of the WEAP training and will remain within Project boundaries at all times.

7. *When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.*

No water diversion activities are proposed during Project activities. Erosion and sediment control BMPs will be implemented throughout the Project site to reduce/prevent sediment from impacting the Temecula Wash in pre-, during- and post-construction phases. Personnel will be educated during WEAP training as to the importance of preventing impacts to the Wash from construction activities.

8. *Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.*

All project activities shall occur within the property boundary and outside of the Temescal Wash. Equipment storage, fueling and staging areas will be located outside any sensitive habitats and in areas with no risk of direct drainage into the surrounding wash and other sensitive habitats. All fuel storage tanks will have secondary containment to retain fuel spills. Construction equipment and materials will be staged as far from the Temescal Wash as practical. The site-specific SWPPP will have BMPs designed to prevent the release of cement or other toxic substances into surface waters or bare soil, as required by the RWQCB. All potentially hazardous materials will be stored appropriately on-site away from sensitive habitats or Waters of the United States. Concrete washouts and active/inactive materials stockpiles will have secondary containment BMPs to prevent the accidental release of hazardous substances to bare soil. The SWPPP is required to have a Spill Prevention Control and Countermeasure (SPCC) to describe necessary actions that should occur in the event of a spill or release of potentially hazardous substances. Spills or releases of toxic substances greater than five-gallons shall be reported to the RWQCB, DTSC, Local Municipalities, and/or federal agencies, as appropriate.

9. *Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.*

No erodible fill material will be deposited into, or stockpiled near the Temescal Wash. Materials stockpiles will be located away from sensitive areas. Inactive materials stockpiles will be covered and bermed to prevent windborne dust or accidental release. The SWPPP will describe BMPs to prevent fugitive dust from migrating to neighboring parcels or the Wash.

10. *The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.*

Site-specific biological mitigation measures will be developed during the Project California Environmental Quality Act approval process, subsequent to recommended pre-construction biological surveys. If necessary, a qualified wildlife biologist will be onsite to ensure that all measures to protect species on, and offsite, are being implemented during construction activities. Section 7 of this report provides recommendations for wildlife exclusionary fencing, rock wren surveys, and nesting bird surveys. Additional protective measures will be implemented as necessary by the qualified Project biologist to avoid incidental disturbance of habitat and species of concern outside the project footprint.

11. *The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.*

No clearing and grubbing of native vegetation is anticipated during the Project activities as the Project site is almost entirely devoid of vegetation. Permanent or temporary impacts are not known at this time as the final Project design has not yet been determined. It is possible that vegetated areas will be planted with native species, however, the vegetation will be maintained to prevent non-native species from becoming normalized within the Project boundaries. The final Project contours will be determined during the design phase; however, the final contour will be away from sensitive habitats.

- 12. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.*

No exotic species were encountered during the Project habitat assessment and none will be utilized in any revegetation efforts. The final landscaping design may incorporate native plant species; however, regular landscape maintenance will prevent exotic, or noxious plant species from taking root on the Project.

- 13. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).*

BMPs for trash storage and removal will be discussed in detail in the Project-specific SWPPP, including containment of sanitation facilities (e.g. portable toilets), and covering waste disposal containers at the end of every business day and before rain events. Trash cans will have a fastenable lid to prevent animals from accessing or spreading trash onsite. The Project-QSD should consult the MSHCP Appendix C Standard Best Management Practices, RWQCB recommendations, and any applicable environmental permit measures and conditions when developing the Project SWPPP.

- 14. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.*

In accordance with the WEAP, all Project activities will occur within the clearly delineated property boundaries. Construction activities will be confined to the Project footprint, and approved routes of travel will be established, including ingress/egress points. Exclusion fencing shall be utilized throughout the Project duration.

- 15. The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.*

The Contractor will allow the Permittee access to the construction site. All visitors will check in with the Project Engineer (or Site Supervisor) prior to accessing the construction site and will be escorted within Project boundaries during normal business hours when construction activities are occurring.

Addendum C – Post Final Mining Reclamation Analysis

C.1 Introduction

On September 7, 2018, in order to complete their review of the Project under the Joint Project Review process in compliance with Section 6.6.2.E of the MSHCP, RCA requested additional Project-related information from the City of Lake Elsinore. The requested additional information included further discussion and analysis for the potential presence of vernal pool habitat, potential habitat for Riverside fairy shrimp, Least Bell's Vireo (LBV), Criteria Area Species Survey Area (CASSA) habitat, and treatment of on-site stormwater during- and post-construction. This addendum contains additional information, analysis, and discussion of the said requested categories.

The current proposed Project represents the fourth extensive development activity on-site since 1978 (**Figure C-1**). In 1978, Caltrans constructed I-15 immediately north of the Project. During this phase of previous development impacts, Temescal Wash was diverted from north to south of the Project site (**Figure C-2**). The second major development occurred in 1993 with the creation of the WYROC mine, which converted the remainder of the Project site from vacant to developed land (**Figure C-3**). The third major development occurred in 2017-2018 where mine reclamation activities required the entire property be graded relatively flat (**Figure A-1**).

The former Lake Street mining operation, originally developed in 1993, was approved for commercial use under the City of Lake Elsinore Alberhill Specific Plan. The site operated as an active sand and gravel mine from approximately 1993 to 2005, and as an aggregate concrete and base processing site from 2005 until 2015. The entire site was graded from July 28, 2017 to March 19, 2018, as shown in **Figure A-1** (South Shore Testing & Environmental 2018) in preparation of redevelopment activities. This resulted in approximately 152,000 cubic yards of cut soil, and 134,000 cubic yards of fill soil according to the Mass Grading Design (Hunsaker & Associates 2017a). The reclaimed gravel mining site, reclaimed in accordance with the Lake Street Property Mining and Reclamation Plan 90-3, is proposed to be redeveloped for a different urban use.

The MSHCP specifically states that "it is understood that review of a site for consistency with the MSHCP Criteria is properly made when the site is initially converted from vacant to developed land. Redevelopment of a site from one urban use to another would not be subject to MSHCP Criteria except with respect to the potential net change in the requirements" (MSHCP Section 3.3.1). All additional information, analysis, and discussion contained within this Addendum C is made within this context.

Figure C-1 – Project Site 1975



Figure C-2 – Project Site 1978



Figure C-3 – Project Site 1994

C.2 Vernal Pool and Fairy Shrimp Habitat

Vernal pools are defined by the MSHCP as “seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season” (MSHCP Section 6.1.2). Fairy shrimp habitat is restricted to vernal pools and “other non-vegetated ephemeral pools greater than 12 inches (30.5 centimeters) in depth in Riverside, Orange, and San Diego County” (UFWS 2008).

C.2.1 Project Site Soils

According to the US Department of Agriculture Natural Resources Conservation Service Web Soil Survey, soils on the Project site prior to the onset of mining operations consisted of Honcut sandy loam, Honcut loam, Temescal rocky loam, and Tujunga gravelly loamy sand, as seen in **Table C-1** and **Figure C-4** (USDA 2018). Each of these four relatively coarse-grained soil types allow for moderate drainage. Neither field observations, nor the Soil Survey, indicated the potential on-site presence of clay soils, hardpan, or bedrock, which are necessary for vernal pool habitat to be present. The moderately well-drained soils onsite do not possess the water retention characteristics necessary to form vernal pools.

In addition, the site has been graded so land contours are relatively flat. During the survey, the Wildlife Biologist did not observe any depressions, road cuts, or other non-vernal pool features where water could potentially pool during, and after storm events. The current project site has been graded to a 5% maximum contour and contains no depressions to allow the formation of vernal or ephemeral pools (Hunsaker & Associates 2017b). Additionally, the moderately well-draining soils do not provide sufficient depth and duration for standing water in depressions or ephemeral pools capable of sustaining fairy shrimp.

Specific soil types are one of the three specific parameters required for the delineation of vernal pools. If one or more of the parameters is not present on-site, by definition, vernal pools cannot be present.

Table C-1 – Project Pre-Development Soil Types

USDA Project Soil Types	
Map Unit Symbol	Map Unit Name
HnD2	Honcut sandy loam, 8 to 15 percent slopes, eroded
HuC2	Honcut loam, 2 to 8 percent slopes, eroded
TbF2	Temescal rocky loam, 15 to 50 percent slopes, eroded
TwC	Tujunga gravelly loamy sand, 0 to 8 percent slopes

C.2.2 Project Site Vegetation

During the grading process of 2017-2018, the entire site was denuded of vegetation, as shown in **Figure C-4** (before) and **Figure A-1** (after), as recommended in the Geological Feasibility Study (Southern California Geotechnical 2017). Since the grading occurred, no vegetation has been established within project boundaries. Rainfall totals are apparently insufficient to support any vegetation, especially wetland species.

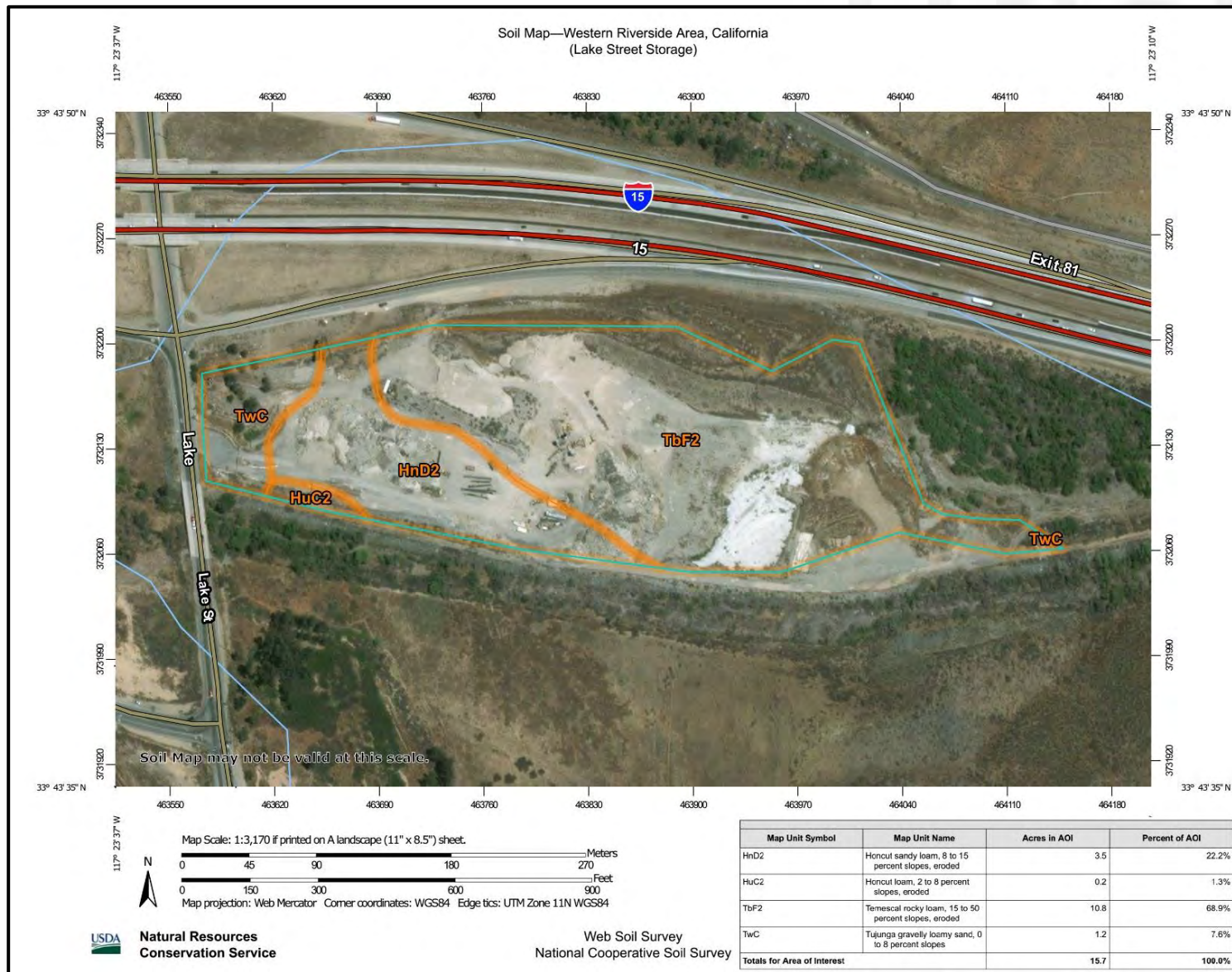
Specific wetland vegetation is one of the three required parameters for vernal pool delineation. If one, or more, of these parameters is not present on-site, by definition, vernal pools cannot be present.

C.2.3 Project Site Hydrology

Hydrology is the third parameter required for vernal pool delineation. Water for vernal pools can be sourced from stormwater that collects in pools and is present for sufficient duration of time, or from underground sources, such as a shallow groundwater table, springs, or artesian wells. The average annual rainfall total for Riverside County is 10.32 inches, however, temperatures in the area are typically such that evaporation equals, or exceeds, precipitation. During the survey, the Wildlife Biologist did not observe any evidence of seeps, springs, or wet soil from underground sources. In addition, no evidence of standing water (i.e. fine-grained soils, mud cracks, etc.) was observed, and no depressions to retain standing water with sufficient depth to sustain branchiopods were observed onsite.

Appropriate hydrology is one of the three required parameters for the delineation of vernal pool habitat. If one, or more, of these parameters is not present on-site, by definition, vernal pools cannot be present.

Figure C-4 – USDA Soil Map



C.3 Least Bell's Vireo

Least Bell's Vireo (LBV) (*Vireo bellii pusillus*) is a small insectivorous bird that is federally listed as endangered (USFWS 1986). Historically, this subspecies of the Bell's vireo (*Vireo bellii*) ranged from coastal Southern California to the San Joaquin and Sacramento Valleys. Owing predominantly to habitat loss and nest predation, LBV has been extirpated from much of its historic range and is now found primarily in Southern and coastal California. During the breeding season, which lasts from March 15 through September 15, LBV exhibit a strong preference for early-to-mid successional riparian habitat, typically consisting of dense stands of willow or cottonwood, with equally dense shrubby understories. Such habitats allow for nest concealment and provide an ample insect prey base. LBV territories range in size from 0.5 to 7.5 acres.

C.3.1 LBV Habitat

The MSHCP describes LBV habitat as "occupy riverine riparian habitats that typically feature dense cover within 1-2 meters of the ground and a dense, stratified canopy. It [LBV] inhabits low, dense riparian growth along water or along dry parts of intermittent streams. Typically, it is associated with southern willow scrub, cottonwood forest, mule fat scrub, sycamore alluvial woodland, coast live oak riparian forest, arroyo willow riparian forest, wild blackberry, or mesquite in desert localities" (MSHCP Volume 2, Birds). As the Project site itself has been graded and is completely devoid of vegetation (**Figure A-1**), it is not expected that LBV will use any portion of it for nesting or foraging purposes. Temescal Wash runs along the southern border of the Project site, and contains a mixture of habitat both unsuitable, and potentially suitable, for LBV (**Figure C-5**). Prior surveys near Nichols Road and Interstate 15 documented the presence of LBV within the Temescal Wash two miles upstream from the Project site. Unless protocol level surveys demonstrate no presence of LBV within the Temescal Wash adjacent to the Project site, the potential LBV habitat shown in Figure C-5 should be considered as occupied by LBV.

Figure C-5 – Off-Site LBV Potential Habitat



Immediately southeast of the Project site, Temescal Wash contains a stand of cottonwood trees (**Figure C-6**).

Figure C-6 – Temescal Wash, South-East of Project Site, Looking East



This stand of trees provides the dense understory needed by LBV for nesting purposes.

Immediately southwest of the Project site, adjacent to Lake Street, Temescal Wash contains a stand of willows, which provides a small patch of potentially suitable LBV habitat (**Figure C-7**).

Figure C-7 – Temescal Wash, South-West of Project Site, Looking South



Between the stand of cottonwood and the stand of willow on the east and west ends of Temescal Wash as it runs south of the Project site, there is very sparse vegetation consisting of tree snags, scattered tamarisk trees, various grasses, and a minimal amount of herbaceous cover, rendering it unsuitable for LBV (**Figure C-8**).

Figure C-8 – Temescal Wash, South of Project Site, Looking South



The conserved area to the east of the Project site also has potentially suitable LBV habitat, as it contains an appropriate amount of dense vegetative cover (**Figure C-9**).

Figure C-9 – Conserved Area, East of Project Site, Looking North



C.3.2 Least Bell's Vireo Recommended Mitigation Measures

As the sections of Temescal Wash southwest and southeast of the Project site, and the conserved area east of the Project site, contain potentially suitable LBV habitat, it is recommended that measures be taken to ensure the protection of the species from adverse impacts stemming from Project activities.

C.3.2.2 LBV Nesting Season Recommended Mitigation Measures

If ground-breaking activities are to occur during the LBV nesting season (March 15-September 15), it is recommended that a qualified biologist conduct focused surveys along the Temescal Wash immediately south of the Project site. If the survey findings are negative, project activities may proceed without the implementation of any specific mitigation measure for protecting LBV. However, it is also recommended that the qualified biologist conduct monthly surveys of the area throughout the duration of the nesting season.

If the survey findings are positive, it is recommended that the biologist perform additional surveys to determine whether or not nesting is taking place within 300 feet of the Project site. If LBV are located, but nesting cannot be confirmed, it is recommended that Project activities not occur within 100 feet of

the suitable habitat area(s) until the nesting season has ended. If nesting is confirmed, it is recommended that Project activities not occur within 150-200 feet of the nest site until it has been confirmed that the young have fledged, and the nest is no longer active. A qualified biologist should always be present when construction crews are working within 1/8 mile surrounding a LBV nest site, to ensure that the birds do not react unfavorably to Project activities. If the qualified biologist observes signs of agitation stemming from Project activities, he or she should request that the activities cease and not resume again until the birds' behavior normalizes. If the birds continue to exhibit signs of agitation, it is recommended that Project activities be adjusted to accommodate the nesting birds' needs.

C.3.2.2 LBV Non-Nesting Season Recommended Mitigation Measures

If ground breaking activities are to occur outside the LBV nesting season (September 16-March 14), it is recommended that a qualified biologist perform a presence/absence survey along the Temescal Wash immediately south of the Project site, and continue these surveys on a monthly basis, especially as breeding season commences.

C.3.2.3 LBV Noise and Lighting Recommended Mitigation Measures

In the presence of LBV nests, the noise level from Project activities is not to exceed 65 dBA. If this is not possible, a noise barrier should be constructed to avoid adverse impacts to the LBV nest(s). Also, it is recommended that during the LBV breeding season, artificial light should not be cast into LBV habitat when night work is occurring.

C.3.3 MSHCP LBV Biological Objective 3

The MSHCP LBV Biological Objective 3 states that "If [LBV] survey results are positive, 90 percent of the occupied portions of the property that provide for long-term conservation value for the vireo shall be conserved in a manner consistent with conservation of the vireo. This will involve including 100 meters of undeveloped landscape adjacent to the Habitat conserved" (MSHCP Volume 1, Appendix E). However, as discussed previously in this Addendum, the Project is a **redevelopment** of an already existing urban use that predates the adoption of the MSHCP and does **not** have any undeveloped landscape on the Project site (**Figure C-10; Figure C-11**). The MSHCP defines development as "the uses to which land shall be put, including construction of buildings, structures, infrastructure and all alterations of the land" (MSHCP Volume 1, MSHCP Definitions). Prior developments of the Project site, including the Lake Street mine, have rendered the Project site 100% developed. No undeveloped land exists within the Project boundaries.

The former Lake Street mining operation, originally developed in 1993, was approved for commercial use under the City of Lake Elsinore Alberhill Specific Plan. This original development predates the 2003 adoption of the MSHCP by ten years. The site operated as an active sand and gravel mine from approximately 1993 to 2005, and as an aggregate concrete and base processing site from 2005 until 2015. As previously stated, the site was reclaimed in accordance with the Lake Street Property Mining and Reclamation Plan 90-3 and is proposed to be redeveloped for a different urban use. There is no existing undeveloped land on the Project site.

Figure C-10 – Temescal Wash, South-West of Project Site, Looking East



Figure C-11 – Lake Street Developed and Undeveloped Land Use



C.3 Criteria Area Species Survey Area (CASSA) Habitat

The current Project represents the fourth extensive development activity on-site since 1978 (**Figure C-2**). In 1978, Caltrans constructed I-15 immediately east of the Project. During this phase of Project impacts, Temescal Wash was diverted from north to south of the Project site (**Figure C-3**). The second major development occurred in 1993 with the creation of the WYROC mine, which converted the remainder of the Project site from vacant to developed land (**Figure C-4**). The third major development occurred in 2017-2018 where mine reclamation activities required the entire property be graded relatively flat (**Figure A-1**).

The former Lake Street mining operation, originally developed in 1993, was approved for commercial use under the City of Lake Elsinore Alberhill Specific Plan. The reclaimed gravel mining site, reclaimed in accordance with the Lake Street Property Mining and Reclamation Plan 90-3, is proposed to be redeveloped for a different urban use. The site operated as an active sand and gravel mine from approximately 1993 to 2005, and, as an aggregate concrete and base processing site from 2005 until 2015. The entire site was graded from July 28, 2017 to March 19, 2018, as shown in **Figure A-1** (South Shore Testing & Environmental 2018) in preparation of redevelopment activities. This resulted in approximately 152,000 cubic yards of cut soil, and 134,000 cubic yards of fill soil according to the Mass Grading Design (Hunsaker & Associates 2017a).

The Project site has been disturbed since 1978. During the grading process of 2017-2018, the entire site was denuded of vegetation, as shown in **Figure A-1** (before) and **Figure C-1** (after), as recommended in the Geological Feasibility Study (Southern California Geotechnical 2017). Since the grading occurred, no vegetation has been established within project boundaries.

According to the US Department of Agriculture Natural Resources Conservation Service Web Soil Survey, soils on the Project site consist of Honcut sandy loam, Honcut loam, Temescal rocky loam, and Tujunga gravelly loamy sand, as seen in **Table C-1** and **Figure C-1** (USDA 2018). Each of these four relatively coarse-grained soil types allow for moderate drainage. Neither field observations, nor the Soil Survey, indicated the potential on-site presence of clay soils, hardpan, or bedrock

The site has been graded so land contours are relatively flat. During the survey, the Wildlife Biologist did not observe any depressions, road cuts, or other non-vernal pool features where water could potentially pool during, and after storm events. The current project site has been graded to a 5% maximum contour and contains no depressions to allow the formation of vernal or ephemeral pools (Hunsaker & Associates 2017b).

The Project site is within a CASSA for thread-leaved brodiaea, Davidson's saltscale, Parish's brittlescale, smooth tarplant, round-leaved filaree, Coulter's goldfields, and little mousetail. These species and their habitat type are listed in **Table C-2** below. These species occur in playa, vernal pool, alkali flat, or clay soil habitats not present on the property. The Wildlife Biologist did not observe sign of species or suitable habitat on the Project site for any of the CASSA species listed below.

The habitat immediately surrounding the Project site is foothill grasslands, chaparral, riparian scrub, and ruderal. The dominant vegetation types identified along the perimeter and immediately outside the property boundaries consists of tumbleweed, willow (*Salix* spp.), eucalyptus (*Eucalyptus* spp.), tamarisk (*Tamarix* spp.), sacred datura (*Datura wrightii*), California buckwheat (*Eriogonum fasciculatum*),

sunflower (*Helianthus* spp.), filaree (*Erodium* spp.), lettuce (*Lactuca* spp.), black mustard (*Brassica nigra*), and brome grass (*Bromus* spp.).

Table C-2 – Project CASSA Species

USDA Project Soil Types		
Common Name	Species Name	Ecology
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	Vernal pools.
Davidson's saltscale	<i>Atriplex serenana</i> var. <i>davidsonii</i>	Alkaline flats.
Parish's brittlescale	<i>Atriplex parishii</i>	Playa, vernal pools.
Smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	Alkaline soils in flats, depressions, and waterways in grassland and disturbed places.
Round-leaved filaree	<i>Erodium macrophyllum</i>	Clay soils in grassland and scrub.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Salt marsh, playa, vernal pools.
Little mousetail	<i>Myosurus minimus</i>	Vernal pools.

C.4 On-Site Stormwater Treatment

The proposed project would incorporate measures, including those required through NPDES requirements, to ensure that no runoff will be discharged to the MSHCP Conservation area. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, landscape materials and other elements that might degrade or harm biological resources or ecosystem processes within the MSHCP Conservation Area. This would be accomplished by using one or more of the following methods: low impact development (LID) practices, natural detention basins, grass swales, and/or mechanical trapping devices.

Regular maintenance shall occur to ensure effective operation of BMPs, and the owner will operate the business in accordance with the requirements of any environmental permits, including, but not limited to, the Industrial General permit, the 401 Water Quality Certification permit, and/or the MSHCP. Specific SWPPP related BMPs proposed for each phase of construction (Clear and Grub, Grading, Vertical Construction, Post Construction) to protect natural resources and for permit compliance will be developed prior to ground disturbance activities, as required. The project currently has a site-specific Water Quality Management Plan. The owner must submit a site-specific Stormwater Pollution Protection Plan to the Regional Water Quality Control Board for approval prior to ground disturbance, in accordance with NPDES requirements.

C.5 Works Cited

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- Hunsaker & Associates. 2017a. WYROC – Lake Elsinore Mass Grading Design as of May 31, 2017.
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- United States Fish and Wildlife Service (USFWS). 2008. 5-Year Review, Riverside Fairy Shrimp (*Streptocephalus woottoni*). Online: https://www.fws.gov/carlsbad/SpeciesStatusList/5YR/20080930_5YR_RFS.pdf. Accessed September 13, 2018.

Addendum D – Revised Fence and Wall Plan MSHCP Consistency Analysis

On December 21, 2018 the Project applicant submitted a revised Fence and Wall Plan to the City of Lake Elsinore. The updated plan includes a 6-foot wall instead of a fence along portions of the southern and eastern Project boundaries (**Figure D-1**). The remainder of the Project boundary will be fenced in accordance with the fence and wall plan. It is our understanding that:

- 1) RCA recommended the wall instead of a proposed fence during the Joint Project Review under the MSHCP, and that,
- 2) The City included the wall as a condition of Project approval.

Soar Environmental reviewed the revised fence and wall plan, and determined the change to the Project is consistent with the MSHCP under Section 6.1.4 Urban/Wildland Interface Guidelines for lighting and barriers. The wall will:

- 1) Potentially decrease ambient light during the night in the surrounding conserved areas by serving as a more solid barrier than a fence, and
- 2) Serve as a more solid barrier to exclude wildlife from the Project area.

All other analysis, conclusions, and recommendations within this report remain the same.

Figure D-1 – Lake Street Revised Fence and Wall Plan

