

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



September 22, 2016

Ian Forrest, Senior Attorney
Southern California Edison Company
Post Office Box 800
Rosemead, CA 91770
Email: ian.forrest@sce.com

RE: Revised Application Deficiency Report #4 - Certificate of Public Convenience and Necessity for the Riverside Transmission Reliability Project – Application No. A.15-04-013

Dear Mr. Forrest,

The California Public Utilities Commission's (CPUC) Energy Division CEQA Unit has completed its review of Southern California Edison's (SCE's) Application (A. 15-04-013) for a Certificate of Public Convenience and Necessity (CPCN) for the Riverside Transmission Reliability Project (RTRP) and responses to CPUC's Deficiency Reports #1, #2, and #3. To date, the CPUC has received no responses to Deficiency Report #4 dated March 18, 2016. The attached revised Deficiency Report #4 restates all outstanding deficiencies and includes additions related to the recent project right-of-way (ROW) revisions presented by SCE, most notably the undergrounding of approximately two miles of transmission line. Complete and adequate responses to outstanding deficiencies will allow the CPUC to deem the application complete and proceed with issuance of the Notice of Preparation (NOP) under the California Environmental Quality Act (CEQA).

Included with this Deficiency Report are the following attachments for SCE's reference:

1. Attachment A – Mapbook set illustrating conflicts with proposed work areas southeast of the Santa Ana River.
2. Attachment B – Mapbook set illustrating the geographic extent of previous cultural resource surveys conducted between 2006 and 2011 southeast of the Santa Ana River.
3. Attachment C – Example of design details required for the underground duct bank component.

In addition to the listed deficiency items in the attached table, SCE needs to re-notice the application consistent with General Order 131-D requirements, including re-noticing all land owners within 300 feet of the revised proposed ROW.

Information provided by SCE in response to the Energy Division's finding of deficiency will constitute additional equivalent environmental information consistent with General Order 131-D and should be filed as supplements to Application A. 15-04-013. One set of responses should be sent to the Energy Division and one to our consultant Panorama Environmental, in both hardcopy and electronic format. SCE's response to this deficiency report must be received no later than November 21, 2016.

We will review the information within 30 days and determine if it is adequate to accept the application as complete. We will be available to meet with you at your convenience to discuss these items.

The Energy Division reserves the right to request additional information at any point in the application proceeding and during subsequent construction of the project should SCE's CPCN be approved.

Please direct questions related to this application to me at (415) 703-5484 or Jensen.Uchida@cpuc.ca.gov.

Sincerely,



Jensen Uchida
Project Manager
Energy Division, CEQA Unit

cc: Mary Jo Borak, Supervisor
Jack Mulligan, CPUC Attorney
Tom Diaz, SCE Regulatory Affairs
Jeff Thomas, Panorama Environmental, Inc.

DEFICIENCY REPORT #4 (REVISED) FOR THE RIVERSIDE TRANSMISSION RELIABILITY PROJECT APPLICATION (A. 15-04-013)

REPORT OVERVIEW

The California Public Utilities Commission (CPUC) has identified deficiencies in Southern California Edison’s (SCE’s) Application (A.15-04-013) for a Certificate of Public Convenience and Necessity for the Riverside Transmission Reliability Project (RTRP). Deficiencies were identified according to requirements of the CEQA (Public Resources Code Section 21000 *et seq.*), General Order 131-D, and the Commission’s Rules of Practice and Procedure for a CPCN. Deficiencies are presented in Table 1.

Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiency Report #4 (Revised 09/22/2016)

Number	Information Requested Previously?	Deficiency
1	Yes	<p>Provide GIS data and detailed route maps showing the locations of the following:</p> <ul style="list-style-type: none"> • Tubular steel pole and lattice steel tower locations • Underground duct bank alignments and vault locations • Riser pole locations • All proposed temporary work areas including <ul style="list-style-type: none"> ○ Conductor stringing pull and tension areas ○ Storage yards ○ Marshalling yards ○ Helicopter fly yards ○ Guard structures ○ 230-kV conductor field snub areas • Footprint of 230-kV Wildlife Substation • New and modified telecommunication facilities <ul style="list-style-type: none"> ○ Mira Loma Substation – Wildlife Substation ○ Pedley Substation – Wildlife Substation ○ Vista Substation – Wildlife Substation • Distribution lines that will be relocated as a result of the proposed project (included in Figure 2.3-8 of the 2013 RTRP FEIR).

Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiency Report #4 (Revised 09/22/2016)

Number	Information Requested Previously?	Deficiency
		<ul style="list-style-type: none"> o Identify the location of additional ROW that will be acquired to accommodate the relocation, if needed. <p>Identify the voltages of all distribution lines that need to be relocated.</p> <p>The GIS data and route maps provided in response to Deficiency Report #2 did not include locations of pull and tension areas, guard structures, or field snub areas. The CPUC also understands that with the addition of approximately 2 miles of underground duct bank, the locations of remaining overhead pole structures and the footprint of the substation may vary from data previously provided; therefore, a complete revised route map set is required for all proposed facilities. This information is required to analyze environmental impacts of the proposed project.</p>
2	Yes	<p>Provide GIS data and detailed route maps showing the full extent of temporary and permanent access roads including:</p> <ul style="list-style-type: none"> • Temporary downline, access, and spur roads (access routing to each structure locations from city streets or adjacent developed sites needs to be completely shown) • Permanent access roads <p>The GIS data provided in response to Deficiency Report #2 shows short segments of access roads. These access roads do not connect to paved roadways. The CPUC considers use of existing unpaved access roads in its calculations and assessment of temporary disturbance. SCE needs to define the full extent of existing unpaved access roads that could be used during construction.</p>
3	Yes	<p>Refine the buffer area boundaries to more accurately reflect on-the-ground siting limitations, and also depict the locations of all proposed temporary and permanent work spaces within buffer areas including:</p> <ul style="list-style-type: none"> • Pole work areas (e.g., crane pads) • Lattice steel tower work areas <p>The preliminary engineering plans/route maps provided on February 9, 2016, in response to Item #1 of Deficiency Report #2 depicted buffer areas of varying size around each proposed structure. The CPUC understands that SCE intends to site temporary and permanent work spaces within the buffer areas and that buffer areas have been depicted to provide siting flexibility as later stages of engineering design are completed. The intention of this approach is reasonable; however, the CPUC believes that the degree of flexibility resulting from the proposed buffer areas (particularly those of a 1,200-foot diameter size or over 1 million square feet) is excessive and will result in an overstatement of project impacts and new impacts not analyzed in the 2013 RTRP Final EIR. For example, in the 2013 Final EIR, it was described that impacts to wetlands and riparian areas would be avoided by the proposed project. The current buffer areas include wetland and riparian areas and there would be significant impacts to these resources if the CPUC assumes work could be conducted anywhere within the buffer area.</p>

Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiency Report #4 (Revised 09/22/2016)

Number	Information Requested Previously?	Deficiency
		<p>The CPUC has prepared a mapbook (Attachment A) showing locations where the proposed buffer areas overlap with the following facilities and resources within the overhead alignment southeast of the Santa Ana River:</p> <ul style="list-style-type: none"> • Steep slopes • Wetlands including the Santa Ana River floodplain and/or tributary drainages • Metropolitan Water District's aqueduct infrastructure • City streets, parking lots, loading/receiving docks, and perimeter landscaping of adjacent buildings • Riverside Water Quality Control Plant facilities • Hidden Valley Wilderness Area (federal land and water conservation fund area) <p>These resources should be avoided and carved out of the work area buffers, where feasible.</p> <p>The revised preliminary engineering plans and detailed route maps should also depict alignment revisions including the proposed underground alignment along Pats Ranch Road and 68th Street, and revised overhead alignment north of Limonite Avenue.</p> <p>Please include GIS data files for all detailed route map refinements.</p>
4	Yes	<p>Provide an updated version of Table 2.5-3a in the 2013 RTRP Final EIR that reflects all changes to calculated work space permanent and temporary disturbance areas based on preliminary engineering revisions (see Items #1 through #3 above).</p>
5	No	<p>Provide details for construction of the underground duct bank including the following:</p> <ul style="list-style-type: none"> • Size and locations of duct banks • Depth of duct banks • Separation between duct banks • Size of the riser poles • Construction approach including approximately how much would be open/constructed per day of the underground line in roads and whether work would occur in multiple areas at once or just in a linear fashion down the line <p>Details previously provided by SCE in the RTRP 230-kV Alternatives Desktop Study may be applicable; however, many of the specific dimension provided (such as for vault structures) appear to be over sized for a 230-kV duct bank and need to be confirmed. See Attachment C for an example from another 230-kV underground project description.</p>
6	Yes	<p>Provide cultural resource survey reports and data for all unsurveyed portions of project disturbance areas as refined in response to Items 1 through 3</p>

Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiency Report #4 (Revised 09/22/2016)

Number	Information Requested Previously?	Deficiency
		<p>above (see also Attachment B) and the revised alignment northwest of the Santa Ana River.</p> <p>The cultural resource survey reports need to contain the results of a record search performed through the California Historical Resources Information System (CHRIS) – Eastern Information Center as well as the results of pedestrian surveys for all unsurveyed work areas along the overhead alignment including those areas shown on Attachment B, the agricultural area north of Limonite Avenue, and the underground alignment within the Goose Creek Golf Club. Please also provide the results of a cultural resources records search performed through the CHRIS for the proposed underground alignment within 68th Street and Pats Ranch Road. Provide all supporting details in the cultural resources survey report (i.e., site records and maps).</p>
7	Yes	<p>Clarify how SCE expects to obtain a permit for new poles located in the Hidden Valley Land and Water Conservation Fund (LWCF) area. How will NEPA be handled for new poles in this area? Where and how will SCE replace the impacted LWCF area?</p> <p>The Land Use section in the 2013 RTRP Final EIR lacks analysis of the land use impacts resulting from conversion of LWCF areas. Mitigation Measure REC-02 in the recreation section does not define where or how SCE would replace the LWCF area or obtain the necessary permits from the National Park Service. Further information is needed to verify the feasibility of the proposed “land conversion” for the proposed transmission line structures within the LWCF area.</p>
8	Yes	<p>Focused surveys are required for the following special-status species within suitable habitat:</p> <ul style="list-style-type: none"> • Least Bell’s vireo • Southwestern willow flycatcher • Western yellow-billed cuckoo • Delhi sands flower-loving fly • San Diego ambrosia • Brand’s phacelia • San Miguel savory • Los Angeles pocket mouse • Northwestern San Diego pocket mouse • San Bernardino kangaroo rat <p>Focused surveys for these species were performed between 2006 and 2009 (seven to ten years ago). These surveys are considered out-of-date and do not reflect current species distribution. The impact analysis and the mitigation measures in the 2013 RTRP Final EIR may therefore not adequately consider the level of impacts on these species. The focused surveys need to include the full limits of all work areas as defined in response to items 1 through 3 above.</p> <p>Understanding that focused surveys for some species require multiple field visits over several weeks and during specific time periods, please provide a</p>

Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiency Report #4 (Revised 09/22/2016)

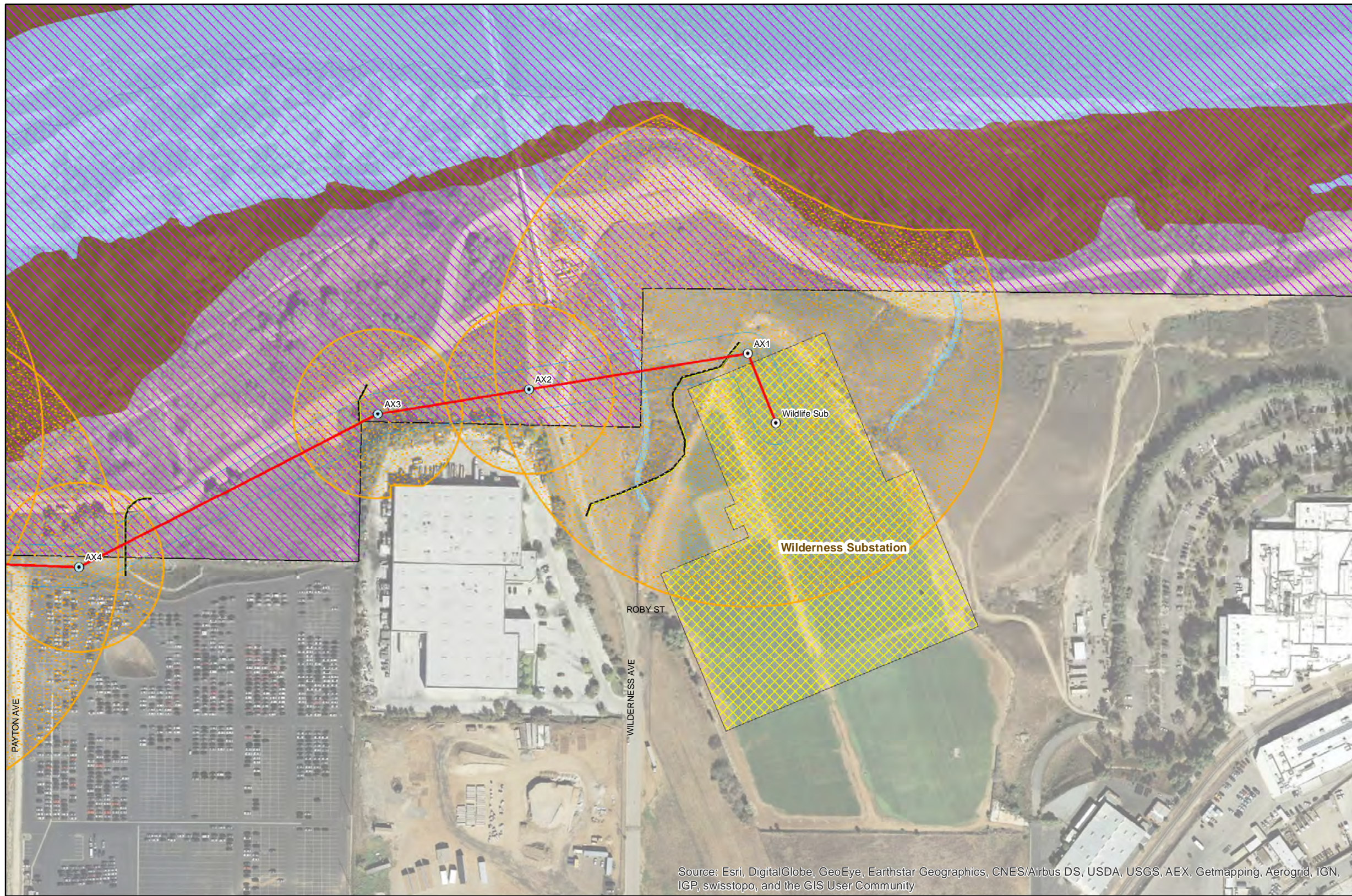
Number	Information Requested Previously?	Deficiency
		detailed schedule for any outstanding focused surveys that extend beyond the September 19 th response deadline for this Deficiency Report.
9	No	<p>Provide an updated construction schedule indicating the start date and duration for each project component.</p> <p>Include detailed information regarding length of time that construction of an individual pole and underground segments would take.</p>
10	No	<p>Update Table 2.5-1 in the RTRP Final EIR to include equipment and personnel required for construction of the revised alignment including the underground transmission line segment. Provide type and number of equipment and employees needed per day and the production rate for construction of aboveground and underground segments.</p>
11	No	<p>Provided quantities of cut, fill, and import material for each project component and a total quantity of import and export by material type.</p>
12	No	<p>Define utility separation requirements for the underground 230-kV transmission line from existing utilities in 68th Street and Pats Ranch Road.</p> <p>If the telecommunication line would also be undergrounded with the 230-kV transmission line, provide the necessary utility separation requirements and the configuration of the telecommunication cable and transmission line within the duct bank. Provide a typical detail and cross-section for the underground duct banks.</p>
13	No	<p>Provide a profile graphic depicting the design of the riser poles. (See Attachment C for an example)</p>
14	No	<p>Provide a profile graphic depicting the design of the vaults. (See Attachment C for an example)</p>
15	No	<p>Provide an updated Noise Technical Report to reflect the different construction techniques that would be used during undergrounding of the 230-kV Transmission Line. Identify and analyze the impacts to the new sensitive receptors along Pats Ranch Road. Revise the corona noise analysis along Wineville Avenue. Provide new mitigation measures to reduce impacts.</p>
16	No	<p>Provide the peak and average estimated number of worker trips, haul truck, and delivery truck trips per day for construction of the overhead and underground 230-kV Transmission Line, Wildlife Substation, and all other project components (telecommunication facilities, relocation of distribution lines, etc.).</p> <p>Provide a detailed breakdown of these peak hour and daily trips by project component.</p> <p>Provide the likely travel routes for construction workers and/or truck trips traveling to/from the staging yards and construction areas for each project component and number of anticipated vehicles traveling down each road during peak hours and per day.</p>

Table 1: SCE Riverside Transmission Reliability Project Application 15-04-013 Deficiency Report #4 (Revised 09/22/2016)

Number	Information Requested Previously?	Deficiency
17	No	Identify specific locations where lane and road closures would occur and for how long the lanes and roads would remain closed.
18	Yes	<p>Provide updated air quality and greenhouse gas emissions modeling for all of the SCE project components; overhead and underground 230-kV transmission, Wildlife substation, telecommunication facilities, relocation of distribution facilities. Provide the calculations and outputs prior to mitigation and after mitigation.</p> <p>Provide updated localized air emissions for construction prior to mitigation and after mitigation. The location and chosen sensitive receptors for the localized air emissions analysis used in the AECOM Memorandum dated December 4, 2015 is adequate. Provide the model assumptions to support the model output.</p> <p>The calculations must be limited to the project components proposed for analysis in the RTRP EIR. The calculations must use the same construction schedule as requested in Question 9, the same equipment types and numbers as requested in Question 10, and the same construction vehicle and truck trips as requested in Question 16. This information should be detailed in the model assumptions.</p>
19	No	Provide a revised Field Management Plan, which includes EMF modeling and analysis of potential "low cost" and "no cost" measures for the revised alignment including the underground transmission line segment.











ATTACHMENT A

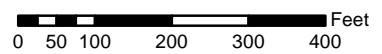
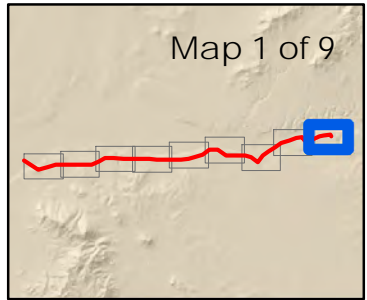
MAPBOOK SET ILLUSTRATING CONFLICTS WITH PROPOSED WORK AREAS SOUTHEAST OF THE SANTA ANA RIVER



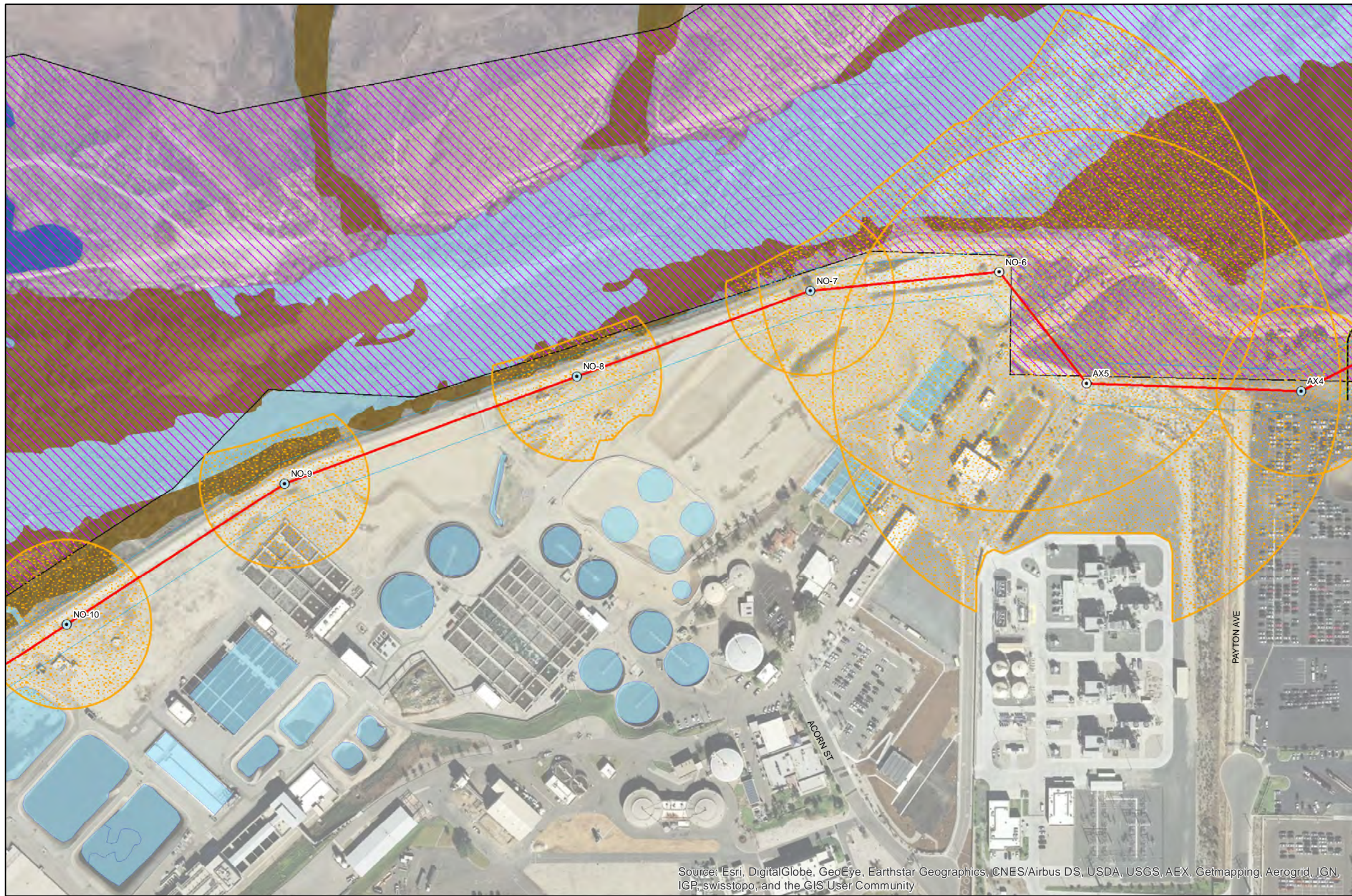
CPUC Riverside
Work Area Constraints
Mapbook

Legend

-  ROW
-  Lattice Structure
-  Tube Structure
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




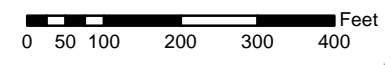
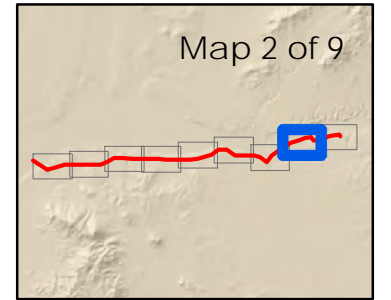
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CPUC Riverside
Work Area Constraints
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


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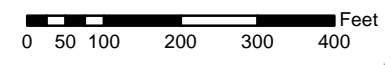
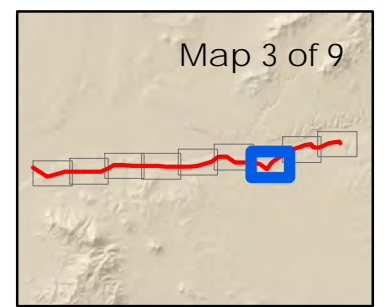
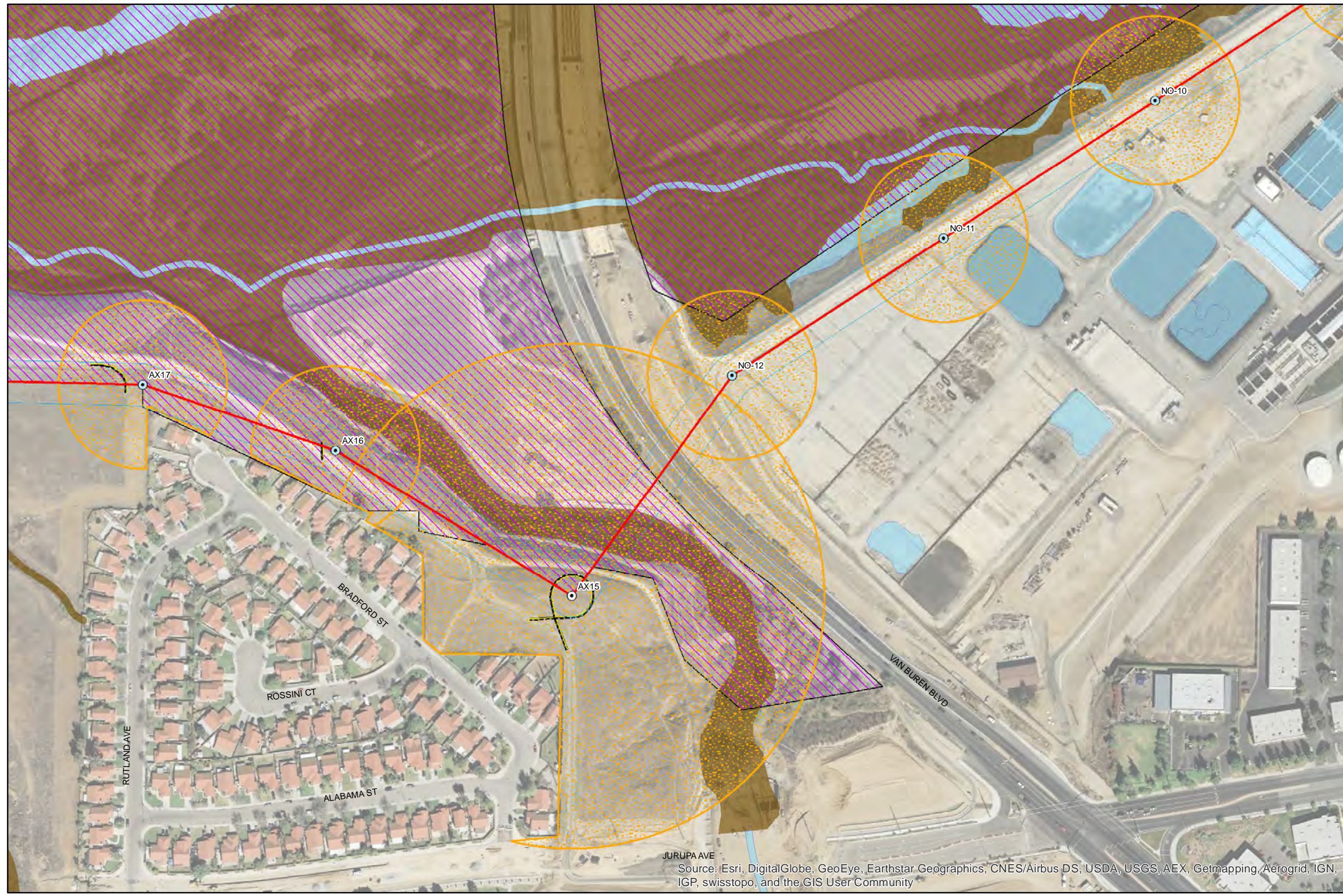


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


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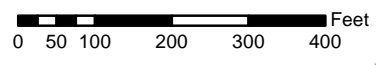
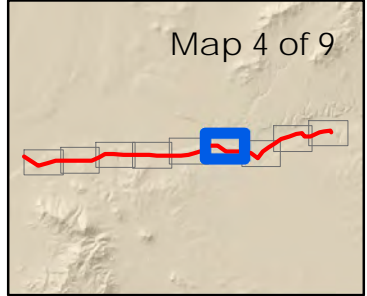
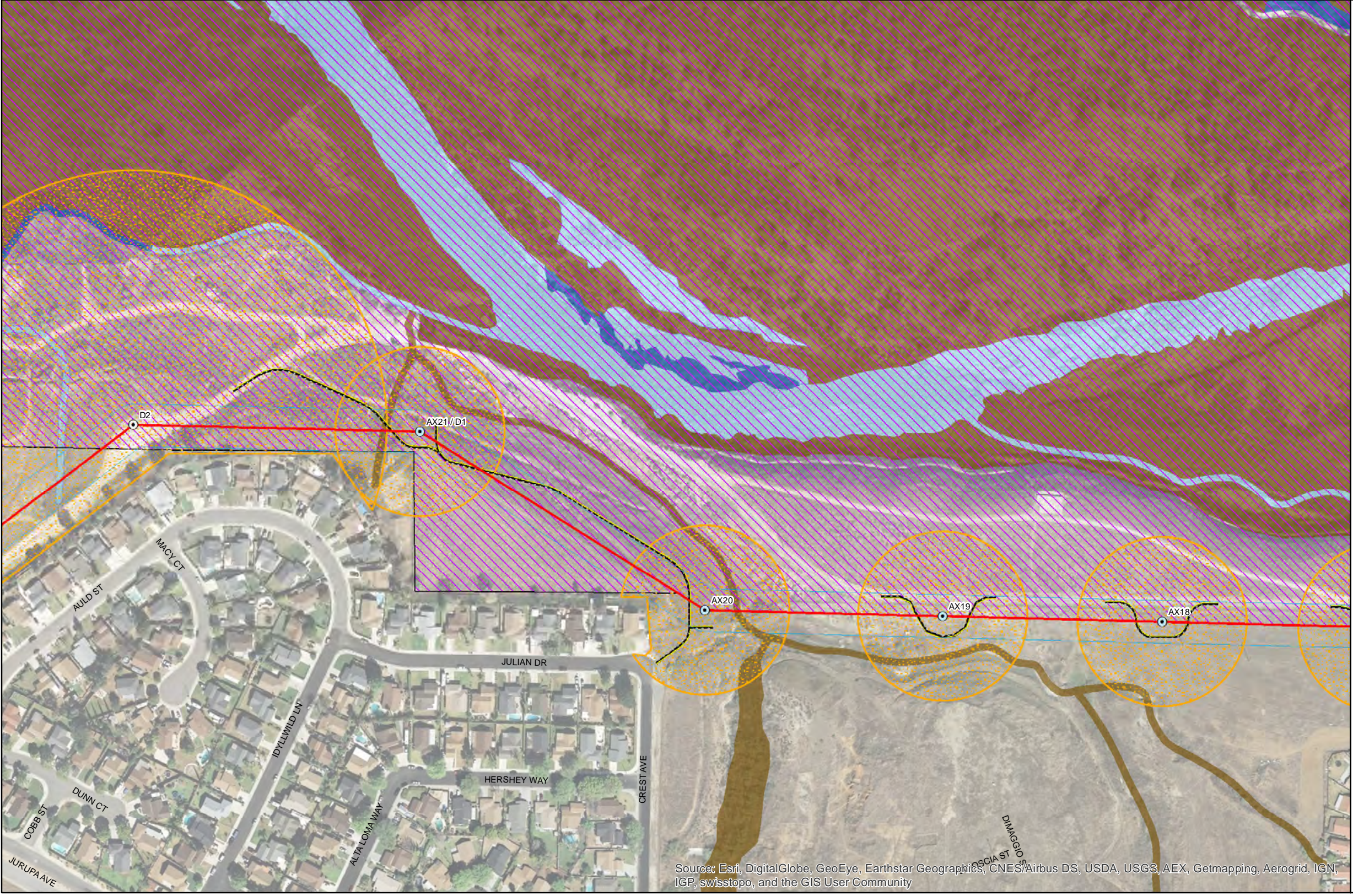


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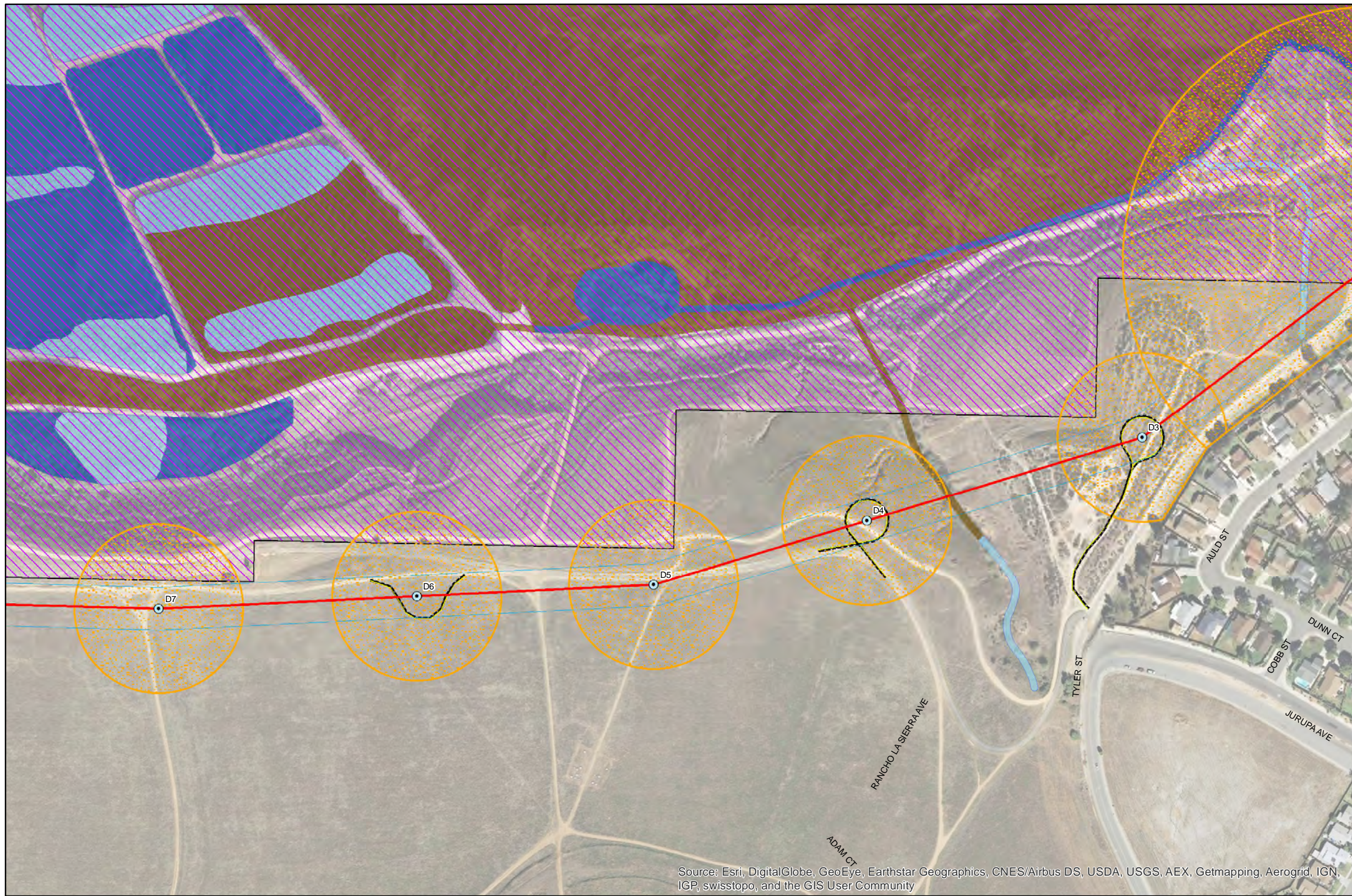
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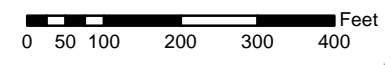
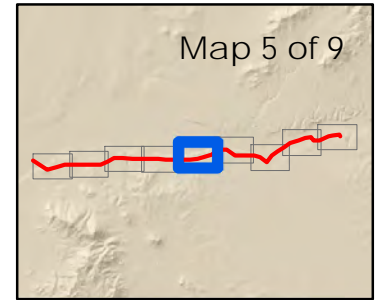
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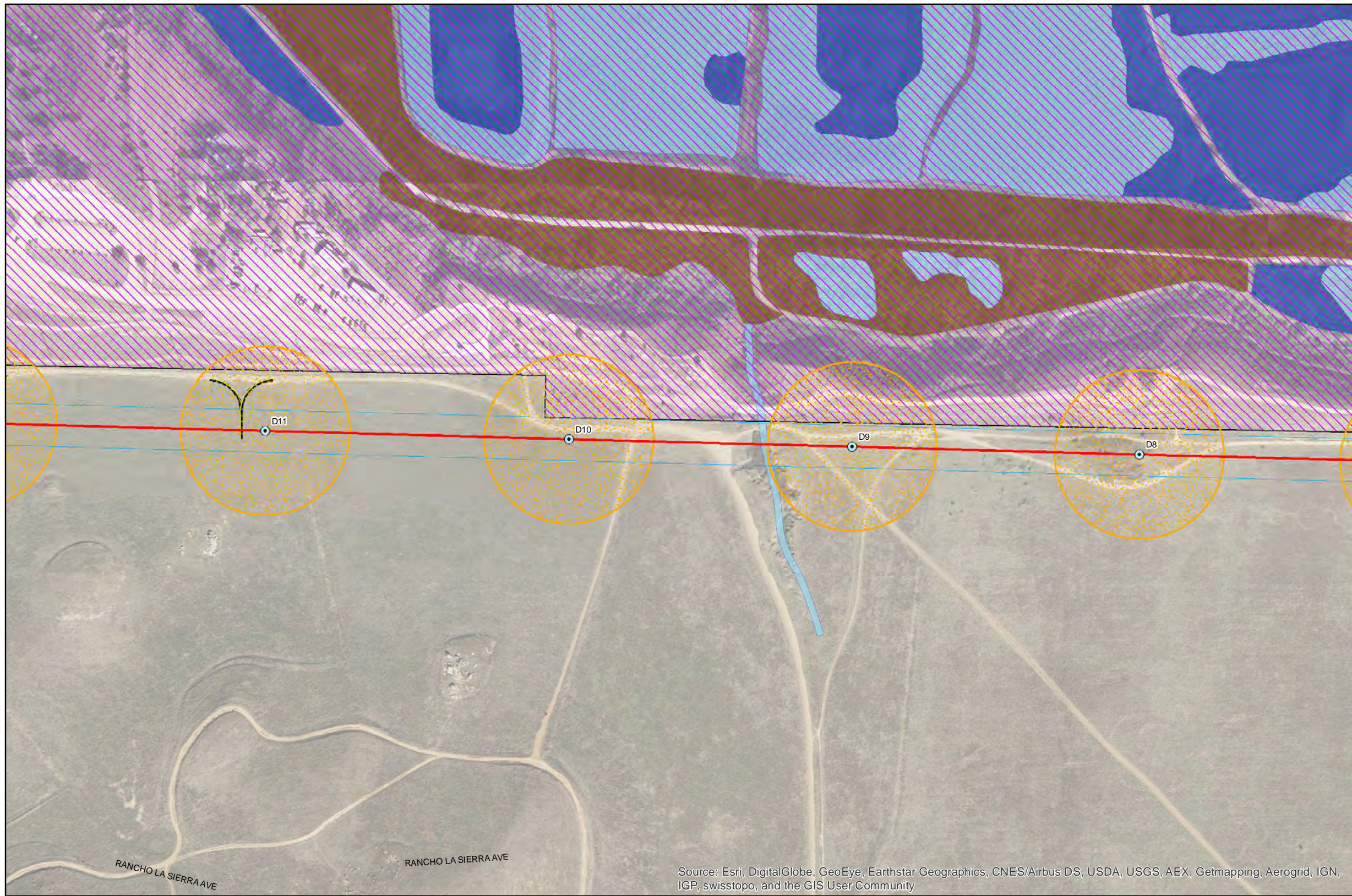
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


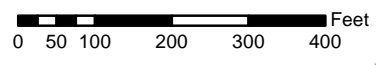
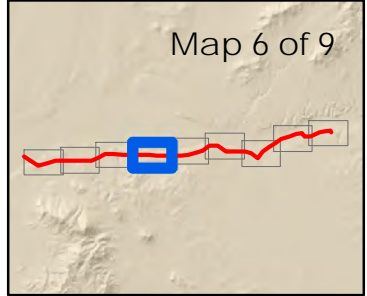
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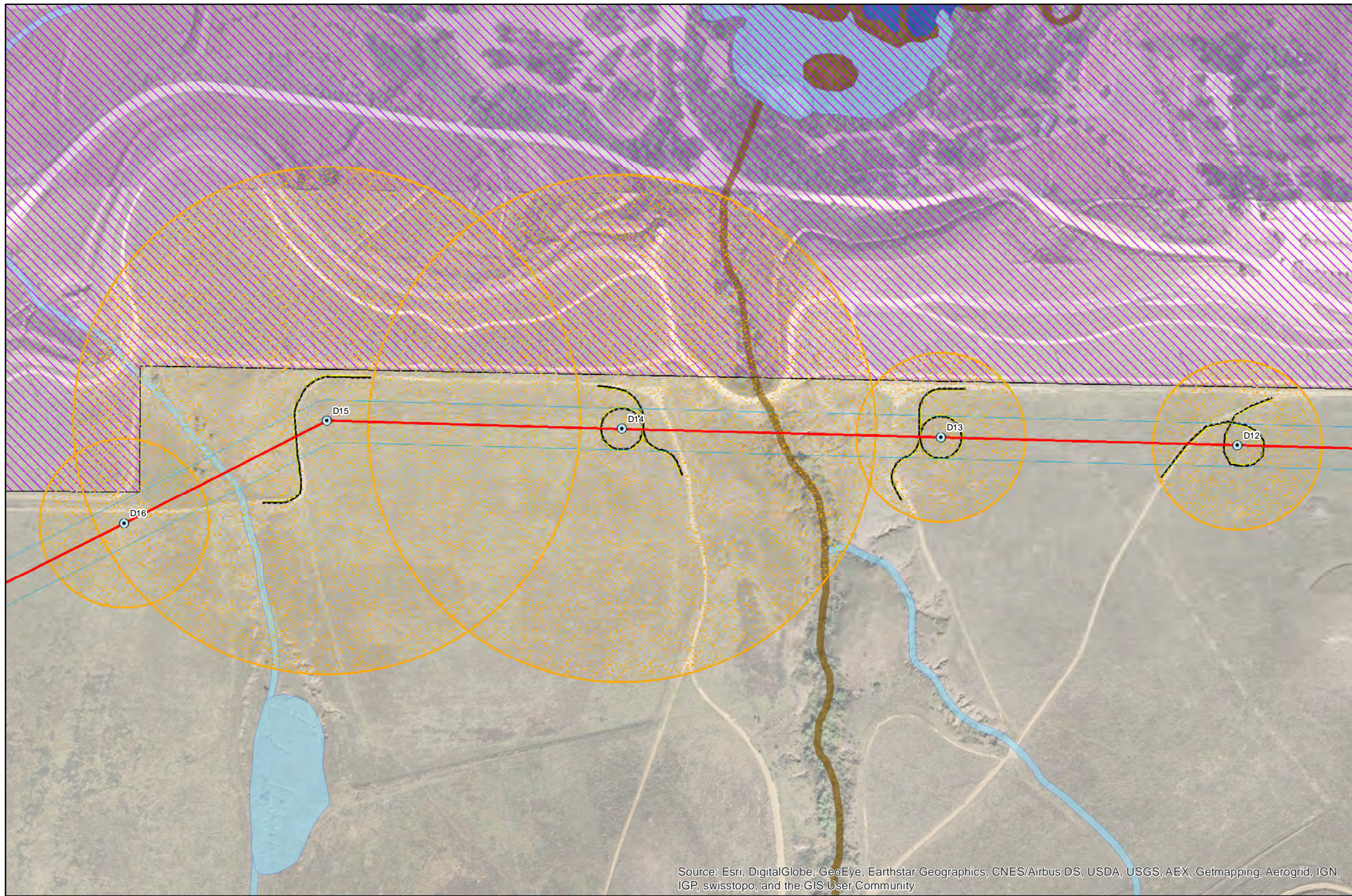
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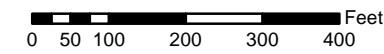
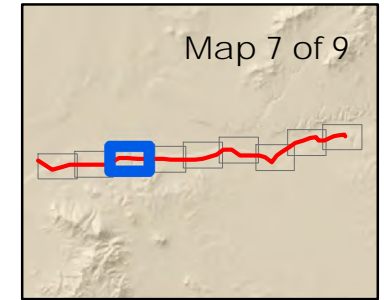
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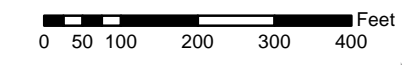
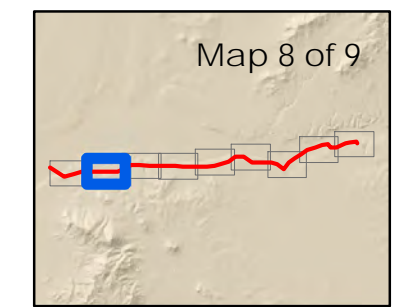
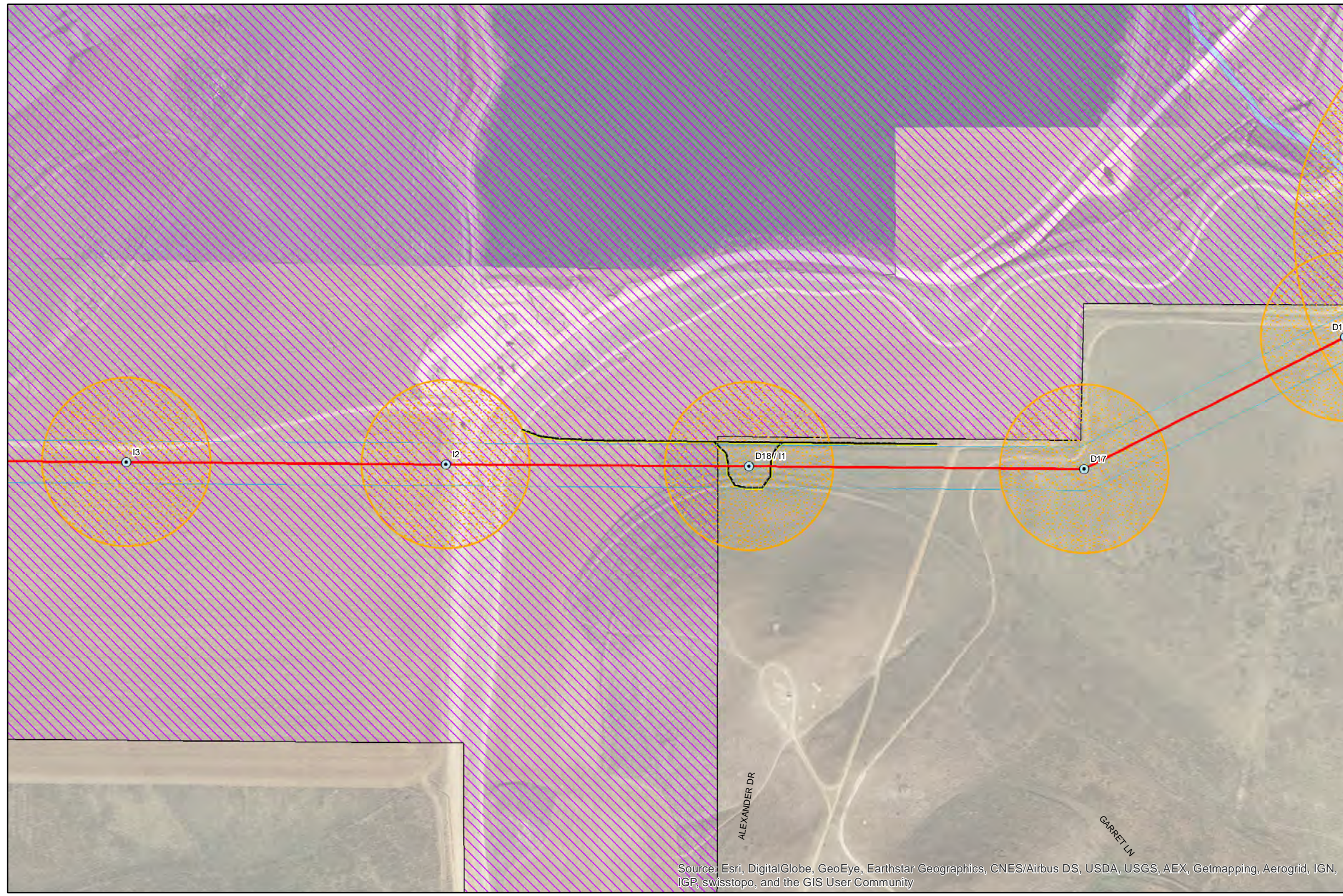


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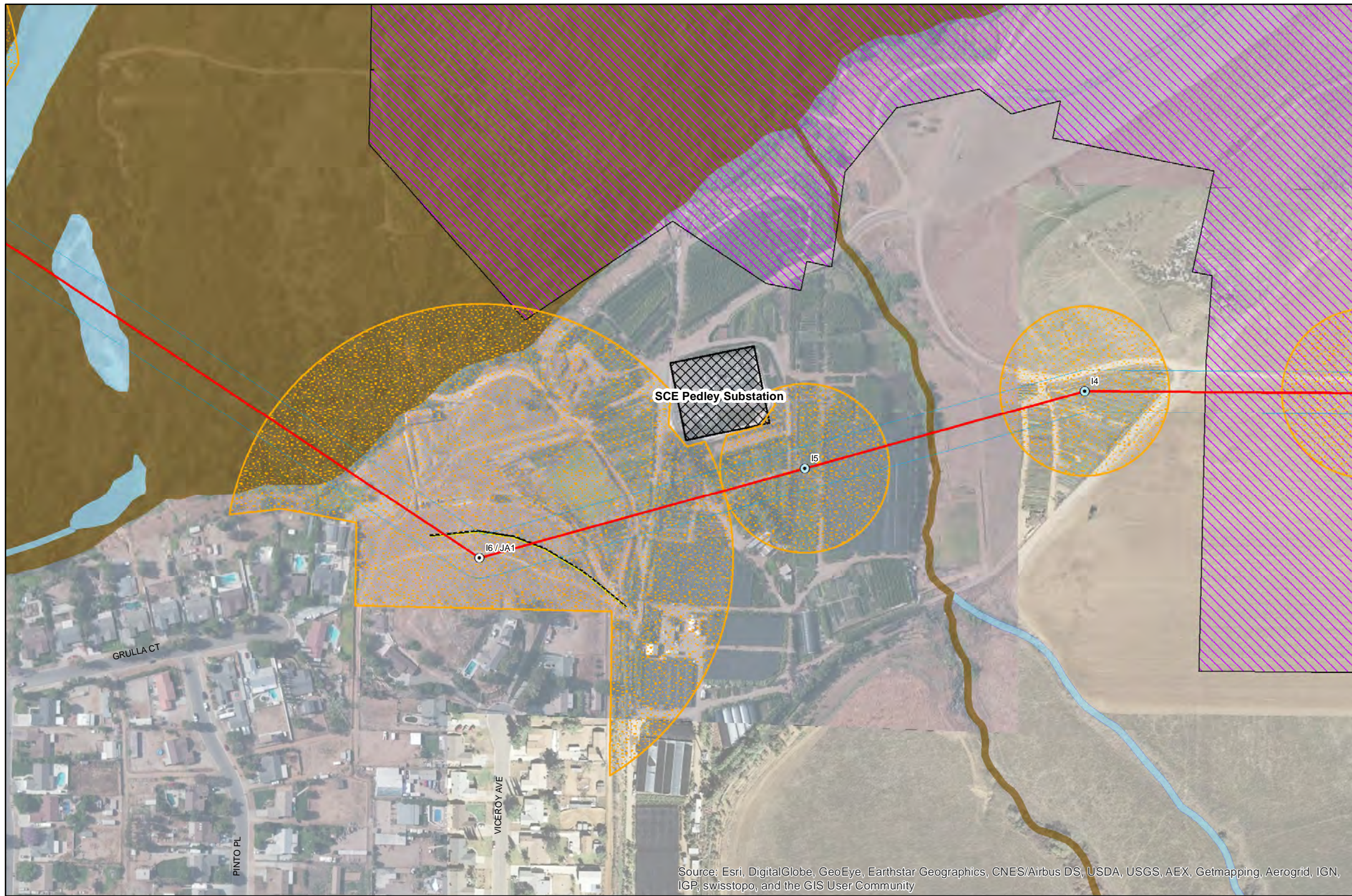
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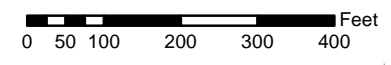
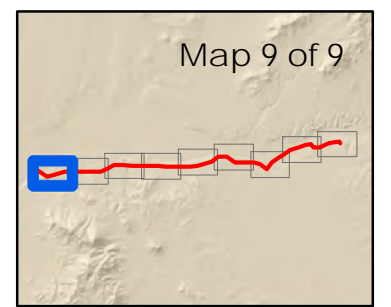
SCE Pedley Substation

16/JA1

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PANORAMA
ENVIRONMENTAL, INC.











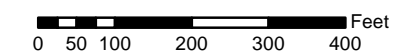
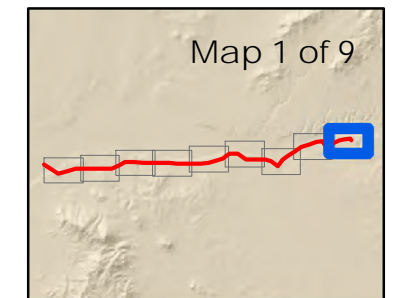
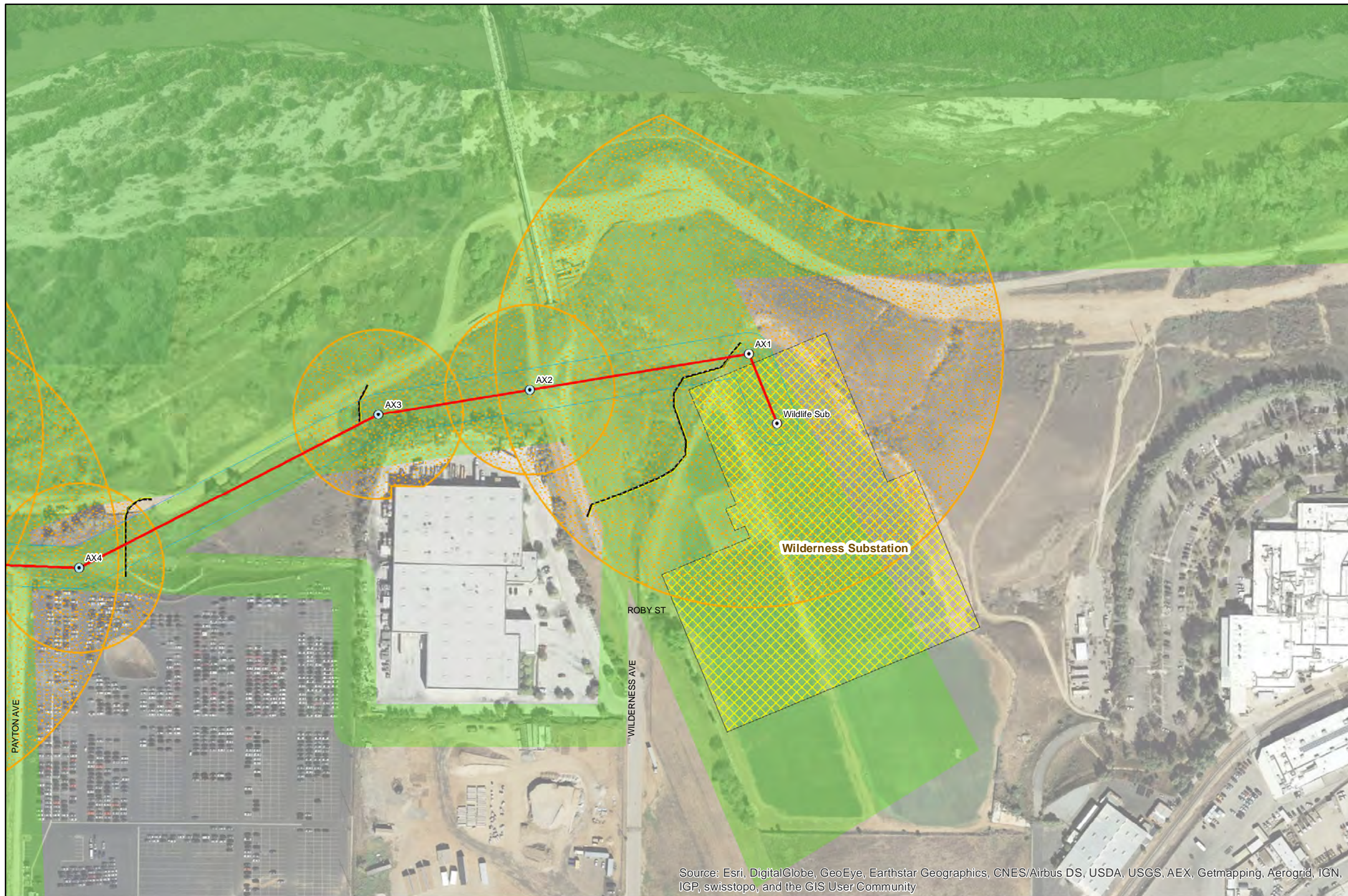
ATTACHMENT B

**MAPBOOK SET ILLUSTRATING THE GEOGRAPHIC
EXTENT OF PREVIOUS CULTURAL RESOURCE
SURVEYS CONDUCTED BETWEEN 2006 AND 2011
SOUTHEAST OF THE SANTA ANA RIVER**

CPUC Riverside
Work Area Constraints
Cultural Survey Mapbook

Legend








-  ROW
-  Lattice Structure
-  Tube Structure
-  Proposed Transmission Line
-  Indicative Access Road
-  GDAD Buffer Area
-  Proposed Substation
-  Cultural Survey Area

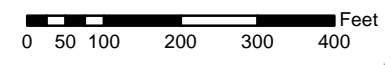
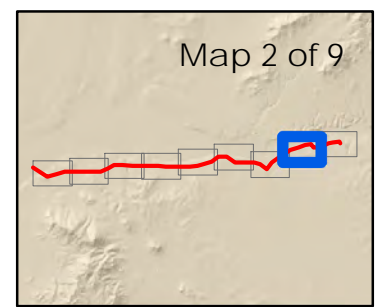
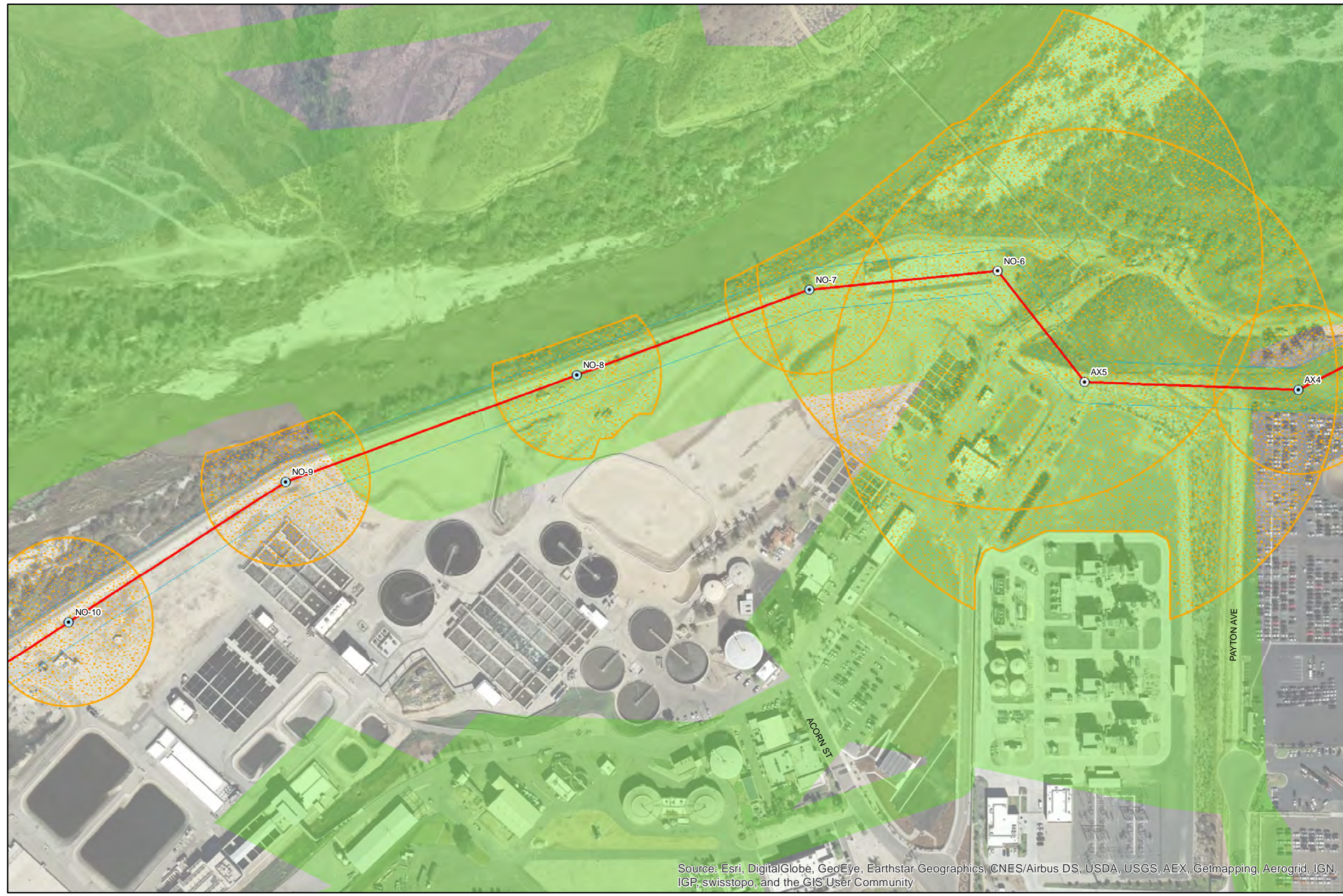


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

CPUC Riverside
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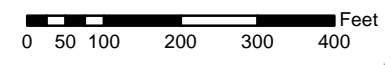
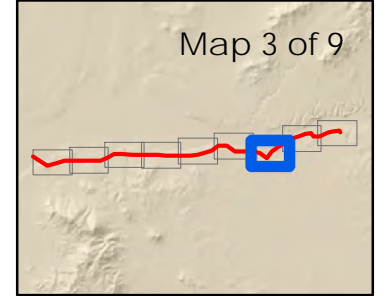
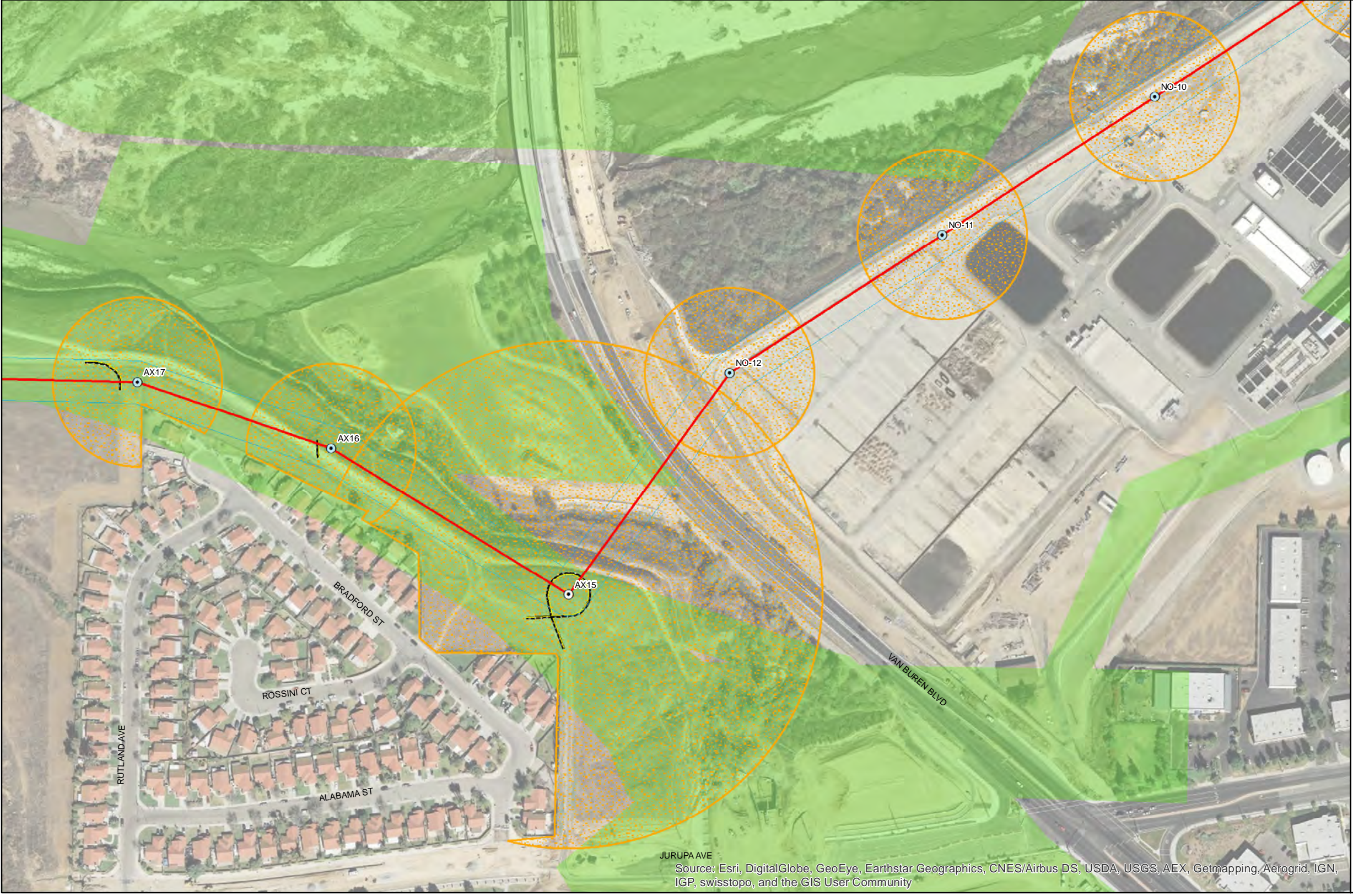


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CPUC Riverside
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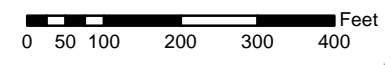
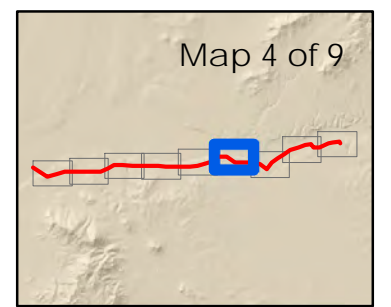
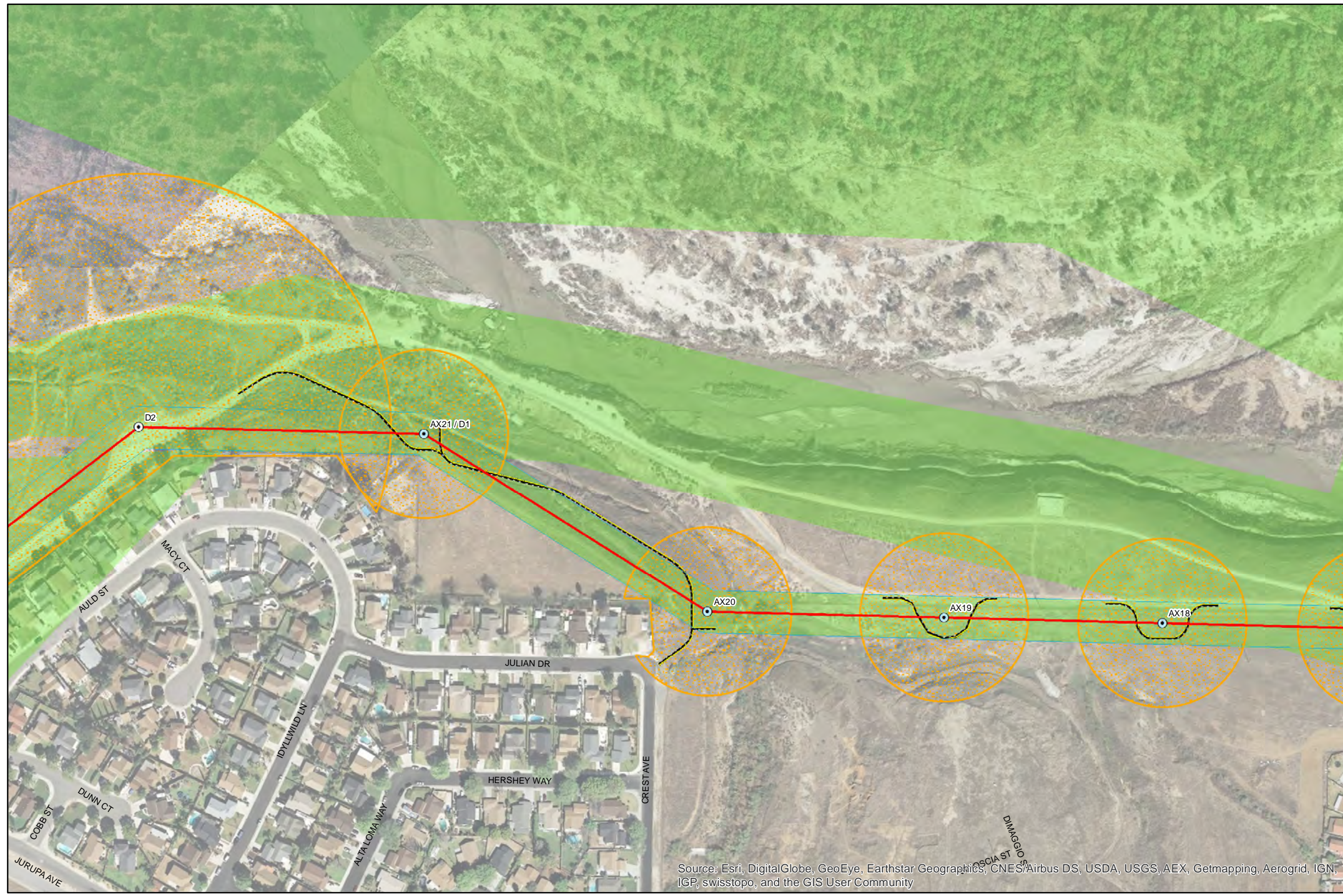


JURUPA AVE
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

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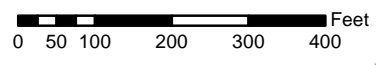
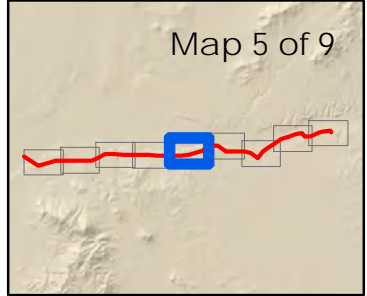
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CPUC Riverside
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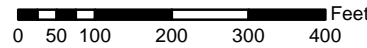
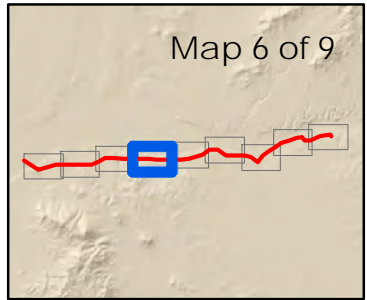
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CPUC Riverside
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


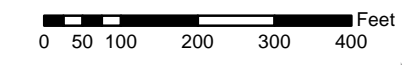
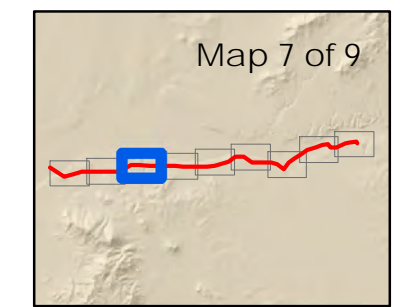
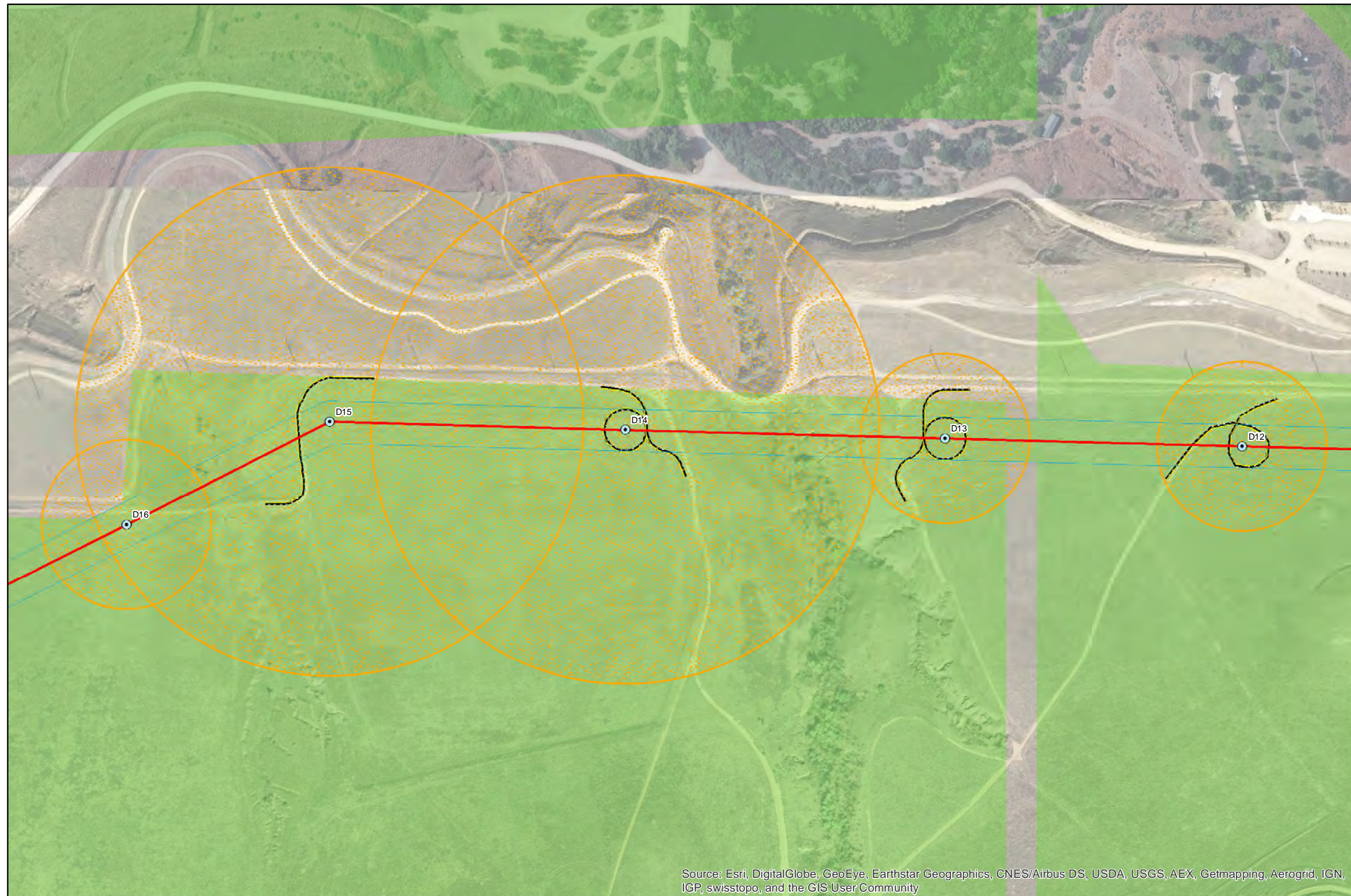
PANORAMA
ENVIRONMENTAL, INC.

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

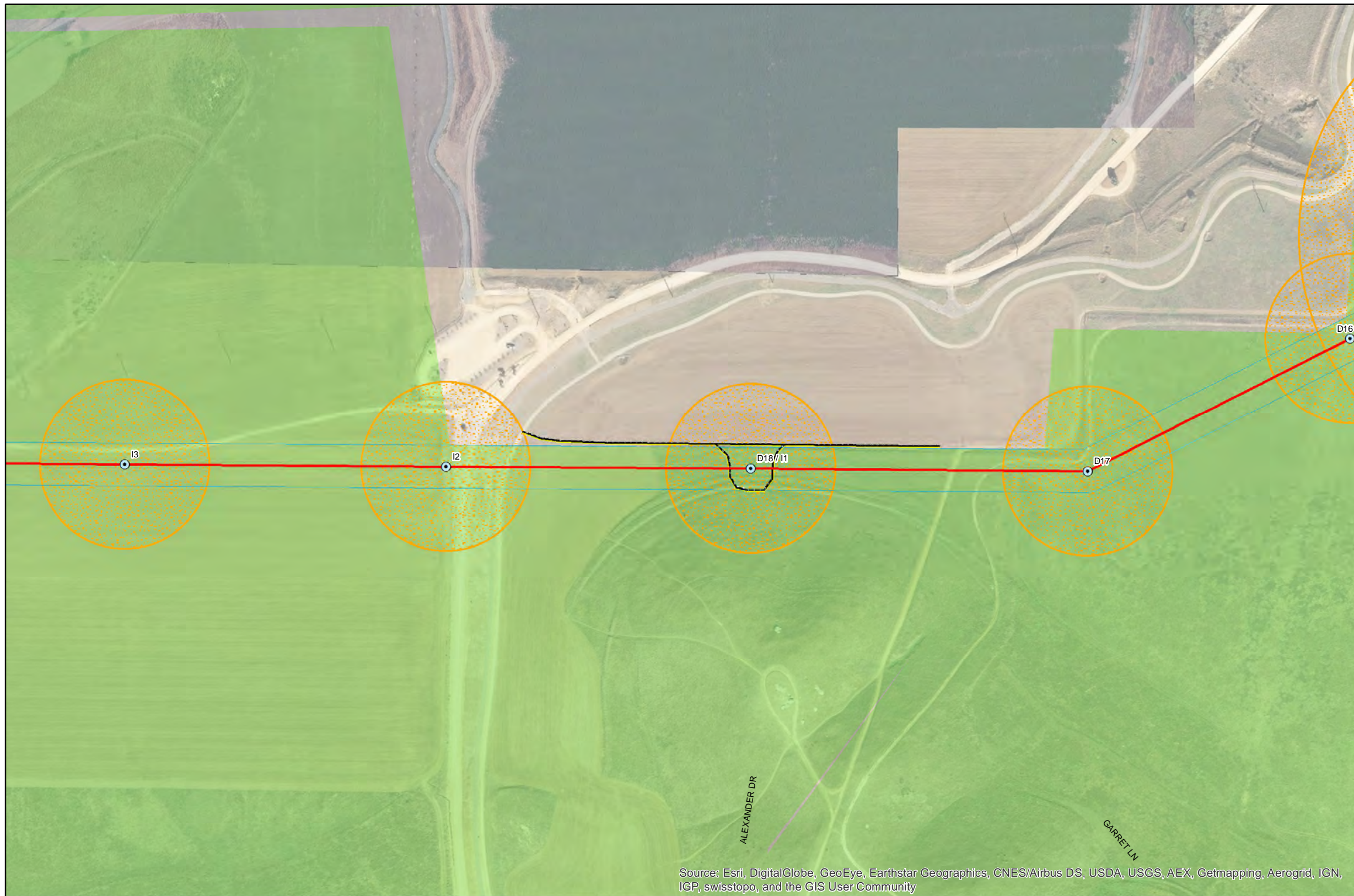
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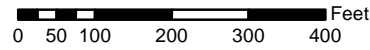
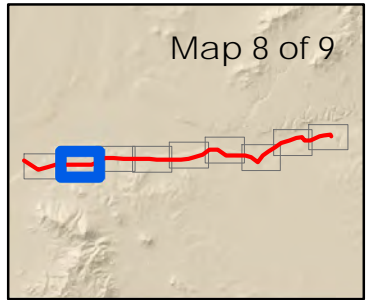
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CPUC Riverside
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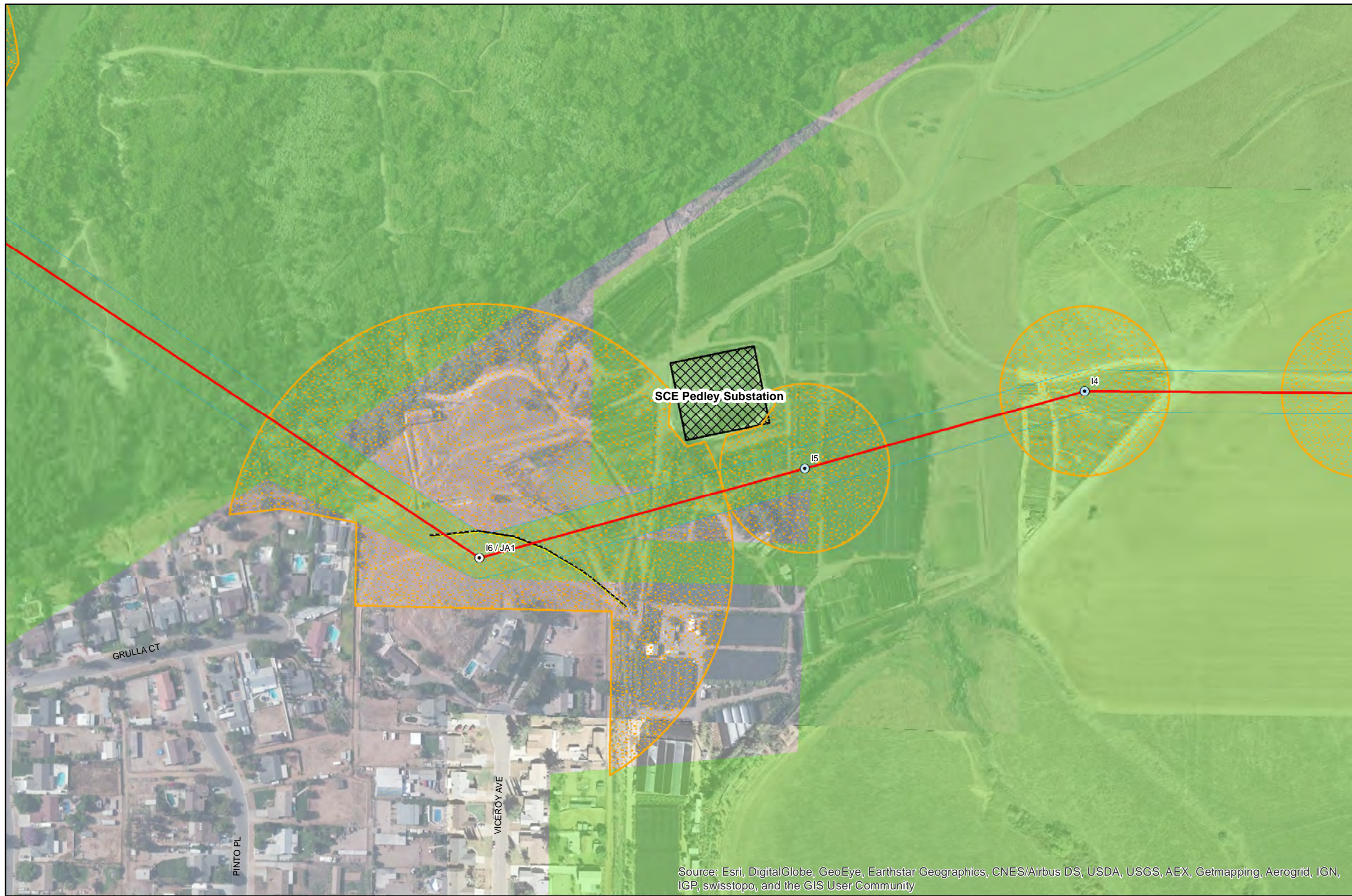
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PANORAMA
ENVIRONMENTAL, INC.

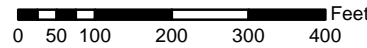
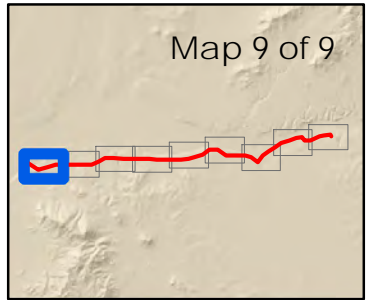
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CPUC Riverside
 Work Area Constraints
 Cultural Survey Mapbook

Legend

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PANORAMA
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ATTACHMENT C

EXAMPLE OF DESIGN DETAILS REQUIRED FOR THE UNDERGROUND DUCT BANK COMPONENT

Trenching

Typical trench dimensions would be a minimum of 6.5 feet deep and 3.5 feet wide. The trench would be shored, if necessary, to meet California Occupational Safety and Health Administration (Cal/OSHA) requirements. If water is encountered, trenches would be dewatered using a portable pump and recovered water would be disposed of in accordance with existing regulations and requirements.

Precast vaults would be installed in the trench. Backfill would be placed, grouted, and compacted. The excavated area would then be repaved if it was paved prior to excavation of the trench.

Underground Duct Banks

The majority of the duct banks would be installed using open-cut trenching techniques. Most of the duct bank would have a double-circuit vertical duct bank configuration, with occasional transitions to a flat configuration to clear existing structures in highly congested areas or to fan out to termination structures at the cable pole transition area.

Conduits would be installed and concrete placed around the conduits to form the duct bank encasement as each section of the trench for the duct banks is completed. The duct banks would be, at a minimum, 3 feet below the ground surface. A fluidized thermal backfill would be placed to fill almost all of the remainder of the trench. Soil, an aggregate road base, or concrete slurry with an asphalt concrete cap would be installed to restore the road in compliance with local requirements. As trenches are being filled in one segment, additional trench would be opened further down the street, with the process continuing until the entire duct bank is in place. Figure 1 depicts a standard configuration for a 230-kV double circuit underground duct bank.

Splice Vaults

Splice vaults would be placed approximately every 1,800 feet would be installed along the underground portion. PVC duct would be installed approximately 8 feet underground. Actual depths would vary based on utility conflicts found.

Concrete splice vaults would be constructed of prefabricated, steel-reinforced concrete. Splice vaults facilitate pulling of cables through the duct bank and connecting pieces of cable. Each vault would have two manhole covers about 34 inches in diameter. The splice vaults would

measure about 24 feet long by 10 feet wide by 10 feet deep. Figure 2 depicts a typical splice vault.

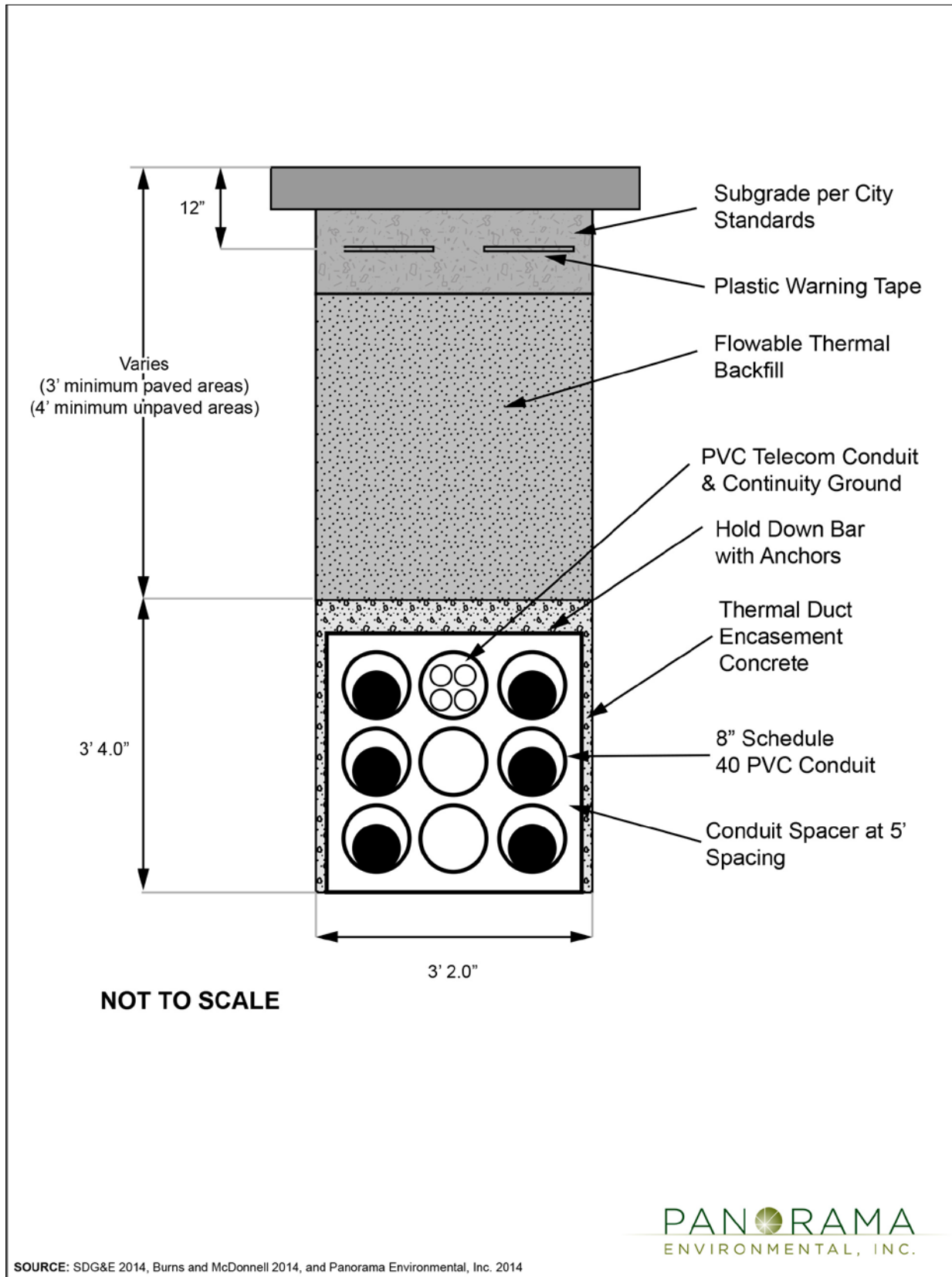
Trenching Work Areas

Construction of the underground transmission line would require an approximately 16-foot-wide work area. The work area would increase to a maximum of 130 feet wide and 30 feet long at vault locations. Prior to trenching, paint would be used to mark out the trench alignment, both centerline and 10-foot offsets, at 50-foot intervals and at the beginning and end of each curve in the alignment. The work area would be demarcated by orange cones and Type II barricades. Part of the work area would be for the trench and the trenching area, whereas the rest of the work area would be reserved for truck loading. Vehicular traffic would be directed outside the work area.

Cable (Riser) Pole Work Areas

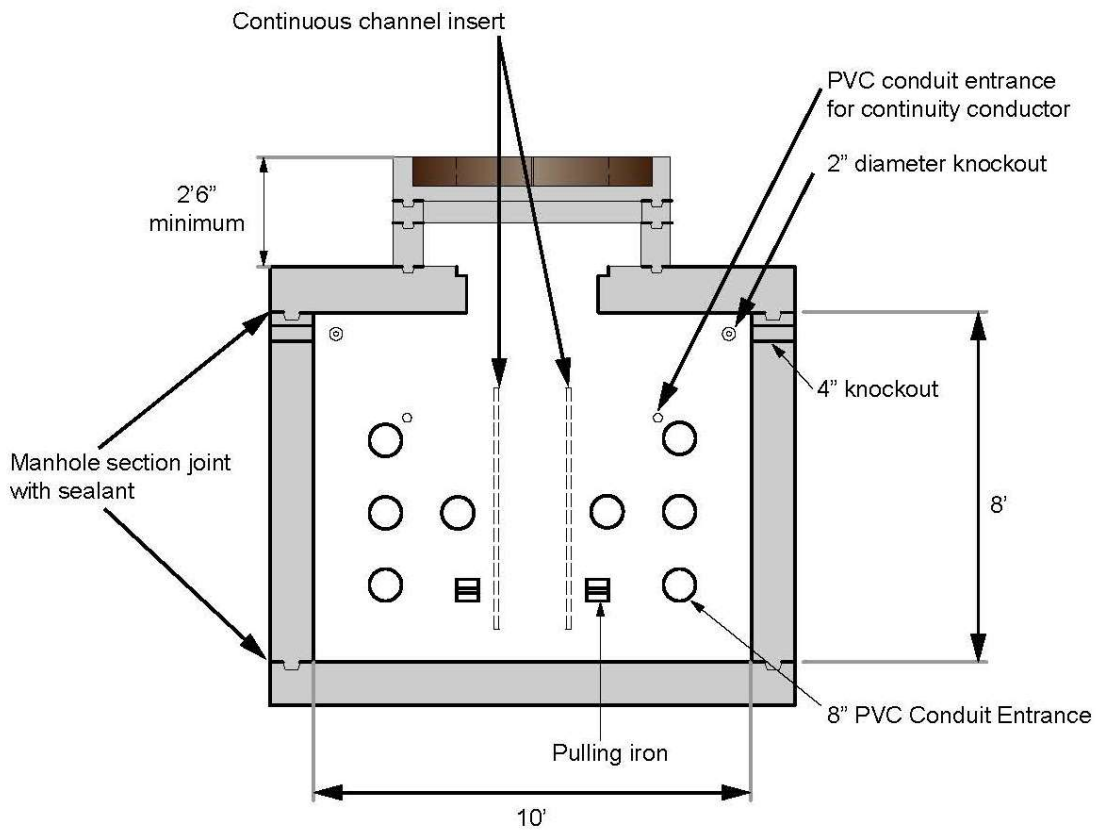
Installation of new transmission cable poles would require an approximately 0.5-acre work area around each structure. The structure work areas would be used for equipment, vehicles, and materials during pole installation. Work areas would be subject to grading and vegetation trimming or removal.

Figure 1 Diagram of Typical Transmission Line Duct Bank



SOURCE: SDG&E 2014, Burns and McDonnell 2014, and Panorama Environmental, Inc. 2014

Figure 2 Typical Splice Vault



NOT TO SCALE

Figure 3 Diagram of Proposed 230-kV Double-Circuit Transition Cable Pole

