

Appendix C: Biological Resources

Habitat Assessment
National Orange Show Industrial Project
City of San Bernardino, San Bernardino County, California

South San Bernardino, CA. USGS 7.5-minute Topographic Quadrangle Map
Township 1 South, Range 4 West, Unsection Portion of The San Bernardino Land Grant
38.1-Acre Study Area

Prepared for:

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SECTION 1: SUMMARY

A biological resources study was conducted to document the existing biological conditions within a 38.1 acre project area located in the City of San Bernardino in San Bernardino County, California.

The habitat assessment is required to determine the extent of sensitive habitats present onsite and the potential for these habitats to support sensitive plant and wildlife species. Based on the site, the project site provides no suitable habitat for any sensitive plant or wildlife species.

The project site contains limited suitable nesting habitat for migratory bird species within the trees located on the project site. Vegetation removal activities should be conducted outside of the nesting season. If these activities must occur during the nesting season, a nesting bird survey should be conducted within 7 days prior to any ground disturbing activities to determine if any nesting birds occur within the project site. If nesting birds are not found within the project site, no further actions are required. If nesting birds are observed on site, no impacts shall occur within 250 feet (500 feet for raptors) of any active nests. Construction activity may only occur within 250 feet of an active nest at the discretion of a biological monitor.

There are no drainages features under the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Game (CDFG). The proposed project would not create a substantial adverse effect on a wildlife corridor or sensitive habitat.

SECTION 2: INTRODUCTION

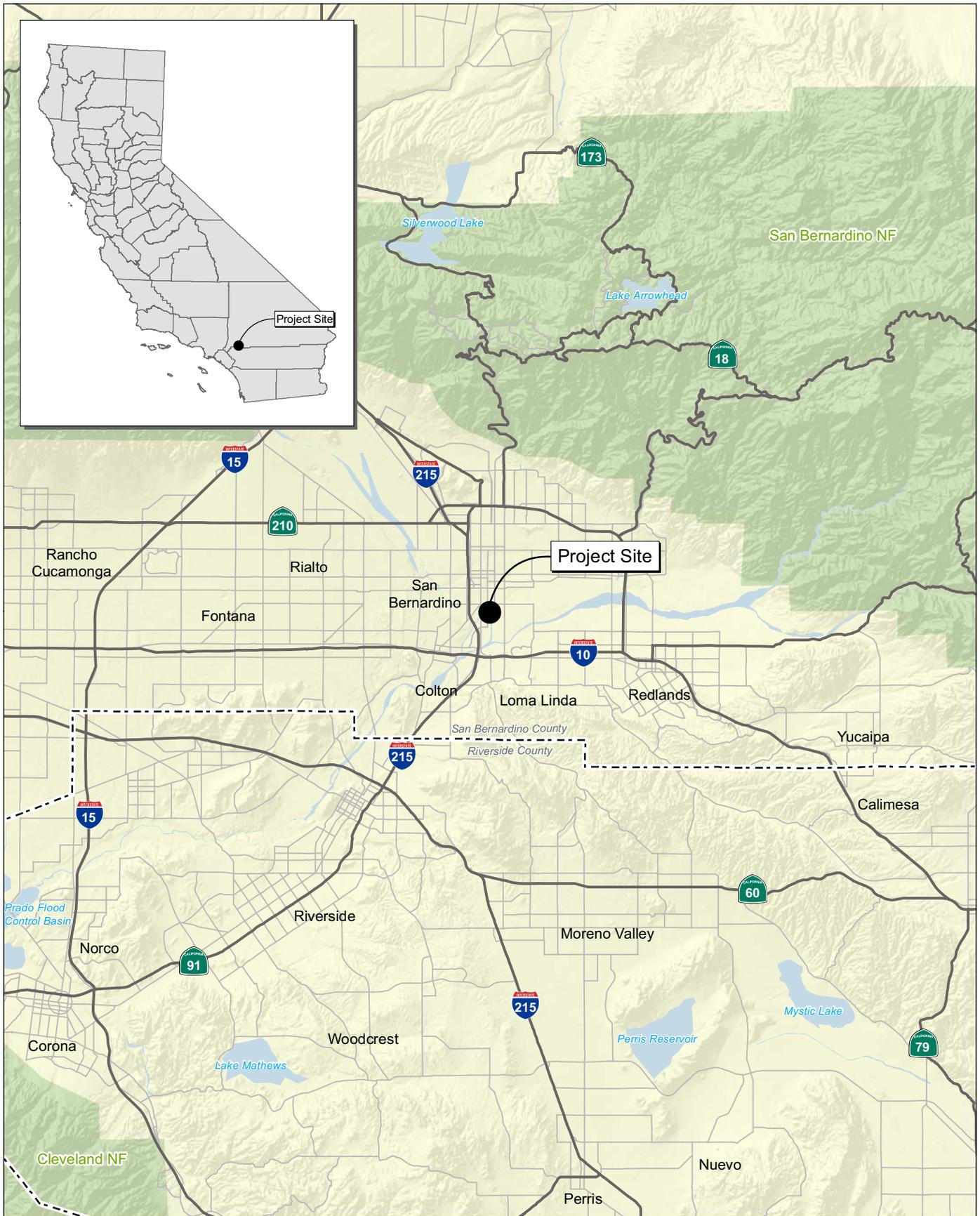
At the request of Lewis Retail Centers, Michael Brandman Associates (MBA) conducted a biological resources study to document the existing conditions within the 38.1-acre project area, hereafter referred to as project site or site, located in the City of San Bernardino, San Bernardino County, California. This report provides a detailed description of existing conditions. The information contained herein includes a literature review and general biological site assessment that identifies the potential biological constraints related to the proposed development of the property. This report provides an updated baseline for review under the California Environmental Quality Act (CEQA), the Clean Water Act (CWA), the Federal Endangered Species Act (FESA), and the California Endangered Species Act (CESA).

2.1 - Project Site Location

The 38.1-acre site is located south of State Route 210, east of Interstate 215, and north of Interstate 10 in the City of San Bernardino (Exhibit 1). The site is situated within an unsectioned portion within the San Bernardino Land Grant, Township 1 south, and Range 4 west of the San Bernardino North, California, United States Geological Survey (USGS) 7.5-minute topographic map (Exhibit 2). The site is specifically located north of Central Avenue, South of Mill Street, east of Arrowhead Avenue, and west of Warm Creek (Exhibit 3).

2.2 - Regulatory Framework

Potential impacts to biological resources as a result of the proposed project were analyzed based upon the environmental policies and regulations discussed in Appendix D. These include regulations set forth by the City of San Bernardino, United States Fish and Wildlife Service (USFWS), USACE, and the CDFG. Regulations include the General Plan, CWA, FESA, CESA, and CEQA.



Source: Census 2000 Data, The CaSIL, MBA GIS 2011.



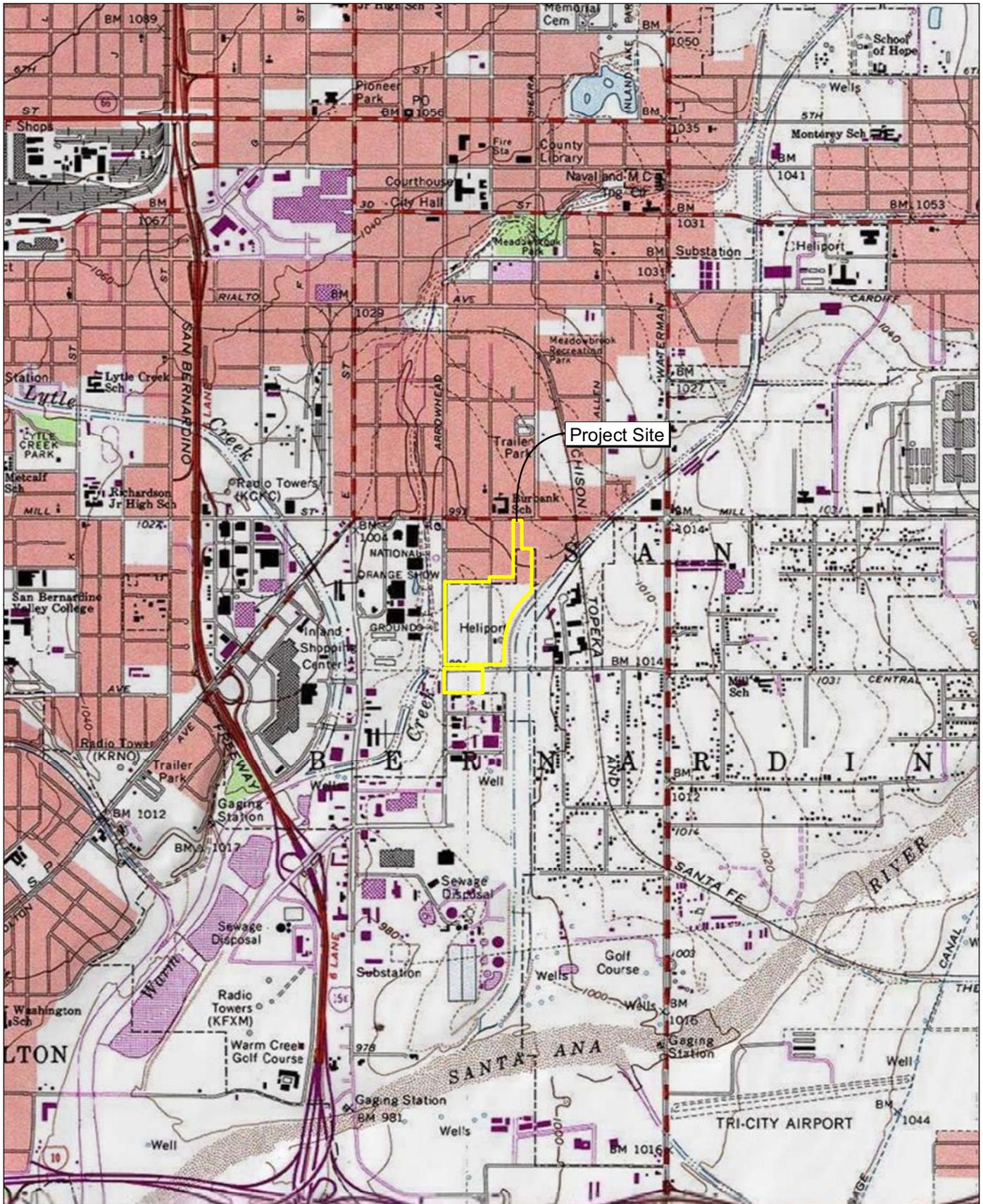
Michael Brandman Associates

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Exhibit 1 Regional Location Map

LEWIS RETAIL CENTERS • NATIONAL ORANGE SHOW
HABITAT ASSESSMENT

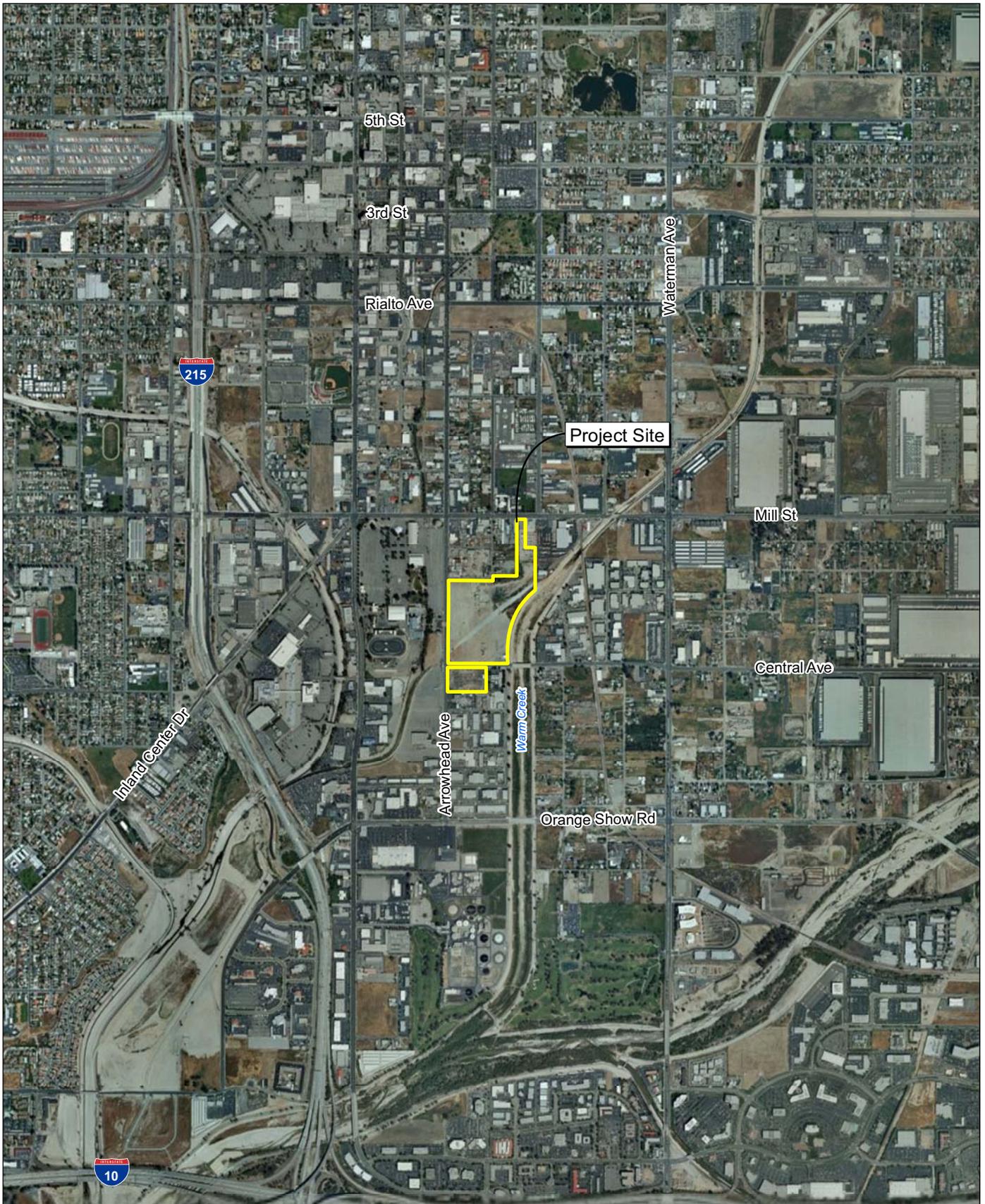


Source: TOPO! USGS, San Bernardino South (1980) 7.5' DRG.



2,000 1,000 0 2,000
Feet

Exhibit 2
Local Vicinity Map
Topographic Base



Source: http://goto.arcgisonline.com/maps/I3_Imagery_Prime_World_2D (2009).



Exhibit 3 Local Vicinity Map Aerial Base

SECTION 3: METHODOLOGY

Analysis of the biological resources associated with the project site began with a thorough review of relevant literature followed by a reconnaissance-level survey. The primary objective of the survey was to document existing site conditions and determine the potential presence of sensitive biological resources.

For the purpose of this report, sensitive species refers to all species formally listed as threatened and/or endangered under the Endangered Species Act (ESA) and CESA, California Species of Special Concern, those designated as Fully Protected by CDFG; given a status of 1A, 1B, or 2 by the California Native Plant Society (CNPS); or designated as sensitive by City, County, or other regional planning documents. Federal and state listed threatened and/or endangered species are legally protected under the ESA. The remaining species mentioned above have no direct legal protection, but require a significance analysis under the CEQA guidelines.

3.1 - Literature Review

The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site, as well as the surrounding area.

3.1.1 - Topographic Maps and Aerial Photographs

MBA reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity. Information obtained from the review of the topographic maps included elevation, general watershed information, and potential drainage feature locations. Aerial photographs provide an aerial perspective of the most current site conditions with regard to on-site and off-site land-use, plant community location, and potential location of wildlife movement corridors.

3.1.2 - Soil Surveys

Many sensitive plant species have a limited distribution based exclusively on soil type. The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series that occur within a particular area. A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units, which provide specific information regarding soil characteristics. Pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish if soil conditions onsite are suitable for any sensitive plant or wildlife species.

3.1.3 - Sensitive Species Database Search

MBA compiled a list of threatened, endangered, and otherwise sensitive species previously recorded within the general area of the site. For the purpose of this report, “sensitive species” are defined as

those protected by FESA or CESA, designated as a California Species of Special Concern, designated as Protected or Fully Protected by CDFG; given a status of 1A, 1B, or 2 by the CNPS; or designated as sensitive by City, County, or regional planning documents. A compilation of sensitive plant and wildlife species recorded in the vicinity of the site was derived from the CDFG's California Natural Diversity Database (CNDDDB 2011). Additional recorded occurrences of plant species found on or near the site were obtained in the CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California database. The CNDDDB GIS database was utilized, together with ArcGIS software, to determine sensitive species located within a 5-mile radius of the project site. Federal Register listings, protocols, and species data provided by the USFWS and CDFG were reviewed in conjunction with anticipated federal and state listed species potentially occurring in the vicinity. These and other documents are listed in Section 8, References.

3.2 - Reconnaissance-Level Survey

MBA biologist Dale Hameister conducted reconnaissance-level field survey on April 28, 2011 from 1100 hours to 1400 hours. Special attention was paid to sensitive habitats or those areas potentially supporting sensitive floral and faunal species, as well as potential jurisdictional features.

The reconnaissance-level survey was conducted on foot during daylight hours. The object of the survey was not to extensively search for every species occurring within the project site, but to ascertain general site conditions and identify potentially suitable habitat areas for various sensitive plant and wildlife species.

3.2.1 - Plant Community Mapping

Plant communities were mapped using 7.5-minute USGS topographic base maps and recent aerial photography. Sensitive or unusual biological resources identified during the literature review were ground-truthed during the reconnaissance-level survey for mapping accuracy. The plant communities within the project site were classified according to Holland's *Preliminary Descriptions of the Terrestrial Natural Communities of California* (1986 and 1996 update) and cross-referenced with CDFG's List of Terrestrial Natural Communities (2003). MBA's biologists made modifications where appropriate.

3.2.2 - Plant Species

Common plant species observed during the reconnaissance-level survey were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified offsite using taxonomical guides. A list of all species observed on the project site was compiled from the survey data, shown in Appendix A. Taxonomic nomenclature used in this study follows Hickman (1993). Common plant names, when not available from Hickman (1993), were taken from other regionally specific references. In this report, scientific names are provided immediately following common names of plant species for the first reference only.

3.2.3 - Wildlife Species

Wildlife species detected during the reconnaissance-level survey by sight, calls, tracks, scat, or other signs were recorded in a field notebook. Notations were made regarding suitable habitat for those sensitive species determined to potentially occur within the project site. Appropriate field guides were used to assist with species identification during surveys. Common names of wildlife species are standard; however, scientific names are provided immediately following common names for the first reference only. Appendix A lists all wildlife species observed or detected on the site during the survey.

3.2.4 - Jurisdictional Waters and Wetlands

Prior to conducting the site visit, MBA's biologists reviewed USGS topographic maps and aerial photography to identify any potential natural drainage features and water bodies that may fall within the jurisdiction of the USACE, RWQCB, and/or CDFG. In general, all surface drainage features indicated as blue-line streams on USGS maps and linear patches of vegetation expected to exhibit evidence of flows are considered potentially subject to state and federal regulatory authorities as "waters of the US and/or State." The assessment was not intended as a formal delineation of waters of the U.S. or State but rather to identify areas that may require a formal delineation.

3.2.5 - Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat, separating different populations of a single species. Corridors effectively act as links between these populations.

The project site was evaluated for evidence of a wildlife movement corridor. The scope of the biological resources survey did not include a formal wildlife movement corridor study such as the use of track plates, camera stations, scent stations, or snares. However, the focus of this study was to determine if the alteration of current land use on the project site would have significant impacts on the regional movement of wildlife. These conclusions are based on the information compiled from the literature review, including aerial photographs, USGS topographic maps, and resource maps for the vicinity, the reconnaissance-level survey, and knowledge of desired topography and resource requirements for wildlife potentially utilizing the project site and vicinity.

SECTION 4: EXISTING CONDITIONS

4.1 - Weather Conditions

The reconnaissance level survey was conducted on April 28, 2011 from 1100 hours to 1400 hours. Weather conditions during the field survey included temperatures ranging from 86 to 89 F, winds ranging from 2-10 miles per hour, and clear skies.

4.2 - Environmental Setting

The project site is located on Arrowhead Avenue in San Bernardino, CA. The elevation on the project site ranges from approximately 996 to 1,004 feet above mean sea level (AMSL) and is generally flat.

The project area consists of disturbed areas used for storage of construction equipment and vehicles for Bar None Auctions, the Department of Motor Vehicles (DMV) Commercial Drive Test Center, and areas used for storage of lumber supplies.

Land use surrounding the site includes residential development on Esperanza street and Mountain View Avenue, commercial development to the west, south, and north, and the Warm Creek channel, which is an earthen engineered channel managed by San Bernardino Flood Control District to the east. The project site is also used for temporary parking for the National Orange Show Raceway facility on the west side of Arrowhead Avenue.

4.3 - Soils

The project site contains two soil series Grangeville fine sandy loam and Tujunga loamy sand, (Exhibit 4). These soils are each excessively drained and typical of flood plains and alluvial fans. The soils within the project site have been historically disturbed by development and road construction. The majority of the project site contains Grangeville fine sandy loam with a small inclusion of Tujunga loamy sand on the west side of the project site.



Source: http://goto.arcgisonline.com/maps/I3_Imagery_Prime_World_2D (2009), USDA Soils Data.



Exhibit 4 Soils Map

4.4 - Plant Communities

The project site contains approximately 4.16 acres of developed areas, 0.16 acres of landscaping, 7.37 acres of ruderal plant communities and 26.50 acres of disturbed areas, (Exhibits 5).

4.4.1 - Developed

Developed areas cover 4.16 acres of the project site. The developed areas consist of paved and commercial areas. These areas are permanently disturbed with concrete, asphalt, or other building materials and does not allow for any future vegetation growth. The developed areas of the project area consist of the Bar None Auctions office south of Central Avenue, the DMV Commercial Driver Test Center, and a storage area used by Barr Lumber on Mill Street.

4.4.2 - Landscape

Landscaped areas are artificially irrigated and include planted shrubs, trees, and lawn within residential and commercial areas. There is a narrow strip of landscaping adjacent to the sidewalk on Arrowhead Avenue. This plant community covers 0.16 acres of the project site. Common landscaping species observed include Festuca lawn (*Festuca* sp.) and orange trees (*Citrus sinensi*).

4.4.3 - Ruderal

Ruderal areas comprise 7.37 acres of the project site. The ruderal plant community is typically associated with a predominance of non-native species as a result of natural opportunistic invasions. Ruderal areas have generally been severely disturbed or are subject to recurring disturbance. In such circumstances, over half the area is covered by species adapted to disturbance, especially forbs, or by bare ground. The common species observed include short-pod mustard (*Hirschfeldia incana*), horseweed (*Conyza canadensis*), ripgut brome (*Bromus diandrus*), puncture vine (*Tribulus terrestris*), and yellow sweet clover (*Melilotus officinalis*). There a few Chinaberry (*Melia azedarach*) trees within the ruderal area located adjacent to the residential area at the corner of Esperanza Street and Mountain View Avenue. Chinaberry trees are also known as Texas umbrella tree and are common landscaping trees.

4.4.4 - Disturbed

Disturbed areas cover 26.50 acres of the project site of the project site. Disturbed areas consist of bare soil and gravel. The disturbed areas within the project area are used to store vehicles and heavy equipment for Bar None Auctions, as well as temporary parking for the National Orange Show Raceway facility on the west side of Arrowhead Avenue.



Source: http://goto.arcgisonline.com/maps/I3_Imagery_Prime_World_2D (2009).

4.5 - Wildlife

Most of the wildlife activity on the project site was represented by bird species. The habitats on the property provide very limited habitat for foraging, cover and nesting habitat for year-round residents, seasonal resident, and migrating songbird species. Common species observed include house finch (*Carpodacus mexicanus*), cliff swallow (*Petrochelidon pyrrhonota*), and European starling (*Sturnus vulgaris*). Other wildlife species observed includes western fence lizard (*Sceloporus occidentalis*) and Botta's pocket gopher (*Thomomys bottae*).

A list of all flora and fauna observed during the survey is included in Appendix A.

SECTION 5: SENSITIVE BIOLOGICAL RESOURCES

5.1 - Critical Habitat

The project area does not contain USFWS designated critical habitat for any listed plant or wildlife species.

5.2 - Sensitive Plant Communities

The project area contains no sensitive plant communities.

5.3 - Special Status Species

Tables 1 and 2 in Appendix A detail the sensitive plant and wildlife species, their status, habitat requirements, and their potential to occur within the project site. There are no federally or state listed threatened or endangered plant or wildlife species potentially occurring within the project site. No state fully protected species were observed onsite and are not anticipated to occur on the project site. There were no CNPS listed plants observed within the project site.

5.4 - Jurisdictional Waters and Wetlands

The project site contains no potentially jurisdictional drainages or wetlands. The project is adjacent to the Warm Creek channel, which is an earthen engineered channel managed by San Bernardino Flood Control District.

5.5 - Wildlife Movement Corridors

The project site has development on the north, south, and west, and an earthen flood control channel on the east. As such, the project site does not represent an area that would link two or more significant wildlife areas and wildlife are not likely to utilize the project site as a wildlife corridor. Therefore, the site is not likely located within a significant wildlife movement corridor.

5.6 - Nesting Birds

The project site contains suitable nesting habitat for a variety of avian species. The trees on the project site could provide suitable nesting habitat several species.

SECTION 6: IMPACTS

6.1 - Critical Habitat

There are no impacts to Critical Habitat anticipated to occur on the project site.

6.2 - Sensitive Plant Communities

There are no impacts to sensitive plant communities anticipated to occur on the project site.

6.3 - Special Status Species

6.3.1 - Threatened and Endangered Species

There are no impacts to threatened or endangered species anticipated to occur on the project site.

6.3.2 - State Fully Protected Species

There are no impacts to State Fully Protected Species anticipated to occur on the project site.

6.3.3 - Sensitive Plant Species

There are no impacts to special status plant species anticipated to occur on the project site.

6.3.4 - Sensitive Wildlife Species

There are no impacts to wildlife species of concern anticipated to occur on the project site.

6.4 - Jurisdictional Waters and Wetlands

There are no impacts to potentially jurisdictional drainages or wetlands anticipated to occur within the project area.

6.5 - Wildlife Movement Corridors

There are no impacts to wildlife movement corridors anticipated to occur within the project area.

6.6 - Nesting Birds

Impacts to nesting birds are a violation of the Migratory Bird Treat Act (MBTA) and CDFG Code. If ground disturbance occurs during the nesting season (February through August), nesting birds may be directly or indirectly impacted, which is a substantial adverse effect.

SECTION 7: RECOMMENDATIONS

Based on the impacts identified above in Section 6, a series of recommendations are provided below. Final determination of appropriate mitigation or other requirements will be determined through consultation with the City of San Bernardino.

7.1 - Sensitive Plant Communities

No additional measures are recommended.

7.2 - Critical Habitat and Listed Species

No additional measures are recommended.

7.3 - Special Status Species

No additional measures are recommended.

7.4 - Jurisdictional Waters and Wetlands

No additional measures are recommended.

7.5 - Nesting Birds

If vegetation removal, soil disturbance, or any other construction related activity is to occur during the avian nesting season (February 1 through August 31), a preconstruction nesting bird survey should be conducted not greater than seven days prior to initiation of construction. If nests are discovered, they should be avoided by an appropriate buffer, as determined by a qualified wildlife biologist. The temporary “no construction” area would have to be maintained until the nest has completed its cycle, as determined by a qualified wildlife biologist. Once the nest cycle is complete and all nestlings have fledged and left the nest, then construction in the area could resume. Construction activity may only occur within the temporary “no construction” area at the discretion of a biological monitor.

If initial ground disturbing activities or site clearing is proposed to take place outside of the nesting season (September 1 through January 31), then a pre-construction survey would not be required and construction could commence unimpeded.

SECTION 8: CERTIFICATION

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

Date: May 4, 2011

Signed: 

Dale Hameister
Biologist

SECTION 9: REFERENCES

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- U.S. Geological Survey (USGS). 1980. South San Bernardino, *California 7.5-Minute Topographic Map*.

Appendix A: Sensitive Species Tables

Table A-1: Species Status Plant Species

Species		Status			Blooming Period	Preferred Habitat	Potential on Site/Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS			
<i>Calochortus plummerae</i>	Plummer's mariposa lily	-	-	1B.2	May-Jul	Rocky and sandy soils in sage scrub, chaparral, cismontane woodland and valley and foothill grasslands	Low. No suitable habitat onsite.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	-	-	3.2	Apr-Jun	Alluvial chaparral and scrub between 100 and 1,300 meters above mean sea level	Low. No suitable habitat onsite.
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Halls monardella	-	-	1B.3	June-Aug	Broadleaved upland forest, chaparral cismontane woodland, lower montane coniferous forest, and valley and foothill grassland	Low. No suitable habitat onsite.
<i>Dodecahema leptoceras</i>	Slender-horned spineflower	FE	SE	1B.1	Apr-Jun	Sandy soils associated with mature alluvial scrub especially on terraces that receive flood events every 50-100 years.	Low. No suitable habitat onsite.
<i>Eriastrum densifolium</i> ssp. <i>Sanctorum</i>	Santa Ana River woollystar	FE	SE	1B.1	May-Sept	Open washes and early successional alluvial fan scrub in areas of frequent flooding and scouring	Low. No suitable habitat onsite.
<i>Horkelia cuneata</i> var. <i>puberula</i>	Mesa horkelia	-	-	1B.1	Feb-Jul	Sage scrub and chaparral with sandy or gravelly substrate from 230 to 2,660 feet in elevation	Low. No suitable habitat onsite.
<i>Eriogonum microthecum</i> var. <i>johnstonii</i>	Johnston's buckwheat	-	-	1B.3	July-Sept	Subalpine coniferous forest and Upper montane coniferous forest	Low. No suitable habitat onsite.
<i>Linanthus concinnus</i>	San Gabriel linanthus			1B.2	April-July	Lower montane coniferous forest and upper montane coniferous forest in rocky openings	Low. No suitable habitat onsite.

Table A-1: Species Status Plant Species (Cont.)

Species		Status			Blooming Period	Preferred Habitat	Potential on Site/Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS			
U.S. Fish and Wildlife Service		California Native Plant Society					
FE	Federal Endangered	1A	Plants presumed extinct in California.				
FT	Federal Threatened	1B	Plants rare, threatened, or endangered in California and elsewhere.				
PE	Proposed Endangered	2	Plants rare, threatened, or endangered in California, but more common elsewhere.				
PT	Proposed Threatened	3	Plants about which we need more information.				
		4	Plants of limited distribution.				
			Threat Rank				
			*.1-Seriously threatened in California (high degree/immediacy of threat)				
			*.2-Fairly threatened in California (moderate degree/immediacy of threat)				
			*.3-Not very threatened in California (low degree/immediacy of threats or no current threats known)				

Table A-2: Special Status Wildlife Species

Species		Status		Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State		
Reptiles and Amphibians					
<i>Rana muscosa</i>	Mountain yellow-legged frog	FE	CSC	In Southern California, the species is restricted to streams and small pools in montane riparian habitats, especially in pools up to three feet deep.	Low. No suitable habitat onsite.
<i>Phrynosoma coronatum blainvillei</i>	Coast (San Diego) horned lizard	—	CSC	Inhabits sage scrub and chaparral in arid and semi-arid climates. Prefers friable, rocky, or shallow sandy soils.	Low. No suitable habitat onsite.
Birds					
<i>Accipiter cooperi</i>	Cooper's hawk	—	CSC	Cooper's hawks nest in interrupted and open woodlands and forages in shrubs and grassland habitats.	Low. No suitable habitat onsite.
<i>Aimophila ruficeps canescens</i>	Rufous-crowned sparrow	—	WL	Grass covered hills, sage scrub, and chaparral. Additionally, grasslands that grow as an early successional stage following brush fires.	Low. No suitable habitat onsite.
<i>Amphispiza belli belli</i>	Bell's sage sparrow	—	CSC	Dry chaparral and sage scrub, closely associated with sagebrush	Low. No suitable habitat onsite.
<i>Athene cunicularia</i>	Burrowing owl	—	CSC	Open dry grasslands, agriculture and range land, shrubland.	Low. No suitable habitat onsite.
<i>Circus cyaneus</i>	Northern harrier	—	CSC	Open fields where they can fly near to the ground in search of prey. Nesting on the ground, in tall dense vegetation, with a preference for wet areas to avoid nest predation	Low. No suitable habitat onsite.
<i>Eremophila alpestris actia</i>	California horned lark	—	CSC	Short-grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.	Low. No suitable habitat onsite.
<i>Lanius ludovicianus</i>	Loggerhead shrike	—	CSC	Broken woodlands, savanna, pinyon-juniper, Joshua tree and riparian woodlands, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Low. No suitable habitat onsite.

Table A-2: Special Status Wildlife Species (Cont.)

Species		Status		Required Habitat	Potential to Occur / Known Occurrence / Suitable Habitat
Scientific Name	Common Name	Federal	State		
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT	CSC	Obligate, permanent resident of sage scrub below 2500 feet. in southern California. Prefers low sage scrub in arid washes and on mesas and slopes.	Low. No suitable habitat onsite.
Mammals					
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	—	CSC	Open sandy areas within sage scrub, sage scrub/grasslands, disturbed grasslands, and chaparral communities with an affinity for moderately gravelly and rocky substrates	Low. No suitable habitat onsite.
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	FE	CSC	Riversidean alluvial fan sage scrub with sandy loamy soils, on alluvial fans and flood plains, and along washes with nearby sage scrub. Low density vegetation	Low. No suitable habitat onsite.
<i>Eumops perotis</i>	Western mastiff bat	—	CSC	Roost in cliff faces and buildings and are probably non-migratory, but may move among several roosts in an area. Prefers broad open areas for foraging, including flood plains, grassland, and agricultural areas.	Low. No cliff faces for roosting, although there are buildings present.
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	—	CSC	Variety of habitat, primarily in arid regions with short grasses and open scrub habitat.	Low. No suitable habitat onsite.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	—	CSC	Variety of scrub and desert habitats. Particularly associated with dense undergrowth. Build elaborate dens with twigs and other debris.	Low. No suitable habitat onsite.
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	—	CSC	Open ground with fine sands among low elevation grasslands and sage scrub	Low. No suitable habitat onsite.
Federal		State			
FE	Federal Endangered	SE	State Endangered		
FT	Federal Threatened	ST	State Threatened		
FSC	Federal Species of Concern	CSC	California Species of Concern		
C	Candidate for Federal Listing	WL	Watch List		
		FP	Fully Protected Species		

Appendix B: Floral and Faunal Compendia

Flora Compendia

Adoxaceae		Honeysuckle Family
<i>Sambucus</i>	<i>mexicana</i>	blue elderberry
Amaranthaceae		Amaranth Family
<i>Amaranthus</i>	<i>albus</i>	tumbling pigweed
Araliaceae		Ginseng Family
<i>Hedera</i>	<i>helix</i>	English ivy
Asteraceae		Sunflower Family
<i>Carduus</i>	<i>pycnocephalus</i>	Italian thistle
<i>Chamomilla</i>	<i>suaveolens</i>	pineapple weed
<i>Conyza</i>	<i>canadensis</i>	horseweed
<i>Helianthus</i>	<i>annuus</i>	common sunflower
<i>Heterotheca</i>	<i>grandiflora</i>	telegraphweed
<i>Lactuca</i>	<i>serriola</i>	prickly lettuce
<i>Pseudognaphalium</i>	<i>luteoalbum</i>	Jersey cudweed
<i>Sonchus</i>	<i>asper</i>	sow thistle
<i>Taraxacum</i>	<i>officinale</i>	common dandelion
Brassicaceae		Mustard Family
<i>Hirschfeldia</i>	<i>incana</i>	short-podded mustard
<i>Sisymbrium</i>	<i>irio</i>	London rocket
Chenopodiaceae		Goosefoot Family
<i>Salsola</i>	<i>tragus</i>	Russian thistle
Crassulaceae		Stonecrop Family
<i>Crassula</i>	<i>connata</i>	pygmy-weed
Euphorbiaceae		Spurge Family
<i>Chamaesyce</i>	<i>prostrata</i>	prostrate sandmat
Fabaceae		Legume Family
<i>Medicago</i>	<i>polymorpha</i>	bur clover
<i>Melilotus</i>	<i>officinalis</i>	yellow sweet clover
<i>Trifolium</i>	<i>campestre</i>	field clover
Geraniaceae		Geranium Family
<i>Erodium</i>	<i>cicutarium</i>	red-stemmed stork's bill
Malvaceae		Mallow Family
<i>Malva</i>	<i>parviflora</i>	cheeseweed
Meliaceae		Mahogany Family
<i>Melia</i>	<i>azedarach</i>	China berry
Oleaceae		Olive Family
<i>Fraxinus</i>	<i>americana</i>	white ash
Oxalidaceae		Oxalis Family
<i>Oxalis</i>	<i>corniculata</i>	creeping wood-sorrel

Flora Compendia

Rutaceae		Rue Family
<i>Citrus</i>	<i>sinensis</i>	sweet orange
Solanaceae		Nightshade Family
<i>Nicotiana</i>	<i>glauca</i>	tree tobacco
Zygophyllaceae		Caltrop Family
<i>Tribulus</i>	<i>terrestris</i>	puncture vine
Arecaceae		Palm Family
<i>Washingtonia</i>	<i>robusta</i>	Mexican fan palm
Poaceae		Grass Family
<i>Bromus</i>	<i>diandrus</i>	ripgut brome
<i>Bromus</i>	<i>rubens</i>	red brome
<i>Cynodon</i>	<i>dactylon</i>	Bermuda grass
<i>Festuca</i>	<i>sp.</i>	unknown fescue species
<i>Hordeum</i>	<i>murinum ssp. leporinum</i>	leporinum barley
<i>Schismus</i>	<i>barbatus</i>	common Mediterranean grass

Fauna Compendia

Phrynosomatidae		Lizards
<i>Sceloporus</i>	<i>occidentalis</i>	western fence lizard
Hirundinidae		Swallows
<i>Petrochelidon</i>	<i>pyrrhonota</i>	cliff swallow
Sturnidae		Starlings
<i>Sturnus</i>	<i>vulgaris</i>	European starling
Fringillidae		Finches
<i>Carpodacus</i>	<i>mexicanus</i>	house finch
Geomyidae		Pocket Gophers
<i>Thomomys</i>	<i>bottae</i>	Botta's pocket gopher
Canidae		Wolves and Foxes
<i>Canis</i>	<i>familiaris</i>	domestic dog

Appendix C: Site Photographs



Photograph 1: Developed Area within the parcel south of Central Avenue.



Photograph 2: Looking east showing disturbed area with DMV facility in the background.

Source: Michael Brandman Associates, 2010



Michael Brandman Associates

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Appendix A – Site Photographs National Orange Show Industrial Project

Lewis Retail Centers



Photograph 1: Landscaped area along Arrowhead Avenue looking north.



Photograph 2: Looking northeast showing ruderal area with Chinaberry trees.

Source: Michael Brandman Associates, 2010



Michael Brandman Associates

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Appendix A – Site Photographs National Orange Show Industrial Project

Lewis Retail Centers

Appendix D: Regulatory Framework

REGULATORY FRAMEWORK

SENSITIVE PLANT AND WILDLIFE SPECIES

Sensitive species are native species that have been accorded special legal or management protection because of concern for their continued existence. There are several categories of protection at both federal and state levels, depending on the magnitude of threat to continued existence and existing knowledge of population levels.

Federal Endangered Species Act

The United States Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (ESA). The ESA provides a process for listing species as either threatened or endangered, and methods of protecting listed species. The ESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its known geographic range. A “threatened” species is a species that is likely to become endangered. A “proposed” species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

ESA Section 9 prohibits “take” of threatened or endangered species. The term “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. Take can include disturbance to habitats used by a threatened or endangered species during any portion of its life history. The presence of any federally threatened or endangered species in a project area generally imposes severe constraints on development, particularly if development would result in “take” of the species or its habitat. Under the regulations of the ESA, the USFWS may authorize “take” when it is incidental to, but not the purpose of, an otherwise lawful act.

California Endangered Species Act

The California Department of Fish and Game (CDFG) administers the California Endangered Species Act (CESA). The State of California considers an “endangered” species one whose prospects of survival and reproduction are in immediate jeopardy. A “threatened” species is one present in such small numbers throughout its range that it is likely to become an endangered species in the near future in the absence of special protection or management. A “rare” species is one present in such small numbers throughout its portion of its known geographic range that it may become endangered if its present environment worsens. The rare species designation applies to California native plants. State threatened and endangered species are fully protected against take, as defined above. The term “species of special concern” is an informal designation used by CDFG for some declining wildlife species that are not state candidates for listing. This designation does not provide legal protection, but signifies that these species are recognized as sensitive by CDFG.

California Native Plant Society

The California Native Plant Society (CNPS) is a California resource conservation organization that has developed and inventory of California's sensitive plant species. This inventory summarizes information on the distribution, rarity, and endangerment of California's vascular plants. The inventory is divided into four lists based on the rarity of the species. In addition, the CNPS provides an inventory of plant communities that are considered sensitive by the state and federal resource agencies, academic institutions, and various conservation groups. Determination of the level of sensitivity is based on the number and size of remaining occurrences as well as recognized threats.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States (U.S.) except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs.

California Fish and Game Code – Sections 3503 and 3511

The CDFG administers the California Fish and Game Code (CFG Code). There are particular sections of the CFG Code that are applicable to natural resource management. For example, Section 3503 of the CFG Code states it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird that is protected under the MBTA. CFG Code Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey such as hawks and owls, and their eggs and nests from any form of take. CFG Code Section 3511 lists fully protected bird species where the CDFG is unable to authorize the issuance of permits or licenses to take these species.

JURISDICTIONAL WATERS AND WETLANDS

Impacts to natural drainage features and wetland areas are regulated by the United States Army Corp of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFG based upon the policies and regulations discussed below.

United States Army Corp of Engineers Regulations

Federal Clean Water Act – Section 404

The USACE administers Section 404 of the federal Clean Water Act (CWA). This section regulates the discharge of dredge and fill material into waters of the U.S. USACE has established a series of nationwide permits that authorize certain activities in waters of the U.S., if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or in excess of 0.5 acre of waters of the U.S. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions. USACE also has discretionary

authority to require an Environmental Impact Statement for projects that result in impacts to an area between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts to endangered species.

Waters of the United States

Waters of the U.S., as defined in the Code of Federal Regulations (CFR) Section 328.3, include all waters or tributaries to waters such as lakes, rivers, intermittent and perennial streams, mudflats, sand-flats, natural ponds, wetlands, wet meadows, and other aquatic habitats. Frequently, waters of the U.S., with at least intermittently flowing water or tidal influences, are demarcated by an ordinary high water mark (OHWM). The OHWM is defined in CFR Section 328.3(e) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. In this region, the OHWM is typically indicated by the presence of an incised streambed with defined bank shelving.

In June 2001 the USACE South Pacific Division has issued *Guidelines for Jurisdictional Delineations for Waters of the United States in the Arid Southwest*. The purpose of this document was to provide background information concerning physical characteristics of dryland drainage systems. These guidelines were reviewed and used to identify jurisdictional drainage features within the Project Site.

Wetlands

According to the USACE *Wetlands Delineation Manual, Technical Report*, three criteria must be satisfied to classify an area as a jurisdictional wetland:

1. A predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation)
2. Soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils)
3. Permanent or periodic inundation or soils saturation, at least seasonally (wetland hydrology)

Wetland vegetation is characterized by vegetation in which more than 50 percent of the composition of dominant plant species are obligate wetland, facultative wetland, and/or facultative species that occur in wetlands. As a result of the 2001 Solid Waste Agency of North Cook County (SWANCC) case, a wetland must show connectivity to a stream course in order for such a feature to be considered jurisdictional. Although wetland criteria was used to identify if areas were considered wetlands, the exact limits of jurisdiction were not measured based on the standard wetland delineation protocol as described in the 1987 USACE manual.

United States Army Corp of Engineers Regulated Activities

The USACE regulates the discharge of dredged or fill material including, but not limited to, grading, placing of rip-rap for erosion control, pouring concrete, laying sod, and stockpiling excavated material. Activities that generally do not involve a regulated discharge, if performed specifically in a manner to avoid discharges, include driving pilings, drainage channel maintenance, temporary mining and farm/forest roads, and excavating without stockpiling.

Regional Water Quality Control Board Regulations

Clean Water Act - Section 401

Per Section 401 of the CWA, “any applicant for a Federal permit for activities that involve a discharge to waters of the State, shall provide the Federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification from the RWQCB.

Porter-Cologne Water Quality Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the state” (water code Section 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (water code Section 13050 (e)).

Regional Water Quality Control Board Regulated Activities

Under Section 401 of the CWA, the RWQCB regulates all activities that are regulated by the USACE. Additionally, under the Porter-Cologne Water Quality Act, the RWQCB regulates all activities, including dredging, filling, or discharge of materials into waters of the state that are not regulated by the USACE due to a lack of connectivity with a navigable water body and/or lack of an OHWM.

California Department of Fish and Game Regulations

California Fish and Game Code - Section 1600 to Section 16003

The CFG Code mandates that “it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity.” CDFG jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources.

Furthermore, CDFG jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFG jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFG definition, a watercourse need not exhibit evidence of an OHWM to be claimed as jurisdiction. However, CDFG does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

California Department of Fish and Game Regulated Activities

The CDFG regulates activities that involve diversions, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife resources.