

## **APPENDIX 2a**

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**BRA, BUOW & JD (2017)**



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August 11, 2017

Tom Dodson and Associates  
Attn: Tom Dodson  
2150 N. Arrowhead Avenue  
San Bernardino, CA 92405

RE: GENERAL BIOLOGICAL RESOURCES ASSESSMENT REPORT  
FOCUSED BURROWING OWL SURVEY & JURISDICTIONAL DELINEATION  
INLAND VALLEY DEVELOPMENT AGENCY SPECIFIC PLAN AMENDMENT

Dear Mr. Dodson:

On behalf of Tom Dodson & Associates (TDA) and the Inland Valley Development Agency (IVDA), Jericho Systems Inc. (Jericho) conducted a general biological resources assessment (BRA) and protocol-level breeding season burrowing owl (*Athene cunicularia*) survey for a Specific Plan Amendment (SPA) Project (Project) within the City of Highland and City of San Bernardino, that intends to rezone the areas within its borders, creating a more cohesive and organized area of business and residential use.

The purpose of the BRA was to address potential effects of the Project to designated critical habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA) or species designated as sensitive by the California Department of Fish and Wildlife (CDFW) and/or the California Native Plant Society (CNPS). Jericho assessed the open lands within the SPA for sensitive species with attention focused on those State- and/or federally-listed as threatened or endangered species and California species of special concern that have been documented in the project vicinity and/or whose habitat requirements are present within the vicinity of the project site.

In addition to the BRA and focused surveys, Jericho's Regulatory Specialists conducted a Jurisdictional Delineation (JD) of the SPA area. The purpose of the JD was to determine the extent of State and federal jurisdictional waters within the project area potentially subject to regulation by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and CDFW under Section 1602 of the California Fish and Game Code (FCG).

## PROJECT SETTING

The SPA specifically concerns the section of the City of San Bernardino located west of the 210 freeway, east of Tippecanoe Ave., north of 3<sup>rd</sup> Street, and south of 6<sup>th</sup> Street, in the eastern portion of City San Bernardino and the western portion of the City of Highland. The site is identified on the Redlands U.S. Geological Survey's (USGS) 7.5-minute topographic map in the southern portions of Sections 4, 5, and 6 of Township 1 South, Range West (Figure 1).

To better explain the changes proposed to the project area, we have broken up the plan into four subareas as follows: City of Highland West, City of San Bernardino, City of Highland Center, and City of Highland East (See Figure 2).

### *City of Highland West*

This section of the SPA is bordered on the west by Tippecanoe Ave, on the north by 6<sup>th</sup> Street, the south by 3<sup>rd</sup> Street, and on the east by the city boundary between Highland and San Bernardino. Currently, this area is a mix of Vacant Land, Single Family Detached, Apartment/Condo, and Commercial uses, with Single Family Detached and Vacant Land being the primary uses, at roughly 60 percent and 20 percent of the total land use respectively. Under the SPA, this area would be converted to Planned Commercial and Business Park uses, with about 15 percent of the area being Planned Commercial on the western-most edge of the section and the rest being Business Park.

This section of the project contains mainly single family residential houses, with vegetative growth being ornamentals associated with the residences. An open, concrete-lined channel bisects the section below 5<sup>th</sup> Street. There are some scattered vacant lots, with the largest being on the east and west sides of the northern part of Del Rosa Drive and adjacent to the western section of the open channel. These fields are undeveloped lots that had at one point been disked and have since grown back with nonnative grasses and weeds. There are no native vegetative communities established on any of the vacant areas or residential lots in this section of the SPA.

### *City of San Bernardino*

A portion of the center of the Specific Plan is City of San Bernardino land. This is currently mostly Vacant Land (80 percent of the area), with small amounts of Industrial, Single Family Detached, and Commercial uses existing near the intersection of 5<sup>th</sup> Street and Lankershim Avenue. This would shift under the Specific Plan to Commercial General on the southwest quarter of the area and Industrial light on the northwest and center sections of the area. The eastern portion of the City of San Bernardino area would be Residential Medium (considered 14 du/ac) with a small scattering of Commercial General.

This section of the SPA almost completely consists of undeveloped lots. There is a small developed section lining Lankershim Avenue that has no associated vegetation or potential habitat for biological resources. The undeveloped lots to the east, west, and south of these developed areas are regularly weed-treated via the mechanical process of disking. Invasives such as mustard (*Brassica sp.*) and brome (*Bromus sp.*) have overtaken these areas, rendering them unsuitable for many of the sensitive native species. Ground squirrel (*Spermophilus beecheyi*) colonies are present in these lots.

### *City of Highland Center*

The part of the SPA that will be referred to as City of Highland Center consists of both a section of land north of 5<sup>th</sup> Street, south of 6<sup>th</sup> Street on either side of Lankershim Avenue that is bordered on both the east and west by City of San Bernardino land, and the part of the Specific Plan east of Victoria Avenue and west of Central Avenue (again, south of 6<sup>th</sup> Street and north of 3<sup>rd</sup> Street). The area surrounded by the City of San Bernardino land is currently mostly Single Family Detached and Industrial, with some Commercial and Vacant Land. The section between Victoria Ave and Central Ave contains an Apartment/Condo complex in the northeast portion, with the rest of the land area split between Single Family Detached (mostly to the north) and Vacant Land (mostly to the south). Under the Specific Plan, all of the area surrounding Lankershim Avenue and the southern half of the Victoria Avenue through Central Avenue land would be Business Park. The Residential areas currently existing would remain mostly

unchanged, with all of the Vacant land north of 5<sup>th</sup> Street also being converted to Low-Density Residential (considered 2.1-6.0 du/ac).

This section of the project is mostly developed around Lankershim Avenue and in the part of the Victoria Avenue to Central Avenue north of 5<sup>th</sup> Street. The area below 5<sup>th</sup> Street is mainly open lots, with an open channel cutting diagonally from the corner of 3<sup>rd</sup> Street and Victoria Avenue to near the intersection of Central Avenue and 5<sup>th</sup> Street. As with the City of San Bernardino section, the majority of the vacant land in this section is mechanically treated to keep vegetation from growing too abundantly. Non-native and invasives make up the majority of the plant species within this section.

#### *City of Highland East*

This section of the SPA is bordered on the west by Central Avenue, the north by an existing open channel that drains into City Creek to the east, the south by 3<sup>rd</sup> Street and the east by Interstate 210. This area is currently mostly Industrial (about 45 percent), with Open Space and Floodways taking up an additional 20 percent with the aforementioned open channel to the north and City Creek on the east. The remaining land is an almost even mix of Vacant Land, Single Family Detached, and Commercial uses.

Under the SPA, the open Channel and City Creek will remain Open Space with no proposed development associated with the Specific Plan, and the Industrial sections will be solidified as zoned in all other areas north of 5<sup>th</sup> Street, as well as east of Alabama Street. The sections south of 5<sup>th</sup> Street will be Business Park.

The western and southern portions of this section of the project have been developed as an industrial area. The northern boundary of the section is an open channel that will remain untouched by the implementation of the SPA, as well as City Creek on the eastern border of the section. Native habitat communities, including the Riversidean Alluvial Fan Sage Scrub (RAFSS) and Southern Riparian Scrub, are present within and along the banks of City Creek. The presence of these habitats means that several sensitive and protected species have the potential to occur within those areas, including least Bell's Vireo (*Vireo bellii pusillus*), Santa Ana River woolly star (*Eriastrum densifolium* ssp. *sanctorum*), and San Bernardino kangaroo rat (*Dipodomys merriami parvus*). As stated, these areas have no proposed development associated with them in the SPA, and as such, no impacts to these areas will occur due to the implementation of the SPA. The developed areas in this section of the project do not, despite their proximity to City Creek, have any native vegetation communities present.

## **ENVIRONMENTAL SETTING**

The SPA lies in the Southern California Northern Baja Ecoregion (85) specifically in the Inland Valleys (85k). The Inland Valleys ecoregion is heavily urbanized, the alluvial fans and basin floors south of the San Bernardino and San Gabriel Mountains are included in this region along with some of the flood plains spanning along the Santa Ana River. The 85k ecoregion also includes the San Jacinto and Perris Valleys in the south. The temperature of the soil in this area is thermic, meaning that the average soil temperature usually sits between 15° C and 22° C. The soil moisture regime is xeric and is typical for Mediterranean climates with cool wet winters and warm dry summers. Vegetation in this ecoregion consists of Riversidean coastal sage scrub, valley grasslands and riparian woodlands. The ecoregion 85 is also characterized by chaparral hillsides that contain vegetation such as ceanothus, manzanita, scrub oak and mountain mahogany; along with Coast live oak, canyon live oak, poison oak, and California black walnut trees.

The SPA is within the Bunker Hill Hydrologic Sub-Area (HSA 807.52) which comprises a 124,791-acre drainage area within the larger Santa Ana River Watershed (HUC 1807020). This watershed originates

within San Bernardino County and continues to the ocean through Riverside and Orange counties. The Santa Ana River Watershed is bound on the north by the Mojave Watersheds, on the east by the Whitewater River Watershed, on the south by the Newport Bay, Aliso-San Onofre, and the San Jacinto Watersheds and on the west by the San Gabriel Watershed. The Santa Ana Watershed encompasses a portion of the San Gabriel and San Bernardino Mountains in the south and is approximately 3,000 square miles in area. The Santa Ana River is the major hydrogeomorphic feature within the Santa Ana Watershed.

Soils in the SPA consist of four types 1) Hanford coarse sandy loam, a granite-based, non-hydric soil; 2) Psamments, Fluvents which are frequently flooded, sandy alluvium soils associated with flooding; 3) Soboba gravelly and stony loamy sand, a granite-based, non-hydric soil; and 4) Tujunga loamy sand and gravelly loamy sand, also a granite-based, non-hydric soil.

## **BIOLOGICAL SETTING**

In addition to field surveys, relevant databases (USFWS threatened and endangered species occurrence data overlay, Environmental Conservation Online System (ECOS), California Natural Diversity Database (CNDDDB) and California Native Plant Society Electronic Inventory (CNPSEI)) were searched for sensitive species data on the *Redlands*, *San Bernardino South* and *Harrison Mountain* USGS 7.5-minute series quadrangles. According to these data bases 92 sensitive species (35 Plants, 51 animals, and 6 habitats) have been documented to occur locally (See Appendix A for full list).

This assessment focuses attention on the specific sensitive species that have been documented in the project vicinity and/or whose habitat requirements are present within the SPA. Of the 92 species and habitats identified, only burrowing owl (*Athene cuniculara*) [BUOW] has a moderate potential to occur in an area affected by the SPA. Although not a State or federally listed as threatened or endangered species, burrowing owl are considered a State and federal Species of Special Concern and are a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California Fish and Game Code (CDFG Code #3513 & #3503.5). Burrowing owl are known to occur throughout the region and have been documented within the project vicinity.

The BUOW is a small, ground-dwelling owl that is protected under the Migratory Bird Treaty Act (MBTA) and by CDFW as a Species of Special Concern. In southern California, BUOW can be found in grassland, shrub steppe, and desert habitat types consisting of short, sparse vegetation with few shrubs, level to gentle topography, and well-drained soils. They can also be found in agricultural areas, ruderal grassy fields, vacant lots and pastures, and flood control facilities. Most importantly, BUOWs require underground burrows or other cavities for nesting, roosting and shelter. Burrows used by the owls are usually dug by other species, termed host burrowers.

In California, California ground squirrel (*Spermophilus beecheyi*) burrows are frequently used by BUOW but they may use dens or holes dug by other fossorial species or man-made structures such as pipes and culverts. They are active during the day, generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31.

## **METHODS**

All surveys conducted for this project in regard to biological resources were conducted on vacant lands within the project area (See Table 1). Previously developed land in active use was not surveyed. Figure 2 depicts the surveyed area of the project.

Table 1: Summary of Surveyed Areas

SPA Sub-Area	# of Vacant Acres	Location
<b>City of Highland West</b>	27	Vacant lot between 5 <sup>th</sup> Street and 6 <sup>th</sup> Street on the west side of Sterling Avenue was surveyed, along with the channelized drainage that runs through the middle of the SPA that is between 5 <sup>th</sup> Street and 3 <sup>rd</sup> Street
<b>City of San Bernardino</b>	136	Large vacant lots to the north and south of 5 <sup>th</sup> Street, bounded by Victoria Ave to the east and a small section of developed housing just east of N Del Rosa Drive to the west, were surveyed
<b>City of Highland Center</b>	25	Large vacant lot on the southeast corner of the intersection of 5 <sup>th</sup> Street and Victoria Avenue as well as the drainage channel running through this section of the SPA were surveyed.
<b>City of Highland East</b>	36	Eastern and northern-most edges of the project. City Creek and the East Storm Drain flowing into it were surveyed.

Jericho biologists Daniel Smith, Shannon Dye and Eugene Jennings conducted a general biological resources assessment of the project area on April 12<sup>th</sup> and 13<sup>th</sup>, 2017. Mr. Smith is a field biologist with over a decade of experience conducting field surveys. He was assisted by Ms. Dye and Mr. Jennings, biologists with experience conducting many such field surveys in San Bernardino, Redlands, and throughout the Inland Empire.

General wildlife species were detected during field surveys by sight, calls, tracks, scat, or other sign. In addition to species observed, expected wildlife usage of the site was determined according to known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The main focus of the assessment was to identify potential habitat for special status wildlife within the project area.

Jericho biologist scheduled their focused surveys to coincide with the breeding season for BUOW. Jericho biologists Daniel Smith, Eugene Jennings, and Shannon Dye, assisted by field intern Bailey Bingham conducted the surveys on April 13, May 9, June 21, and July 15, 2017 in accordance with the March 7, 2012 “California Department of Fish and Game staff report on Burrowing Owl Mitigation”. The surveyors conducted comprehensive surveys with complete coverage of the site and adjacent areas (when appropriate and feasible). They assessed the survey site for soil type and level of friability as well as habitat type and habitat structure. As per BUOW survey protocol, the surveyors systematically searched all open, undeveloped areas of the Specific Plan with sparse, low-growing vegetation or open channels with sloped banks by walking transects spaced at approximately 100 feet (30 meters), which provided 100 percent visual coverage of the ground surface. During each of the required four site visits, they inspected all natural and non-natural substrates and searched for signs of BUOW including, burrows, molted feathers, cast pellets, prey remains, and owl white-wash. Surveys were conducted during the morning hours of 6 am through 10 am.

In addition to the biological resources assessment and focused surveys, potential jurisdictional waters were also assessed within the project area. Historical aerial photographs were examined to gain an understanding of the impact of land-use on natural drainage patterns in the area. Where possible, surface drainage systems were traced using aerial imagery to downstream receiving waters. The USFWS National Wetland Inventory and Environmental Protection Agency (EPA) Water Program “My Waters” data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey was used to identify the soil

series in the area and to check these soils to determine whether they are regionally identified as hydric soils.

Field verification of measurements established via aerials was conducted on foot on July 26<sup>th</sup>. Suspected jurisdictional areas were checked for the presence of definable channels and/or wetland vegetation, riparian habitat, soils, and hydrology. The lateral extent of USACE jurisdiction was measured at the Ordinary High Watermark (OHWM), as 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. Evaluation of CDFW jurisdiction followed the guidance in the FGC by measuring the elevations of land that confine a stream to a definite course when its waters rise to their highest level and to the extent of associated riparian vegetation.

Upon completion of fieldwork, all data collected in the field were incorporated into a Geographic Information System (GIS) along with base map data. The GIS was then used to quantify the extent of jurisdictional waters. Upstream and downstream connectivity of waterways was reviewed in the field and on aerial photographs and topographic maps to determine jurisdictional status per the CWA.

## RESULTS

All of the vacant lands within the SPA subareas have been experienced periodic weed abatement activities. The vacant lands are characterized by long grasses and non-native weedy species, such as slender oat (*Avena barbata*), hoary mustard (*Hirschfeldia incana*), red brome (*Bromus madritensis ssp. rubens*), and ripgut (*Bromus diandrus*). Much of the SPA area and surrounding land uses have heavily disturbed, if not completely eliminated, most of the naturally occurring habitats in SPA project site, reducing the suitability of the habitat to support very sensitive species.

### Habitat

Table 2: Habitats in Sub-Areas

SPA Sub-Area	Location Type/Acreage	Habitat	Wildlife Observed
<b>City of Highland West</b>	Vacant Lot and West Storm Drain/ 27 acres	Mediterranean grass grassland	California ground squirrel ( <i>Spermophilus beecheyi</i> ), domestic cat ( <i>Felis catus</i> ), red-tailed hawk ( <i>Buteo jamaicensis</i> ), house finch ( <i>Haemorrhous mexicanus</i> ), house sparrow ( <i>Passer domesticus</i> )
<b>City of San Bernardino</b>	Vacant Lot and West Storm Drain/ 136 acres	Mediterranean grass grassland	California ground squirrel, coyote ( <i>Canis latrans</i> ), domestic dog ( <i>Canis lupus familiaris</i> ), red-tailed hawk, side-blotched lizard ( <i>Uta stansburiana</i> ), western fence lizard ( <i>Sceloporus occidentalis</i> )
<b>City of Highland Center</b>	Vacant Lot/ 25 acres	Mediterranean grass grassland	American crow ( <i>Corvus branchyrhynchos</i> ), red-tailed hawk, domestic dog, side-blotched lizard
<b>City of Highland East</b>	City Creek and East Storm Drain/ 36 acres	Mediterranean grass grassland	California ground squirrel, killdeer ( <i>Charadrius vociferus</i> ), western kingbird ( <i>Tyrannus verticalis</i> ), Say's phoebe ( <i>Sayornis saya</i> ), house finch, side-blotched lizard

### Special Status Species

No State and/or federally listed threatened or endangered species, or other sensitive species were observed on any of the sites during the field surveys. The conditions present onsite were marginally-suitable for BUOW. According to the CNDDDB, there are 4 documented occurrences of BUOW within the *Redlands*, *San Bernardino South*, and *Harrison Mountain* quads. Of these occurrences, a 2006

observation noted BUOW within the drainage along 3<sup>rd</sup> Street, at the southern edge of the City of San Bernardino sub-area of the SPA.

The soils on site are friable and conducive to burrowing. The focused surveys were structured to detect BUOW in their peak times of activity. No evidence of BUOW was found in any of the vacant lands in any of the subareas during the survey area. All ground squirrel burrows located within the SPA property were evaluated and did not present any evidence of historic or current use by BUOW. Predators such as domestic cat, great-horned owl, domestic dog, coyote, and a red-tailed hawk were observed on site, which would deter BUOW from using the site. No BUOW individuals or BUOW sign was observed within or adjacent to SPA survey area. No sign of BUOW was found within the channel noted to have a BUOW occurrences previously.

### *Nesting Birds*

The open areas of the SPA and immediate surrounding areas do contain habitat suitable for nesting birds. Nesting bird surveys should be conducted prior to any vegetation clearing or new construction activities taking place during the nesting season to avoid potentially taking any birds or active nests. In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season (generally February 1<sup>st</sup> to August 31<sup>st</sup>), and conducting a worker awareness training. However, if all work cannot be conducted outside of nesting season, a project-specific Nesting Bird Management Plan can be prepared to determine suitable buffers.

### *Critical Habitat*

Federally-designated Critical Habitat does exist within the SPA. City Creek contains both San Bernardino kangaroo rat (*Dipodomys merriami parvus*) [SBKR] Critical Habitat and Santa Ana sucker (*Catostomus santaanae*) [SASU] Critical Habitat. The extent of the Critical Habitat is limited in both species to within the corridor of City Creek, with no part in an actionable part of the SPA.

### *Jurisdictional Waters*

There are potentially jurisdictional waters within the SPA. The potentially jurisdictional features that remain above-ground, with the exception of City Creek on the eastern edge, have been channelized in open channels with either rock or concrete edging or earthen channels. The jurisdictional features are tributary to the Santa Ana River, which is located south of the project site.

The Santa Ana River is jurisdictional water subject to the Clean Water Act (CWA) and Fish and Game Code under the jurisdictions of U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW respectively. Any project related impacts to the ephemeral stream that exists onsite will likely require a Streambed Alteration Agreement from the CDFW, and CWA Sections 401/404 permits from the RWQCB and Corps respectively.

There are sections within the SPA that are subject to the jurisdictions of the California FGC Section 1600 and Clean Water Act Sections 404 and 401. The eastern section contains a portion of City Creek, as well as, earthen and concrete lined channels used as storm drain facilities. The western portion of the specific plan contains an earthen channel. All jurisdictional features occur within existing flood control facilities. See Figures 4, 4.1, 5, 5.1, 6, & 6.1 for jurisdictional features within the plan area.

See table 3 below for acreages of jurisdictional features.



Table 3: Summary of Acreages of Jurisdictional Waters within the Subject Parcel

Feature	Average OHWM (feet)	Average Bank-full Width (feet)	Length (feet)	WoUS USACE jurisdiction (acres)	FGC 1600 CDFW jurisdiction (acres)
East Storm Drain	37	86	8,748	5.46	13.18
West Storm Drain	25	54	5,659	2.03	4.73
City Creek	267	352	2,362	13.83	19.43

## CONCLUSIONS AND RECOMMENDATIONS

No State- and/or federally-listed threatened or endangered species, or other sensitive species were observed on any of the vacant lands within any of the SPA subareas during the field survey. No evidence of BUOW was found in the survey areas. The burrows located within the property sites showed no sign of historical or current use of BUOW. No BUOW pellets, feathers or white wash were present and no burrowing owl individuals were observed. As such, BUOW is currently absent from the vacant lands within the SPA.

Nesting birds are protected under the federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C 703-711). The MBTA provides protection for nesting birds that are both residents and migrants whether or not they are considered sensitive by resource agencies. The MBTA prohibits take of nearly all native birds. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered take under federal law. The USFWS, in coordination with the CDFW, administers the MBTA. CDFW’s authoritative nexus to MBTA is provided in FGC Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all nongame birds that occur naturally in the State.

In addition to potential impacts to designated critical habitats and special status species, potential impacts to jurisdictional waters must be considered. Impacts to jurisdictional waters typically require regulatory approvals from one or more of the following regulatory agencies: USACE, RWQCB, and/or CDFW.

### *Clean Water Act Compliance*

The proposed project is to re-designate existing land uses within the specific plan area to allow for future development of vacant parcels. The re-designation map shows that some of the existing flood control channels designated as either Public/Institutional, Commercial General, Business Park, or Planned Commercial. Any alterations to existing flood control channels within the specific plan area would be subject to the CWA and would require a Clean Water Act 401 permit from the Regional Water Quality Control Board and a Clean Water Act Section 404 permit from the Army Corps of Engineers. The proposed project is to re-designate existing land uses within the specific plan area to allow for future development of vacant parcels. The re-designation map shows that some of the existing flood control channels being either Public/Institutional, Commercial General, Business Park, or Planned Commercial.

### *California Fish and Game Code Streambed Alteration Compliance*

The proposed project is to re-designate existing land uses within the specific plan area to allow for future development of vacant parcels. The re-designation map shows that existing flood control channels being

Tom Dodson  
BRA – Specific Plan Amendment  
August 11, 2017

either Public/Institutional, Commercial General, Business Park, or Planned Commercial. Any alterations to existing flood control channels within the specific plan area would be subject to the FGC and would require a 1602 permit from the California Department of Fish and Wildlife.

## **CERTIFICATION**

I hereby certify that the statements furnished herein, and in the attached exhibits present data and information required for this Biological Survey to the best of my ability, and the facts, statements, and information presented are true and correct to the best of my knowledge and belief. This report was prepared in accordance with professional requirements and recommended protocols.

Feel free to contact me if you have any questions at (909) 915-5900 or [shay@jericho-systems.com](mailto:shay@jericho-systems.com)

Sincerely,



Shay Lawrey,

### Appendices

- Appendix A Potential to Occur Table
- Appendix B Figures
- Appendix C Site photos

Tom Dodson  
BRA – Specific Plan Amendment  
August 11, 2017

**APPENDIX A**  
**Potential to Occur Table**

Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
<i>Accipiter cooperii</i>	Cooper's hawk	None/None	G5, S4	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Agelaius tricolor</i>	tricolored blackbird	None/ Candidate Endangered	G2G3, S1S2, SSC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Aimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	None/None	G5T3, S3	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Anniella pulchra pulchra</i>	silvery legless lizard	None/None	G3G4T3T4Q, S3, SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Open fields with loose loamy and sandy soils do exist on the project site. However, the sites are regularly weed-abated via disking, rendering these areas less suitable. The eastern edge of the project area, inside the City Creek drainage, may contain suitable habitat for this species, however the potential for this species to occur in the actionable area of the project is <b>low</b> .
<i>Antrozous pallidus</i>	pallid bat	None/None	G5, S3, SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Arenaria paludicola</i>	marsh sandwort	Endangered/ Endangered	G1, S1, CNPS 1B.1	Marshes and swamps. Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Arizona elegans occidentalis</i>	California glossy snake	None/None	G5T2, S2, SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin	Suitable habitat for this species does not exist onsite.

Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
				Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	The potential for this species to occur is <b>low</b> .
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	None/None	G5T2T4, S3	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	None/None	G5, S2S3	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	None/None	G5T5, S3, SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	Open fields with sparse vegetation do occur in the project area. However, the fields are regularly weed-abated via disking, rendering these areas less suitable. The eastern edge of the project area, inside the City Creek drainage, may contain suitable habitat for this species, however the potential for this species to occur in the actionable area of the project is <b>low</b> .
<i>Astragalus hornii var. hornii</i>	Horn's milk-vetch	None/None	G4G5T1T2, S1, CNPS 1B.1	Meadows and seeps, playas. Lake margins, alkaline sites. 75-350 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Athene cucularia</i>	burrowing owl	None/None	G4, S3, SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester,	Suitable habitat for this species does exist onsite. Focused surveys for

Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
				dependent upon burrowing mammals, most notably, the California ground squirrel.	burrowing owl were conducted within the potentially suitable sections of the project. <b>No burrowing owls were located</b> during the focused surveys.
<i>Berberis nevini</i>	Nevin's barberry	Endangered/ Endangered	G1, S1, CNPS 1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub. On steep, N-facing slopes or in low grade sandy washes. 290-1575 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Bombus crotchii</i>	Crotch bumble bee	None/None	G3G4, S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Buteo swainsoni</i>	Swainson's hawk	None/ Threatened	G5, S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	None/None	G4, S4, CNPS 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Carex comosa</i>	bristly sedge	None/None	G5, S2, CNPS 2B.1	Marshes and swamps, coastal prairie, valley and foothill grassland. Lake margins, wet places; site below sea level is on a Delta island. -5-1620 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Carolella busckana</i>	Busck's gallmoth	None/None	G1G3, SH		Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Catostomus santaanae</i>	Santa Ana sucker	Threatened/ None	G1, S1	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water,	Suitable habitat for this species does not exist onsite. The potential for this species

Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
				and algae.	to occur is <b>low</b> .
<i>Centromadia pungens ssp. laevis</i>	smooth tarplant	None/None	G3G4T2, S2, CNPS 1B.1	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland. Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	None/None	G5T3T4, S3S4, SSC	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County. Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Suitable habitat for this species does exist onsite. Disking activities in the area have reduced potential suitability for this species in the open fields in the project area. The potential for this species to occur is <b>moderate</b> .
<i>Chloropyron maritimum ssp. maritimum</i>	salt marsh bird's-beak	Endangered/Endangered	G4?T1, S1, CNPS 1B.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat. 0-10 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Chorizanthe parryi var. parryi</i>	Parry's spineflower	None/None	G3T2, S2, CNPS 1B.1	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	Threatened/Endangered	G5T2T3, S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Coleonyx variegatus abbotti</i>	San Diego banded gecko	None/None	G5T3T4, S1S2, SSC	Coastal & cismontane Southern California. Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Crotalus ruber</i>	red-diamond rattlesnake	None/None	G4, S3, SSC	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .

Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
<i>Cuscuta obtusiflora</i> <i>var. glandulosa</i>	Peruvian dodder	None/None	G5T4T5, SH, CNPS 2B.2	Marshes and swamps (freshwater). Freshwater marsh. 15-280 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	Endangered/ None	G5T1, S1, SSC	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains. Needs early to intermediate seral stages.	Suitable habitat for this species does exist onsite within the City Creek drainage area on the eastern edge of the site. There is a known population within City Creek, and the potential for this species to occur within that section of the project is <b>high</b> . However, no action is planned for the City Creek area and no suitable habitat exists within the actionable area of the project.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	Endangered/ Threatened	G2, S2	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Dodecahema leptoceras</i>	slender-horned spineflower	Endangered/ Endangered	G1, S1, CNPS 1B.1	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub). Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	Endangered/ Endangered	G5T2, S1	Riparian woodlands in Southern California.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Eremophila alpestris actia</i>	California horned lark	None/None	G5T4Q, S4	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	This species has been observed in the San Bernardino Airport, adjacent to the project area. The potential for this species to utilize parts of the project area



Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
					is <b>high</b> .
<i>Eriastrum densifolium ssp. sanctorum</i>	Santa Ana River woollystar	Endangered/Endangered	G4T1, S1, CNPS 1B.1	Coastal scrub, chaparral. In sandy soils on river floodplains or terraced fluvial deposits. 180-700 m.	This species <b>does occur</b> within the City Creek area of the project. No suitable habitat exists in the project area outside of City Creek area, however. The potential for this species to occur in the actionable area of the project is <b>low</b> .
<i>Eumops perotis californicus</i>	western mastiff bat	None/None	G5T4, S3S4, SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Falco columbarius</i>	merlin	None/None	G5, S3S4	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches. Clumps of trees or windbreaks are required for roosting in open country.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Galium californicum ssp. primum</i>	Alvin Meadow bedstraw	None/None	G5T1, S1, CNPS 1B.2	Chaparral, lower montane coniferous forest. Grows in shade of trees and shrubs at the lower edge of the pine belt, in pine forest-chaparral ecotone. Granitic, sandy soils. 1350-1700 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Gila orcuttii</i>	arroyo chub	None/None	G2, S2, SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Helianthus nuttallii ssp. parishii</i>	Los Angeles sunflower	None/None	G5TH, SH, CNPS 1A	Marshes and swamps (coastal salt and freshwater). 10-1524 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Horkelia cuneata</i>	mesa horkelia	None/None	G4T1, S1,	Chaparral, cismontane woodland, coastal	Suitable habitat for this

Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
<i>var. puberula</i>			CNPS 1B.1	scrub. Sandy or gravelly sites. 15-1645 m.	species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Icteria virens</i>	yellow-breasted chat	None/None	G5, S3, SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Imperata brevifolia</i>	California satintail	None/None	G4, S3, CNPS 2B.1	Coastal scrub, chaparral, riparian scrub, mojavean desert scrub, meadows and seeps (alkali), riparian scrub. Mesic sites, alkali seeps, riparian areas. 3-1495 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Lanius ludovicianus</i>	loggerhead shrike	None/None	G4, S4, SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	This species has been observed in the San Bernardino Airport, adjacent to the project area. The potential for this species to utilize parts of the project area is <b>high</b> .
<i>Lasiurus xanthinus</i>	western yellow bat	None/None	G5, S3, SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Lepidium virginicum var. robinsonii</i>	Robinson's pepper-grass	None/None	G5T3, S3, CNPS 4.3	Chaparral, coastal scrub. Dry soils, shrubland. 4-1435 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	None/None	G5T3T4, S3S4, SSC	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Lycium parishii</i>	Parish's desert-thorn	None/None	G3?, S1, CNPS 2B.3	Coastal scrub, Sonoran desert scrub. 135-1000 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Malacothamnus parishii</i>	Parish's bush-mallow	None/None	GXQ, SX, CNPS 1A	Chaparral, coastal sage scrub. In a wash. 305-455 m.	Suitable habitat for this species does not exist onsite. The potential for this species

Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
					to occur is <b>low</b> .
<i>Monardella pringlei</i>	Pringle's monardella	None/None	GX, SX, CNPS 1A	Coastal scrub. Sandy hills. 300-400 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Nasturtium gambelii</i>	Gambel's water cress	Endangered/Threatened	G1, S1, CNPS 1B.1	Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. 5-330 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/None	G5T3T4, S3S4, SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County. Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	Suitable habitat for this species exists within the City Creek section of the project area. The potential for this species to occur within the drainage there is <b>high</b> . However, no suitable habitat for this species exists outside of that area, and therefore it is unlikely that this species will occur within the actionable area of the project.
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	None/None	G4, S3, SSC	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Onychomys torridus ramona</i>	southern grasshopper mouse	None/None	G5T3, S3, SSC	Desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	Open fields with friable soils do exist on the project site. However, the sites are regularly weed-abated via disking, rendering these areas less suitable. The eastern edge of the project area, inside the City Creek drainage, may contain suitable habitat for this species, however the potential for this species to occur in the actionable area of the project is <b>low</b> .

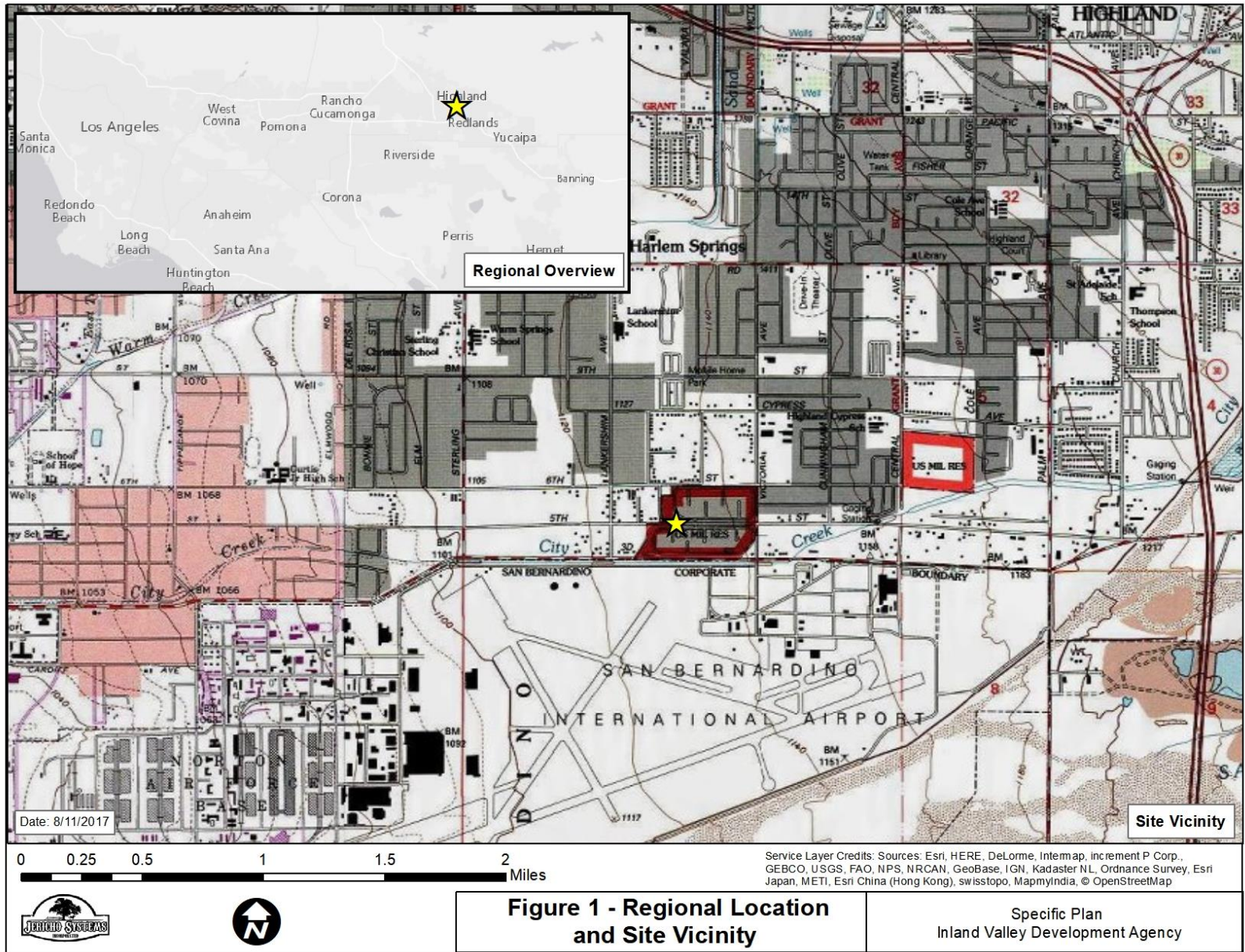
Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	None/None	G5T1T2, S1S2, SSC	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	Open fields with loose loamy and sandy soils do exist on the project site. However, the sites are regularly weed-abated via disking, rendering these areas less suitable. The potential for this species to occur in the actionable area of the project is <b>moderate</b> .
<i>Phrynosoma blainvillii</i>	coast horned lizard	None/None	G3G4, S3S4, SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Poliophtila californica californica</i>	coastal California gnatcatcher	Threatened/None	G4G5T2Q, S2, SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Suitable habitat for this species exists onsite in the City Creek portion of the project site. However, they are not known to occur in this area. The potential for this species to occur is <b>low</b> .
<i>Rana muscosa</i>	southern mountain yellow-legged frog	Endangered/Endangered	G1, S1	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, Apr 2014, effective Jun 30, 2014. Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Rhaphiomidas terminatus abdominalis</i>	Delhi Sands flower-loving fly	Endangered/None	G1T1, S1	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties. Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.	Suitable habitat for this species does not exist onsite. No Delhi Sands are mapped near the project area. The potential for this species to occur is <b>low</b> .
<i>Rhinichthys osculus ssp. 3</i>	Santa Ana speckled dace	None/None	G5T1, S1, SSC	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the	Suitable habitat for this species does not exist onsite.

Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
				Los Angeles River system. Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	The potential for this species to occur is <b>low</b> .
<i>Ribes divaricatum</i> <i>var. parishii</i>	Parish's gooseberry	None/None	G4TX, SX, CNPS 1A	Riparian woodland. Salix swales in riparian habitats. 65-300 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<b>Riversidian Alluvial Fan Sage Scrub</b>		None/None	G1, S1.1	Habitat type <b>does occur</b> within the City Creek section of the project area. It does not occur outside of this section and is not likely to be impacted by the implementation of the project.	
<i>Setophaga petechia</i>	yellow warbler	None/None	G5, S3S4, SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Sidalcea neomexicana</i>	Salt Spring checkerbloom	None/None	G4, S2, CNPS 2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. 0-1530 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<b>Southern Coast Live Oak Riparian Forest</b>		None/None	G4, S4	Habitat type <b>does not occur</b> onsite.	
<b>Southern Cottonwood Willow Riparian Forest</b>		None/None	G3, S3.2	Habitat type <b>does not occur</b> onsite.	
<b>Southern Riparian Scrub</b>		None/None	G3, S3.2	Habitat type <b>does occur</b> within the City Creek section of the project area. It does not occur outside of this section and is not likely to be impacted by the implementation of the project.	
<b>Southern Sycamore Alder Riparian Woodland</b>		None/None	G4, S4	Habitat type <b>does not occur</b> onsite.	
<i>Spea hammondi</i>	western spadefoot	None/None	G3, S3, SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Sphenopholis obtusata</i>	prairie wedge grass	None/None	G5, S2, CNPS 2B.2	Cismontane woodland, meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 300-2000 m.	Suitable habitat for this species does not exist onsite. The potential for this species

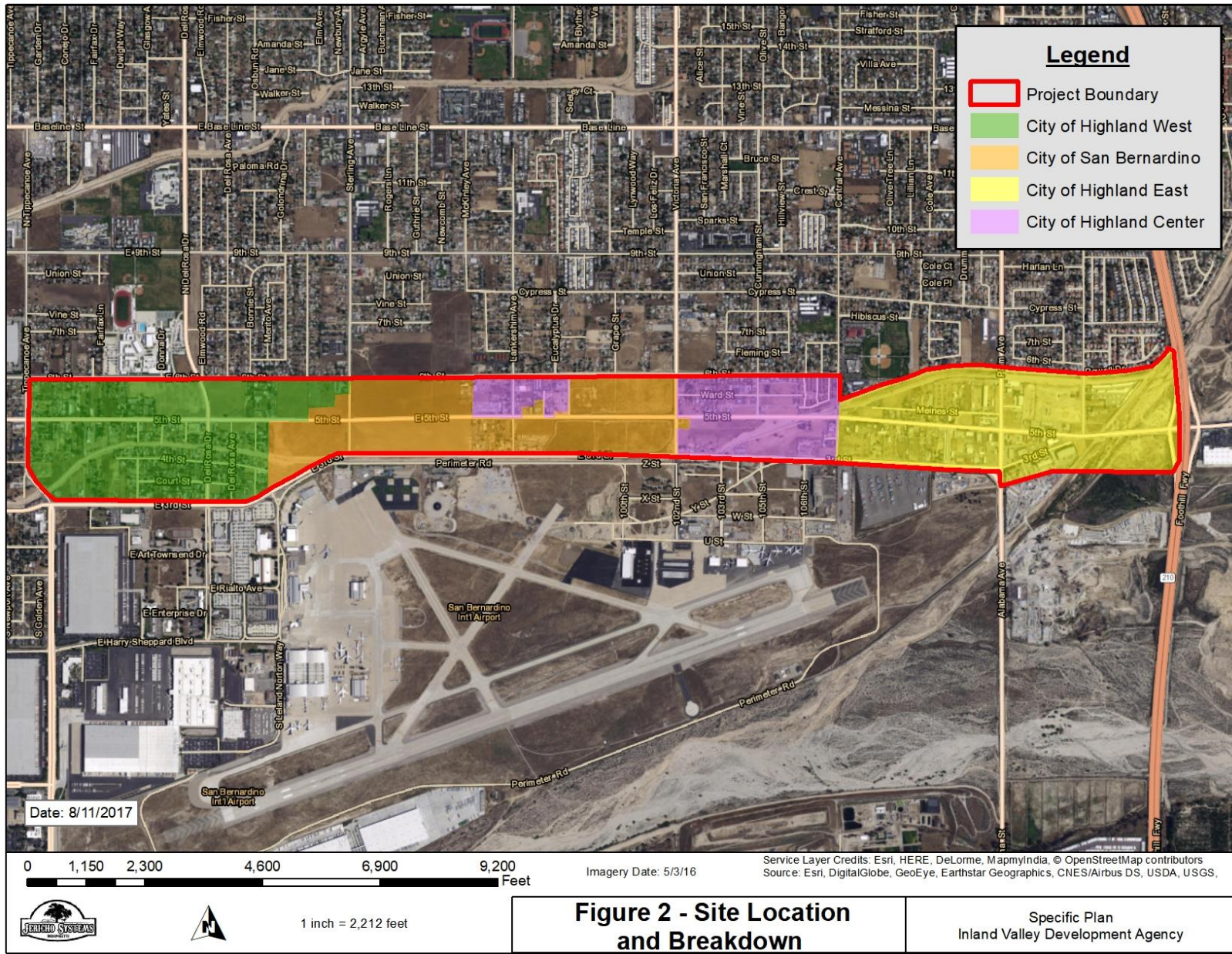
Scientific Name	Common Name	Federal/State Rankings	Other Rankings	Habitat	Potential to Occur
					to occur is <b>low</b> .
<i>Symphotrichum defoliatum</i>	San Bernardino aster	None/None	G2, S2, CNPS 1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 2-2040 m.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Taxidea taxus</i>	American badger	None/None	G5, S3, SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Thamnophis hammondi</i>	two-striped gartersnake	None/None	G4, S3S4, SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Suitable habitat for this species does not exist onsite. The potential for this species to occur is <b>low</b> .
<i>Vireo bellii pusillus</i>	least Bell's vireo	Endangered/ Endangered	G5T2, S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Suitable habitat for this species exists onsite in the City Creek portion of the project site, and they have been found to occur in the upper reaches of City Creek, approximately 1.3 miles upstream of the project area. The potential for this species to occur is <b>moderate</b> . However, no suitable habitat exists in the project area outside of City Creek, and therefore the potential of this species to occur within the actionable portion of the project area is <b>low</b> .

**APPENDIX B**  
**Figures**

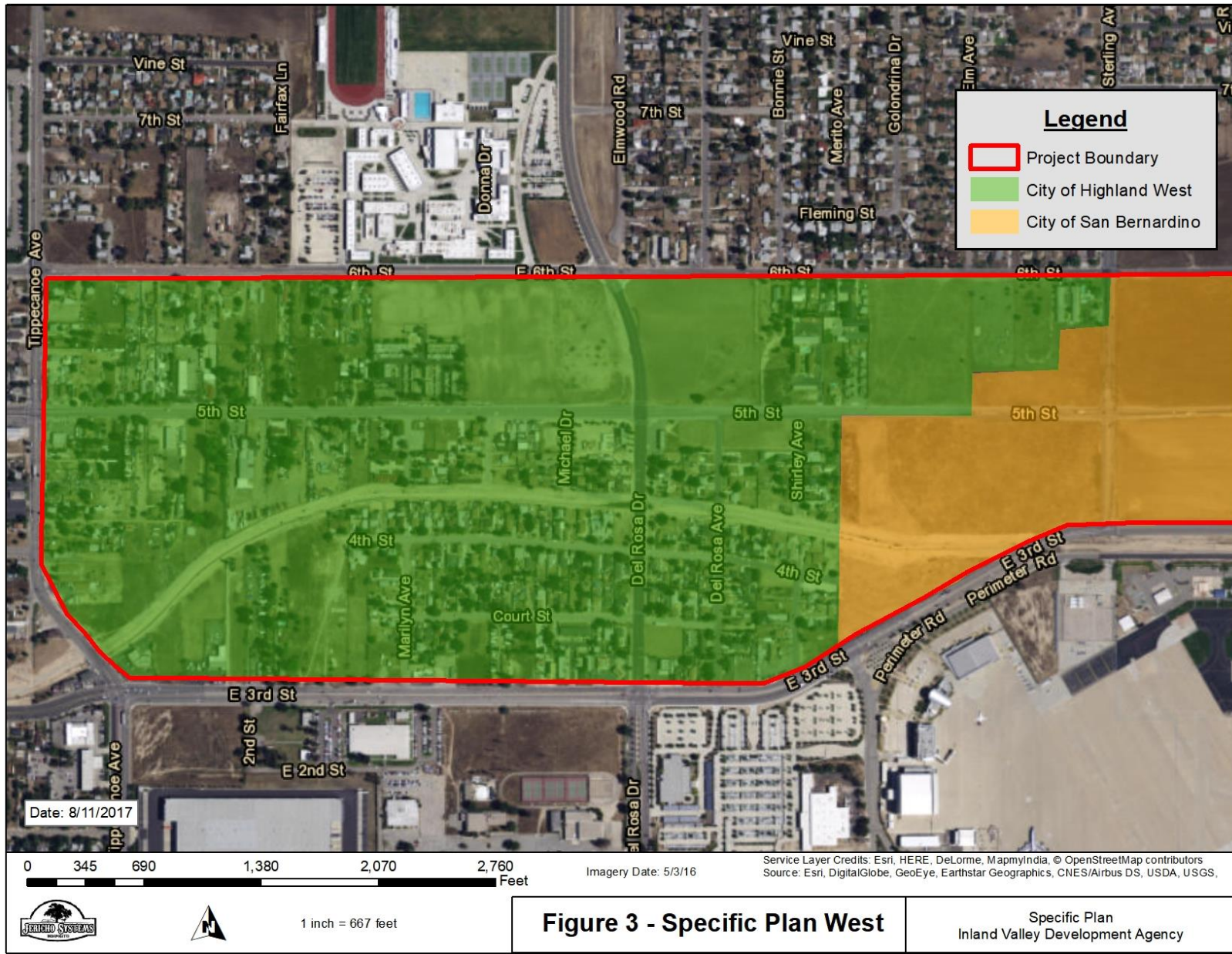




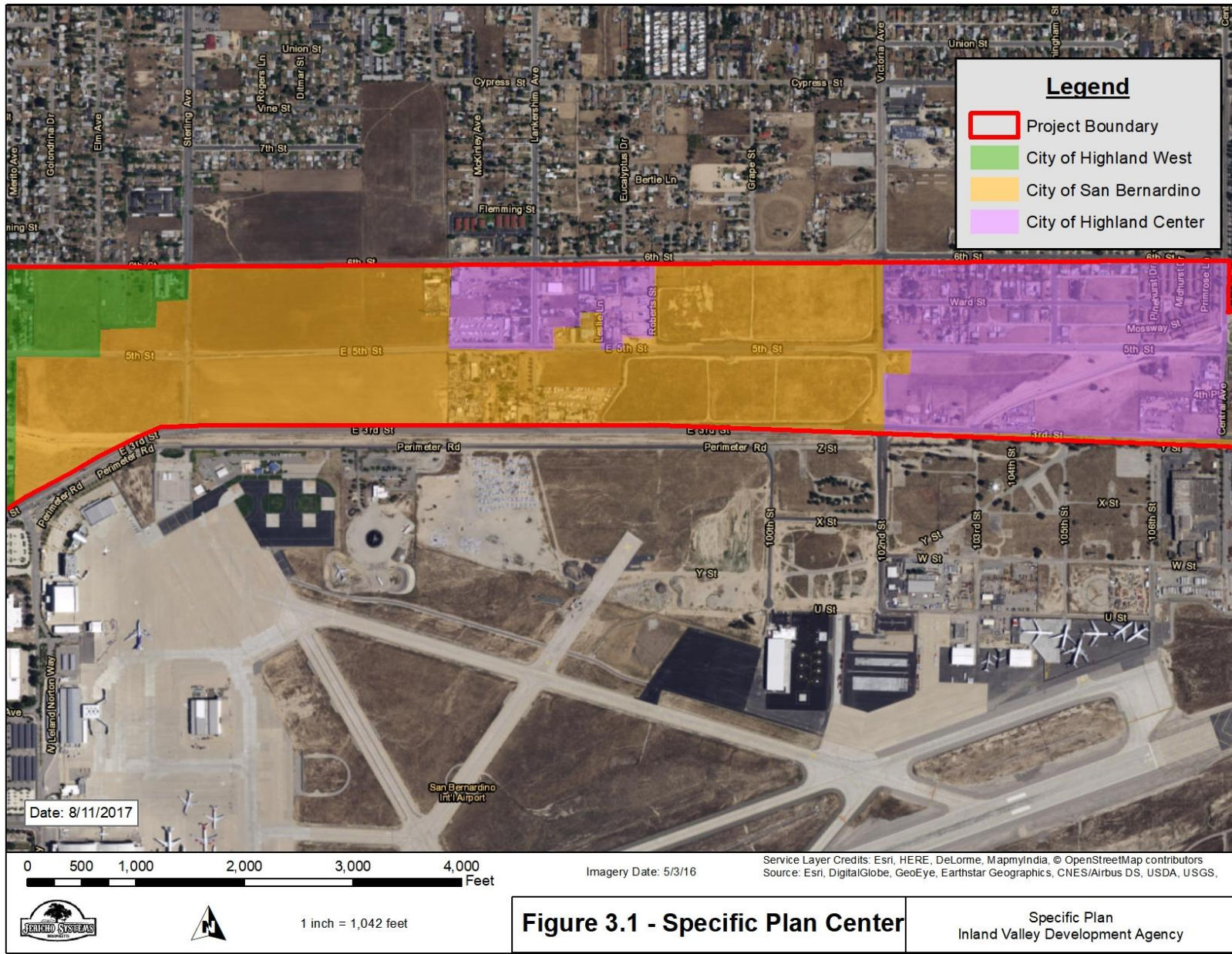




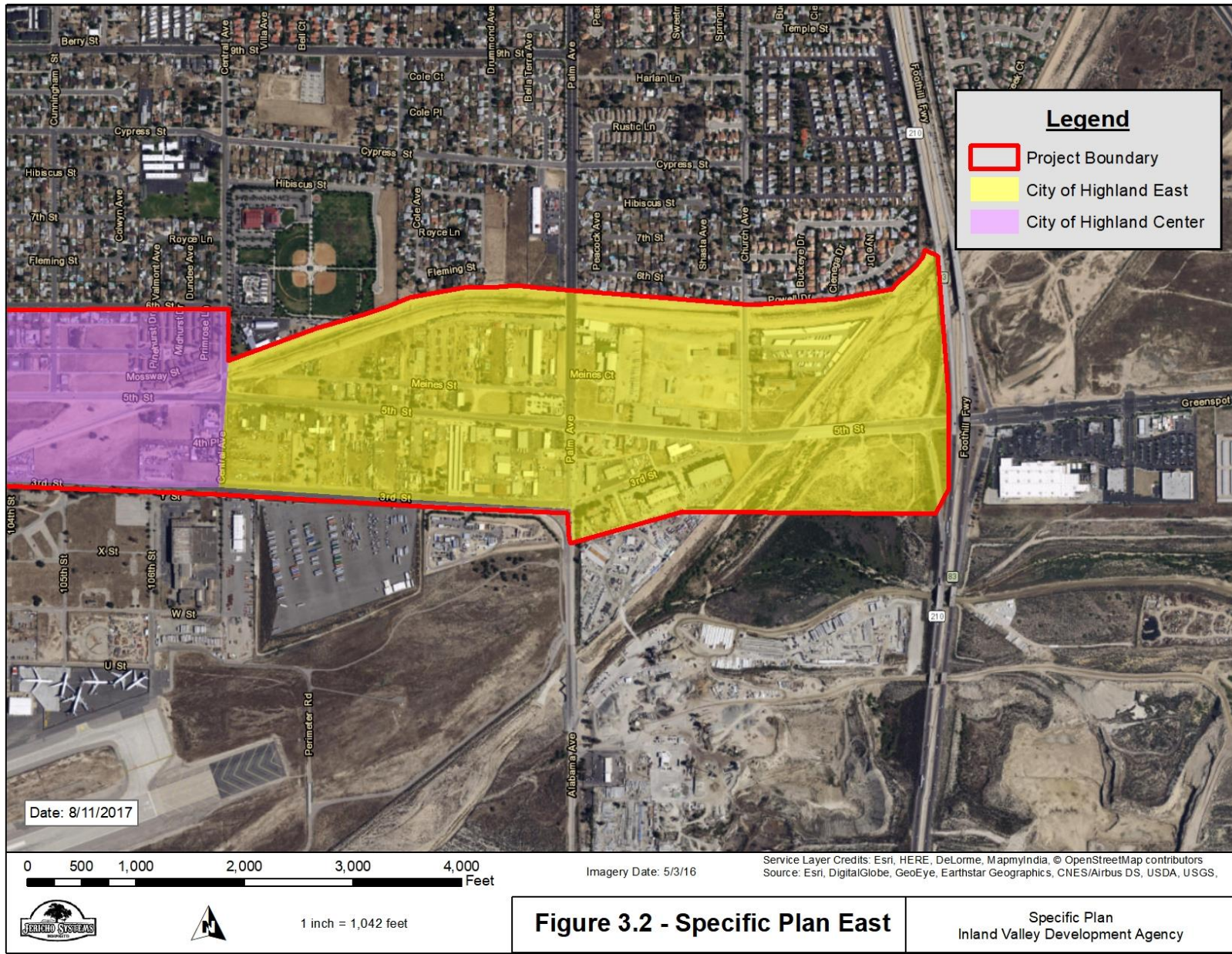




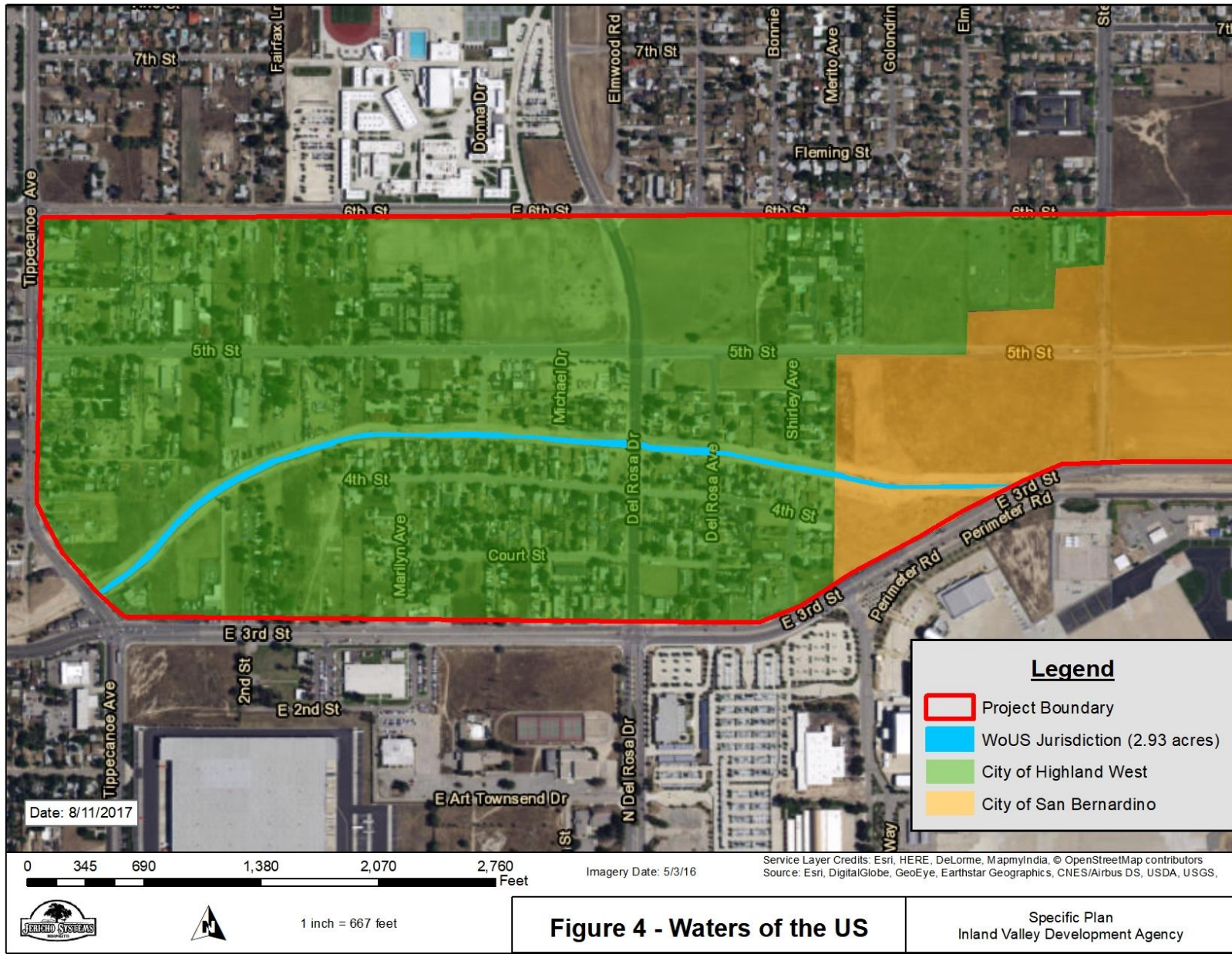




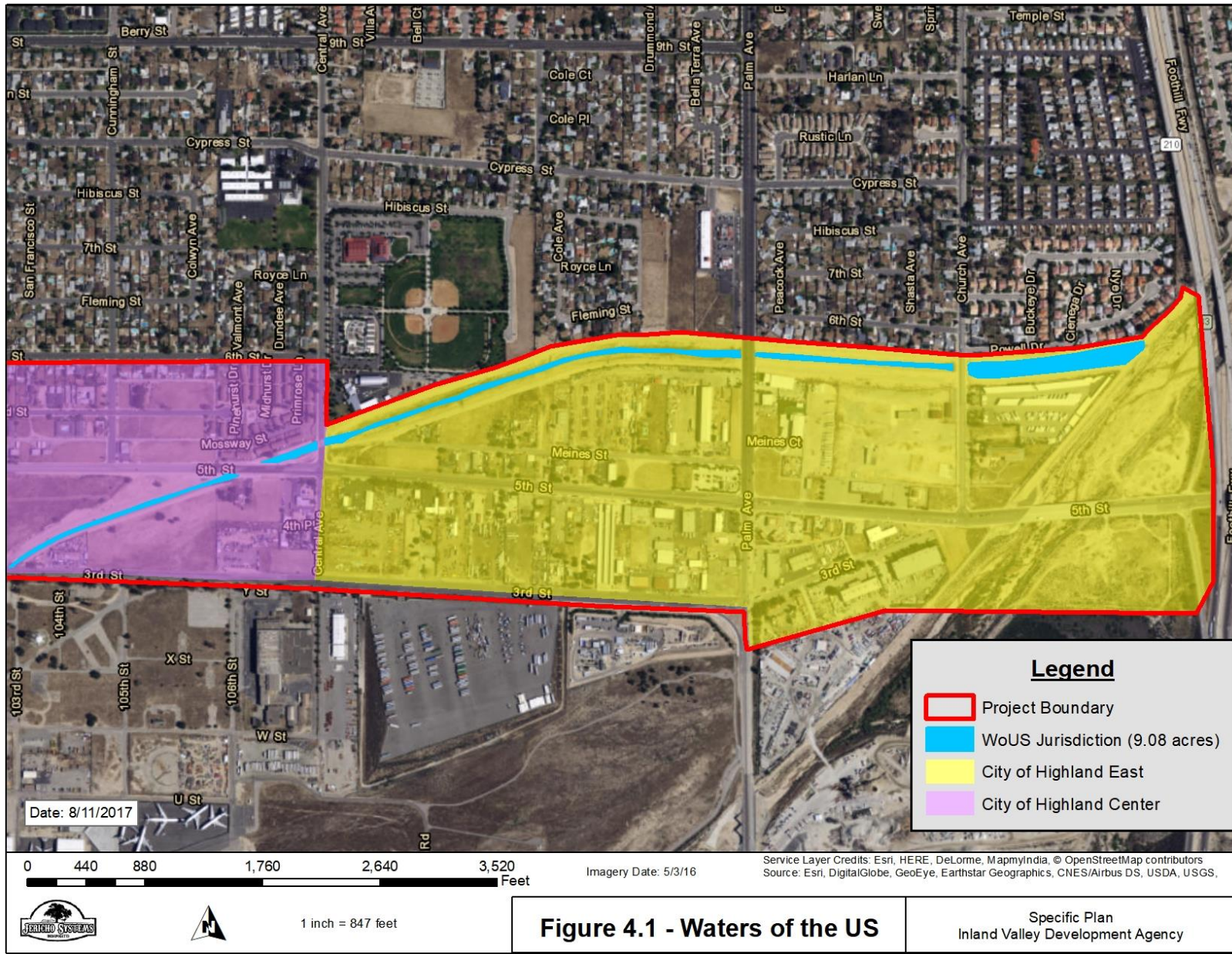




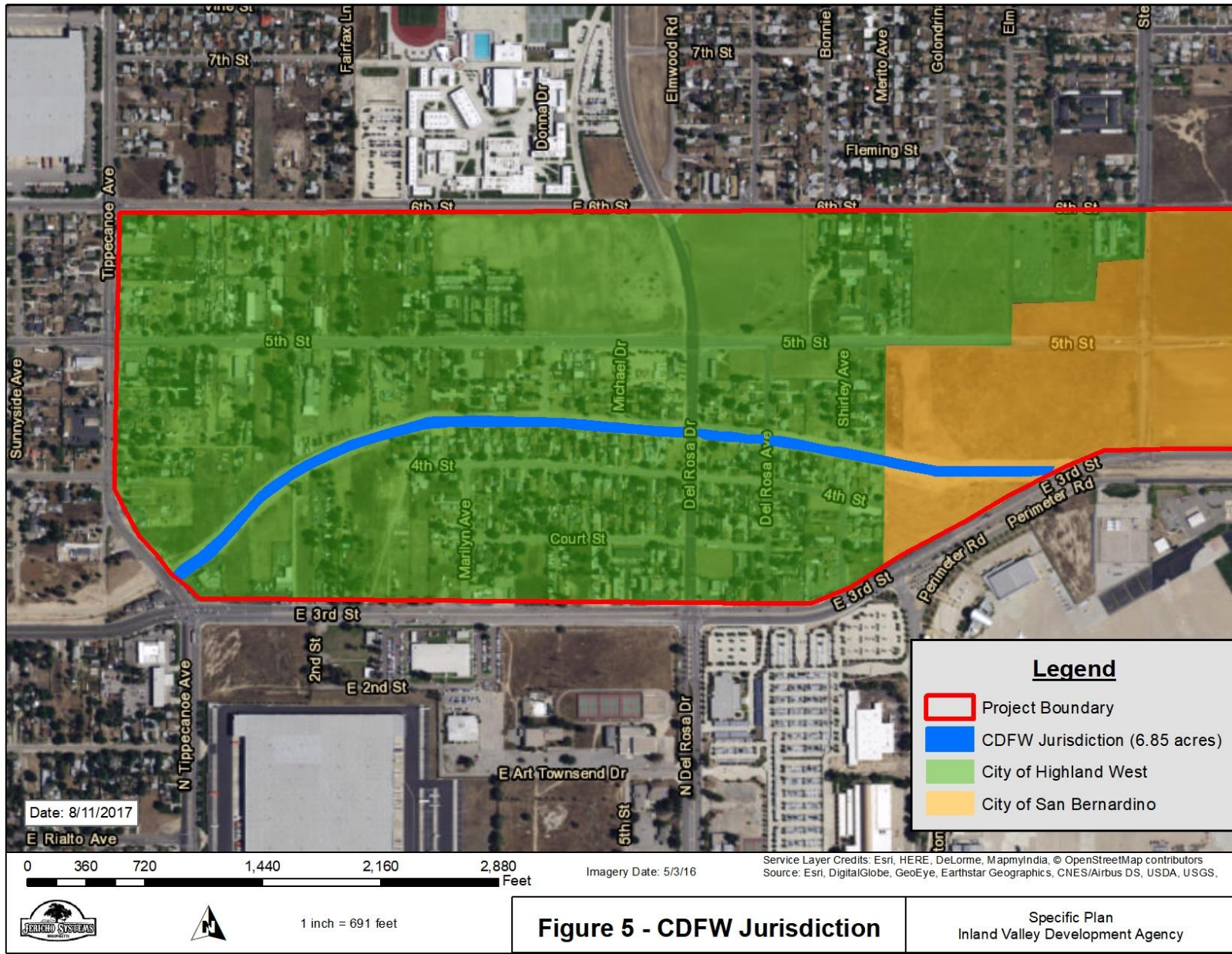




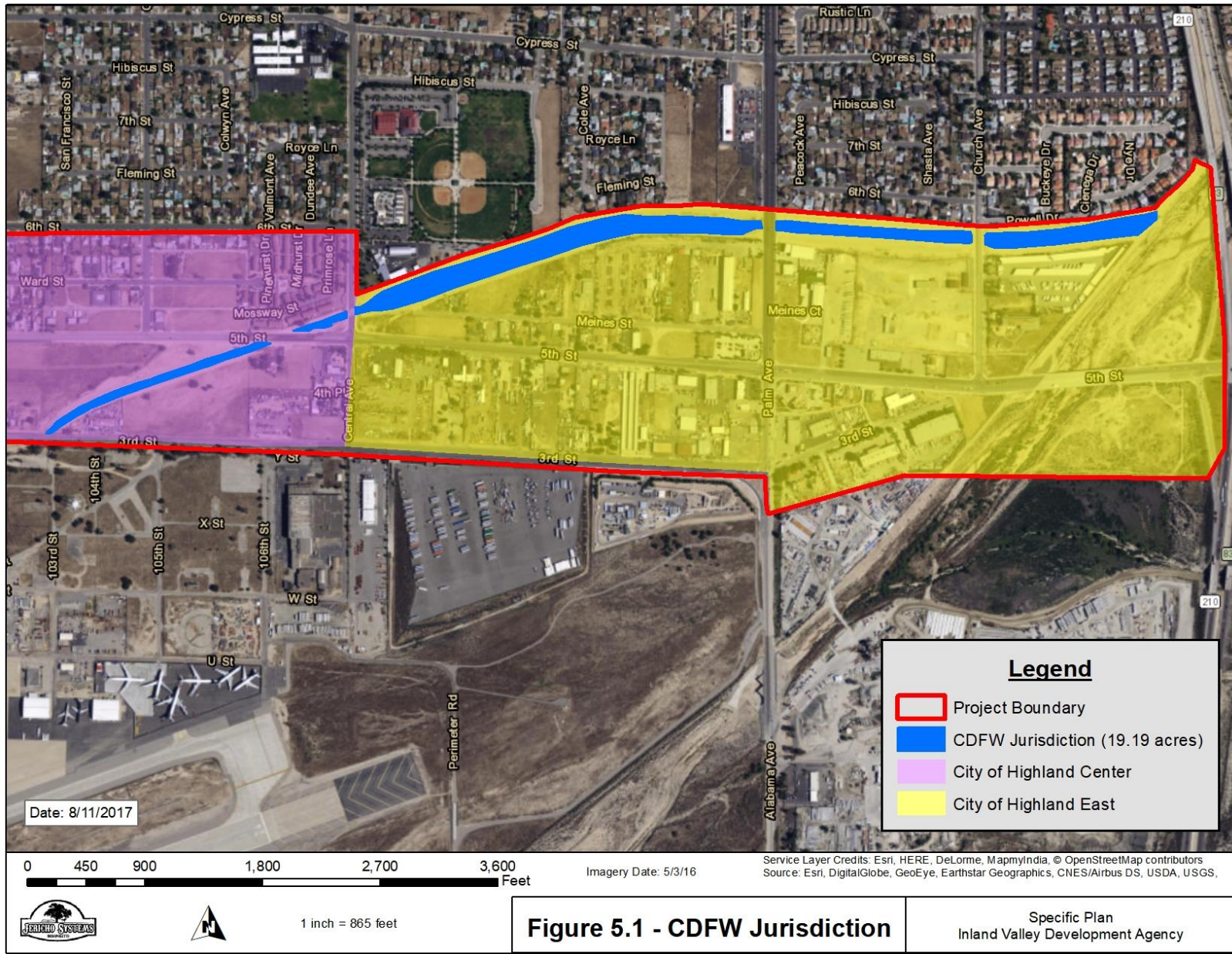




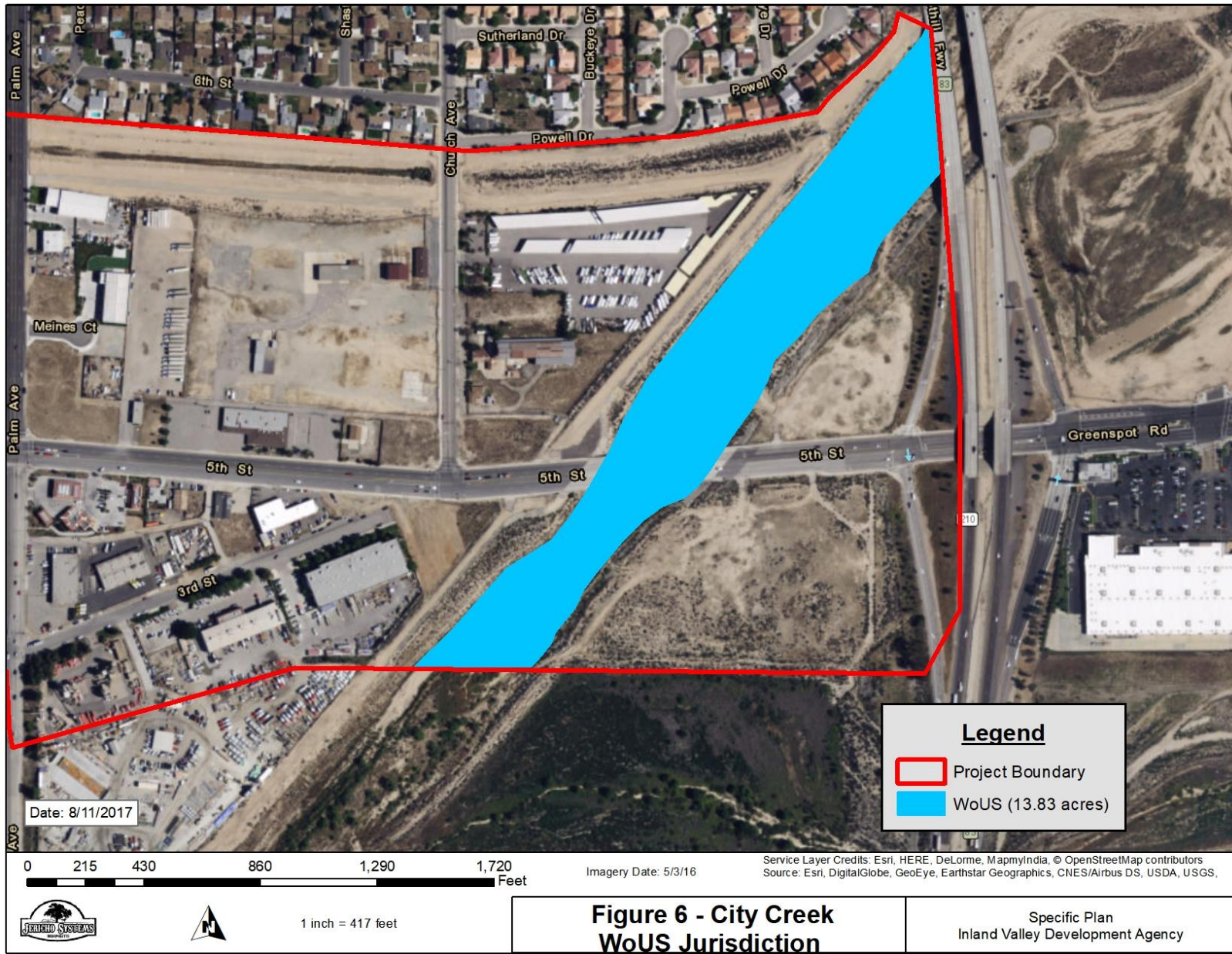








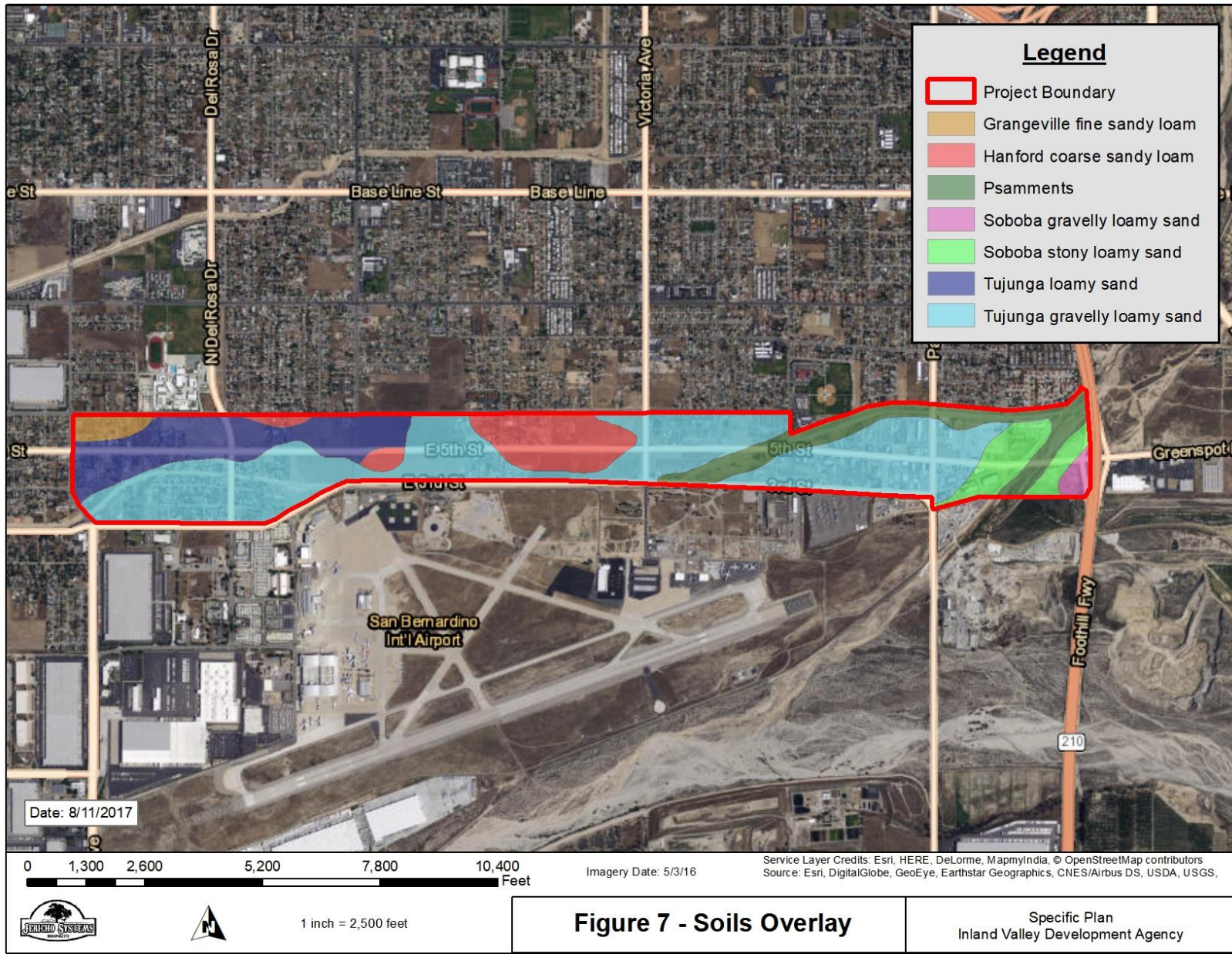












**APPENDIX C**  
**Photos**





Photo 1.  
*City of Highland East*—City Creek



Photo 4. *City of Highland Center*—Vacant lot facing north. Invasives and non-native grasses take-over evident



Photo 3.  
*City of Highland Center*—Vacant lot with evidence of past mechanical treatment



Photo 4. *City of San Bernardino*—Disked vacant lot





Photo 5.  
*City of Highland West*—  
Vacant lot with  
invasive  
grasses



Photo 6. *City of Highland West*—West  
Storm Drain  
channel