GENERAL BIOLOGICAL RESOURCES ASSESSMENT

PINON HILLS GAS STATION
APN 3066-191-04

SAN BERNARDINO COUNTY, CALIFORNIA
(USGS Phelan, CA Quad.; Township 4 North, Range 7 West, Section 22)

Prepared for:

George Wanis
9128 Green Road
Pinon Hills, California 92372

Prepared by:

RCA Associates, Inc.
15555 Main Street, #D4-235
Hesperia, California 92345
Randall C. Arnold, Jr., Principal Investigator
(760) 956-9212
Project No: RCA#2017-13

Report Prepared by Randall C. Arnold, Jr.

Revised October 2, 2017

Table of Contents

EXECUTIVE SUMMARY

The project proponent is proposing to construct a gas station on a 3.01-acre parcel (APN 3066-1891-04) located in San Bernardino County, California (Section 22, Township 4 North, Range 7 West) in San Bernardino County. The site is bordered on the north and west by residential dwellings and on the south and east by State Highway 138 and Beekley Road respectively. The property supports a Joshua tree (*Yucca brevifolia*) woodland with co-dominants desert sage (*Salvia dorrii*), Mojave rabbitbrush (*Ericameria nauseosa var. mohavensis*) and California buckwheat (*Eriogonum fasciculatum*). Joshua tree woodlands provide habitat for a variety of wildlife species including desert wood rats (*Neotoma* sp.) and night lizards *(Xantusia* sp.) both of which utilize the base of the trees. A variety of birds also utilize Joshua trees for nesting such as hawks, common ravens, and cactus wrens. CDFW consider Joshua tree woodlands as areas that support relatively high species diversity and as such are considered to be a sensitive desert communities.

In addition to the baseline surveys conducted on the 3.01-acre site, the site was also evaluated for the presence of suitable habitat for the burrowing owl and the desert tortoise since the site is located within the known distribution of these species. Field investigations were conducted on March 23, 2017. No special status wildlife species were observed during the field work, and the results of the surveys are summarized in the following sections.

1.0 PROJECT AND PROPERTY DESCRIPTION

The property consists of relatively undisturbed land which supports a Joshua tree woodland community. The 3.01-acre property is located directly west of Beekley Road and directly north of State Highway 138 (Township 4 North, Range 7 West, Section 22) at an elevation of approximately 4,390 feet (MSL) (Figures 1 & 2). Soils consisted of sandy gravelly loam. No water resources (i.e., stream channels, ponds, etc.) were observed on the site during the field investigations, and the USGS Phelan Quadrangle (1996) does not show any such habitats on the site or in adjacent areas (Figure 2). An ephemeral desert wash is located approximately 200 feet west of the property and traverses in a southwest to northeast direction; however, this wash does not cross the property at any point. As stated above, the property supports a Joshua tree woodland community. This habitat is capable of supporting relatively high species diversity and as such is considered to be a sensitive desert community.

Weather conditions during the March 13, 2017 survey consisted of winds of 5 to 10 mph, temperatures in the low 50's (AM, °F), with ten percent cloud coverage. The site is bordered on the north and west by residential dwellings and on the East and south by Beekley Road and State Highway 138 respectively. The vegetation on the site consisted of a lush chapparel community dominated by desert sage (*Salvia dorrii*), Mojave rabbitbrush (*Ericameria nauseosa var. mohavensis*) and California buckwheat (*Eriogonum fasciculatum*). The project map is provided below (Figure 1), and the USGS quadrangle map is provided in Figure 2. Figure 3 provides photographs of the site. The proponent is proposing to construct a gas station on the site.

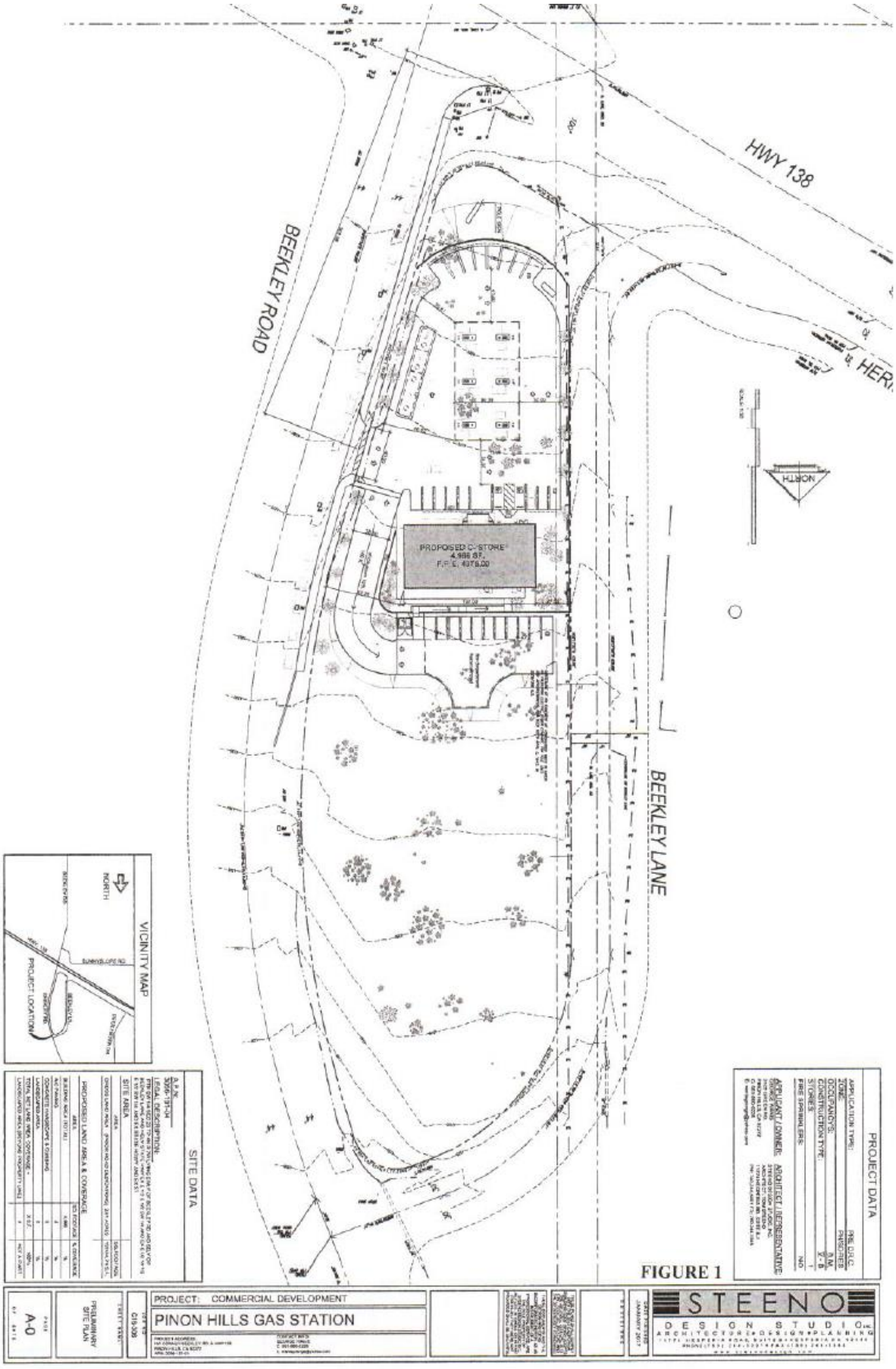

HWY 138
BEEKLEY ROAD
BEEKLEY LANE
PROPOSED C-STORE
4,986 SF.
F.F.E. 4978.00
NORTH
VICINITY MAP
PROJECT LOCATION
SITE DATA
PROJECT DATA
PROJECT: COMMERCIAL DEVELOPMENT
PINON HILLS GAS STATION
PRELIMINARY SITE PLAN
A-0
STEENO
DESIGN STUDIO
ARCHITECTURE + DESIGN + PLANNING

FIGURE 1

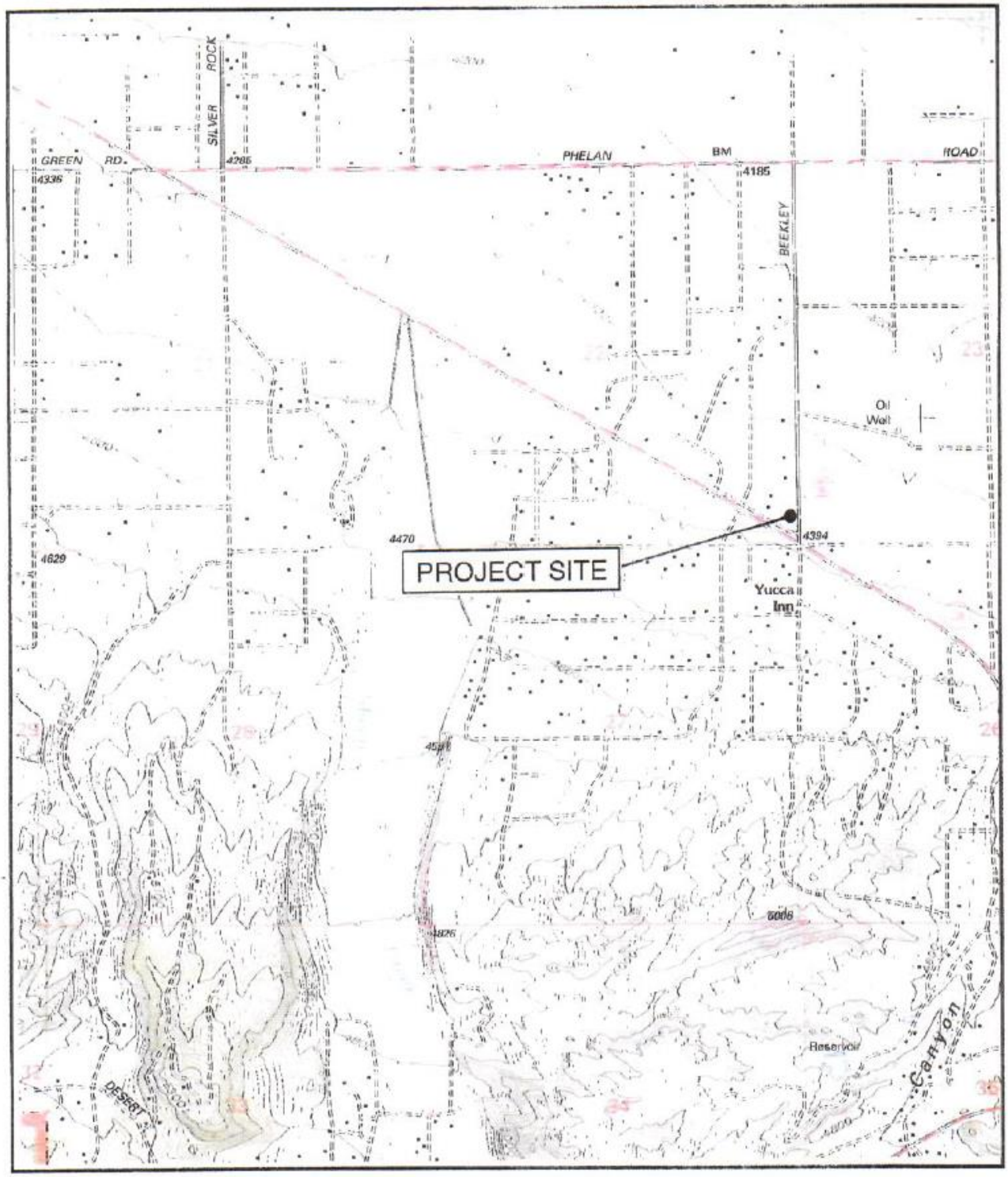
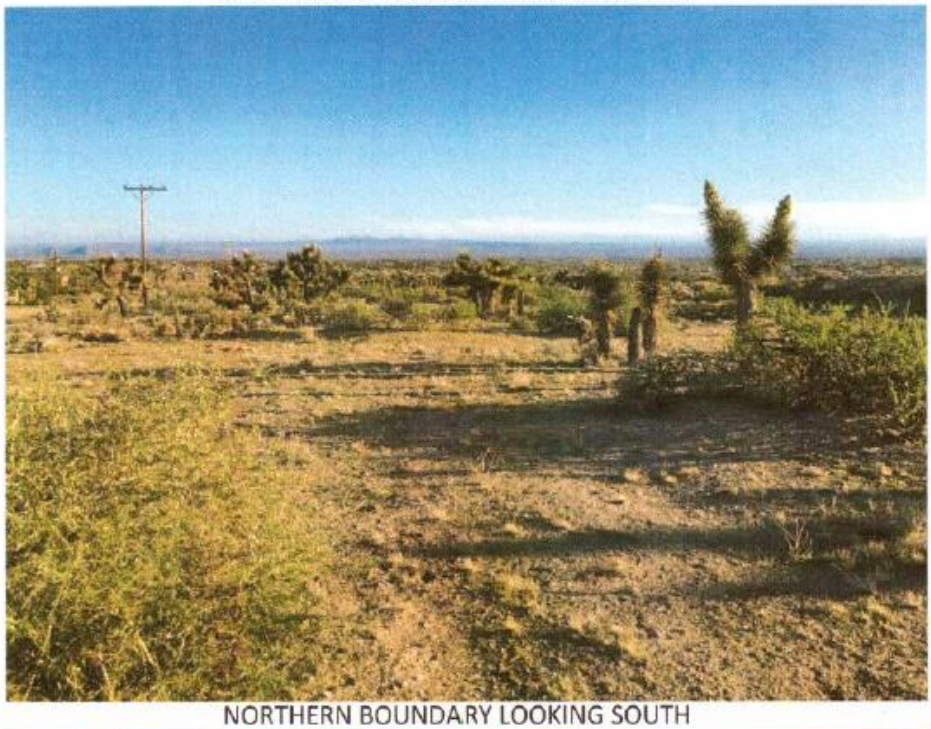


FIGURE 2

PROPERTY LOCATION
(Source: USGS Phelan, CA Quadrangle, 1996)

SOUTHERN BOUNDARY LOOKING NORTH



NORTHERN BOUNDARY LOOKING SOUTH

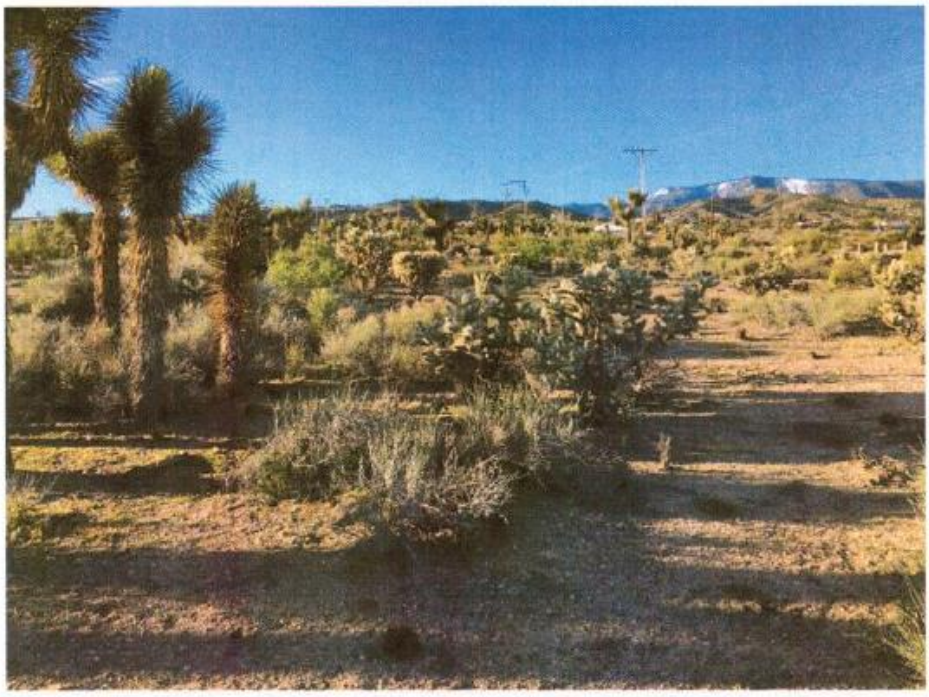


FIGURE 3
SITE PHOTOS

2.0 LITERATURE/RECORD REVIEW - SPECIES OF SPECIAL CONCERN

As part of the environmental process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed to determine if any listed and/or sensitive species have been documented in the area surrounding the site. The Federal Endangered Species Act provides protection for species of fish, wildlife, and plants that are listed by the US Government as threatened or endangered in the U.S., and the Act outlines procedures for Federal agencies to follow when evaluating projects which may jeopardize any listed species. In addition, The California Endangered Species Act (CESA) provides protection to those species which are deemed to be threatened with a significant decline or extinction within California, and the CESA provides CDFG with the responsibility of evaluating projects which may effect sensitive species.

Based on a literature review, a search of USFWS and CDFG data bases, and a search of the California Natural Diversity Database (CNDDB), it was determined that there are seven sensitive species that have been documented in the surrounding region within approximately five to seven miles of the site (CNDDB, 2017). These species include white pygmy poppy (*Canbya candida*), short-joint beavertail cactus (*Opuntia basilaris var. brachyclada*), coast horned lizard (*Phrynosoma blainvillii*), Le Conte's thrasher (*Toxostoma lecontei*), Mohave ground squirrel (*Xerospermophilus mohavensis*), burrowing owl (*Athene cunicularia*), and desert tortoise (*Gopherus agassizii*). Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980). Table 1 (Appendix A) provides a detailed summary of the sensitive species listed above. Following the data review, general biological surveys were performed on the site on March 23, 2017 by a biologist from RCA Associates, Inc. from approximately 0630 to 1030 hours. As part of the surveys, the project site and the adjoining lands were evaluated for the presence of native habitats which could potentially support populations of special status species.

3.0 METHODOLOGIES

General Vegetation and Wildlife

General biological surveys were conducted on March 23, 2017 during which a biologist (i.e., Randall C. Arnold, Jr.) from RCA Associates, Inc. walked parallel 10-meter transects in a north-south direction from 0630 to 1030 hours in order to provide 100 percent coverage of the site. No Zone of Influence (ZOI) surveys were performed in the surrounding area due to the presence of existing residential dwellings and private property, as well as the presence of Beekley Road and State Highway 138.

During the general surveys, data was collected on the plant species present on the site and in the immediate surrounding area and the wildlife observed. The plants present on the site are typical of the area and were readily identifiable. The few birds which use the site and adjacent areas were identified by visual observations and sound, and the presence of mammals was determined by the presence of scats, tracks, burrows, or direct observations. All plants and animals detected during the field investigations were recorded and are provided in compendium Tables 2 & 3 (Appendix A). During the field investigations the site was also evaluated for the presence of any sensitive habitats (e.g., wetlands, streams, etc.) and wildlife corridors.

4.0 GENERAL BIOLOGICAL SURVEY RESULTS

The property supports a Joshua tree woodland with co-dominants desert sage (*Salvia dorrii*), Mojave rabbitbrush (*Ericameria nauseosa var. mohavensis*), and California buckwheat (*Eriogonum fasciculatum*). Table 1 provides a compendium of plants observed on the property (Appendix A).

Only a few wildlife species were identified in the surrounding area during the field investigations conducted on March 23, 2017 from 0630 to 1030 hours. Birds observed were limited to mourning doves (*Zenaida macroura*), ravens (*Corvus corax*), and song sparrows (*Melospiza melodia*), and house finch (*Carpodacus mexicanus*). No reptiles were observed on the site; although, side-blotched lizards (*Uta stansburiana*) and western whiptail lizards (*Cnemidophorus tigris*) are relatively common in the region and may occasionally occur on the property and the surrounding area. Jackrabbits (*Lepus californicus*) and desert cottontail rabbits (*Sylvilagus auduboni*) are also common in the area and were observed on the site. No wildlife corridors were identified on the site or in the immediate surrounding area, and no breeding activities were observed among any of the wildlife species. Table 2 (Appendix A) provides a compendium of wildlife species observed on the site and other species known to occur in the region.

FIGURE 4

BIOLOGICAL RESOURCES
(Source: Google Maps, 2017)

5.0 IMPACTS AND RECOMMENDATIONS

General Biological Resources

Future development of the site will result in the removal of approximately half of the current vegetation based on the proposed site plan (Figure 1). As discussed above and as shown in Figure 3, the site is relatively undisturbed and supports a Joshua tree (*Yucca brevifolia*) with desert sage (*Salvia dorrii*), Mojave rabbitbrush (*Ericameria nauseosa var. mohavensis*), and California buckwheat (*Eriogonum fasciculatum*). Numerous Joshua trees and other vegetation will be removed during construction activities, especially in the southern portion of the site where the proposed gas station would be located. Wildlife species which inhabit the site or which occasionally occur on the site would also be impacted. Birds present on the site at the time of development would be able to disperse over larger areas given their mobility and no increase in mortality is expected. Any reptiles (i.e., lizards) and small mammals present on the site may be displaced into adjacent areas where suitable habitat may be present, and minimal mortality is expected to occur. Therefore, cumulative impacts are not expected to be significant given the small size of the site (3.01-acres) and the limited amount of vegetation and wildlife species which would be affected.

In regards to the Joshua trees present on the site, a Desert Vegetation Preservation Plan has been prepared under separate cover to evaluate each Joshua tree on the property, and determine those Joshua trees which are suitable for future transplanting. Any Joshua trees deemed satiable for transplanting should be transplanted during a time of year when weather is cooler (i.e., October through March). Joshua trees transplanted during warmer weather generally have a poor transplant recovery rate.

Sensitive Wildlife Species

None of the sensitive species that have been documented within a few miles of the site are expected to occur on the property based on the existing site conditions and the small size of the site. In addition, no suitable (i.e., occupiable) burrows were observed anywhere on the site for the burrowing owl or the desert tortoise during the field investigation. Given the absence of any suitable burrows for these species and the small size of the property and surrounding lands uses, neither species is expected to inhabit the site in the future. However, CDFW will require pre-construction surveys be performed 30-days before the start of any future site clearing activities to determine if the burrowing owl has moved onto the site since the March 2017 surveys. Of the other special status species known to occur in the region (See Section 2.0), there is a very low probability of any of these species occurring on the site in the future based on the small size of the site and level of development in the immediate surrounding area.

6.0 PROPOSED MITIGATION MEASURES

Future development activities are expected to result in the removal of vegetation from the 3.01-acre parcel; however, cumulative impacts to the general biological resources (plants and animals) in the surrounding area are expected to be negligible. This assumption is based on the presence of habitat on the site which is very common throughout the region. In addition, future development activities are not expected to have any impact on any State or Federal listed or State special status plant or animal species. In addition, burrowing owls do not inhabit the site and are not expected to be impacted given the absence of any suitable burrows. The following mitigation measures are recommended:

1. Pre-construction surveys for burrowing owls and nesting birds protected under the Migratory Bird Treaty Act and Section 3503 of the California Fish and Wildlife Code shall be conducted prior to the commencement of Project-related ground disturbance.

a. Appropriate survey methods and timeframes shall be established, to ensure that chances of detecting the target species are maximized.

b. In the event that listed species are encountered, authorization from the USFWS and CDFW must be obtained. If nesting birds are detected, avoidance measures shall be implemented to ensure that nests are not disturbed until after young have fledged.

c. Pre-construction surveys shall encompass all areas within the potential footprint of disturbance for the project, as well as a reasonable buffer around these areas.

If any sensitive species are observed on the property during future activities, CDFW and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFW and USFWS are the only agencies which can grant authorization for the "take" of any sensitive species and can approve the implementation of any applicable mitigation measures.

7.0 BIBLIOGRAPHY

Baldwin, Bruce G, et. al.
2002. The Jepson Desert Manual. Vascular Plants of Southeastern California. University of California Press, Berkeley, CA.

Bureau of Land Management
January 2005. Final Environmental Impact Report and Statement for the West Mojave Plan. Vol. 1A.

California Burrowing Owl Consortium
1993. Burrowing Owl Survey Protocol and Mitigation Guidelines

California Department of Fish and Game
1990. California Wildlife: Volume 1 (Amphibians and Reptiles), Volume II (Birds), and Volume III (Mammals).

California Department of Fish and Game
1995. Staff Report on Burrowing Owl Mitigation.

California Department of Fish and Game
2003. Mohave Ground Squirrel Survey Guidelines.

California Department of Fish and Game
2017. Rarefind 3 Natural Diversity Database. Habitat and Data Analysis Branch. Sacramento, CA.

California Native Plant Society
2001. Inventory of Rare and Endangered Plants of California (sixth edition). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA x + 388 pp.

Ehrlich, P., Dobkin., Wheye, D.
Birder's Handbook. A Field Guide to the Natural History of North American Birds. Simon & Schuster Building Rockefeller Center 1230 Avenue of the Americas. New York, New York 10020.

Hickman, James C.
The Jepson Manual Higher Plants of California. University of California Press. Berkeley, CA. 3rd Edition. 1996.

Jaeger, Edmund C.
1969. Desert Wild Flowers. Stanford University Press, Stanford, California. 321 pp.

Kays, R. W. & Wildson, D. E.
Mammals of North America. Princeton University Press, Princeton, New Jersey. 2002.

Munz, Philip A.
1974. A Flora of Southern California. University of California Press, Berkeley, California. 1086 pp.

Tugel, Arlene J., Woodruff, George A.
Soil Conservation Service, 1978. Soil Survey of San Bernardino County California, Mojave River Area.

Sibley, David Allen.
National Audubon Society. The Sibley guide to Birds. Alfred A Knopf, Inc. 2000.

Stebbins, Robert C.
A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Company. 2003.

Whitaker, John O.
The Audubon Society Field Guide to North American Mammals. Alfred A Knopf, Inc. 1980.

Appendix A

CNDDB Sensitive Species List
&
Flora and Fauna Compendium Tables

Table 1 - Federal and State Listed Species and State Species of Special Concern occurring within five miles of the site.

(Fed; T = Threatened; SC = Species of special concern; S = Sensitive species; CNDDB = California Natural Diversity Data Base; CNPS: California Native Plant Society)

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
Desert tortoise (*Gopherus agassizii*)	Fed: T State: T	Desert scrub	No tortoises or tortoise sign were observed during focused survey. Site does not support habitat for the species.	Nearest pop. 7 miles east (Occ. #66, CNDDB, 2017).
White pygmy poppy (*Canbya candida*)	Fed: None State: None CNPS: List 4.2	Desert scrub	Site does not support suitable habitat for the species.	Nearest observation 3 miles northwest of site (Occ. #6, CNDDB, 2017).
Short-jointed beavertail cactus (*Opuntia basilaris var. brachyclada*)	Fed: None State: None CNPS: List 1B.2	Desert scrub	Site does not support suitable habitat for the species.	Nearest observation 3-miles south of site (Occ. #96, CNDDB, 2017).
Coast horned lizard (*Phrynosoma blainvillii*)	Fed: None State: SC	Desert scrub	Site does not support suitable habitat for the species.	Nearest observation 3-miles south of site (Occ. #251, CNDDB, 2017)
Le Conte's thrasher (*Toxostoma lecontei*)	Fed: None State: None CDFG: SC	Desert scrub	Site does not support suitable habitat for the species.	Nearest observation 16-miles south of site. (Occ. #21, CNDDB, 2017)
Mohave ground squirrel (*Xerospermophilus mohavensis*)	Fed: None State: T	Desert scrub	Site does not support suitable habitat for the species.	Nearest observation 3 miles east of site. (CNDDB, 2017)
Burrowing owl (*Athene cunicularia*)	Fed: None State: None CDFG: SC	Desert scrub; agricultural areas, various other habitats.	Site does not support any occupiable burrows which precludes the site from supporting the species.	Species observed within few miles of site (CNDDB, 2017)

Table 2 - Plants observed on the site and know to occur in the immediate surrounding area.

Common Name	Scientific Name	Location
Joshua tree	*Yucca brevifolia*	On-site
Desert sage	Salvia dorrii	"
Mojave rabbitbrush	Ericameria nauseosa var. mohavensis	"
California buckwheat	Eriogonum fasciculatum	"
Cholla	Opuntia ramosissima	"
Ephedra	*Ephedra nevadensis*	"
Erodium	*Erodium texanum*	"
Schismus	*Schismus barbatus*	"
Buckwheat	*Eriogonum sp.*	"
Brome grass	*Bromus sp.*	"
Anderson thornbush	*Lycium andersonii*	"
Mustard	*Descuriana pinnata*	"
Saltbush	*Atriplex canescens*	Off-site
Creosote bush	*Larrea tridentata*	"

Table 3 - Wildlife observed on the site and those species expected to occur in surrounding area.

Common Name	Scientific Name	Location
Common raven	*Corvus corax*	On-site/Off-site
Song sparrow	*Melospiza melodia*	"
Mourning dove	*Zenaida macroura*	"
House finch	*Carpodacus mexicanus*	"
Western whiptail lizard	*Cnemidophorus tigris*	Occurs in region
Side-blotched lizard	*Uta stansburiana*	"
Antelope ground squirrel	*Ammospermophilus leucurus*	"
Desert spiny lizard	*Sceloporus magister*	"
California ground squirrel	*Spermophilus beecheyi*	"
Coyote	*Canis latrans*	"
Merriam's kangaroo rat	*Dipodomys mohavensis*	"

Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which were identified on the site during the one-day survey or which are known to occur in the region.

Appendix B

Certification

CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: October 2, 2018 Signed: Randall Arnold

Field Work Performed By: Randall Arnold
Principal Biologist