

APPENDIX F
SCE BIOLOGICAL CONSTRAINTS REPORT

July 30, 2013

Mr. Roger Overstreet
Southern California Edison
1218 South Fifth Avenue
Monrovia, California 91016

VIA EMAIL
Roger.Overstreet@sce.com

Subject: Biological Resources Report for the Path 42 Electrical Transmission Line Project in the Coachella Valley Area, Riverside County, California

Dear Mr. Overstreet:

This Letter Report presents the findings of a biological survey for Southern California Edison's (SCE's) portion of the Path 42 Electrical Transmission Line Project (hereinafter referred to as the "Proposed Project") from Desert Hot Springs to Thousand Palms in Riverside County, California (Exhibit 1). The purpose of the survey was to evaluate biological resources present that may be impacted by the Proposed Project.

The Survey Area for the Proposed Project includes all areas that would be temporarily or permanently disturbed during construction and an additional 100-foot-wide buffer zone extending around the temporary and permanent impact boundaries and on either side of the access road in an effort to include areas that may be indirectly impacted.

PROJECT LOCATION AND DESCRIPTION

The Proposed Project is located along an existing 15-mile-long electricity transmission line alignment between the Devers Substation and the Mirage Substation in Riverside County, California (Exhibit 1). The alignment runs through the Coachella Valley portion of unincorporated Riverside County and portions of Cathedral City, northeast of and generally paralleling Interstate (I) 10. Portions of the alignment run through the Agua Caliente Band of Cahuilla Indians' reservation. The Survey Area is located on the U.S. Geological Survey's (USGS') Desert Hot Springs, Seven Palms Valley, Cathedral City, and Myoma 7.5-minute topographic quadrangles of the San Bernardino Meridian at Township 3 South, Range 4 East, Sections 3, 4, 9, 10, 11, 13, 14, and 24; Township 3 South, Range 5 East, Sections 19, 28, 29, 32, 33, and 34; Township 4 South, Range 5 East, Sections 1, 2, 3, and 12; and Township 4 South, Range 6 East, Sections 7, 8, 16, and 17 (Exhibit 2).

The Survey Area runs along the base of the Indio Hills. Topography along the alignment gently slopes from an elevation of approximately 1,100 feet above mean sea level (msl) at the northwestern end to an elevation of approximately 280 feet above msl at the southeastern end. The Survey Area is predominantly utilized by existing electrical transmission line facilities with the immediate surrounding land consisting of undeveloped open space. Surrounding land uses outside the open space areas include sparse residential development, an airport, and transportation facilities. Soil types in the Survey Area are mapped as Badlands, Carsitas cobbly sand



(2 to 9 percent slopes), Carsitas fine sand (0 to 5 percent slopes), Carsitas gravelly sand (0 to 9 percent slopes and 9 to 30 percent slopes), Carsitas variant (5 to 30 percent slopes), Lithic Torripsamments-rock outcrop complex, and Myoma fine sand (0 to 5 percent slopes and 5 to 15 percent slopes) (Exhibit 3) (USDA NRCS 2007).

The Proposed Project primarily consists of upgrading and reconductoring SCE's existing 220-kilovolt (kV) Devers-Mirage No. 1 and No. 2 transmission lines on the existing structures; 3 new structures will be constructed and 5 structures will be modified. These lines extend approximately 15 miles from the Devers Substation in north Palm Springs, southeast to the Mirage Substation in Thousand Palms. In addition, less than 1 mile of both the Coachella Valley-Mirage and Mirage-Ramon 220-kV transmission lines would be upgraded.

RELATIONSHIP TO COACHELLA VALLEY MULTIPLE SPECIES HABITAT CONSERVATION PLAN

The Coachella Valley Multiple Species Habitat Conservation Plan/Natural Community Conservation Plan (CVMSHCP) is a regional plan that protects 240,000 acres of native desert communities in the Coachella Valley. The California Department of Fish and Wildlife (CDFW)¹ issued the Natural Community Conservation Plan permit for the CVMSHCP on September 9, 2008, and the U.S. Fish and Wildlife Service (USFWS) issued the final permit for the CVMSHCP on October 1, 2008. The CVMSHCP "balances environmental protection and economic development objectives in the Plan Area and simplifies compliance with endangered species related laws" (CVAG 2007). The CVMSHCP currently covers 27 species, and a Reserve System has been established within 21 Conservation Areas based on occurrences of 27 natural communities that provide habitat for the Covered Species. The CVMSHCP is used to allow the participating jurisdictions to authorize "take" of plant and wildlife species identified within the Plan Area. Under the CVMSHCP, the wildlife agencies (i.e., the USFWS and the CDFW) will grant "Take Authorization" for otherwise lawful actions. SCE is given the option of utilizing the CVMSHCP as a "Participating Special Entity".²

The Survey Area is located within the CVMSHCP Plan Area, and crosses the Willow Hole and Thousand Palms Conservation Areas (CVAG 2007). The Willow Hole Conservation Area contains core habitat for the Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *cochellae*), the Coachella Valley fringe-toed lizard (*Uma inornata*), the Palm Springs [Coachella Valley] round-tailed ground squirrel (*Xerospermophilus* [*Spermophilus*] *tereticaudus* ssp. *chlorus*), and the Palm Springs pocket mouse (*Perognathus longimembris bangsi*). It also contains corridors/linkages for Coachella Valley fringe-toed lizard, Palm Springs [Coachella Valley] round-tailed ground squirrel, and Palm Springs pocket mouse. The Thousand Palms Conservation Area contains core habitat for Coachella Valley milk-vetch, Coachella Valley giant sand-treader cricket (*Macrobaenetes valgum*), Coachella Valley fringe-toed lizard, flat-tailed horned lizard (*Phrynosoma mcallii*), Palm Springs [Coachella Valley] round-tailed ground squirrel, and Palm Springs pocket mouse. The Thousand Palms Conservation Area also contains Core Habitat for Mecca aster (*Xylorhiza cognata*). Conservation objectives and required measures for the Willow Hole and Thousand Palms Conservation Areas are included in Sections 4.3.8 and 4.3.11 of the CVMSHCP, respectively.

¹ The California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW) effective January 1, 2013.

² A "Participating Special Entity" is any regional public service provider, such as a utility company or a public district or agency, that operates and/or owns land within the CVMSHCP Plan Area and that applies for Take Authorization pursuant to Section 11.7 of the Implementing Agreement.

METHODS

The California Native Plant Society's (CNPS') Electronic Inventory of Rare and Endangered Vascular Plants of California and the CDFW's California Natural Diversity Database (CNDDB) were reviewed prior to the survey to identify special status plants, wildlife, and habitats known to occur in the vicinity of the Survey Area. Database searches included the USGS' Desert Hot Springs, Seven Palms Valley, Cathedral City, and Myoma 7.5-minute quadrangles (CNPS 2013; CDFW 2013). These databases contain records of reported occurrences of federally and State-listed listed or proposed Endangered or Threatened species, CDFW Species of Special Concern, or otherwise special status species or habitats that occur in the Proposed Project region. Lists of special status plant and wildlife species potentially occurring in the Survey Area vicinity were subsequently developed from these database searches.

BonTerra Consulting Biologists Kai Palenscar and Jonathan Aguayo performed vegetation mapping and conducted a general plant and wildlife survey on May 8, 2013. Vegetation was mapped in the field on an aerial photograph printed at a scale of 1 inch equals 400 feet (1" = 400'). Nomenclature for vegetation types generally follows the CVMSHCP. All plant and wildlife species observed during the survey were recorded in field notes. Attachment A contains representative photographs of the Survey Area.

Previous surveys conducted for the Proposed Project include a focused Coachella Valley milk-vetch survey (BonTerra Consulting 2012a); focused Coachella Valley fringe-toed lizard surveys (BonTerra Consulting 2012b); focused burrowing owl (*Athene cunicularia*) surveys (BonTerra Consulting 2012c); and jurisdictional delineation surveys (BonTerra Consulting 2013). The results of the focused surveys for the Proposed Project have been incorporated into this analysis; 2013 burrowing owl surveys are currently in progress and results, to date, have been incorporated. In addition, studies have been conducted in the vicinity of the Survey Area as part of the Devers-Palo Verde No. 2 Project (Garcia and Associates 2011).

SURVEY RESULTS

Vegetation Types and Other Areas

The following vegetation types and other areas occur in the Survey Area (Exhibit 4): stabilized and partially stabilized desert dunes, active desert sand fields, ephemeral desert sand fields, Sonoran creosote bush scrub, desert saltbush scrub, desert dry wash woodland, ephemeral wash, disturbed/unvegetated, and developed.

The prevailing vegetation type in the Survey Area is Sonoran creosote bush scrub dominated by creosote bush (*Larrea tridentata*). Associated species include white bur-sage (*Ambrosia dumosa*), cheesebush (*Ambrosia salsola*), cholla (*Cylindropuntia* spp.), beavertail cactus (*Opuntia basilaris* var. *basilaris*), California barrel cactus (*Ferocactus cylindraceus*), indigo bushes (*Psoralea* spp.), and Mormon tea (*Ephedra* spp.).

Stabilized and partially stabilized desert dune areas consist of windborne sand, which has been stabilized in areas of relief and is still active in other areas of minor dune formation. Dead woody vegetation is present on these stabilized dune formations, presumably from mesquite (*Prosopis glandulosa*), which is dominant in this vegetation type just outside of the Survey Area. The current dominant species throughout this area is creosote bush. Other species observed at lower abundance within this vegetation type include brittlebush (*Encelia farinosa*), cheesebush, plicate tiquilia (*Tiquilia plicata*), and indigo bushes. The dunes in these areas have become

more stabilized over time and the spaces between the desert shrubs have become vegetated with ruderal (weedy) species such as Sahara mustard (*Brassica tournefortii*).

Active desert sand fields are found near the center of the Survey Area, west of the intersection of Varner Road and Date Palm Drive. This formation is characterized by large expanses of open, actively moving sand with few shrub species. This area is characteristic habitat for several special status plant and wildlife species.

Ephemeral desert sand fields are comprised of very loose sandy soil that is irregularly deposited by a major flood event or other movement process. The substrate differs from the active desert sand fields in that the sand depth in ephemeral fields are shallow and do not provide the same wildlife habitat characteristics as active fields. The species makeup is similar to that of creosote bush scrub but with few succulent species and lower overall plant abundance. The dominant species throughout this area is creosote bush, with brittlebush, cheesebush, plicate tiquilia, and indigo bushes found at lower abundance. These areas gradually transition into Sonoran creosote bush scrub.

Desert saltbush scrub is located in one area near the intersection of Varner Road and Date Palm Drive on the margins of an eroded drainage which passes under Date Palm Drive, roughly paralleling Varner Road. The dominant species throughout this area is saltbush (*Atriplex* spp.), with creosote bush and Emory indigo bush (*Psoralea emoryi*) found in lower abundance.

Desert dry wash woodland occurs along one sandy desert wash near the eastern end of the Survey Area. This vegetation type is dominated by smoke tree (*Psoralea spinosus*). Associated species include creosote bush, indigo bushes, and annual herbs.

Ephemeral wash occurs near the western end of the Survey Area and runs from north to south across the Survey Area. The primary associated species in the ephemeral wash area include a few Mojave rabbitbrush shrubs (*Ericameria paniculata*), with wide areas of unvegetated sandy alluvium between plants.

Disturbed/unvegetated areas consist of previously graded or paved areas and compacted road shoulders. These areas generally lack vegetation or have sparse ruderal species. Previously paved roads were included here if the asphalt was significantly degraded, exposing large sections of soil with sparse ruderal species.

Developed areas consist of paved roadways and residential development. Ornamental trees and shrubs planted within the developed areas include an athel (*Tamarix aphylla*) windrow located along the southeastern Survey Area boundary.

Wildlife

The following section describes wildlife species observed, or common species likely to occur, in the Survey Area. Assumptions about presence of uncommon or special status species are not addressed in this section.

No fish or amphibians were observed during the survey and none would be expected based on the disturbed nature of the Survey Area; the fact that there is no temporary or permanent water present within or adjacent to the Survey Area; the lack of areas that would support persistent, above-ground water following storm events; and the lack of suitable habitat.

Reptiles observed in the Survey Area include Great Basin whiptail (*Aspidoscelis tigris tigris*) and side-blotched lizard (*Uta stansburiana*). Other reptile species that may occur in the Survey Area include western banded gecko (*Coleonyx variegatus*), desert iguana (*Dipsosaurus dorsalis*), long-nosed leopard lizard (*Gambelia wislizenii*), zebra-tailed lizard (*Callisaurus draconoides*), red coachwhip (*Coluber [Masticophis] flagellum piceus*), gopher snake (*Pituophis catenifer*), western glossy snake (*Arizona elegans*), California kingsnake (*Lampropeltis getula californiae*), Mojave shovel-nosed snake (*Chionactis occipitalis occipitalis*), Baja California lyresnake (*Trimorphodon biscutatus lyrophanes*), northern desert nightsnake (*Hypsiglena chlorophaea deserticola*), and sidewinder (*Crotalus cerastes*).

Resident bird species observed in the Survey Area include Gambel's quail (*Callipepla gambellii*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), rock pigeon (*Columba livia*), Eurasian collared-dove (*Streptopelia decaocto*), mourning dove (*Zenaida macroura*), greater roadrunner (*Geococcyx californianus*), loggerhead shrike (*Lanius ludovicianus*), common raven (*Corvus corax*), barn swallow (*Hirundo rustica*), verdin (*Auriparus flaviceps*), northern mockingbird (*Mimus polyglottos*), European starling (*Sturnus vulgaris*), great-tailed grackle (*Quiscalus mexicanus*), house finch (*Carpodacus mexicanus*), and house sparrow (*Passer domesticus*).

One mammal species, white-tailed antelope squirrel (*Ammospermophilus leucurus*), was observed in the Survey Area. Other mammal species that may occur in the Survey Area include desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), desert kit fox (*Vulpes macrotis*), coyote (*Canis latrans*), desert woodrat (*Neotoma lepida*), western harvest mouse (*Reithrodontomys megalotis*), western deer mouse (*Peromyscus maniculatus*).

Bats occur throughout most of Southern California and may use any portion of the Survey Area as foraging habitat. Most of the bats that could potentially occur in the Survey Area are inactive during the winter and either hibernate or migrate, depending on the species. The western pipistrelle (*Pipistrellus hesperus*) and California myotis (*Myotis californicus*) are expected to occur in the Survey Area.

Wildlife Movement

The Survey Area is contiguous with large areas of open space to the north, northwest, and east. Existing structures (i.e., electrical transmission lines and associated towers) and paved and unpaved roads transverse the Survey Area with sparse residential development at either end of the Survey Area. The existing roads are infrequently used and are not expected to represent a barrier to wildlife movement. Likewise, the transmission lines and associated towers do not prevent movement. It is important to note that, in large open space areas such as those contiguous with the Survey Area where there are few or no man-made or naturally occurring physical constraints to wildlife movement, wildlife corridors (i.e., a piece of habitat that connects two or more habitat patches that would otherwise be fragmented or isolated by unsuitable landcover) may not exist. Therefore, wildlife is expected to use the Survey Area for relatively unhindered local and regional movement to the north, northwest, and east.

I-10 and residential development occurs south of the Survey Area. The I-10/residential development to the south would represent a substantial barrier to wildlife movement off-site in a southerly direction. To a lesser extent, State Route 62 represents a barrier to movement west of the Survey Area.

Special Status Resources

Special status biological resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. In addition to providing an inventory of special status plant and wildlife species, the CNDDDB also provides an inventory of vegetation types that are considered special status by the State and federal resource agencies, academic institutions, and various conservation groups (such as the CNPS).

Special Status Vegetation Communities

The following special status vegetation types were observed in the Survey Area: stabilized and partially stabilized desert dunes (G4 S3.2), Sonoran creosote bush scrub (G4 S4), desert saltbush scrub (G4 S3.2), and desert dry wash woodland (G3 S3.2). Determination of the level of sensitivity at the global (G) or statewide (S) basis is based on the number and size of remaining occurrences as well as recognized threats (e.g., proposed development, habitat degradation, and invasion by non-native species). Vegetation communities with a ranking of 4 are considered apparently secure and uncommon but not rare, with some cause for long-term conservation concern due to declines or other factors; communities with a ranking of 3 are considered vulnerable and at moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors (Faber-Langendoen et al. 2009).

Jurisdictional Areas

Section 404 of the Clean Water Act (CWA) and Section 1602 of the *California Fish and Game Code* regulate activities affecting resources under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and the CDFW, respectively. "Waters of the U.S." under the jurisdiction of the USACE include navigable coastal and inland waters, lakes, rivers, and streams and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce. The CDFW has jurisdictional authority over resources associated with rivers, streams, and lakes. Section 401 of the CWA provides the Regional Water Quality Control Board (RWQCB) with the authority to regulate, through a Water Quality Certification, any proposed federally permitted activity that may affect water quality.

Several ephemeral channels are present in the Survey Area. Those that drain into the Whitewater River, which provides a connection to the Salton Sea, would be under the jurisdiction of the USACE. The remaining drainages are isolated and so would be under the jurisdiction of the RWQCB and the CDFW only. A total of 0.94 acre of non-wetland "Waters of the U.S." under the jurisdiction of the USACE; 3.67 acres under the jurisdiction of the RWQCB; and 5.16 acres under the jurisdiction of the CDFW occur along the Project alignment (BonTerra Consulting 2013).

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Special Status Plant Species

Based on the results of the literature review, a total of 16 special status plant species known to occur in the Proposed Project region are summarized below (Table 1). Two special status plant species were observed in the Survey Area: chaparral sand-verbena (*Abronia villosa* var. *aurita*) and Coachella Valley milk-vetch. These species are described further below.

**TABLE 1
 SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION**

Scientific Name	Common Name	Status			CVMSHCP Coverage ^a	General Habitat Description	Habitat Present (P)/ Absent (A)	Amount of Suitable Habitat ^b (acres)	Results of Surveys/Rationale (Potential For Species To Occur) ^c
		USFWS	CDFW	CRPR					
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	-	-	1B.1	No	Occurs in areas of fine sand, often on benches of alluvial habitats, but also in openings of scrub or grassland vegetation types.	P	525.63	Observed during focused surveys in 2012.
<i>Astragalus lentiginosus</i> var. <i>cochellae</i>	Coachella Valley milk-vetch	FE	-	1B.2	Covered Species	Occurs in windblown sand dunes and hummocks.	P	525.63	Observed during focused surveys in 2012
<i>Astragalus tricarinatus</i>	triple-ribbed milk-vetch	FE	-	1B.2	Covered Species	Occurs in dry washes and bases of canyon slopes in creosote bush scrub	A	0	Outside known elevation range; not expected to occur.
<i>Chamaesyce abramsiana</i>	Abram's spurge	-	-	2.2	No	Occurs in sand flats in creosote bush scrub.	P	525.63	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.
<i>Chamaesyce arizonica</i>	Arizona spurge	-	-	2.3	No	Occurs in sand flats in creosote bush scrub.	P	525.63	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.
<i>Chamaesyce platysperma</i>	flat-seeded spurge	-	-	1B.2	No	Occurs in windblown sand and sandy areas in Sonoran creosote bush scrub.	P	525.63	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.

TABLE 1 (CONTINUED)
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE THE PROJECT REGION

Scientific Name	Common Name	Status			CVMSHCP Coverage ^a	General Habitat Description	Habitat Present (P)/ Absent (A)	Amount of Suitable Habitat ^b (acres)	Results of Surveys/Rationale (Potential For Species To Occur) ^c
		USFWS	CDFW	CRPR					
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	white-bracted spineflower	-	-	1B.2	No	Occurs in sandy or gravelly soils in creosote bush scrub	P	514.7	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.
<i>Eremothera boothii</i> ssp. <i>boothii</i>	Booth's evening primrose	-	-	2.3	No	Occurs in sandy flats and steep loose slopes in Joshua-tree and pinyon/juniper woodland	P	525.63	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.
<i>Eriastrum harwoodii</i>	Harwood's eriastrum	-	-	1B.2	No	Occurs in sand dunes in creosote bush scrub	A	0	Outside current known range; not expected to occur.
<i>Euphorbia misera</i>	cliff spurge	-	-	2.2	No	Occurs on slopes near the mouth of Whitewater Canyon.	A	0	No suitable habitat; not expected to occur.
<i>Linanthus maculatus</i>	little San Bernardino Mountains linanthus	-	-	1B.2	Covered Species	Occurs in very loose soft sand on low benches along washes.	P	1.47	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.
<i>Mentzelia tricuspis</i>	spiny-hair blazing star	-	-	2.1	No	Occurs in sandy or gravelly slopes or washes in creosote bush scrub.	P	525.63	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.
<i>Nemacaulis denudata</i> var. <i>gracilis</i>	slender cottonheads [woolly-heads]	-	-	2.2	No	Occurs in sandy dunes and hummocks.	P	10.93	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.
<i>Selaginella eremophila</i>	desert spike moss	-	-	2.2	No	Occurs in Sonoran desert scrub in rocky or gravelly soils.	A	0	No suitable habitat; not expected to occur.

TABLE 1 (CONTINUED)
SPECIAL STATUS PLANT SPECIES REPORTED FROM THE THE PROJECT REGION

Scientific Name	Common Name	Status			CVMSHCP Coverage ^a	General Habitat Description	Habitat Present (P)/ Absent (A)	Amount of Suitable Habitat ^b (acres)	Results of Surveys/Rationale (Potential For Species To Occur) ^c
		USFWS	CDFW	CRPR					
<i>Stemodia durantifolia</i>	purple stemodia	–	–	2.1	No	Occurs in Sonoran desert scrub in mesic or sandy soils.	P	525.63	Suitable habitat; not expected to occur; not observed during focused surveys conducted in 2012.
<i>Xylorhiza cognata</i>	Mecca aster	–	–	1B.2	Covered Species	Occurs in Sonoran creosote bush scrub in periodically flooded canyons.	A	0	No suitable habitat; not expected to occur.

USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank; CVMSHCP: Coachella Valley Multiple Species Habitat Conservation Plan.

STATUS DESIGNATIONS
Federal Designations (USFWS)
 FE Listed by the federal government as an Endangered species

CRPR Designations
 1B Plants considered Rare, Threatened or Endangered in California and elsewhere
 2 Plants Rare, Threatened or Endangered in California but more common elsewhere

California Rare Plant Rank (CRPR) Threat Code Extensions
 .1 Seriously Endangered in California (over 80% of occurrences threatened; high degree and immediacy of threat)
 .2 Fairly Endangered in California (20-80% of occurrences threatened)
 .3 Not very Endangered in California (less than 20% of occurrences threatened or no current threats known)

^a *Covered Species*: The CVMSHCP provides authorization under the Federal and California Endangered Species Acts to allow the “take” of Covered Species, including loss of their habitat, if the Proposed Project is consistent with the MSHCP requirements.
^b The amount of suitable habitat represents an estimate of potential habitat based on the results of vegetation mapping. It does not take into account heterogeneity of a particular vegetation type (e.g., changes in vegetation density) that might render some areas more or less suitable.
^c Focused surveys were targeted only at the Coachella Valley milk-vetch; therefore, negative results are not definitive for this species. If this species bloomed at a different time or occurs in a different habitat than the milk-vetch, it may not have been observed during the surveys. Additionally, because it was a year of limited rainfall, this species may not have been detectable.

Chaparral Sand-verbena

Chaparral sand-verbena has a California Rare Plant Rank (CRPR) of 1B.1; it is not a Covered Species in the CVMSHCP. It typically blooms between January and August. It is a sprawling annual that occurs on sand dunes and sandy washes from 650 to 5,250 feet above msl. This species is closely related to the common desert sand verbena (*A. villosa* var. *villosa*), but its geographic distribution is primarily on the coastal sides of Southern California mountains (especially sandy river washes) and in the mountains themselves. This species reportedly occurs with the common desert variety in the Mojave Desert, especially around the western margins of the Coachella Valley, including the Palm Springs area (Jaeger 1940). Scattered locations farther east have also been reported, including western Arizona and northern Baja California, Mexico (Shreve and Wiggins 1964). Approximately 525.63 acres of suitable habitat for this species in the Survey Area occurs in stabilized and partially stabilized desert dunes, active desert sand fields, ephemeral desert sand fields, open areas of Sonoran creosote bush scrub, desert saltbush scrub, desert dry wash woodland, ephemeral wash, and in disturbed areas along roadsides. This species was observed in a disturbed area adjacent to Varner Road during 2012 focused surveys (Exhibit 5).

Coachella Valley Milk-vetch

Coachella Valley milk-vetch is a federally listed Endangered species and has a CRPR of 1B.2; it is a CVMSHCP Covered Species. It typically blooms between February and May depending on rainfall and temperature. In years of low rainfall it may not sprout at all. It is endemic to windblown sand in the Coachella Valley from Cabazon to Indio, between sea level and approximately 1,200 feet above msl. It has also been reported on hillsides surrounding the dunelands (Shreve and Wiggins 1964), though there has been no further documentation in these habitats. This species is an annual or short-lived perennial with a deep taproot that dies back to ground level in summer. This subspecies is distinguished, in part, from other members of the milk-vetch genus by its strongly inflated, two-chambered mottled (freckled) pods (CVAG 2007). When dried, the pods fall to the ground and are blown along the dunes (CVAG 2007). The number of individuals of this species at a given location can vary dramatically from year to year, depending on available soil moisture and other factors (CVAG 2007). Approximately 525.63 acres of suitable habitat for this species in the Survey Area occurs in stabilized and partially stabilized desert dunes, active desert sand fields, ephemeral desert sand fields, Sonoran creosote bush scrub, desert saltbush scrub, desert dry wash woodland, and ephemeral wash. This species was observed in stabilized and partially stabilized desert dunes, active desert sand fields, ephemeral desert sand fields, and Sonoran creosote bush scrub during 2012 focused surveys and previous surveys that included the Survey Area (Exhibit 5).

On December 14, 2005, the USFWS published a final rule stating that, because all habitat essential to the conservation of Coachella Valley milk-vetch was within areas to be conserved by the CVMSHCP, no land was being designated as critical habitat for the species. Following lawsuits, the USFWS proposed a revised critical habitat designation on August 25, 2011. This proposed rule was finalized on February 12, 2013. The current final critical habitat designation covers 9,603 acres of land in the Coachella Valley area of Riverside County as critical habitat for the Coachella Valley milk-vetch (USFWS 2013). The Survey Area is within Unit 3 of the designated critical habitat. A detailed calculation of impacts anticipated within critical habitat is discussed on page 25 of this letter report.

Special Status Wildlife Species

A total of 24 special status wildlife species that are known to occur in the Proposed Project region are summarized below (Table 2). Five special status wildlife species were observed in the Survey Area: Coachella Valley fringe-toed lizard, golden eagle (*Aquila chrysaetos*), northern harrier (*Circus cyaneus*), prairie falcon (*Falco mexicanus*), and loggerhead shrike. These species are discussed further below. Because the Bureau of Land Management (BLM) provides a *Flat-tailed Horned Lizard Rangewide Management Strategy* (FHLICC 2003), this species is also discussed below.

**TABLE 2
 SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION**

Scientific Name	Common Name	Status		CVMSHCP Coverage ^a	General Habitat Description	Habitat Present (P)/ Absent (A)	Amount of Suitable Habitat ^b (acres)	Results of Surveys/Rationale (Potential for Species to Occur)
		USFWS	CDFW					
Invertebrates								
<i>Macrobaenetes valgum</i>	Coachella giant sand-treader cricket	–	SA	Covered Species	Occurs in Aeolian sand hummocks and dunes with perennial shrubs, including creosote bush, burrobush (<i>Ambrosia dumosa</i>), honey mesquite (<i>Prosopis glandulosa</i>), Mormon tea (<i>Ephedra</i> sp.), desert willow (<i>Chilopsis linearis</i>), and/or sandpaper plant (<i>Petalonyx thurberi</i>).	P	10.93	May occur; potentially suitable habitat.
<i>Oliarces clara</i>	cheeseweed owlfly [moth lacewing]	–	SA	No	Occurs in rocky streams in desert canyons.	A	0	Not expected to occur; lack of suitable habitat.
<i>Stenopelmatus cahuiensis</i>	Coachella Valley Jerusalem cricket	–	SA	Covered Species	Desert dunes.	P	2.80	May occur; suitable habitat.
Fish								
<i>Cyprinodon macularius</i>	desert pupfish	FE	SE	Covered Species	Springs, marshes, lakes, and pools of creeks, usually over mud or sand.	A	0	Not expected to occur; lack of suitable habitat.
Reptiles								
<i>Crotalus ruber</i>	red-diamond rattlesnake	–	SSC	No	Chaparral, Mojavean desert scrub, and Sonoran desert scrub.	P	525.63	May occur; suitable habitat.

TABLE 2 (Continued)
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Scientific Name	Common Name	Status		CVMSHCP Coverage ^a	General Habitat Description	Habitat Present (P)/ Absent (A)	Amount of Suitable Habitat ^b (acres)	Results of Surveys/Rationale (Potential for Species to Occur)
		USFWS	CDFW					
<i>Gopherus agassizii</i>	desert tortoise	FT	ST	Covered Species	Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub.	P	525.63	May occur; marginally suitable habitat.
<i>Phrynosoma blainvillii</i>	coast horned lizard	-	SSC	No	Desert wash.	P	525.63	May occur; suitable habitat.
<i>Phrynosoma mcallii</i>	flat-tailed horned lizard	-	SSC	Covered Species	Sandy flats and valleys with sparse creosote bush, white bur-sage (<i>Ambrosia dumosa</i>), and/or mixed Sonoran desert scrub.	P	525.63	May occur; potentially suitable habitat.
<i>Uma inornata</i>	Coachella Valley fringe-toed lizard	FT	SE	Covered Species	Aeolian sand dunes and hummocks with widely spaced desert shrubs, particularly creosote bush.	P	10.93	Incidentally observed during jurisdictional delineation surveys; suitable habitat.
Birds								
<i>Aquila chrysaetos</i>	golden eagle	-	WL, FP	No	<i>Foraging:</i> broad expanses of open country. <i>Nesting:</i> primarily in rugged mountainous areas with large trees or cliffs.	P (foraging) A (nesting)	622.91	Incidentally observed during jurisdictional delineation surveys; suitable foraging habitat. Not expected for nesting; lack of suitable nesting habitat.

TABLE 2 (Continued)
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Scientific Name	Common Name	Status		CVMSHCP Coverage ^a	General Habitat Description	Habitat Present (P)/ Absent (A)	Amount of Suitable Habitat ^b (acres)	Results of Surveys/Rationale (Potential for Species to Occur)
		USFWS	CDFW					
<i>Circus cyaneus</i>	northern harrier	–	SSC	No	<i>Foraging:</i> open areas, marshes and fields. <i>Nesting:</i> on the ground in dense vegetation.	P (foraging) A (nesting)	622.91	Incidentally observed during jurisdictional delineation surveys; suitable foraging habitat. Not expected for nesting; lack of suitable nesting habitat.
<i>Falco mexicanus</i>	prairie falcon	–	WL	No	<i>Foraging:</i> grasslands, open areas. <i>Nesting:</i> cliff ledges.	P (foraging) P (nesting)	622.91	Incidentally observed during jurisdictional delineation surveys; suitable foraging habitat. Limited potential to nest; marginal suitable nesting habitat.
<i>Athene cunicularia</i>	burrowing owl	–	SSC	Covered Species	Forages over open habitats such as grasslands, and flat to low rolling hills in treeless terrain; also found in burrows along banks and roadsides.	P	525.63	May occur; suitable habitat. Not observed during focused surveys in 2012.
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher	FE	SE	Covered Species	Riparian woodland.	A	0	Not expected to occur; lack of suitable habitat.
<i>Lanius ludovicianus</i>	loggerhead shrike	–	SSC	No	Desert wash. Sonoran desert scrub.	P	622.91	Observed; suitable habitat.

TABLE 2 (Continued)
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Scientific Name	Common Name	Status		CVMSHCP Coverage ^a	General Habitat Description	Habitat Present (P)/ Absent (A)	Amount of Suitable Habitat ^b (acres)	Results of Surveys/Rationale (Potential for Species to Occur)
		USFWS	CDFW					
<i>Toxostoma lecontei</i>	Le Conte's thrasher	-	SSC	Covered Species	Nests and forages in sparsely vegetated desert flats, dunes, alluvial fans, or hills with saltbush and/or cholla.	P	525.63	May occur; suitable habitat.
Mammals								
<i>Lasiurus xanthinus</i>	western yellow bat	-	SSC	Covered Species	Desert wash. Roosts in leafy vegetation.	P (foraging) A (roosting)	622.91	May occur only for foraging; potentially suitable foraging habitat. Not expected to roost; no suitable roosting habitat.
<i>Xerospermophilus [Spermophilus] tereticaudus chlorus</i>	Palm Springs [Coachella Valley] round-tailed ground squirrel	-	SSC	Covered Species	Occurs in open, flat, desert areas with fine sandy soils, grasses, and/or desert succulent shrubs.	P	525.63	May occur; suitable habitat.
<i>Chaetodipus fallax pallidus</i>	pallid San Diego pocket mouse	-	SSC	No	Pinyon-juniper woodland, desert scrub, and agave-ocotillo habitat on rocky desert slopes.	P	525.63	May occur; suitable habitat.
<i>Dipodomys merriami collinus</i>	Earthquake Merriam's kangaroo rat	-	SA	No	Occurs in Riversidean sage scrub, chaparral, and non-native grassland with sandy loam substrates.	A	0	Not expected to occur; lack of suitable habitat.
<i>Perognathus longimembris bangsi</i>	Palm Springs pocket mouse	-	SSC	Covered Species	Occurs in sandy flats and hummocks with sparse to moderate vegetative cover.	P	525.63	May occur; suitable habitat.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	-	SSC	No	Coastal scrub, often the vicinity of rocky outcrops.	P	525.63	May occur; suitable habitat.

TABLE 2 (Continued)
SPECIAL STATUS WILDLIFE SPECIES REPORTED FROM THE PROJECT REGION

Scientific Name	Common Name	Status		CVMSHCP Coverage ^a	General Habitat Description	Habitat Present (P)/ Absent (A)	Amount of Suitable Habitat ^b (acres)	Results of Surveys/Rationale (Potential for Species to Occur)
		USFWS	CDFW					
<i>Taxidea taxus</i>	American badger	–	SSC	No	Drier, open stages of shrub, forest, and herbaceous habitats with friable soil.	P	525.63	May occur; suitable habitat.
<i>Ovis canadensis nelsoni</i>	Nelson's bighorn sheep	–	SA	No	Occurs on mountain range slopes, plateaus, and alluvial fans.	A	0	Not expected to occur; lack of suitable habitat.
<i>Ovis canadensis nelson</i> DPS	peninsular bighorn sheep	FE	ST, FP	Covered Species	Occurs on mountain range slopes, plateaus, and alluvial fans.	A	0	Not expected to occur; lack of suitable habitat.

USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife; CVMSHCP: Coachella Valley Multiple Species Habitat Conservation Plan; DPS: Distinct Population Segment

STATUS DEFINITIONS

Federal Designations (USFWS)		State Designations (CDFW)	
FE	Listed by the federal government as an Endangered species	SE	Listed as Endangered by the State of California
FT	Listed by the federal government as a Threatened species	ST	Listed as Threatened by the State of California
		SSC	Species of Special Concern
		FP	Fully Protected
		WL	Watch List
		SA	Special Animal

^a *Covered Species*: The CVMSHCP provides authorization under the Federal and California Endangered Species Acts to allow the “take” of Covered Species, including loss of their habitat, if the Proposed Project is consistent with the MSHCP requirements.

^b The amount of suitable habitat represents an estimate of potential habitat based on the results of vegetation mapping. It does not take into account heterogeneity of a particular vegetation type (e.g., changes in vegetation density) that might render some areas more or less suitable. For bird/bat species, the amount of suitable habitat represents suitable foraging habitat, not nesting/roosting habitat.

Desert Tortoise

Desert tortoise (*Gopherus agassizii*) is a federally and State-listed Threatened species; it is a CVMSHCP Covered Species. The desert tortoise occurs in the Mojave and Sonoran deserts in California, Nevada, Utah and Arizona, as well as in Sonora and Sinaloa, Mexico; populations north and west of the Colorado River ("Mojave population") are considered genetically, morphologically, ecologically, and behaviorally distinct than those south of the river (the "Sonoran population"). The desert tortoise typically inhabits desert scrub, including washes, Joshua tree woodlands, and creosote bush scrub with extensive annual wildflower blooms (Zeiner et al. 1988; USFWS 1994). They often occur on gently sloping terrain with soils ranging from sand to sandy-gravel and scattered shrubs with abundant inter-shrub space for growth of herbaceous plants (USFWS 1994). Tortoises primarily forage in April and May; aestivate in underground burrows in July and August; re-emerge in September; and hibernate in their burrows from October through February (Rautenstrauch et al. 2002). Desert tortoise habitat has been lost to urbanization, agriculture and mining, while livestock grazing and off-road vehicle activity may have degraded remaining habitat. In addition, desert tortoises have also been taken as pets and a fatal respiratory disease has been introduced into the tortoise population (USFWS 1994).

Both the USGS and the CVAG assessed habitat suitability for desert tortoise in the region (Nussear, et. Al. 2009 and CVAG 2007). USGS geographically analyzed probability of suitable habitat presence while CVAG geographically analyzed suitable habitat presence in addition to locations of existing populations. The CVAG analysis relied heavily upon input from desert tortoise experts, specifically Jeff Lovich with USGS. The resulting Core Areas identified in the CVMSHCP contain suitable habitat and viable desert tortoise populations, which is regionally a more important qualifier of potential for desert tortoise. The Study Area occurs in both the Willow Hole and Thousand Palms Conservation Areas of the CVMSHCP and neither Conservation Area contains Core Areas for desert tortoise.

Approximately 525.63 acres of marginally suitable habitat for this species is present within the Study Area. The Study Area does not occur in or adjacent to any federally mapped critical habitat for desert tortoise. No desert tortoise burrows were observed during either of the focused burrowing owl burrow surveys in 2012 or 2013. Furthermore, the nearest occurrence of desert tortoise is approximately 2.7 miles west of the western-most end of the Study Area (CDFW 2013) and no incidental observation of any desert tortoise sign was observed during any of the reconnaissance-level biological resource surveys conducted in the Study Area.

Flat-tailed Horned Lizard

Flat-tailed horned lizard is a California Species of Special Concern; it is a CVMSHCP Covered Species. The USFWS previously published a rule proposing Threatened status for the flat-tailed horned lizard in 1993 but withdrew the proposed rule to list in 1997 based on information available at that time. On December 26, 2001, under court order, the USFWS reinstated the proposed listing of this species as Threatened and reopened the public comment period. The USFWS withdrew the proposed listing in January 2003. The proposal for listing was reinstated on December 7, 2005, but the proposed rule was again withdrawn on June 28, 2006 (USFWS 2006). This species occupies areas of fine windblown sand and extremely barren country within the creosote bush scrub vegetation type where vegetation is sparse or lacking (USFWS 1997). Adult lizards will hibernate between November and February. This species occurs within the Lower Colorado River Valley Subdivision of the Sonoran Desert. This area includes portions of eastern San Diego County, central Riverside County, and Imperial County

in California; southwestern Arizona; and Sonora and Baja California, Mexico. Approximately 525.63 acres of suitable habitat for this species is present in the Survey Area.

Coachella Valley Fringe-toed Lizard

Coachella Valley fringe-toed lizard is a State-listed Endangered and federally listed Threatened species; it is a CVMSHCP Covered Species. The Coachella Valley fringe-toed lizard is restricted to sand dunes in the Coachella Valley and requires fine, loose, wind-blown sand, and widely spaced desert shrubs. Suitable habitat can include sand dunes, sand hummocks, and the edges of washes where blowsand has accumulated (England and Nelson 1976). The Coachella Valley fringe-toed lizard has developed morphological and behavioral adaptations to survive in blowsand habitats (Norris 1958) and it occurs wherever there are large patches of appropriate substrate (England and Nelson 1976). Morphological adaptations include fringed toes that have projecting pointed scales; a countersunk lower jaw; and well-developed earflaps (Stebbins 2003). These adaptations allow the Coachella Valley fringe-toed lizard to run and dive into loose sand and remain just below the surface to escape predators (Norris 1958). Approximately 10.93 acres of suitable habitat for this species is present in a small area of active desert sand fields located west of the Varner Road and Date Palm Drive intersection and in stabilized and partially stabilized desert dune located southeast of the intersection of Little Morongo Road and 18th Avenue (Exhibit 5). Extant populations of this species were monitored by SCE through 2012 in the active desert sand fields and incidental observations during the jurisdictional delineation surveys confirmed species presence in 2012 (Exhibit 5B). In 2012, subsequent to the 2012 focused Coachella Valley fringe-toed lizard surveys, this species was determined to be absent from the stabilized and partially stabilized desert dune impact area (BonTerra Consulting 2012b).

On September 25, 1980, the USFWS published a final rule designating the Coachella Valley area of Riverside County as critical habitat for the Coachella Valley fringe-toed lizard (USFWS 1980). The Survey Area is within designated critical habitat for this species. A detailed calculation of impacts anticipated within critical habitat is discussed on page 24 of this letter report.

In 1986, the Coachella Valley Preserve system was established; three separate sites, each having a discrete source of blowsand, were set aside to protect Coachella Valley fringe-toed lizard populations: (1) the Coachella Valley Preserve, also known as the Coachella Valley Fringe-toed Lizard Preserve or the Thousand Palms Preserve; (2) the Willow Hole-Edom Hill Preserve; and (3) the Indian Avenue Preserve within the Whitewater River Floodplain. The Survey Area is not located within a preserve.

Golden Eagle

Golden eagle is a California Fully Protected species, a Watch List species, and is also protected by the federal Bald and Golden Eagle Protection Act (16 USC 668-668d); both nesting and wintering individuals are protected. It is not a Covered Species in the CVMSHCP. This species breeds in open and semi-open habitats, such as tundra, shrublands, grasslands, woodland-brushlands, coniferous forests, farmland, and riparian habitats (Kochert et al. 2002). Broad expanses of open country are required for foraging, while nesting is primarily restricted to rugged mountainous areas with large trees or on cliffs (Johnsgard 2001); they are generally absent from the immediate coast and urbanized areas (Garrett and Dunn 1981). The golden eagle is an uncommon resident throughout Southern California, except in the Colorado Desert and Colorado River where it is a casual winter visitor (Garrett and Dunn 1981). Approximately 622.91 acres of suitable foraging habitat, but no suitable nesting habitat, for this species is

present throughout the Survey Area. Golden eagle was incidentally observed during jurisdictional delineation surveys. This species is not expected to nest in the Survey Area.

Northern Harrier

Northern harrier is a California Species of Special Concern; nesting individuals are protected. It is not a Covered Species in the CVMSHCP. This species is threatened by loss of habitat, pesticides (Ehrlich et al. 1988), and loss of suitable breeding habitat (Macwhirter and Bildstein 1996). It is a regular winter migrant in marshes and fields throughout Southern California, but is very scarce as a local breeder (Garrett and Dunn 1981). Some breeding populations may be resident, though the species appears to be nomadic, both between years and within the breeding season (Shuford and Gardali 2008). This raptor occurs year-round over open habitats, nesting on the ground within dense vegetation (Shuford and Gardali 2008). While once a relatively common species during fall, winter, and spring in undeveloped areas of the County, the northern harrier population is now greatly reduced and localized in distribution. Approximately 622.91 acres of suitable foraging habitat, but no suitable nesting habitat, for this species is present in the Survey Area. Northern harrier was incidentally observed foraging during jurisdictional delineation surveys. This species is not expected to nest in the Survey Area.

Prairie Falcon

Prairie falcon is a Watch List species; nesting individuals are protected. It is not a Covered Species in the CVMSHCP. Preferred foraging habitats include grassland and scrub vegetation types. Prairie falcons nest almost exclusively on cliffs (Clark and Wheeler 2001), though there are reports of them nesting on transmission towers (DeLong and Steenhof 2004). It is an uncommon year-round resident in the interior of Southern California (Garrett and Dunn 1981). The prairie falcon has become an increasingly scarce winter resident and very rare summer resident along the Southern California coast (Unitt 1984; Lehman 1994). Approximately 622.91 acres of suitable foraging habitat and marginal suitable nesting habitat for this species is present in the Survey Area. Prairie falcon was incidentally observed foraging during jurisdictional delineation surveys and has limited potential to nest in the Survey Area.

Loggerhead Shrike

Loggerhead shrike is a California Species of Special Concern; nesting individuals are protected. It is covered by the CVMSHCP. Year-round, shrikes inhabit open habitats with short vegetation such as pastures, agricultural fields, riparian areas, and open woodlands (Yosef 1996). They can often be found perched on fences and posts from which prey items (e.g., large insects, small mammals, and lizards) can be seen. This species was widely distributed across North America but has declined throughout most of its range in recent decades (Yosef 1996). It was considered to be a fairly common year-round resident in Southern California (Garrett and Dunn 1981), but has recently shown declines in its California population (Shuford and Gardali 2008). Approximately 622.91 acres of suitable foraging and nesting habitat for this species is present throughout the Survey Area. Loggerhead shrike was observed during the survey.

PROJECT IMPACTS

The determination of impacts in this analysis is based on a comparison of maps depicting current Proposed Project limits (including permanent and temporary impacts) and maps of biological resources in the Survey Area (Exhibit 6). Should any of the impact areas be modified by SCE to extend beyond the limits shown in Exhibit 6, additional analysis would be required. Biological impacts associated with the Proposed Project were evaluated with respect to the following special status biological issues:

- Federally or State-listed Endangered or Threatened plant or wildlife species;
- Non-listed species that meet the criteria in the definition of “Rare” or “Endangered” in the CEQA Guidelines (i.e., 14 *California Code of Regulations*, Section 15380)³;
- Species designated as California Species of Special Concern;
- Streambeds, wetlands, and their associated vegetation;
- Habitats suitable to support a federally or State-listed Endangered or Threatened plant or wildlife species;
- Habitats, other than wetlands, considered special status by regulatory agencies (e.g., the USFWS, the CDFG) or resource conservation organizations;
- Other species or issues of concern to regulatory agencies or conservation organizations.

The actual and potential occurrence of these resources in the Survey Area was correlated with the significance criteria provided by the California Environmental Quality Act (CEQA) Guidelines in order to determine whether Project impacts on these resources would be considered significant.

Vegetation Types and Other Areas

The Proposed Project would impact a total of 65.92 acres (3.23 acres of active desert sand fields, 16.89 acres of ephemeral desert sand fields, 34.54 acres of Sonoran creosote bush scrub, 0.06 acre of desert saltbush scrub, 7.81 acres of disturbed/unvegetated areas, and 3.39 acre of developed areas) (Table 3, Exhibit 6).

³ Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., CNPS List 1B plants) to be Endangered, Rare, or Threatened if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species meets the definitions for Rare and Endangered according to Section 15380 of the CEQA Guidelines.

**TABLE 3
 VEGETATION TYPES AND OTHER AREAS THAT WOULD BE IMPACTED BY
 THE PROPOSED PROJECT**

Vegetation Type and Other Areas	Existing (Acres)	Permanent Project Impact (Acres)	Temporary Project Impact (Acres)	Total Project Impact (Acres)
Stabilized and Partially Stabilized Desert Dunes	2.80	0.00	0.00	0.00
Active Desert Sand Fields	8.13	0.84	2.39	3.23
Ephemeral Desert Sand Fields	78.04	2.93	13.96	16.89
Sonoran Creosote Bush Scrub	434.82	2.72	31.82	34.54
Desert Saltbush Scrub	0.19	0.00	0.06	0.06
Desert Dry Wash Woodland	0.18	0.00	0.00	0.00
Ephemeral Wash	1.47	0.00	0.00	0.00
Disturbed/Unvegetated	97.28	1.01	6.80	7.81
Developed	21.15	0.05	3.34	3.39
Total	644.06	7.55	58.38	65.92

Wildlife Impacts

General Habitat Loss and Wildlife Loss

Construction of the Proposed Project will result in the loss of native habitat that provides valuable nesting, foraging, and denning opportunities for a variety of wildlife species. Removal of these habitats may result in the loss of small mammals, reptiles, and other slow-moving animals that occupy the direct impact area. The permanent loss of approximately 6.49 acres of native desert habitat types that support common wildlife species is considered an adverse impact. However, this loss is not expected to reduce wildlife populations of commonly-occurring species to below self-sustaining levels and the majority of this impact is temporary in nature. Therefore, impacts resulting from general habitat loss and wildlife loss are not expected to present a constraint on development.

The proposed project consists of maintenance of existing facilities and no new collision risk will be introduced into the Study Area as a result of this project. Electrocution can occur when the bird's body is in contact with two different phases at the same time (e.g., connecting phase to ground or connecting phase to phase). Collision risk may occur when the bird's body comes into contact with a static wire. The Proposed Project will comply with the current Avian Power Line Interaction Committee (APLIC) 2012 guidance to minimize avian electrocution and collisions with power line facilities. Proposed Project impacts are not expected to increase the electrocution or collision risk for avian species above current conditions.

Wildlife Movement

The Proposed Project runs along an existing SCE transmission line alignment. As such, Proposed Project impacts would not represent a substantial change from current conditions and wildlife movement would not be permanently affected by the Proposed Project. Therefore, permanent impacts on wildlife movement are not expected to present a constraint on development.

Construction activities would create dust and noise within and adjacent to the impact area. During active construction, wildlife movement may be deterred by noise and human activity; however, most wildlife movement would occur at night while most construction activities would occur during the day. In addition, construction activities would also be temporary in nature. Therefore, construction impacts on wildlife movement would be considered less than significant and would not be expected to present a constraint on development.

Special Status Biological Resource Impacts

Special Status Vegetation Communities

A total of 34.60 acres (2.72 acre permanent; 31.88 acre temporary) of special status vegetation types (i.e., Sonoran creosote bush scrub and desert saltbush scrub) would be impacted by the Proposed Project. Impacts on Sonoran creosote bush scrub would not be considered a constraint on development because the CDFW considers this vegetation type to be apparently secure and uncommon but not rare. Impacts on desert saltbush scrub would not be considered a constraint on development due to the limited amount of impacts (i.e., 0.06 acre) relative to the amount of this vegetation type in the region (i.e., approximately 169 acres within the Willow Hole Conservation Area; CVAG 2007).

Jurisdictional Areas

The Proposed Project would impact approximately 0.08 acre of non-wetland “Waters of the U.S.”; 0.40 acre under the jurisdiction of the RWQCB; and 0.50 acre under the jurisdiction of the CDFW (Table 4). Impacts on these resources may be a constraint on development.

**TABLE 4
 USACE JURISDICTIONAL “WATERS OF THE U.S.” AND CDFW
 JURISDICTIONAL “WATERS OF THE STATE” ALONG THE ALIGNMENT**

Jurisdiction	Existing (Acres)	Permanent Impact (Acres)	Temporary Impact (Acres)	Total Impacts (Acres)
“Waters of the U.S.” (USFWS, RWQCB)	0.94	0.00	0.08	0.08
Isolated Waters (RWQCB)	2.73	0.03	0.29	0.32
“Waters of the State” (CDFW)	5.16	0.04	0.46	0.50
USFWS: U.S. Fish and Wildlife Service; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife.				

Special Status Plant Species

CVMSHCP Covered Species known to occur in the Survey Area or having suitable habitat present in the Survey Area include Coachella Valley milk-vetch and little San Bernardino Mountains linanthus (*Linanthus maculatus*). Based on the results of the 2012 focused surveys, the Proposed Project may impact 1 Coachella Valley milk-vetch individual. It should be noted that, due to limited rainfall in the 2012 season, it is expected that additional individuals would germinate under more favorable rain conditions. Therefore, the actual number of individuals impacted by the Proposed Project may be higher. Impacts (e.g., direct mortality) on Coachella Valley milk-vetch are considered significant because of its federal listing. Impacts on the little

San Bernardino Mountains linanthus, if present, may be considered a constraint on development; this would depend upon the number of impacted individuals in relation to the population size in the region. As a CVMSHCP Covered Species, impacts resulting from a project participating in the CVMSHCP within the boundaries of the CVMSHCP have been analyzed under CEQA and NEPA. The Final Recirculated joint Environmental Impact Report/Statement (EIR/EIS) prepared for the CVMSHCP was “prepared pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) [and] provides a comprehensive assessment of the potential environmental impacts that could result from the implementation of the proposed [CV]MSHCP.” (CVAG 2007) Furthermore, projects covered under the CVMSHCP are authorized take on CVMSHCP Covered Species and subsequent impacts resulting from these actions of take are analyzed under CEQA and NEPA. Therefore, no new instances of take on CVMSHCP Covered Species are anticipated and impacts are less than significant.

Species not covered by the CVMSHCP that are known to occur or have potential to occur in the Survey Area include chaparral sand-verbena, Abram’s spurge (*Chamaesyce abramsiana*), Arizona spurge (*Chamaesyce arizonica*), flat-seeded spurge (*Chamaesyce platysperma*), white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), Booth’s evening primrose (*Eremothera boothii* ssp. *boothii*), spiny-hair blazing star (*Mentzelia tricuspis*), slender cottonheads [woolly-heads] (*Nemacaulis denudata* var. *gracilis*), and purple stemodia (*Stemodia durantifolia*). Based on the results of the 2012 focused surveys, the Proposed Project may impact 24 chaparral sand-verbena individuals. However, due to limited rainfall in the 2012 season, the actual number of individuals may be higher. Impacts to individual specimens (e.g., direct mortality) would be adverse, but mortality of individual specimens are not expected to decrease population sizes of the species’ below self-sustaining levels. Subsequently, any impacts to the species’ are not adverse and are not expected to present a constraint on Proposed Project development.

The Survey Area is within Unit 3 of designated critical habitat for Coachella Valley milk-vetch. Approximately 17.85 acres (0.39 acre permanent; 17.46 acres temporary) of critical habitat will be impacted by the Proposed Project.

Special Status Wildlife Species

CVMSHCP Covered Species known to occur or having potential to occur in the Survey Area include Coachella giant sand-treader cricket (*Macrobaenetes valgum*), Coachella Valley Jerusalem cricket (*Stenopelmatus cahuilensis*), flat-tailed horned lizard, Coachella Valley fringe-toed lizard, burrowing owl, Le Conte’s thrasher (*Toxostoma lecontei*), western yellow bat (*Lasiurus xanthinus*), Palm Springs pocket mouse, and Palm Springs [Coachella Valley] round-tailed ground squirrel. As a CVMSHCP Covered Species, impacts resulting from a project participating in the CVMSHCP within the boundaries of the CVMSHCP have been analyzed under CEQA and NEPA. The Final Recirculated joint Environmental Impact Report/Statement (EIR/EIS) prepared for the CVMSHCP was “prepared pursuant to the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) [and] provides a comprehensive assessment of the potential environmental impacts that could result from the implementation of the proposed [CV]MSHCP.” (CVAG 2007) Furthermore, projects covered under the CVMSHCP are authorized take on CVMSHCP Covered Species and subsequent impacts resulting from these actions of take are analyzed under CEQA and NEPA. Therefore, no new instances of take (e.g., direct mortality; loss of habitat) on CVMSHCP Covered Species are anticipated and impacts are less than significant. SCE has proposed additional measures to avoid/minimize impacts on Coachella Valley fringe-toed lizard above measures provided by the

CVMSHCP (SCE 2013). These measures include pre-construction clearance surveys, construction during the season the species is most active, and access road stabilization.

Species not covered by the CVMSHCP that are known to occur or have potential to occur in the Survey Area include red-diamond rattlesnake (*Crotalus ruber*), coast horned lizard (*Phrynosoma blainvillii*), golden eagle (for foraging only), northern harrier (for foraging only), prairie falcon (for foraging only), loggerhead shrike, pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*), San Diego desert woodrat (*Neotoma lepida intermedia*), and American badger (*Taxidea taxus*). Due to the limited amount of impacts on habitat for these species relative to the availability of suitable habitat in the region, impacts on non-Covered species would be less than significant and would not be expected to present a constraint on Proposed Project development. Furthermore, direct impacts would be avoided by implementing the recommended measures listed at the end of this report.

The Survey Area is within designated critical habitat for Coachella Valley fringe-toed lizard. Approximately 3.23 acres (0.84 acre permanent; 2.39 acres temporary) of critical habitat will be impacted by the Proposed Project.

Other Considerations

Movement of Sand

The Survey Area runs through a “sand transport” area and along the southern extent of a “sand source” area in the Willow Hole Conservation Area (see CVMSHCP Figure 4-13d; CVAG 2007) and through a “sand transport” area in the Thousand Palms Conservation Area (see CVMSHCP Figure 4-16d; CVAG 2007). Section 8.4.1 of the CVMSHCP discusses threats to and management/monitoring of Aeolian sand communities. The Proposed Project is not expected to impact the transport of sand because Proposed Project structures will be nearly identical in nature to those currently in the Survey Area.

California Desert Native Plants Act

Division 23 of the *California Food and Agricultural Code* protects certain California desert native plants from unlawful harvesting on publicly and privately owned lands. Protected species observed in the Survey Area include cholla, California barrel cactus, mesquite, and smoke tree. Pursuant to Section 80117 of the California Desert Native Plants Act, this division “does not apply to a public agency or to a publicly or privately owned public utility when acting in the performance of its obligation to provide service to the public”. Therefore, removal permits issued by Riverside County are not required.

Nesting Birds

Vegetation, poles, and towers in the Survey Area have the potential to support nesting birds. The Migratory Bird Treaty Act (MBTA) protects the nests of all native bird species, including common species such as mourning dove. Impacts on active bird nests would present a constraint on development.

Nesting Raptors

Some of the poles and towers in the Survey Area have potential to support nesting raptors (e.g., red-tailed hawks). Any impact on an active raptor nest (common or special status species)

would be considered a violation of Sections 3503, 3503.5, and 3513 of the *California Fish and Game Code*. Impacts on active raptor nests would present a constraint on development.

Burrowing owls have not been observed in the Survey Area to date; however, there is potential for them to occupy habitat in the Survey Area in the future. Suitable habitat for burrowing owl would be impacted by the Proposed Project. Impacts on this species, if present, may present a constraint on development.

Golden and Bald Eagle Act

Suitable foraging habitat, but no suitable nesting habitat, for golden eagle is present in the Survey Area. The federal Bald and Golden Eagle Protection Act (16 USC 668-668d) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession, and commerce of these bird species. The 1972 amendments increased penalties for violating provisions of the Act and strengthened other enforcement measures. A 1978 amendment authorizes the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations. A 1994 Memorandum (59 CFR 22953, April 29, 1994) from President William J. Clinton to the heads of Executive Agencies and Departments sets out the policy concerning collection and distribution of eagle feathers for Native American religious purposes. Proposed Project activities are not expected to impact a nest protected under this Act or to result in the direct mortality of individuals. Long-term impacts on golden eagle are not expected to increase above current conditions because Project implementation would not be substantially different than existing conditions.

California Fur-bearing Mammals Act

Suitable habitat for desert kit fox (*Vulpes macrotis arsipus*) and American badger is present in the Survey Area. This species is protected by the California Fur-bearing Mammals Act (*California Fish and Game Code*, Sections 4000-4012). Section 4000 (Fur-bearing Mammals Specified) states, "the following are fur-bearing mammals: pine marten, fisher, mink, river otter, gray fox, red fox, kit fox, raccoon, beaver, badger, and muskrat". Their protection comes from the California Code of Regulations (CCF, Title 14, Division 1, Subdivision 2, Chapter 5, Section 460, Fur-bearing Mammals) which states, "fisher, marten, river otter, desert kit fox, and red fox may not be taken at any time". "Take" is defined in the law (*California Fish and Game Code*, Section 86) as "to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill".

Indirect Impacts

Indirect effects, commonly referred to as "edge effects", may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats. The primary indirect effect of the Proposed Project is expected to be a temporary increase in noise levels in the Survey Area. Noise levels would substantially increase over present levels during construction. Temporary construction noise has the potential to disrupt foraging, nesting, and denning activities for a variety of wildlife species. Construction activities may also generate dust that could settle on the leaves of trees, shrubs, and herbs in the vicinity of the construction site; this may affect the respiratory function of plants. During construction, concrete washing used to construct the Proposed Project or runoff that carries petroleum residues from construction equipment could potentially impact water quality, however, a Storm Water Pollution Prevention Program will be prepared and implemented as part of the Proposed Project.

These edge effects may impact Conservation Areas during construction; however, they are anticipated to be temporary in nature. The CVMSHCP provides Land Use Adjacency Guidelines to minimize indirect effects. After construction is completed, indirect effects are not expected to substantially impact Conservation Areas because impacts would be limited to periodic maintenance activities which would be no different from what occurs under current conditions. The long-term impacts associated with either the Proposed Project or a no-project alternative would be the same: continued maintenance activities on either the existing or proposed structures would not be different.

RECOMMENDATIONS

The following measures are recommended to minimize potential impacts:

1. As a Participating Special Entity, SCE may request Take Authorization for the Proposed Project through the CVMSHCP; this can occur as long as the Proposed Project is consistent with the terms and requirements of the permits, the CVMSHCP, and the Implementing Agreement. The CVMSHCP outlines specific avoidance, minimization, and mitigation measures necessary to preserve sensitive plant and wildlife species' populations within the Plan Area (CVAG 2007 [see Section 4.4]). Measures for the Willow Hole and Thousand Palms Conservation Areas are provided in Section 4.3 of the CVMSHCP. As a Participating Special Entity, avoidance and minimization measures will be supplied to SCE and the resource agencies (i.e., CDFW and USFWS) by the Coachella Valley Conservation Commission (CVCC) upon submittal of final Project plans. The Resource agencies may then prescribe additional guidance on avoidance and minimization.
2. Pre-construction clearance surveys are recommended prior to construction to minimize impacts on special status species and species protected by the California Fur-bearing Mammals Act.
3. Construction monitoring by a qualified Biologist is recommended to assist with avoidance of special status biological resources. The Biological Monitor would be responsible for ensuring that impacts on special status species, native vegetation, wildlife habitat, and unique resources are avoided to the extent feasible.
4. Impacts to resources under the jurisdiction of the USACE, the RWQCB, and/or the CDFW should be avoided to the extent feasible. If avoidance is not feasible, permits/agreements from the USACE, the RWQCB, and/or the CDFW would be required for impacts on areas within these agencies' jurisdictions.
5. If construction occurs during the nesting season for birds/raptors (generally between February 1 and June 30) and an active nest is present, then Project activities may impact the nest. Therefore, it is recommended that vegetation that will be impacted by the Proposed Project be removed during the non-nesting season, if feasible. If this is not feasible, then a qualified Biologist should conduct a nesting bird/raptor survey to ensure that no nesting birds/raptors are present. If a nest is present, then appropriate minimization measures would need to be developed to protect the active nest until nesting activity has ended.
6. A pre-construction survey for burrowing owls is recommended prior to construction. If burrowing owls are observed in the Survey Area, then appropriate minimization measures would need to be developed in compliance with the CVMSHCP.

Mr. Roger Overstreet
July 30, 2013
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7. Implementation of the CVMSHCP Land Use Adjacency Guidelines (CVAG 2007 [see Section 4.5]) is recommended to minimize edge effects from development of the Proposed Project within and/or adjacent to Conservation Areas.

Thank you for the opportunity to prepare this Letter Report. If you have any questions or comments, please contact Allison Rudalevige at (714) 444-9199.

Sincerely,

BONTERRA CONSULTING


Ann M. Johnston
Principal


Allison D. Rudalevige
Biologist/Regulatory Technician

Enclosures: Exhibits 1–6
Attachment A – Site Photos

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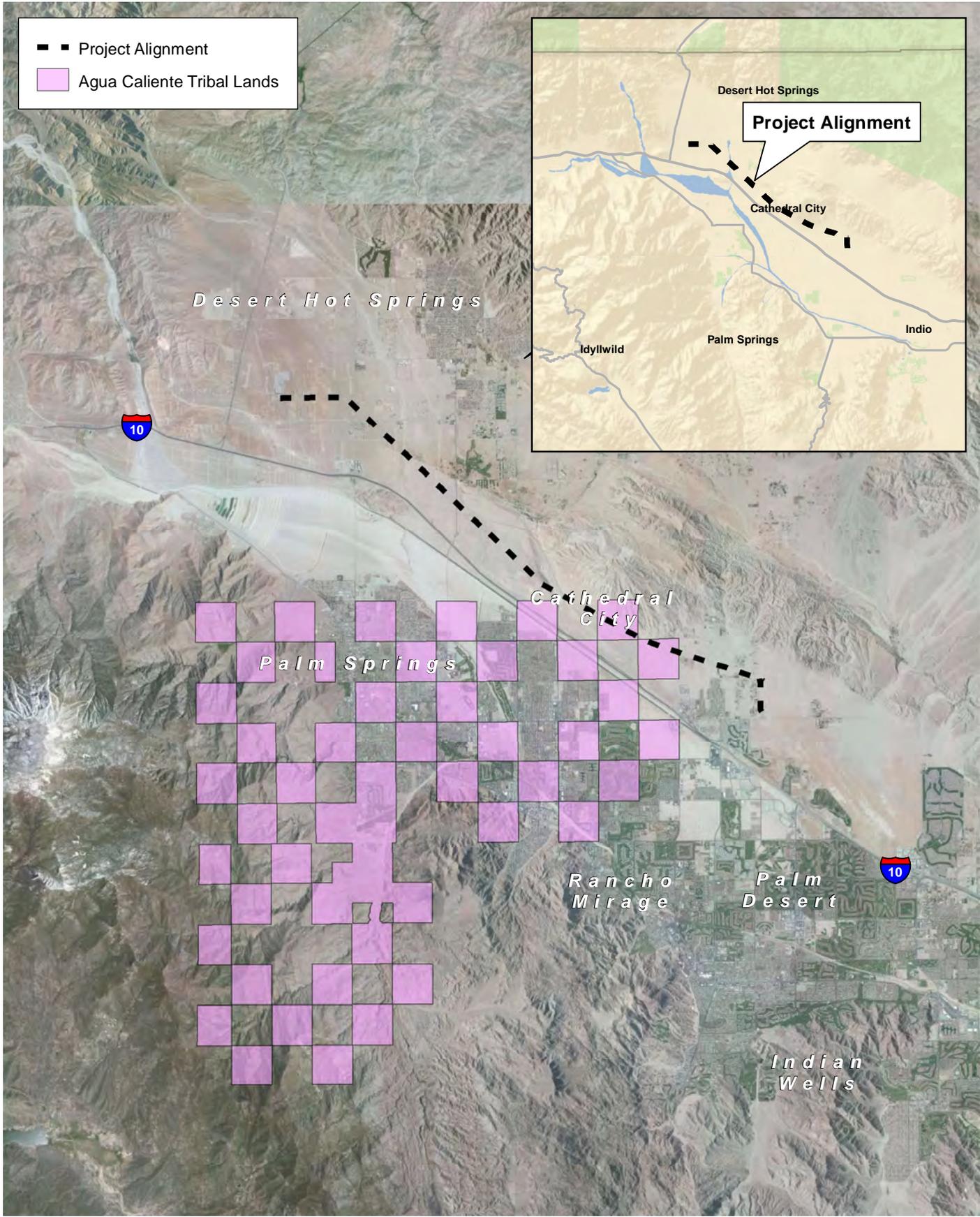
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- ■ Project Alignment
- Agua Caliente Tribal Lands

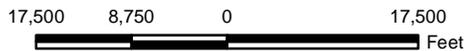


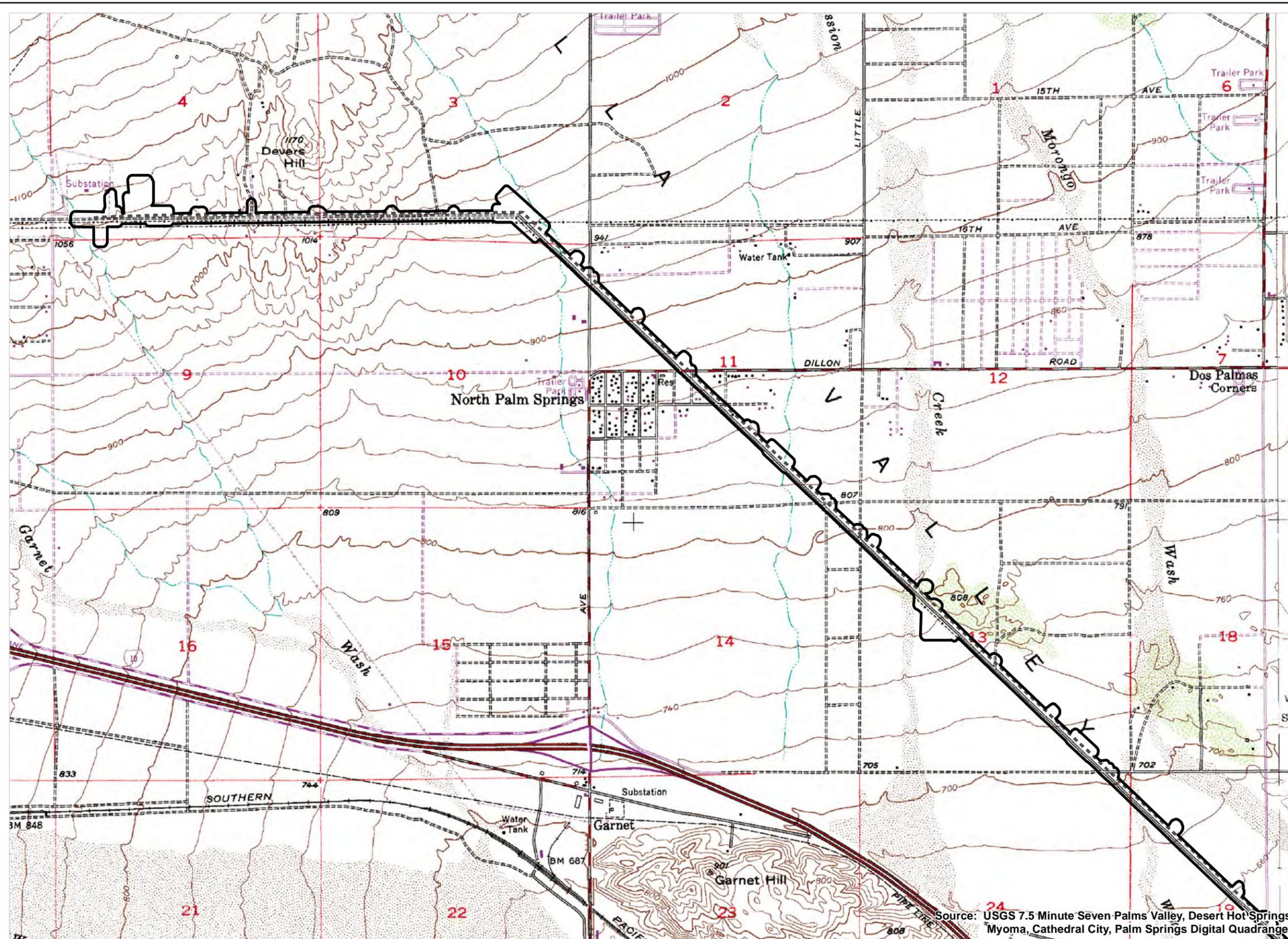
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Project Location

Exhibit 1

Path 42 Electrical Transmission Line Project





- Survey Area
- Project Alignment

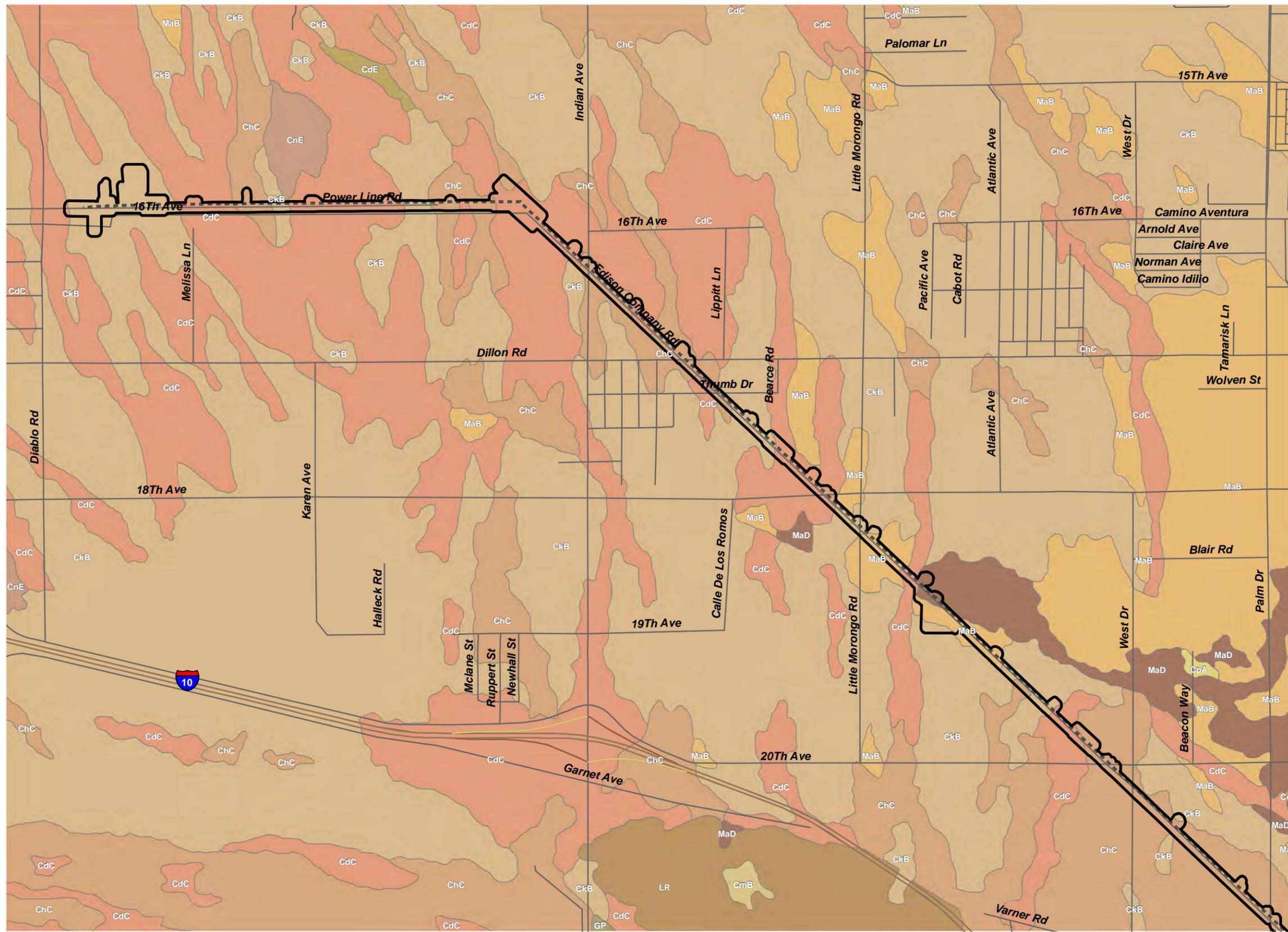
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USGS 7.5-minute Digital Quadrangle

Path 42 Electrical Transmission Line Project



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- Survey Area
- Project Alignment
- Soil Types In Survey Area**
- BA - Badland
- CdC - Carsitas gravelly sand
0 to 9 percent slopes
- CdE - Carsitas gravelly sand
9 to 30 percent slopes
- ChC - Carsitas cobbly sand
2 to 9 percent slopes
- CkB - Carsitas fine sand
0 to 5 percent slopes
- CmE - Carsitas variant
5 to 30 percent slopes
- LR - Lithic Torripsamments-Rock outcrop complex
- MaB - Myoma fine sand
0 to 5 percent slopes
- MaD - Myoma fine sand
5 to 15 percent slopes

Soil Types

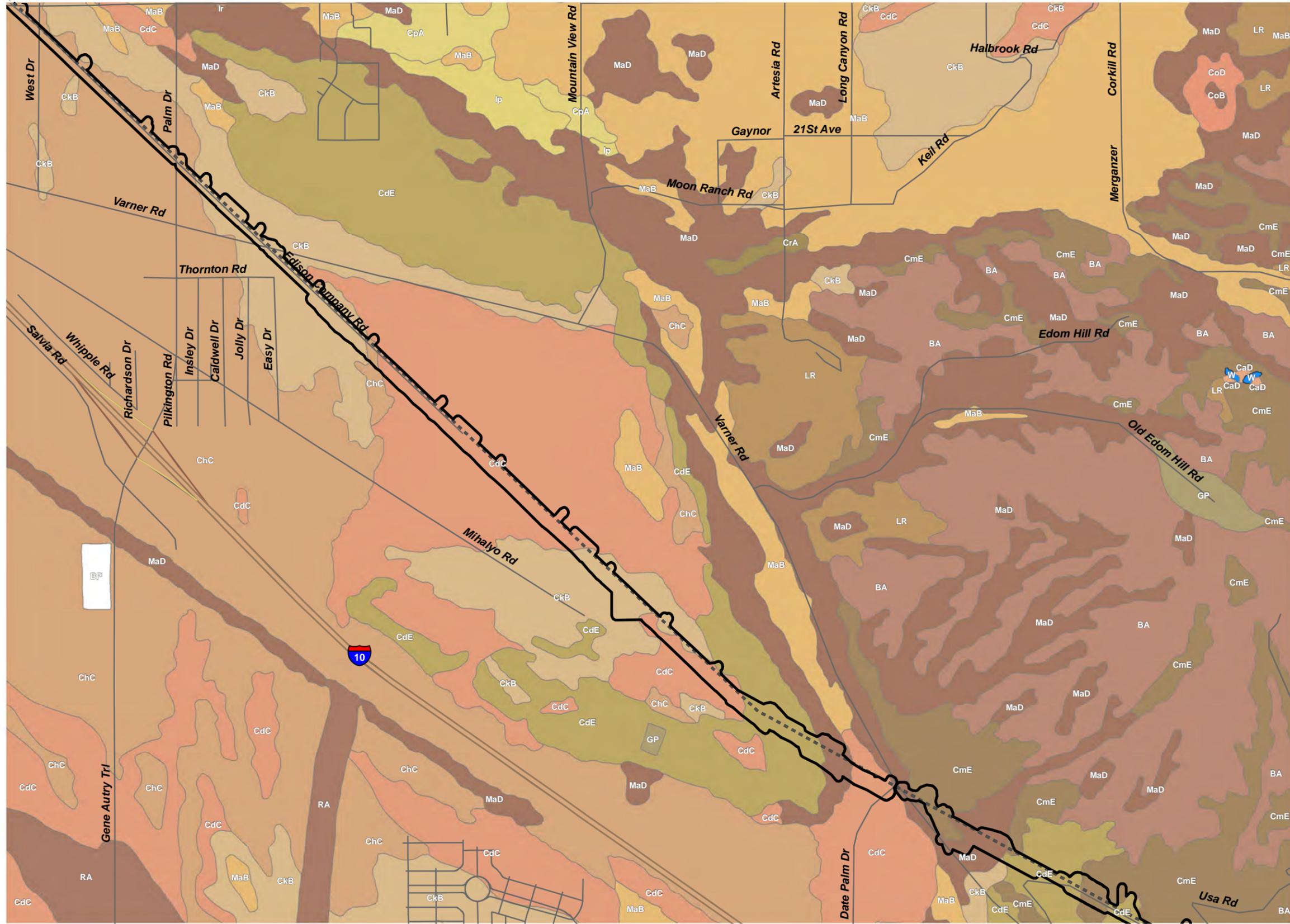
Path 42 Electrical Transmission Line Project



Exhibit 3A



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- Survey Area
- Project Alignment
- Soil Types In Survey Area**
- BA - Badland
- CdC - Carsitas gravelly sand
0 to 9 percent slopes
- CdE - Carsitas gravelly sand
9 to 30 percent slopes
- ChC - Carsitas cobbly sand
2 to 9 percent slopes
- CkB - Carsitas fine sand
0 to 5 percent slopes
- CmE - Carsitas variant
5 to 30 percent slopes
- LR - Lithic Torripsamments-Rock outcrop complex
- MaB - Myoma fine sand
0 to 5 percent slopes
- MaD - Myoma fine sand
5 to 15 percent slopes

Soil Types

Path 42 Electrical Transmission Line Project

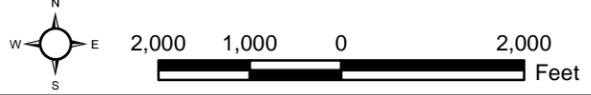
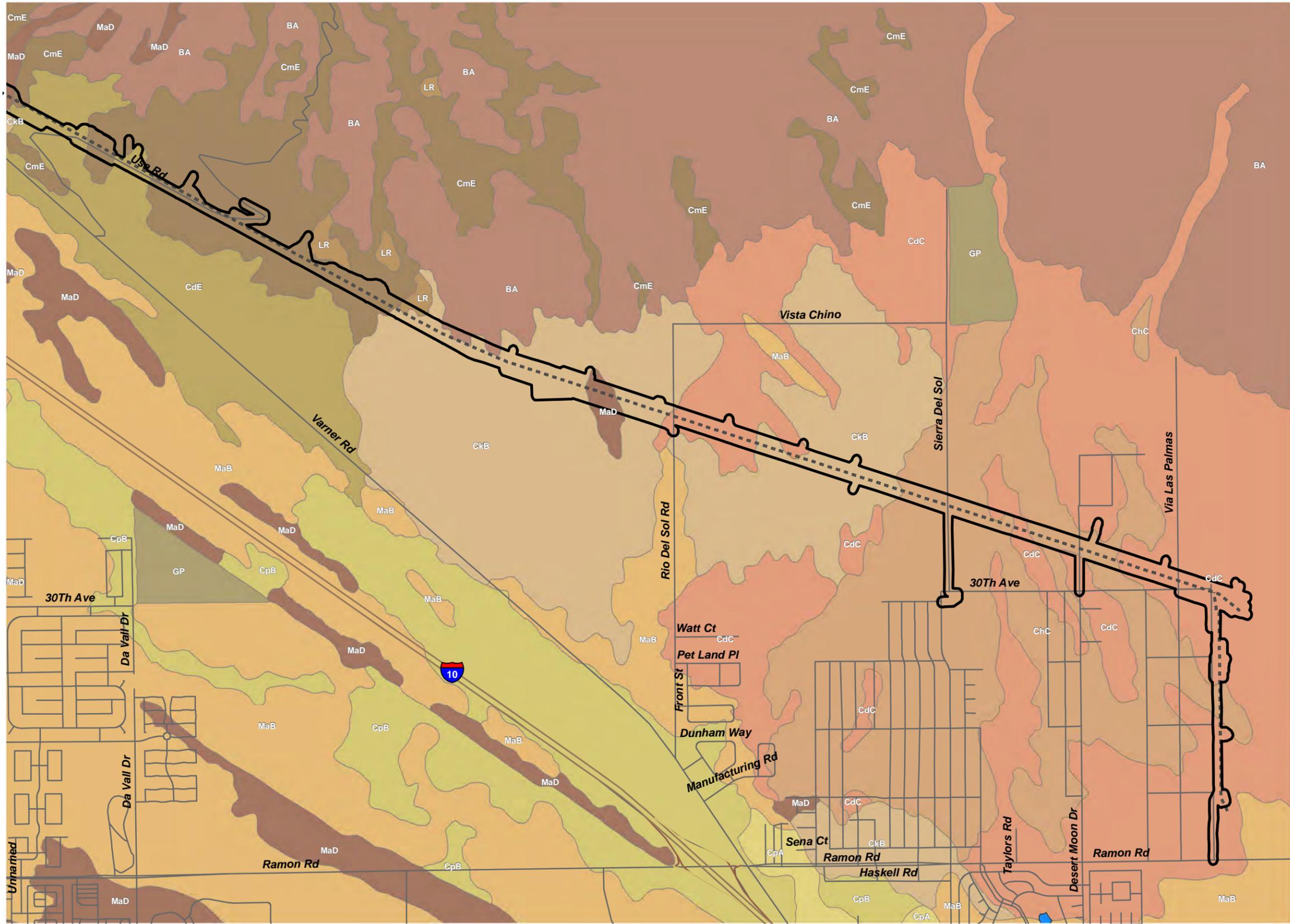


Exhibit 3B



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- Survey Area
- Project Alignment
- Soil Types In Survey Area**
- BA - Badland
- CdC - Carsitas gravelly sand
0 to 9 percent slopes
- CdE - Carsitas gravelly sand
9 to 30 percent slopes
- ChC - Carsitas cobbly sand
2 to 9 percent slopes
- CkB - Carsitas fine sand
0 to 5 percent slopes
- CmE - Carsitas variant
5 to 30 percent slopes
- LR - Lithic Torripsamments-Rock outcrop complex
- MaB - Myoma fine sand
0 to 5 percent slopes
- MaD - Myoma fine sand
5 to 15 percent slopes

Soil Types
Path 42 Electrical Transmission Line Project

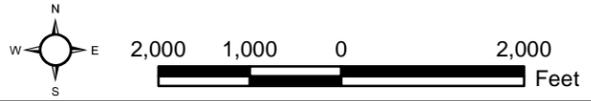
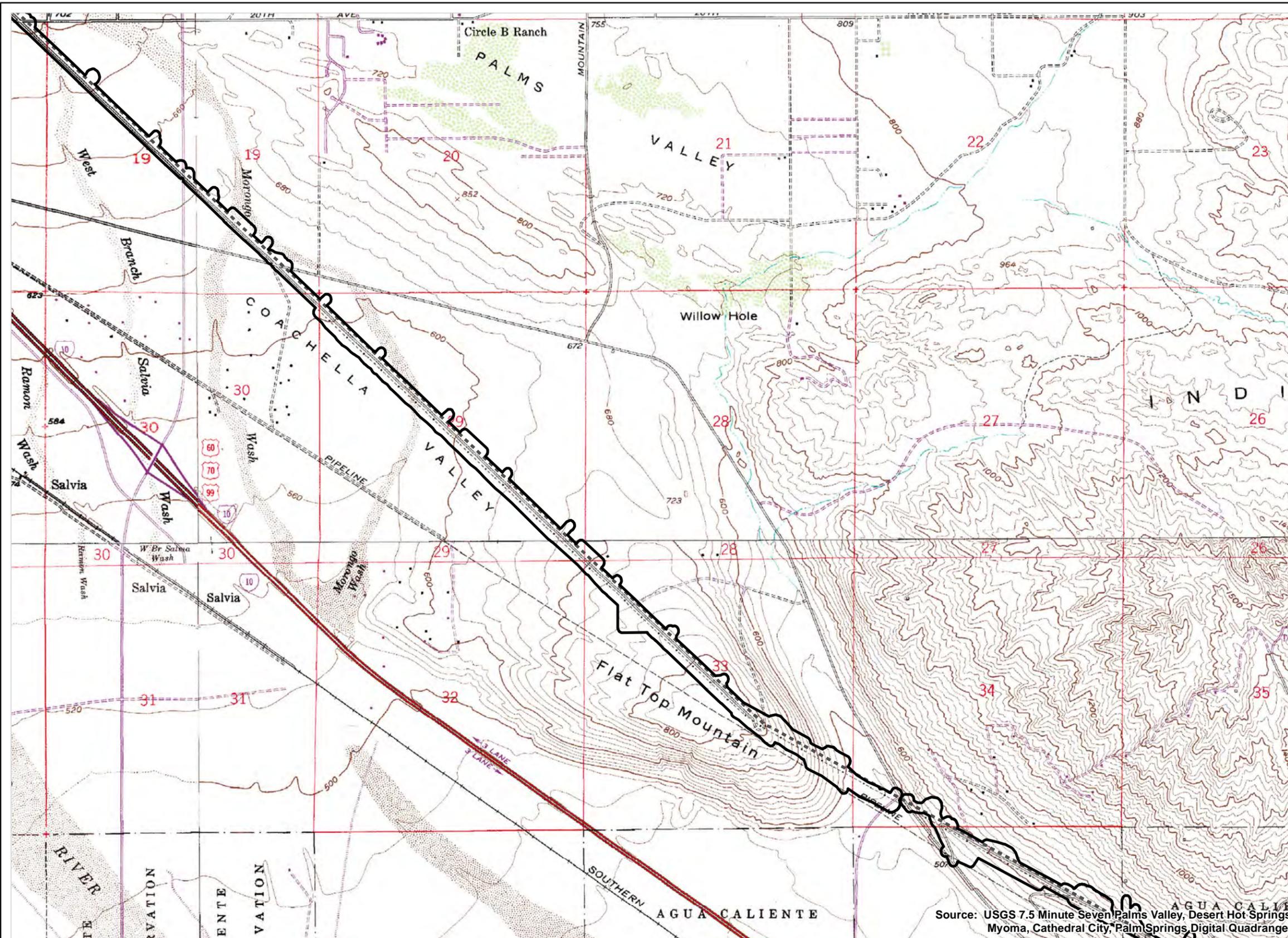


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- Survey Area
- Project Alignment

Source: USGS 7.5 Minute Seven Palms Valley, Desert Hot Springs, Myoma, Cathedral City, Palm Springs Digital Quadrangles

USGS 7.5-minute Digital Quadrangle

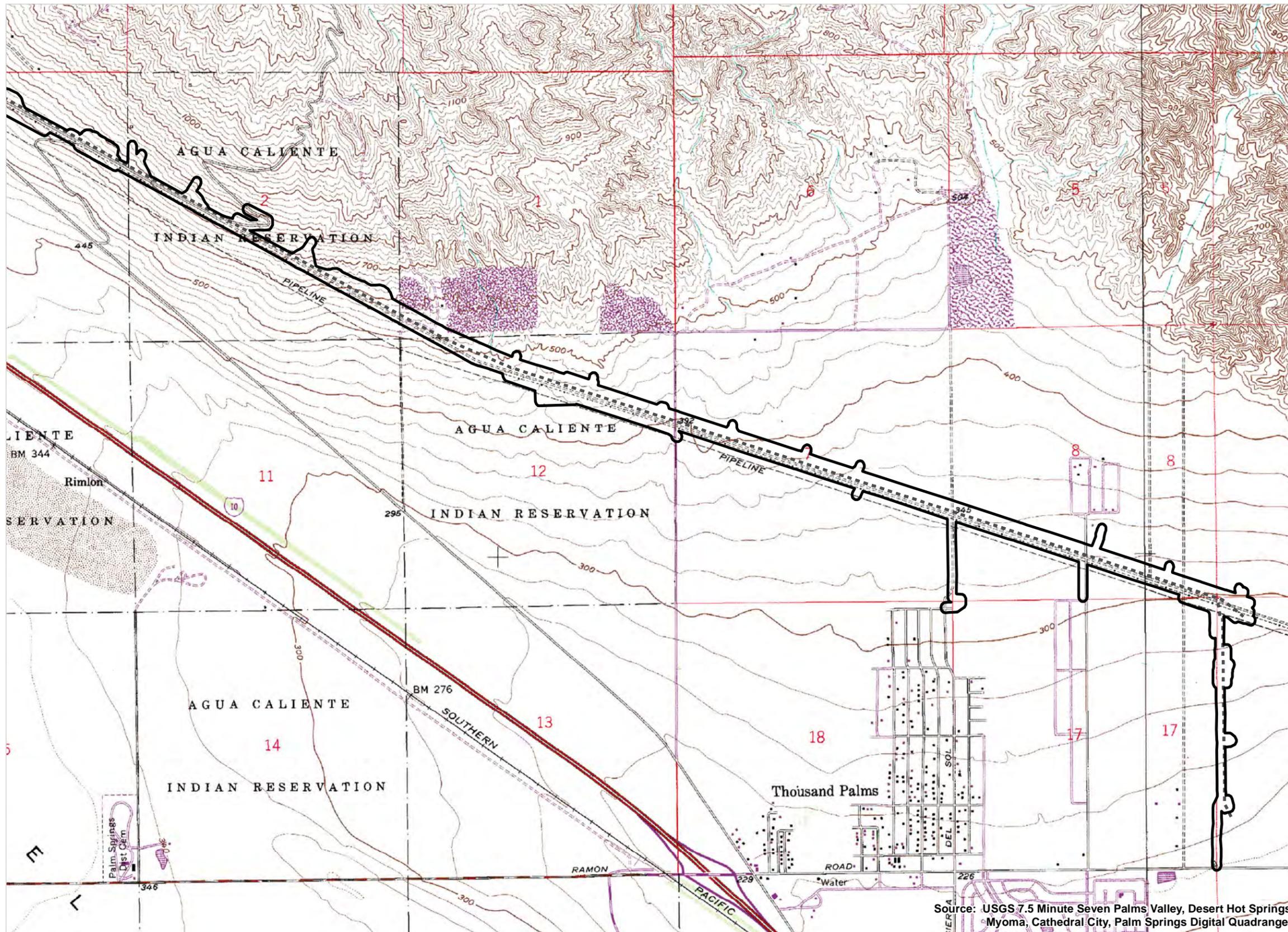
Path 42 Electrical Transmission Line Project



Exhibit 2B



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-  Survey Area
-  Project Alignment

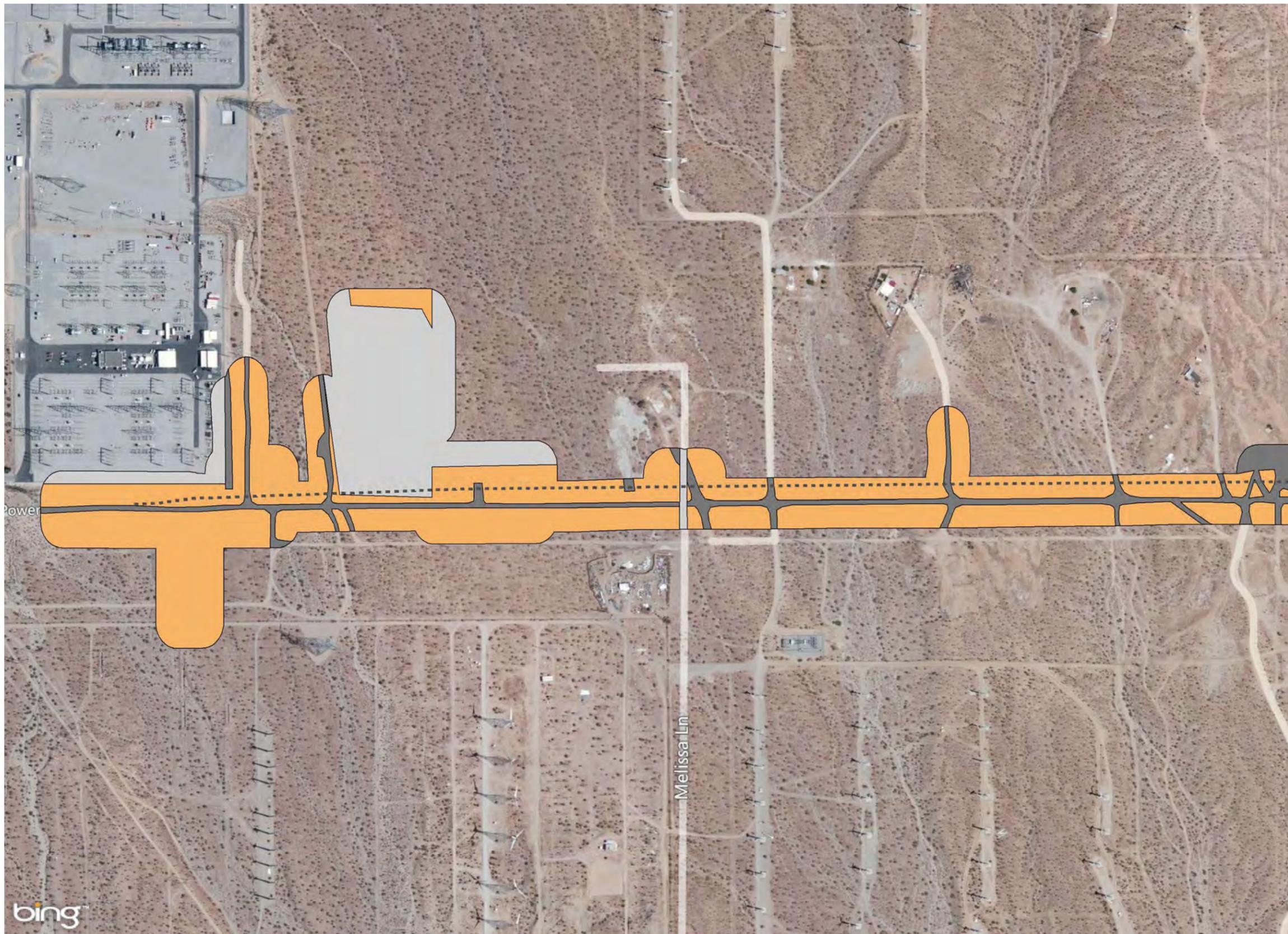
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USGS 7.5-minute Digital Quadrangle

Path 42 Electrical Transmission Line Project



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

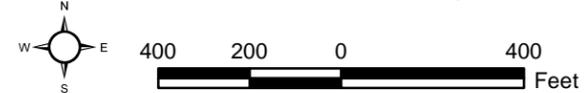
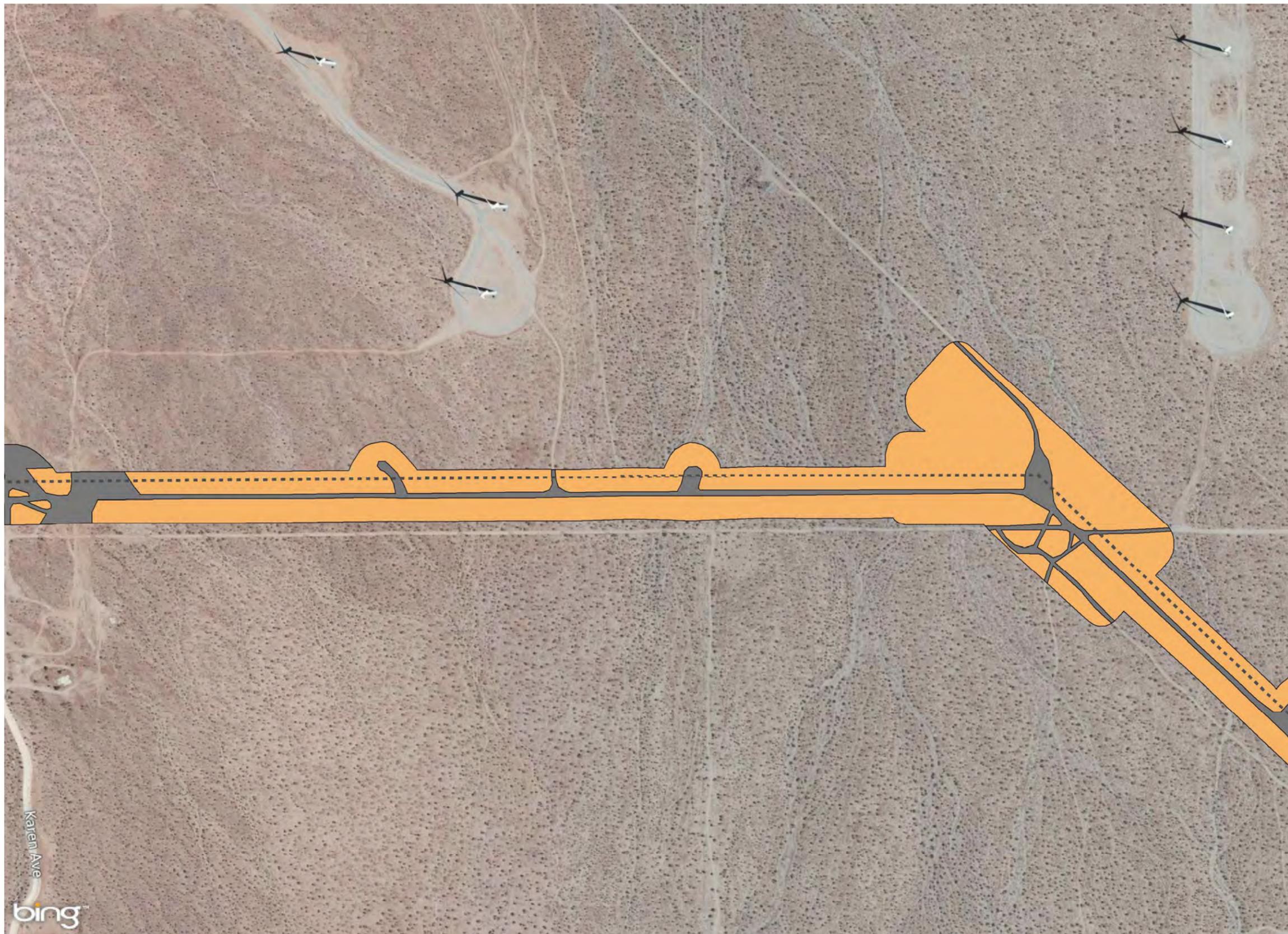


Exhibit 4A



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

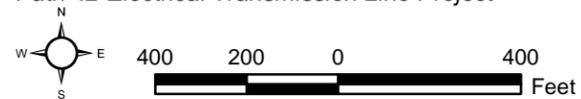
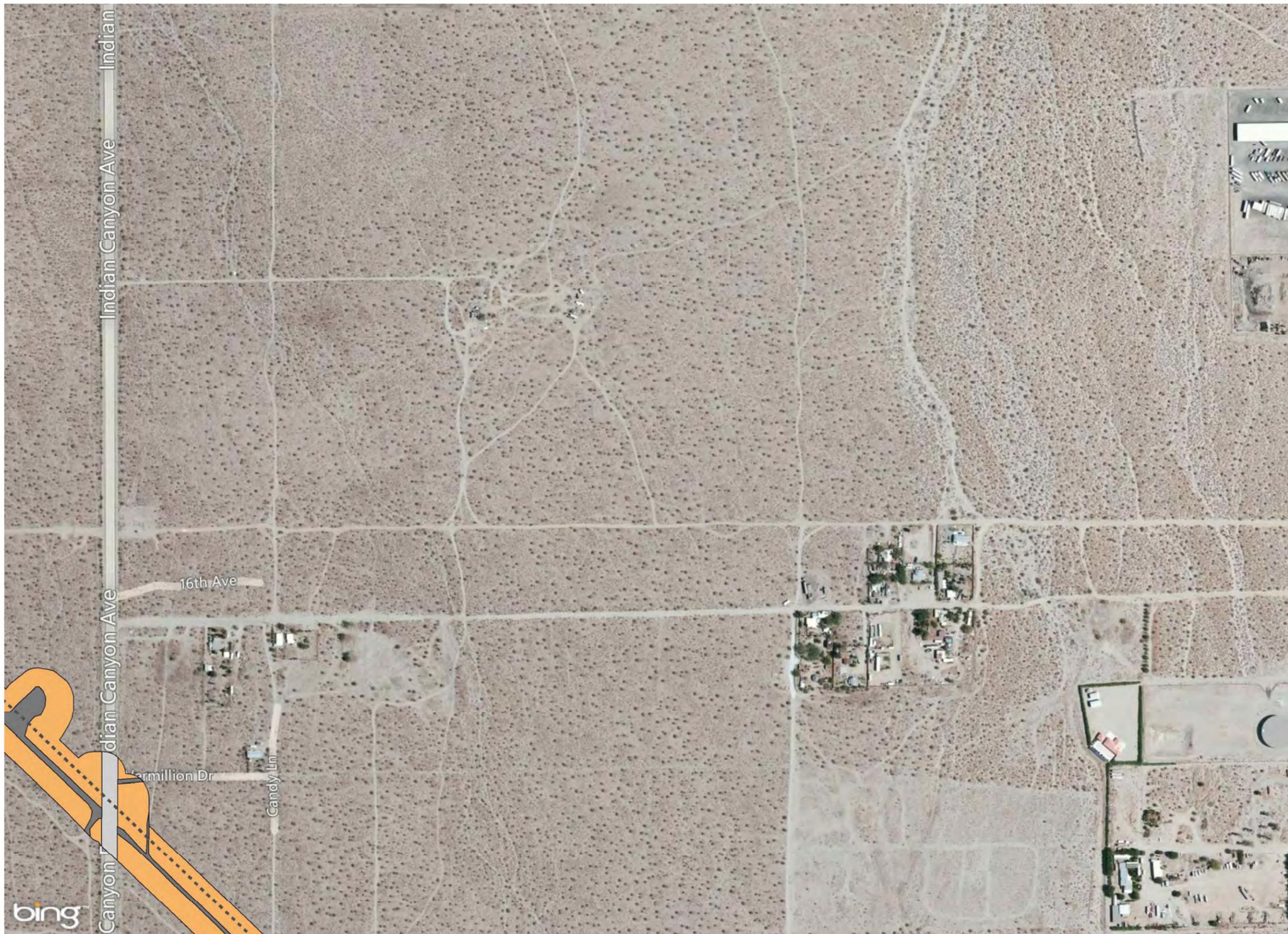


Exhibit 4B





- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

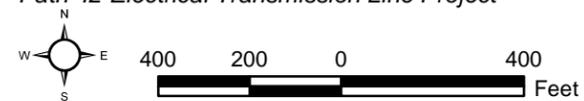
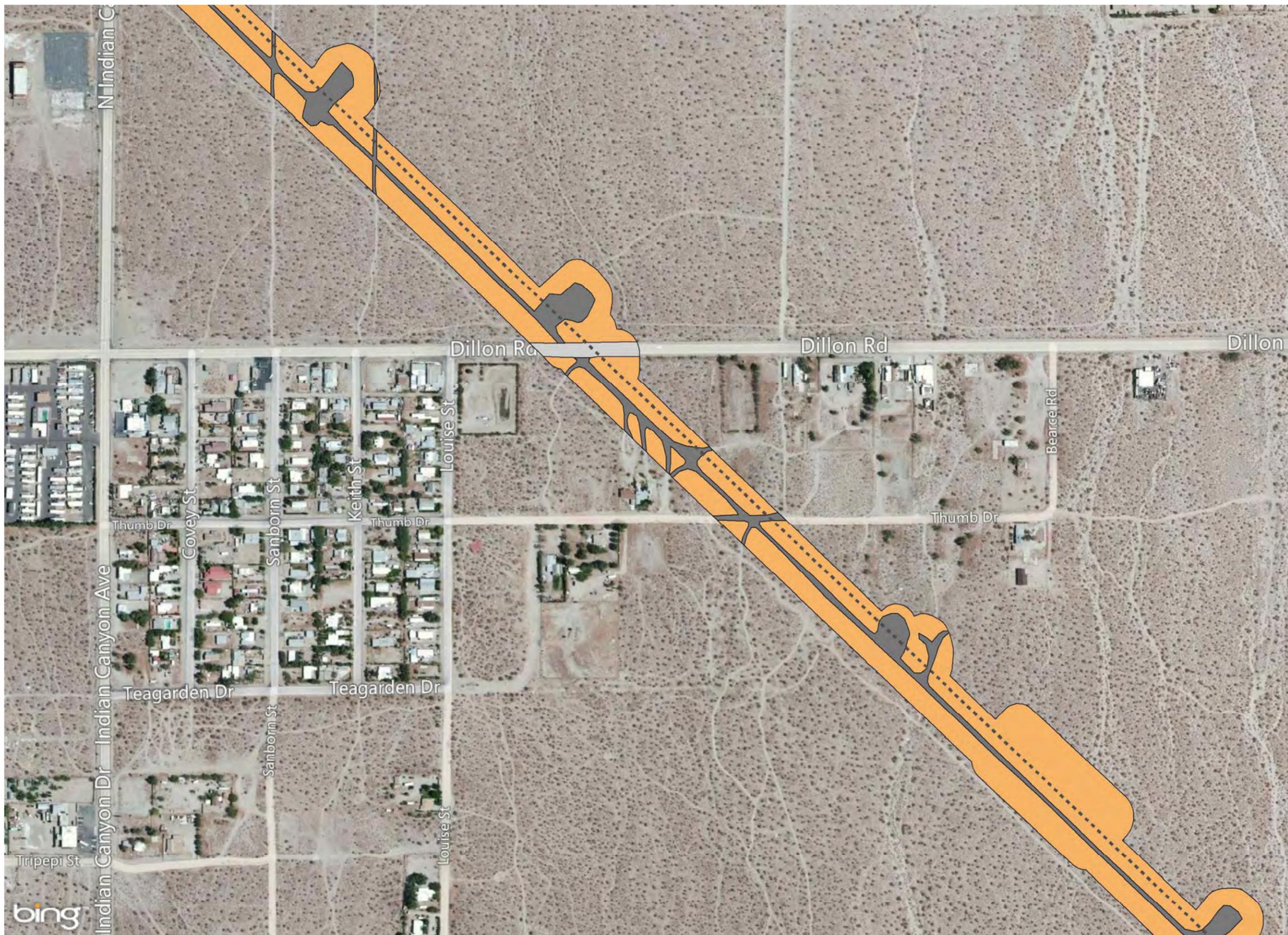


Exhibit 4C





- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project



Exhibit 4D



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

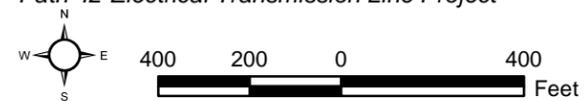


Exhibit 4E



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

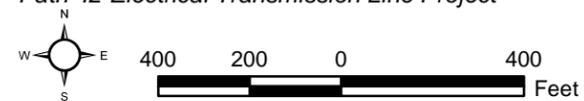


Exhibit 4F



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project



Exhibit 4G



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
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 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

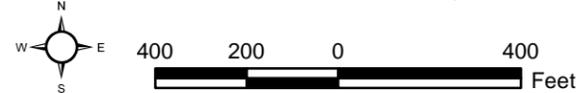
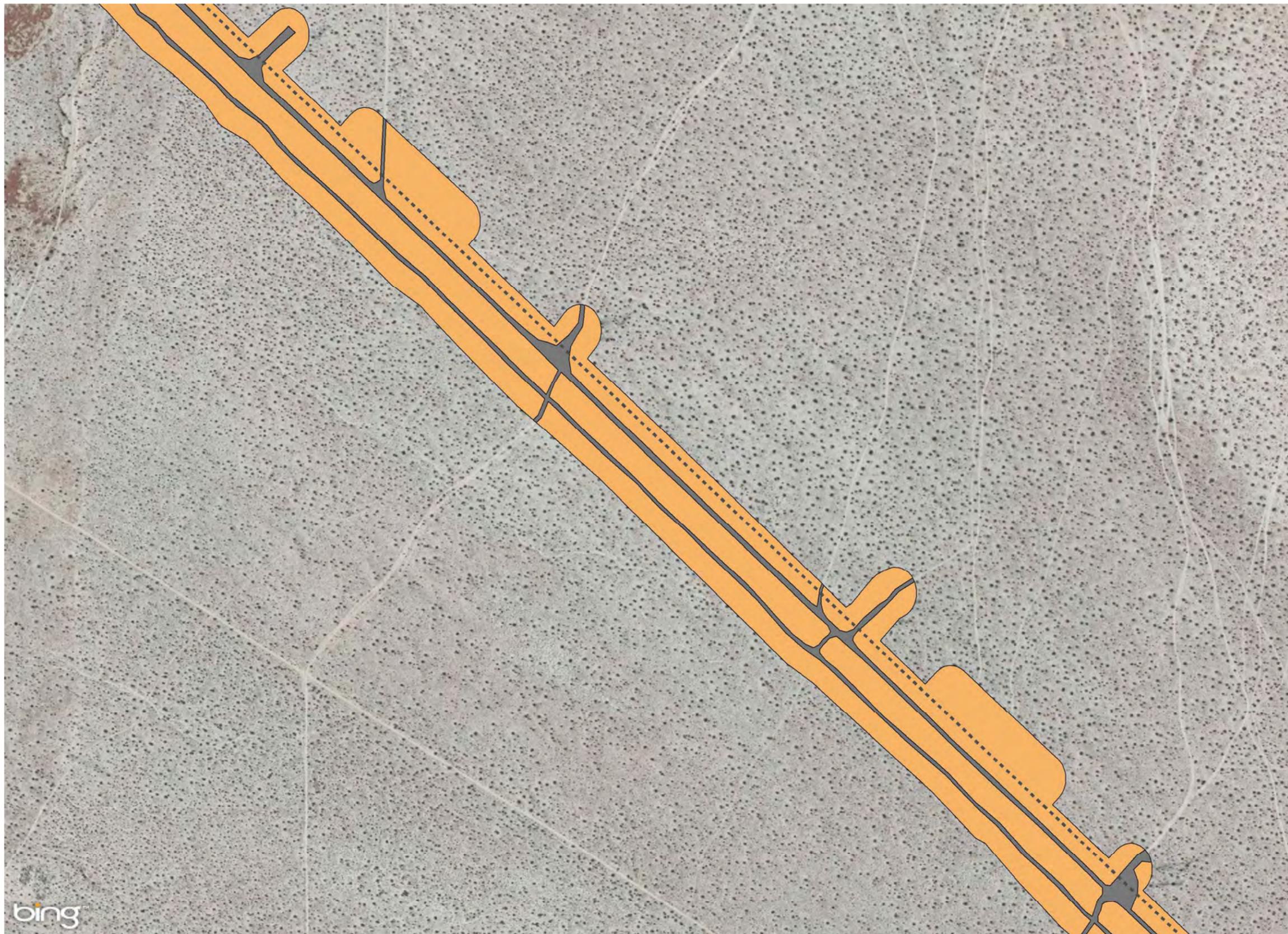


Exhibit 4H



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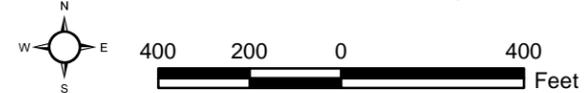
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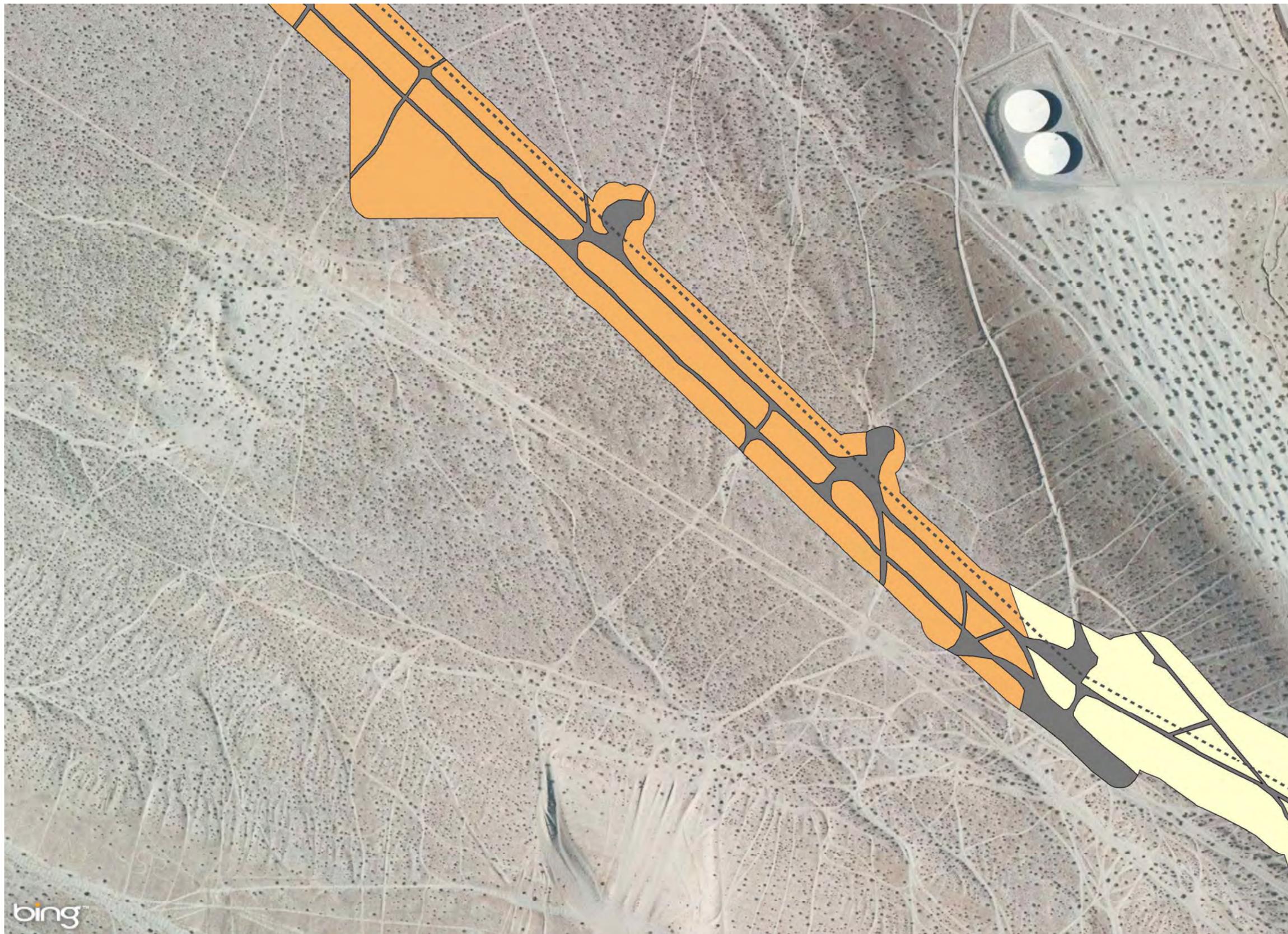
- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
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 - Ephemeral Desert Sand Fields
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 - Desert Saltbush Scrub
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 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

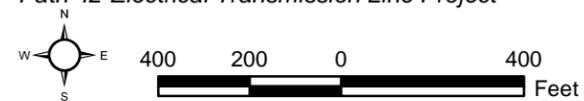
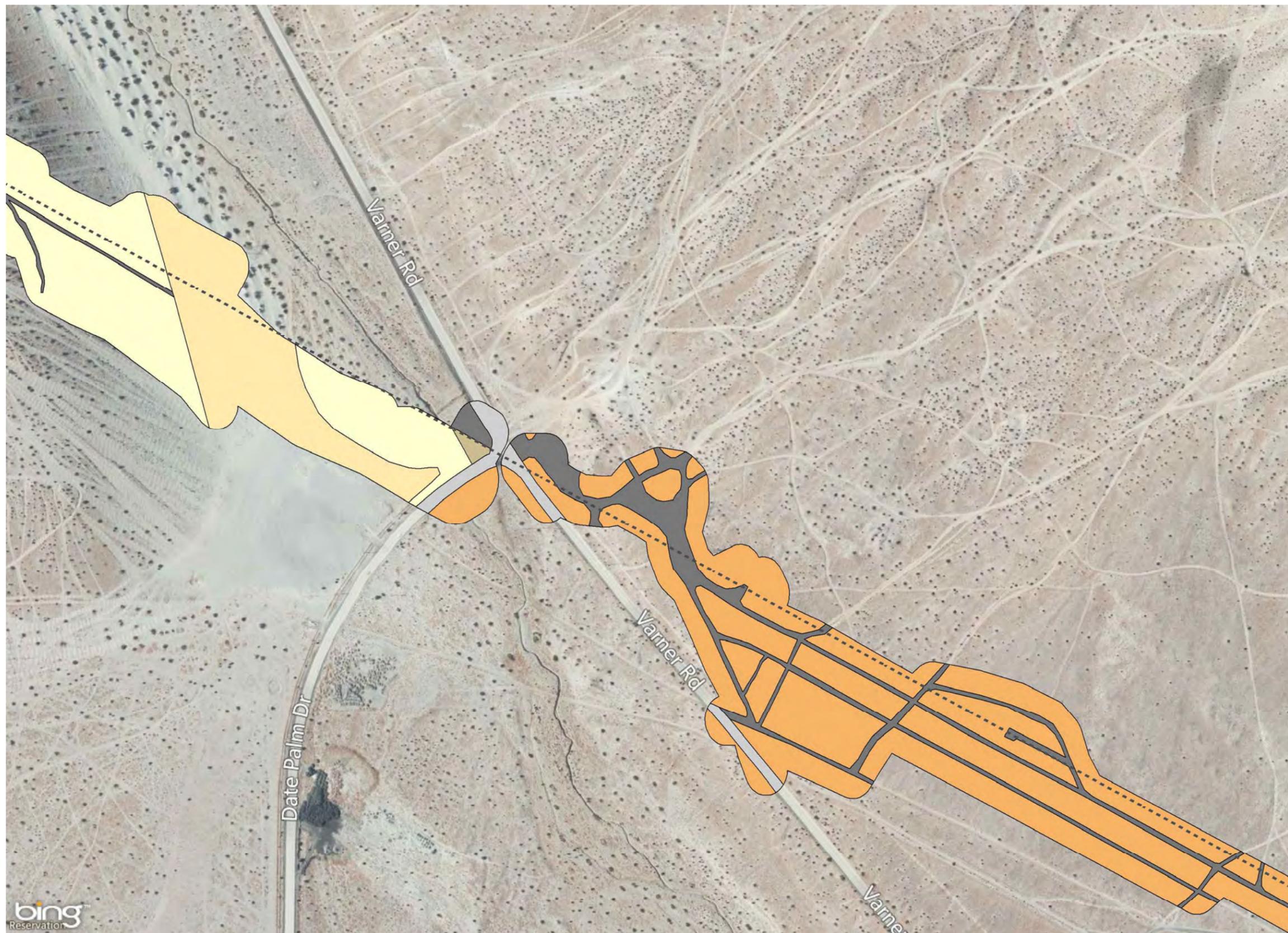


Exhibit 4J

Bonterra
CONSULTING

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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

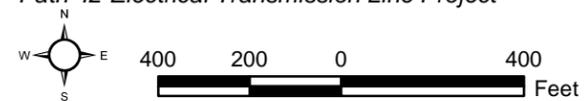
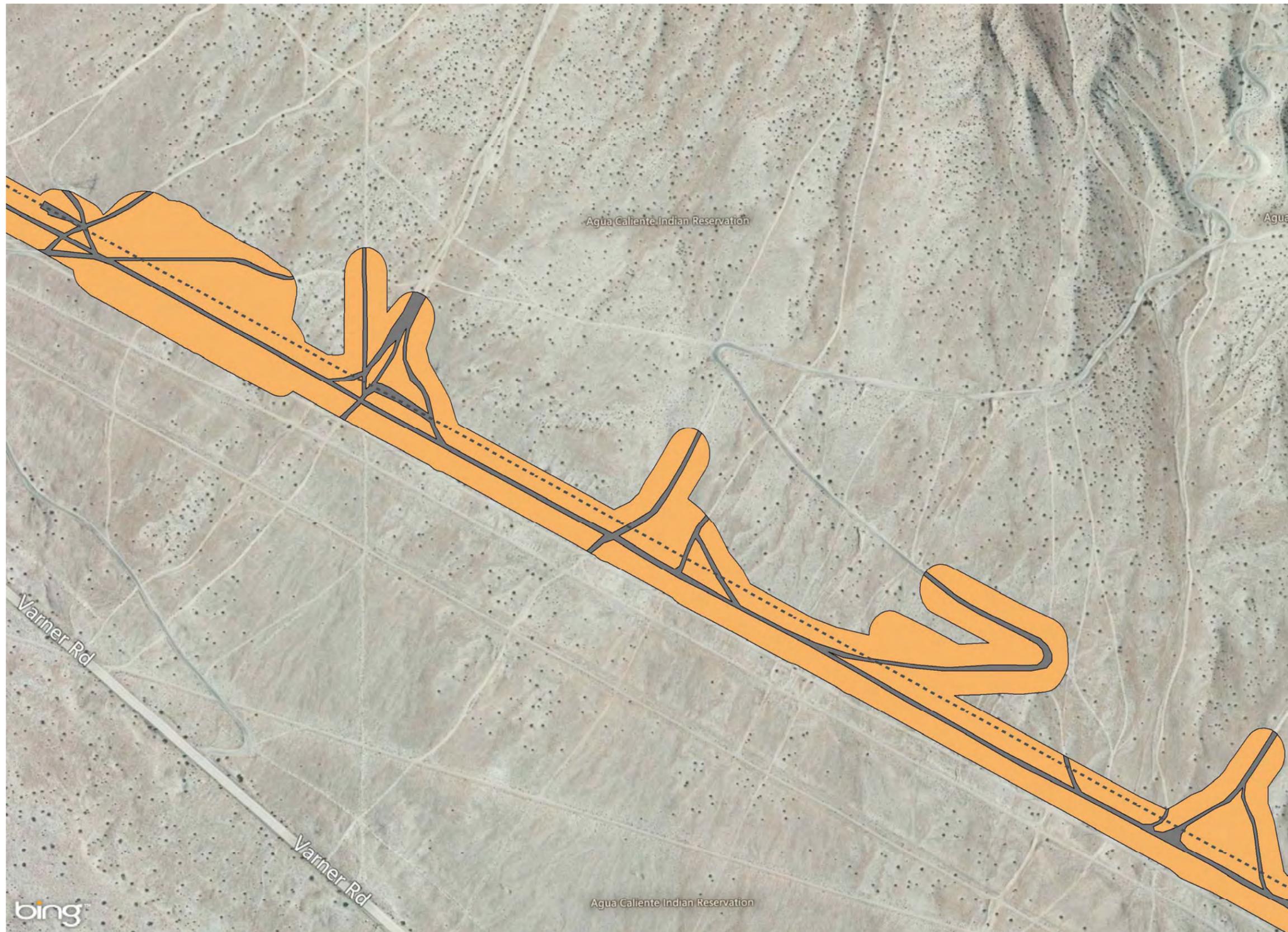


Exhibit 4K



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

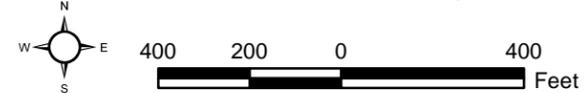
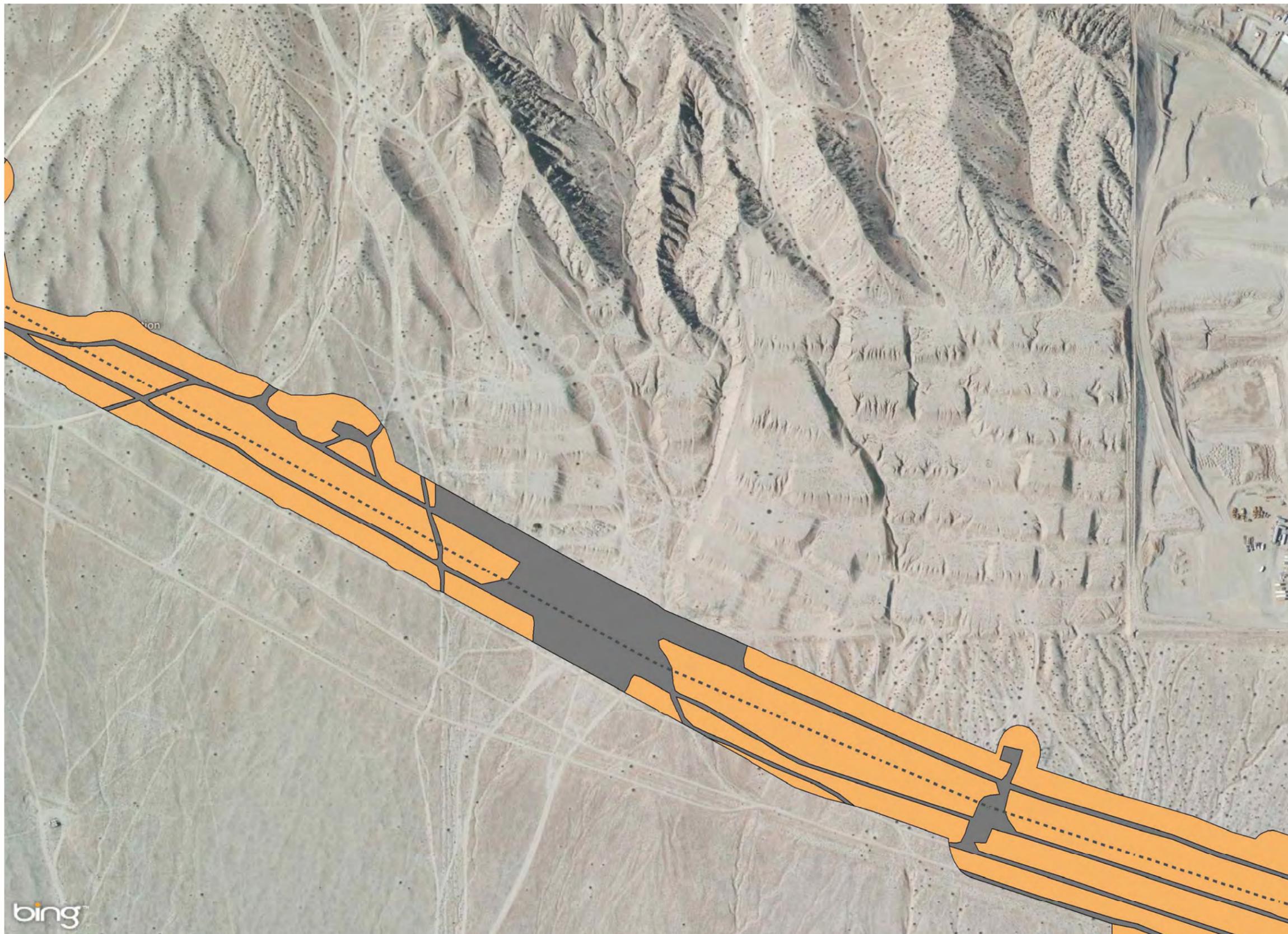


Exhibit 4L



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- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
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 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

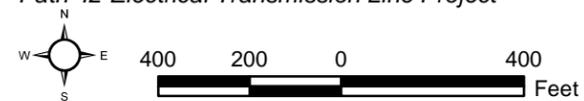
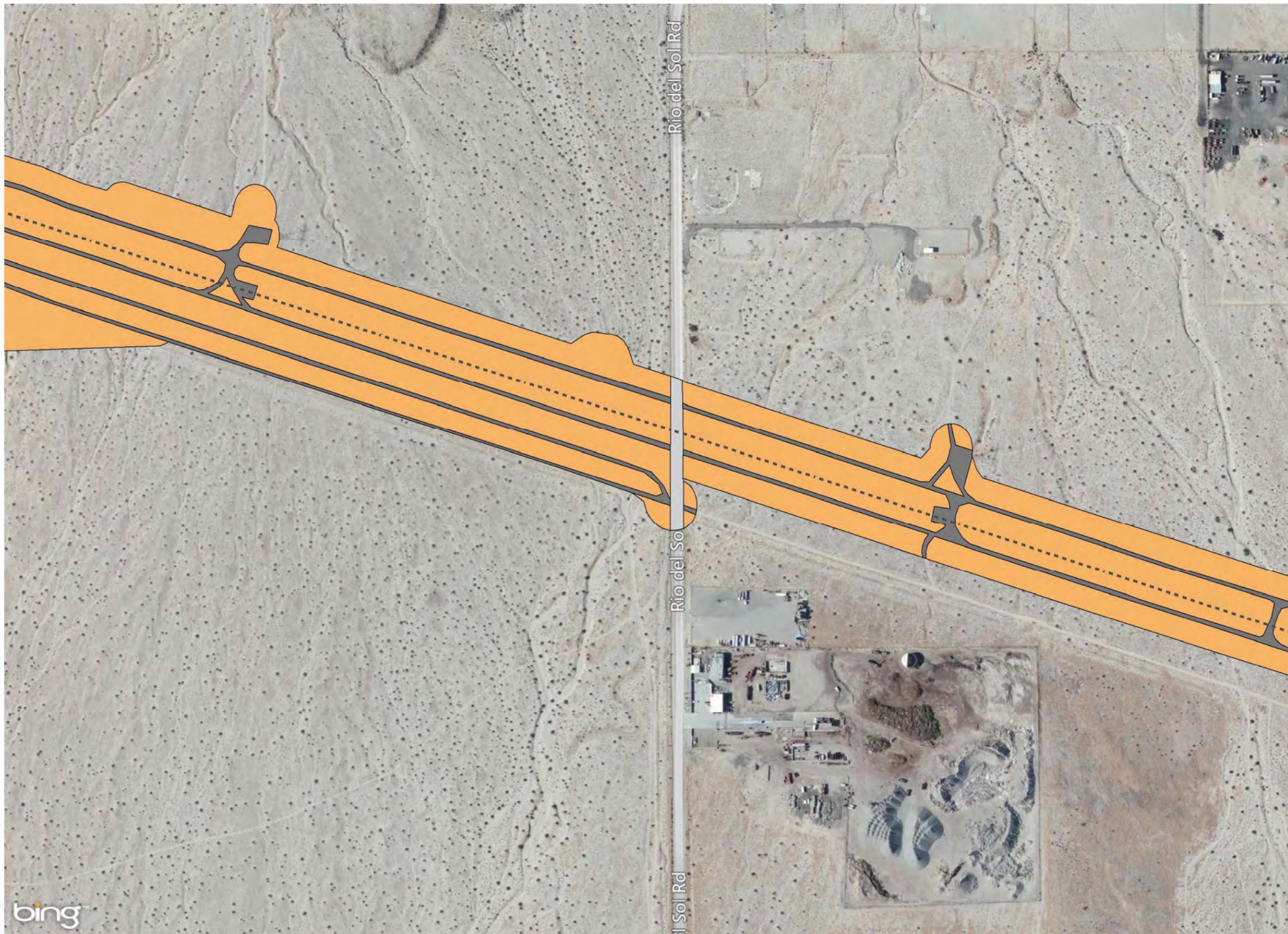


Exhibit 4M





- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

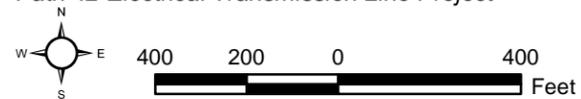
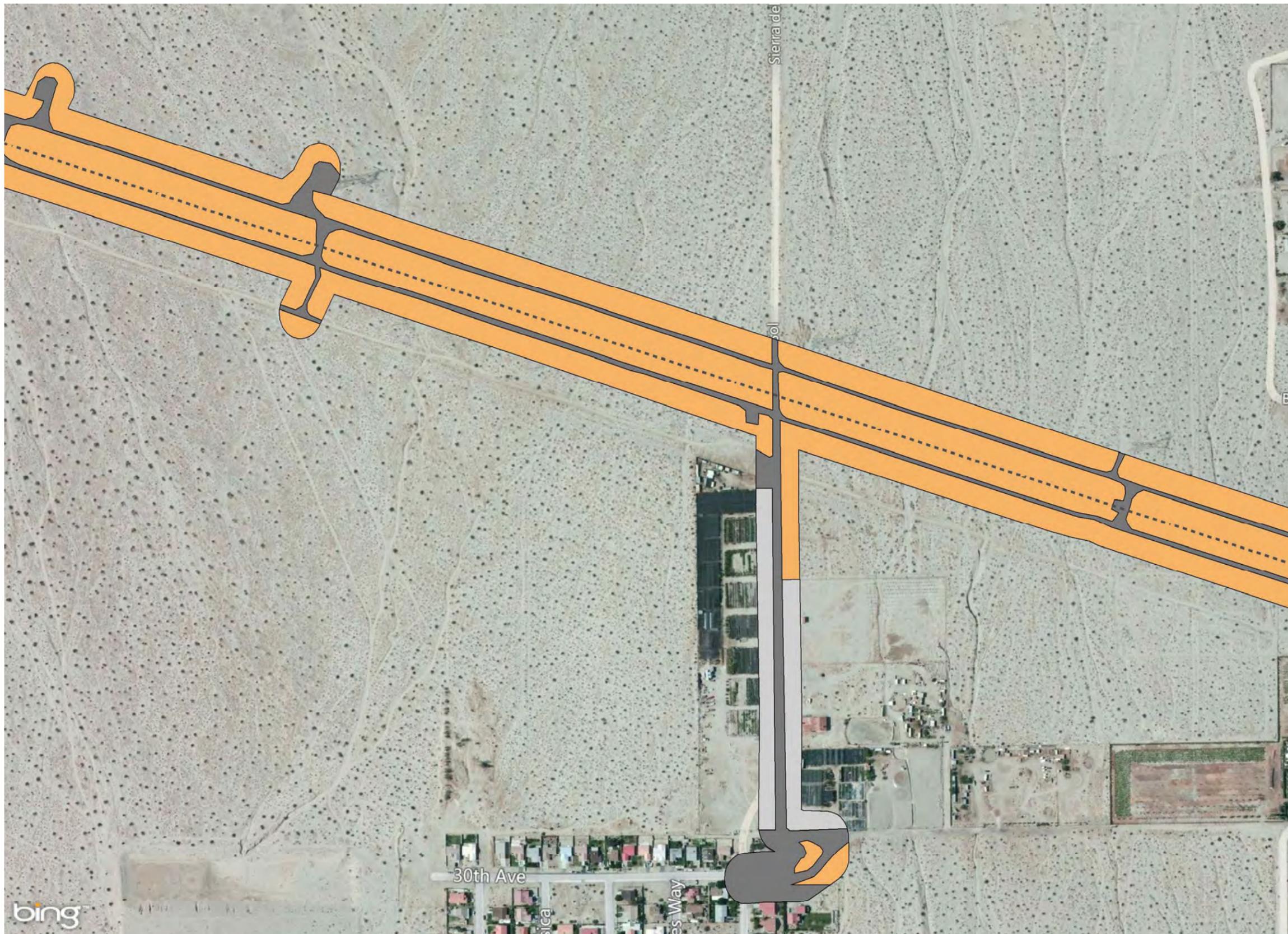


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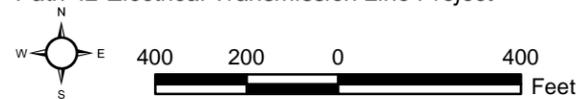


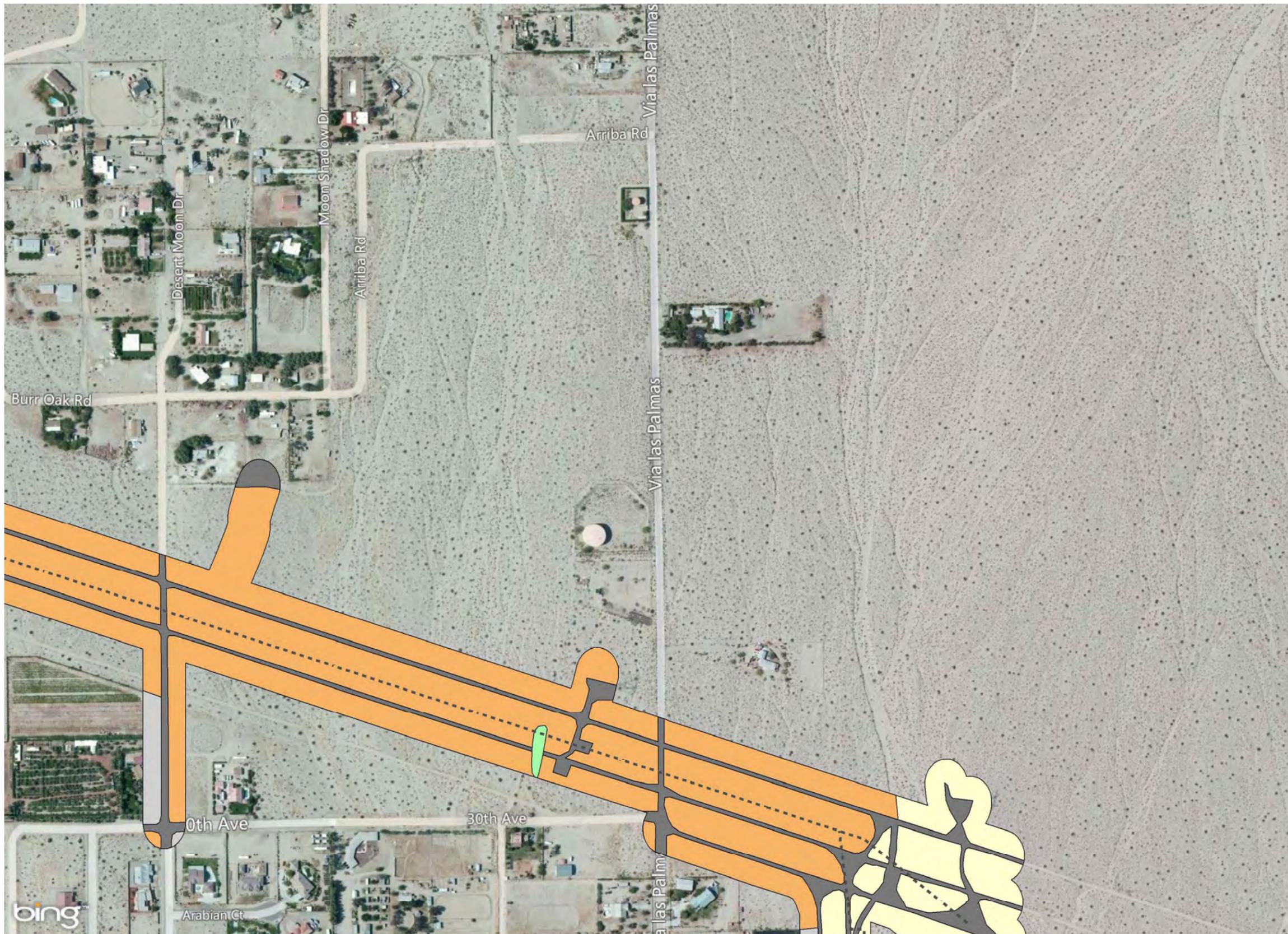


- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
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 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project





- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
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 - Ephemeral Desert Sand Fields
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 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

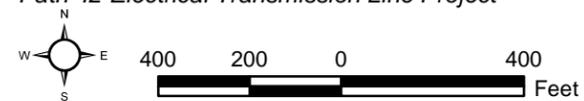
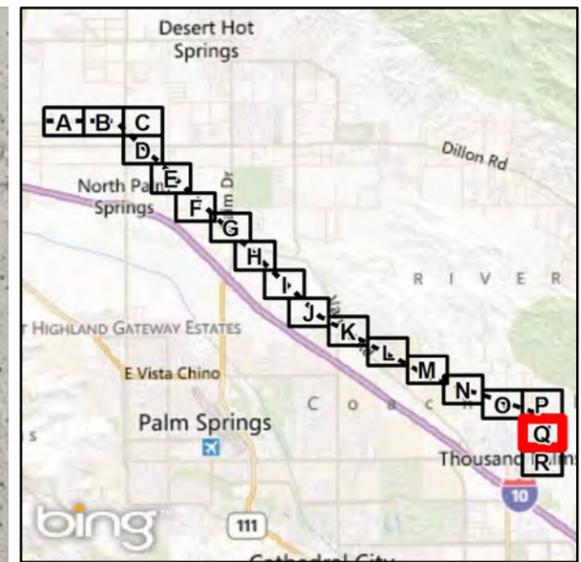


Exhibit 4P





- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project

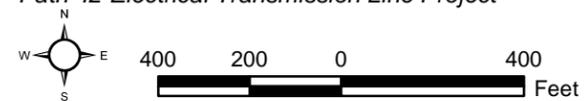
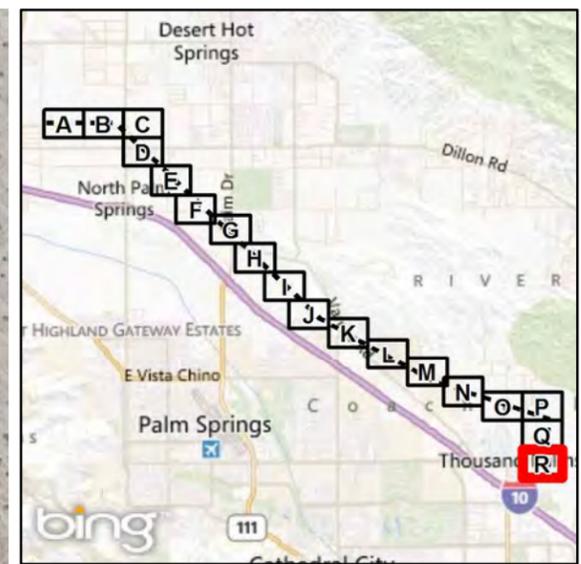


Exhibit 4Q





- Survey Area
 - Project Alignment
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
 - Active Desert Sand Fields
 - Ephemeral Desert Sand Fields
 - Sonoran Creosote Bush Scrub
 - Desert Saltbush Scrub
 - Desert Dry Wash Woodland
 - Ephemeral Wash
 - Disturbed/Unvegetated
 - Developed

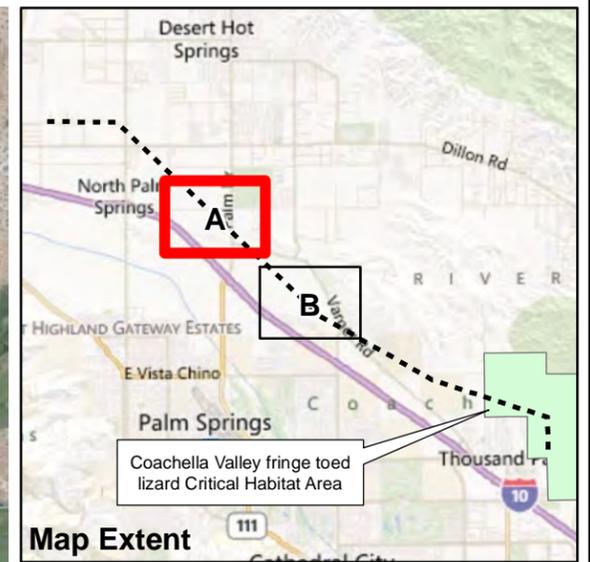
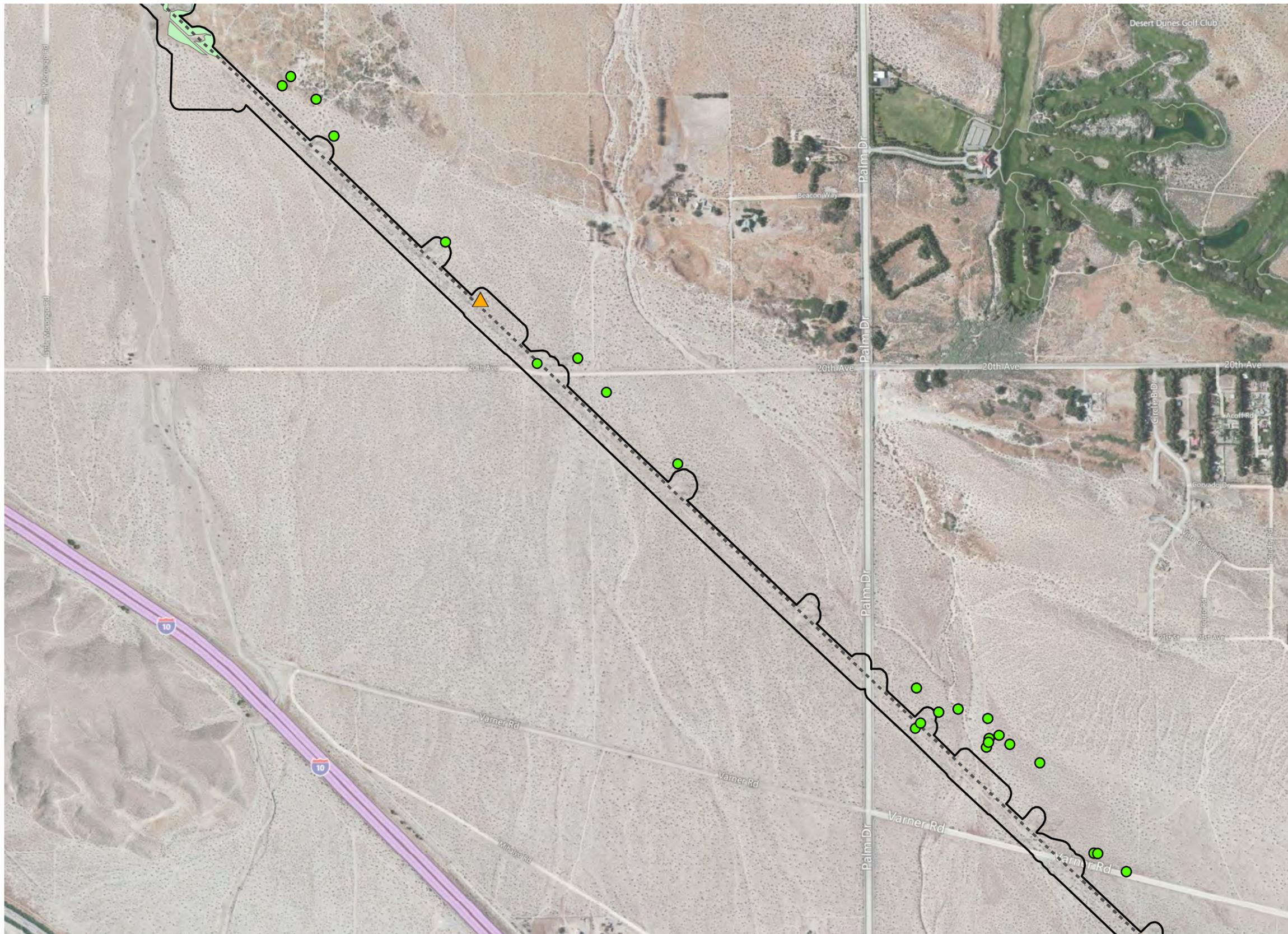
Vegetation Types and Other Areas

Path 42 Electrical Transmission Line Project



Exhibit 4R





- Survey Area
 - Project Alignment
 - Species Observations**
 - ▲ Coachella Valley Milk-vetch (2012)
 - Coachella Valley Milk-vetch Observations (2003 - 2010)
 - Chaparral Sand-verbena (2012)
 - Coachella Valley Fringe-toed Lizard (2012)
 - Coachella Valley Fringe-toed Lizard Suitable Habitat
- Note: Digital Critical Habitat data is not available for the Coachella Valley milk-vetch*

Special Status Biological Resources

Path 42 Electrical Transmission Line Project

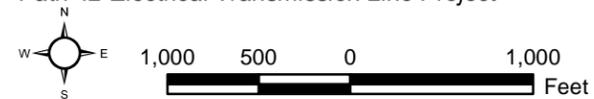
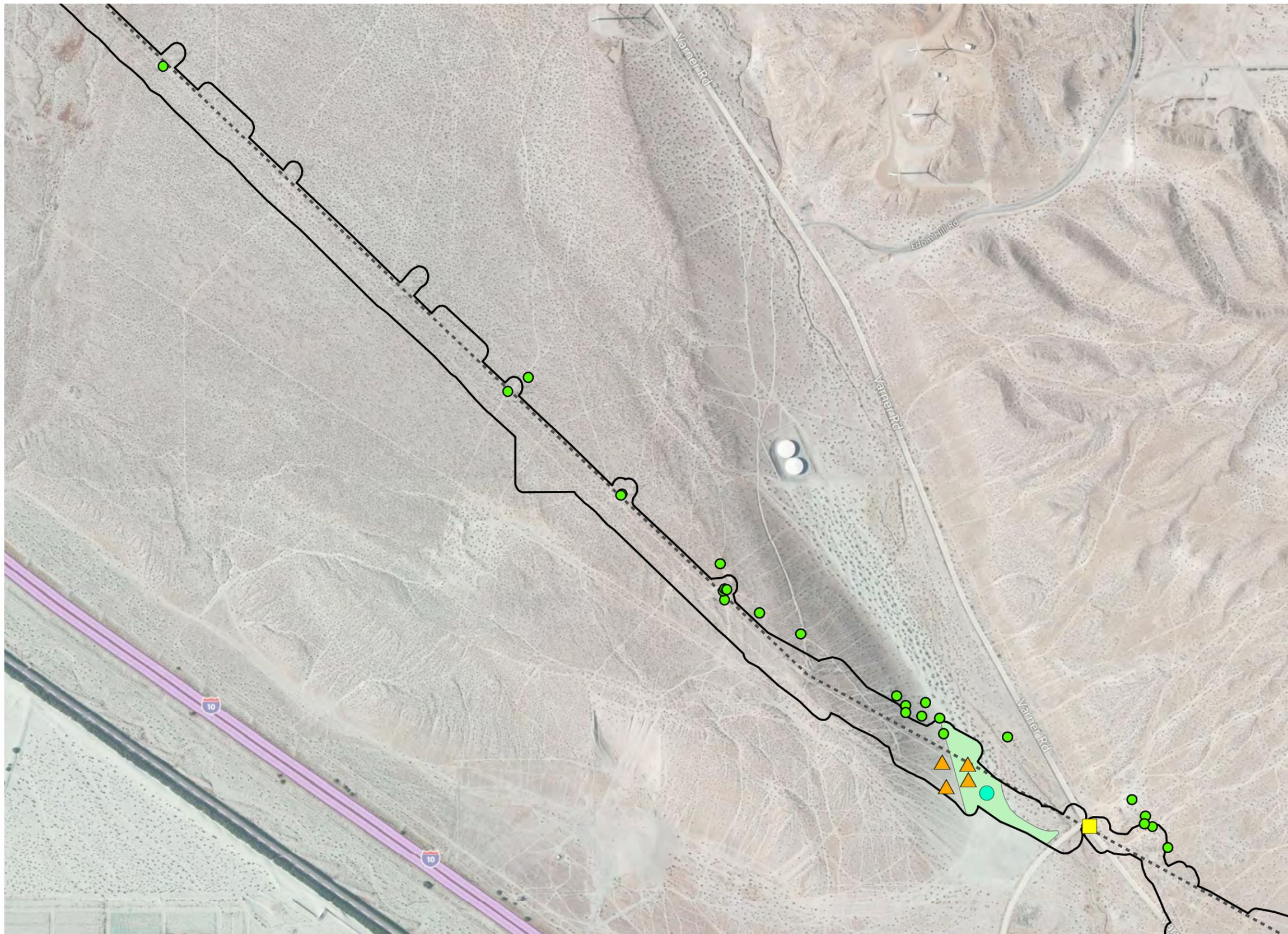


Exhibit 5A





- Survey Area
- Project Alignment
- Species Observations**
- ▲ Coachella Valley Milk-vetch (2012)
- Coachella Valley Milk-vetch Observations (2003 - 2010)
- Chaparral Sand-verbena (2012)
- Coachella Valley Fringe-toed Lizard (2012)
- Coachella Valley Fringe-toed Lizard Suitable Habitat

Note: Digital Critical Habitat data is not available for the Coachella Valley milk-vetch

Special Status Biological Resources

Path 42 Electrical Transmission Line Project

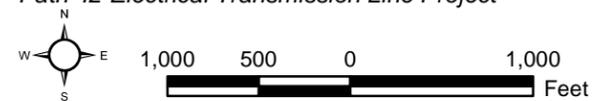
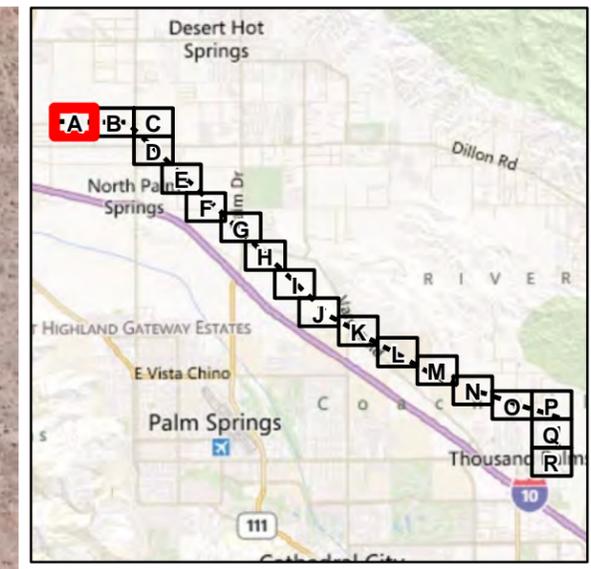
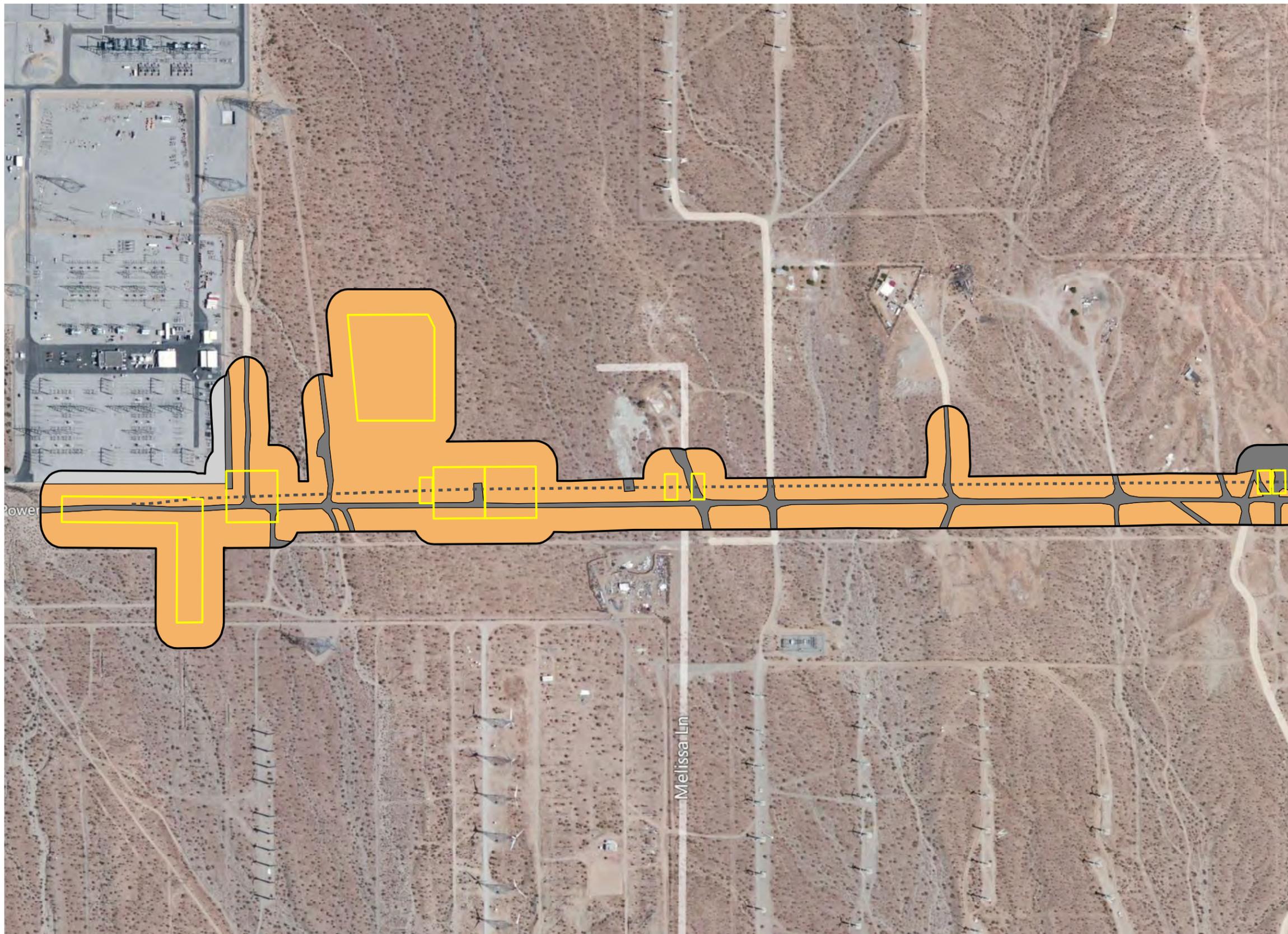


Exhibit 5B





- Survey Area
- Project Alignment
- Impact Areas**
- Permanent
- Temporary
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
- Active Desert Sand Fields
- Ephemeral Desert Sand Fields
- Sonoran Creosote Bush Scrub
- Desert Saltbush Scrub
- Desert Dry Wash Woodland
- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

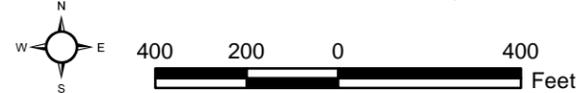
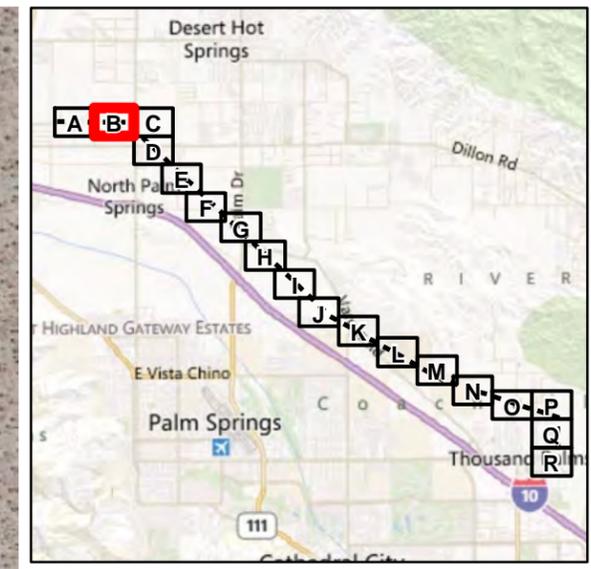
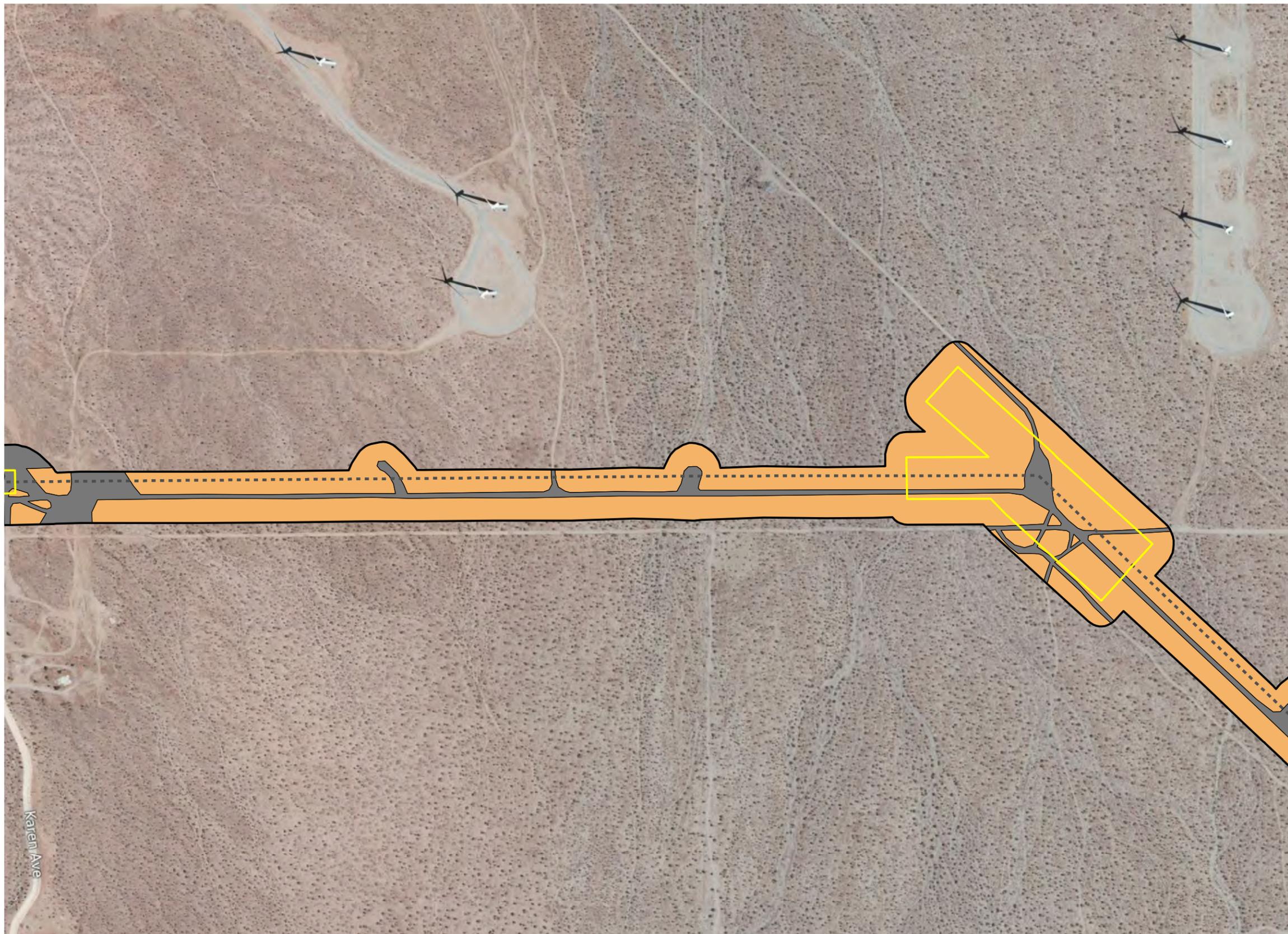


Exhibit 6A



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- Survey Area
- Project Alignment
- Impact Areas**
- Permanent
- Temporary
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
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- Desert Saltbush Scrub
- Desert Dry Wash Woodland
- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

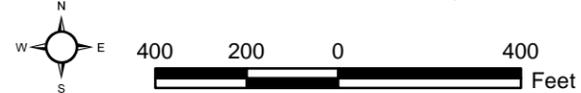


Exhibit 6B



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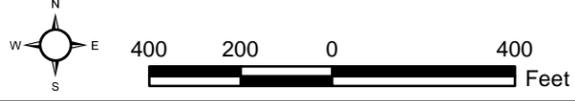
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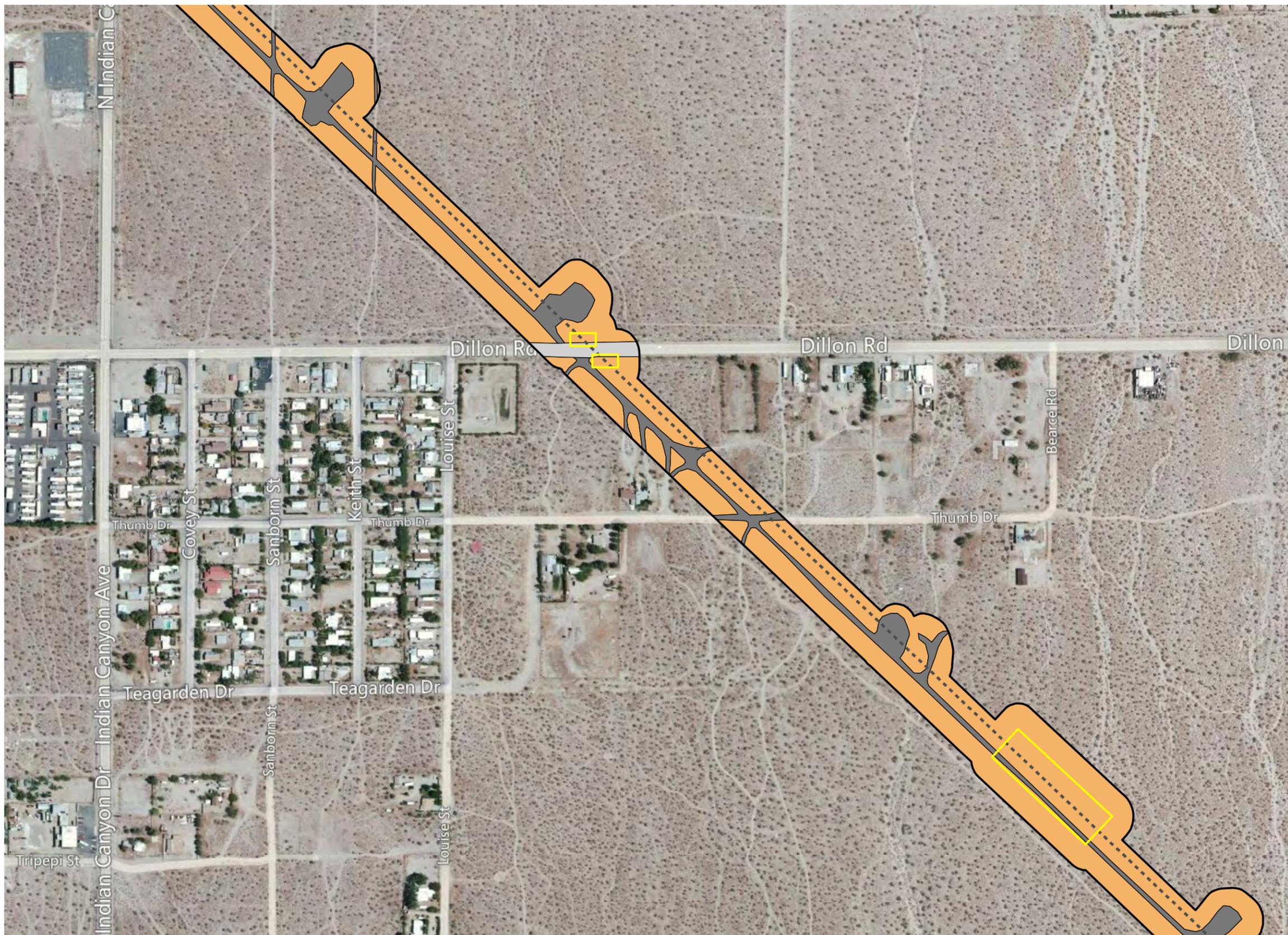
- Survey Area
- Project Alignment
- Impact Areas**
- Permanent
- Temporary
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
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- Desert Saltbush Scrub
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- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project



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- Survey Area
- Project Alignment
- Impact Areas**
- Permanent
- Temporary
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
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- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

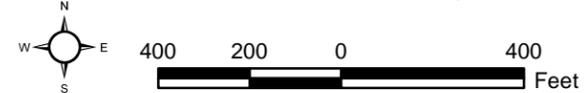
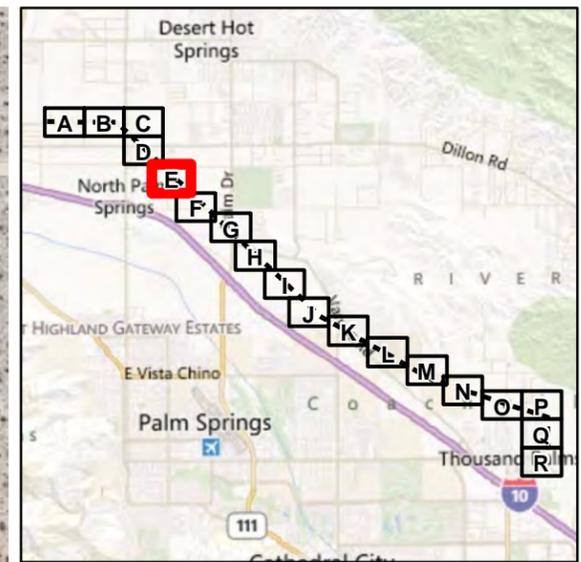
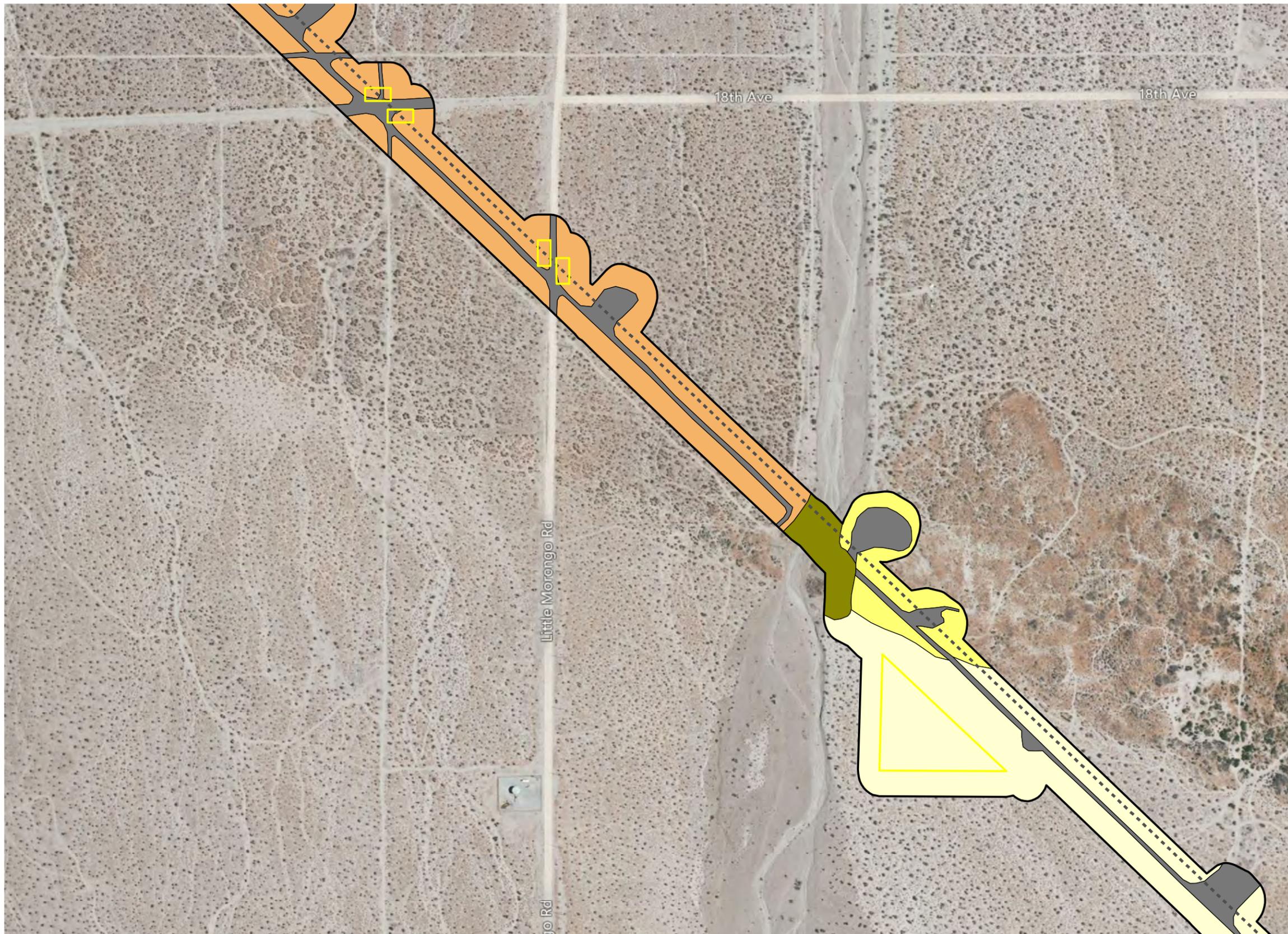


Exhibit 6D



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- Survey Area
- Project Alignment
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- Permanent
- Temporary
- Vegetation Types and Other Areas**
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- Active Desert Sand Fields
- Ephemeral Desert Sand Fields
- Sonoran Creosote Bush Scrub
- Desert Saltbush Scrub
- Desert Dry Wash Woodland
- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

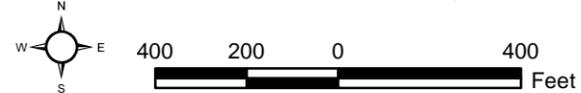
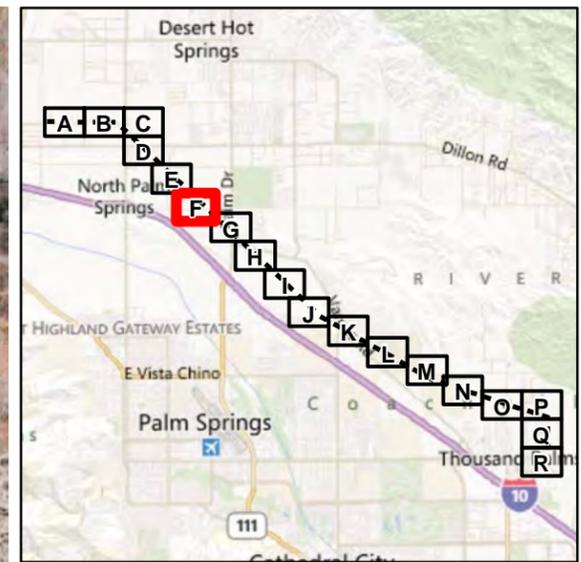


Exhibit 6E



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- Survey Area
- Project Alignment
- Impact Areas**
- Permanent
- Temporary
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
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- Ephemeral Desert Sand Fields
- Sonoran Creosote Bush Scrub
- Desert Saltbush Scrub
- Desert Dry Wash Woodland
- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

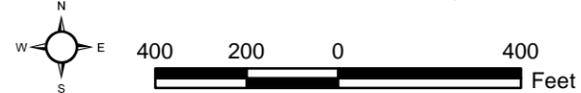
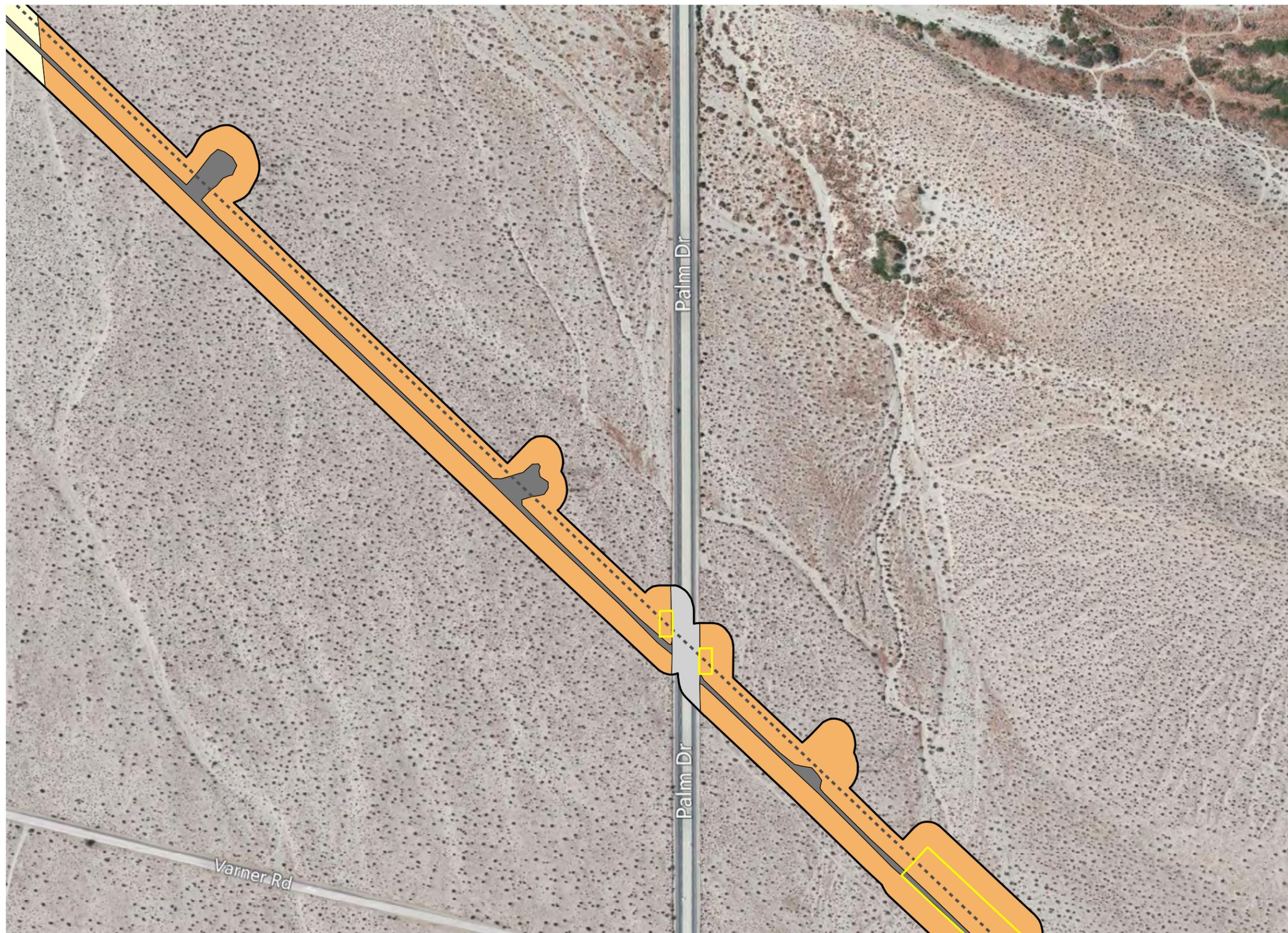


Exhibit 6F





- Survey Area
- Project Alignment
- Impact Areas**
- Permanent
- Temporary
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
- Active Desert Sand Fields
- Ephemeral Desert Sand Fields
- Sonoran Creosote Bush Scrub
- Desert Saltbush Scrub
- Desert Dry Wash Woodland
- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

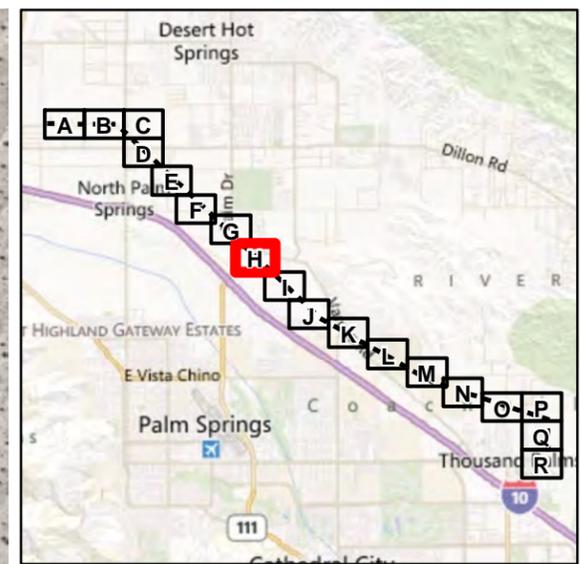
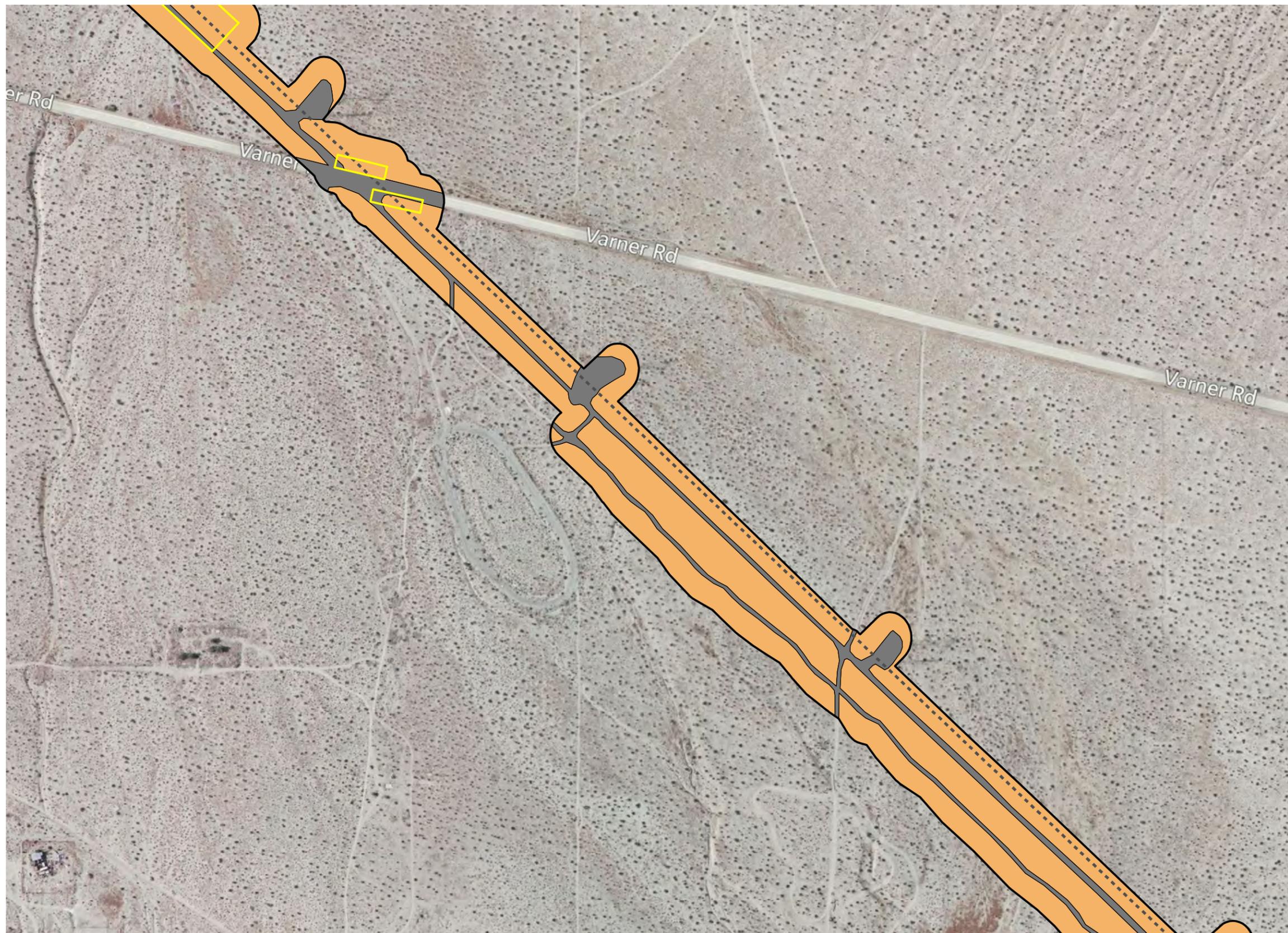


Exhibit 6G



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- Survey Area
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- Ephemeral Wash
- Disturbed/Unvegetated
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Project Impacts

Path 42 Electrical Transmission Line Project

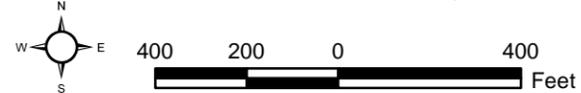
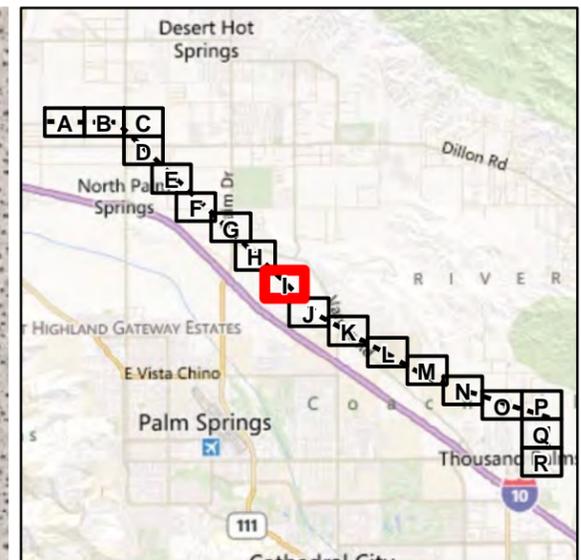
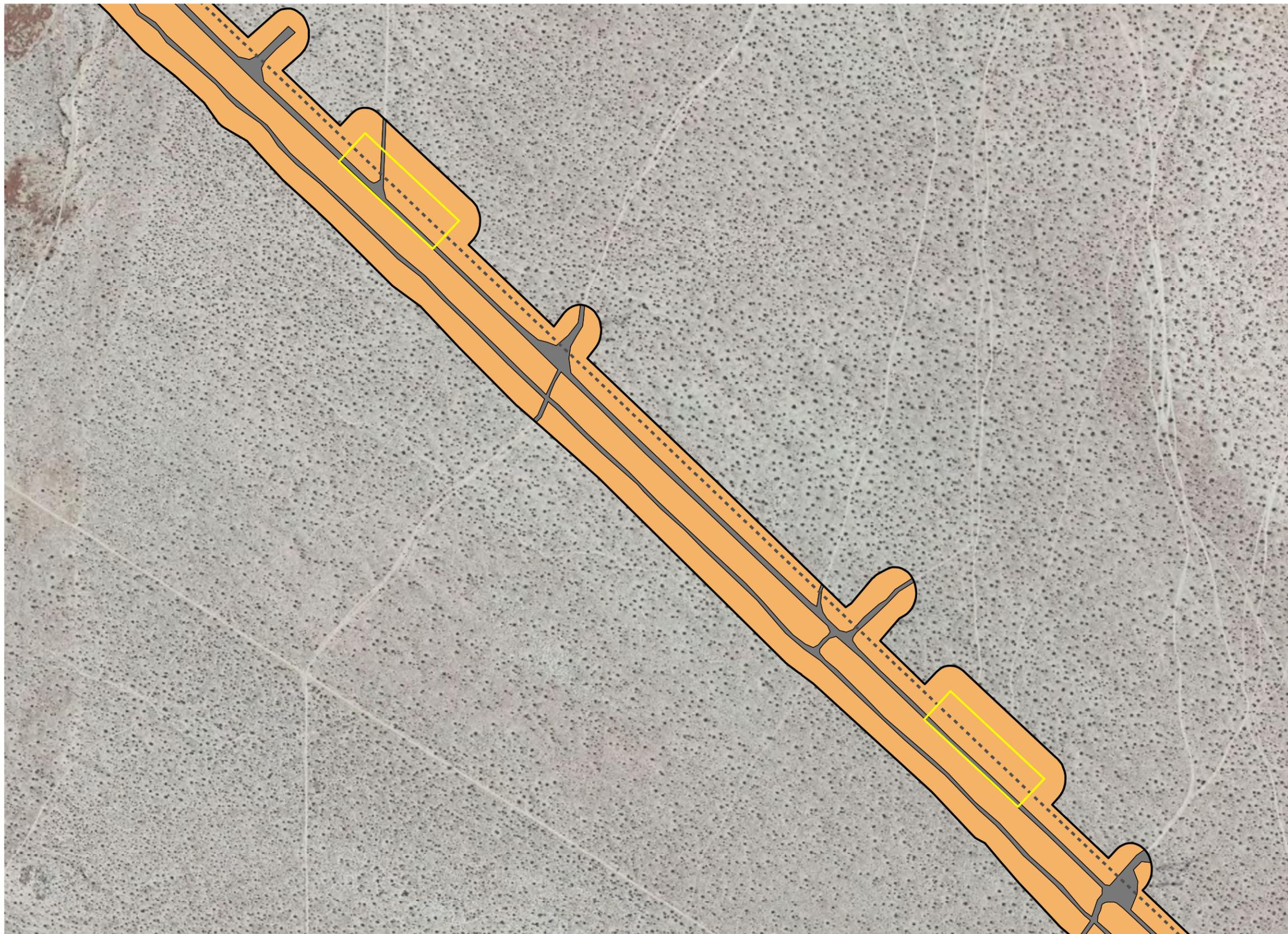


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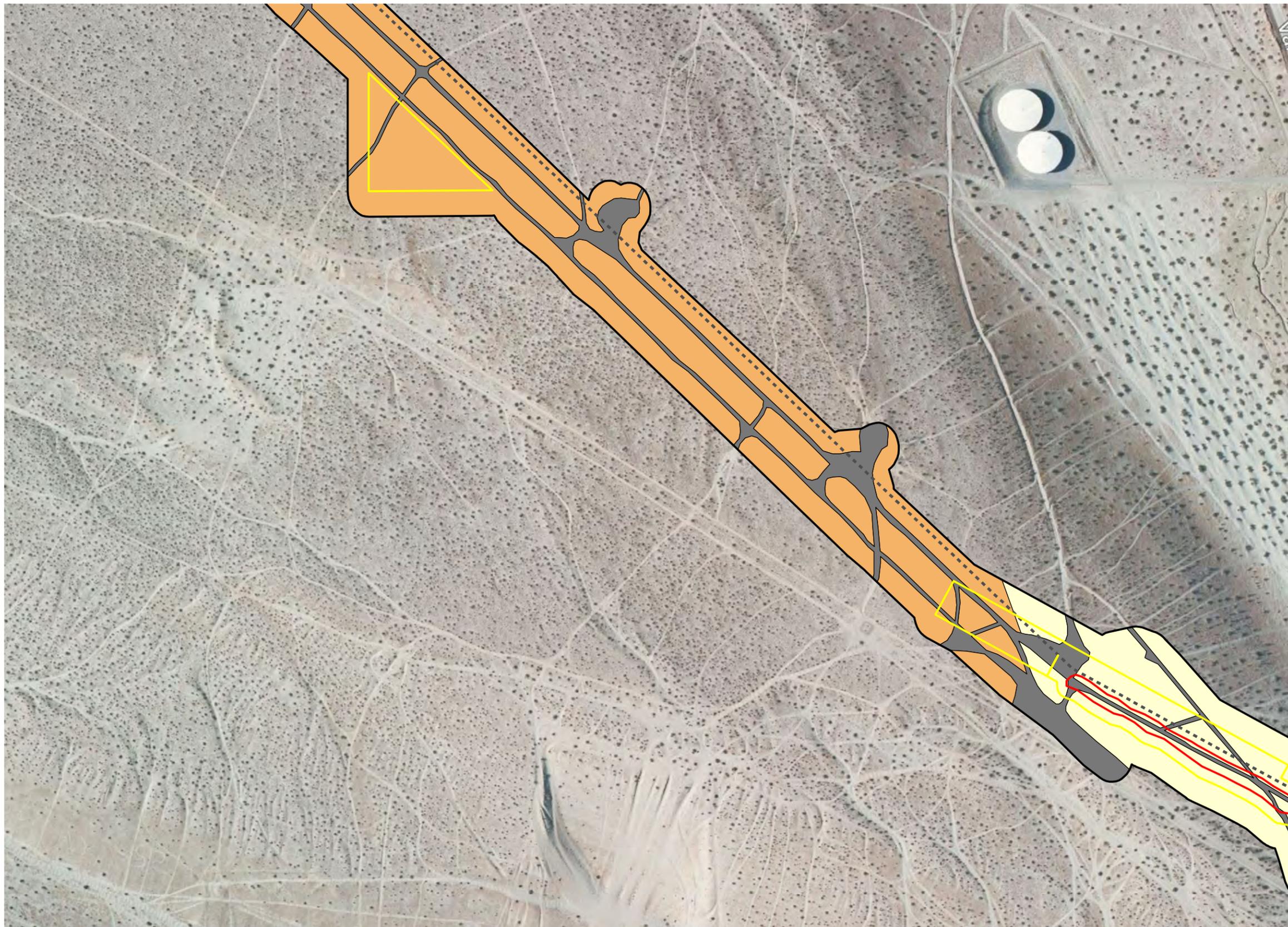
- Survey Area
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- Stabilized and Partially Stabilized Desert Dunes
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Project Impacts

Path 42 Electrical Transmission Line Project



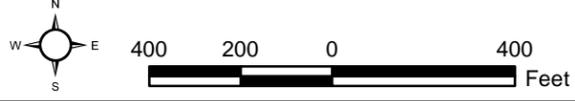
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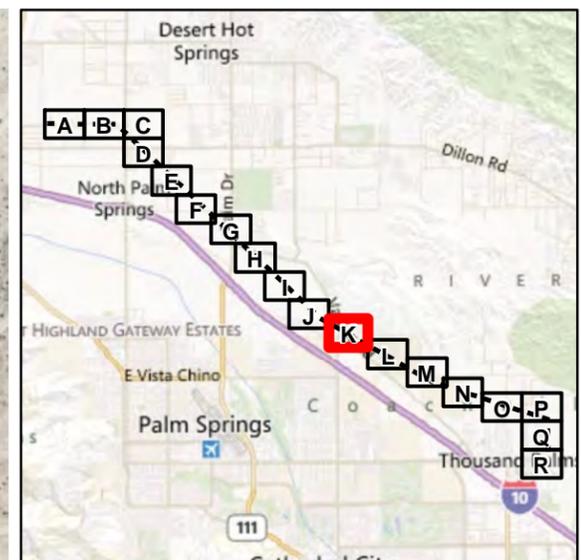
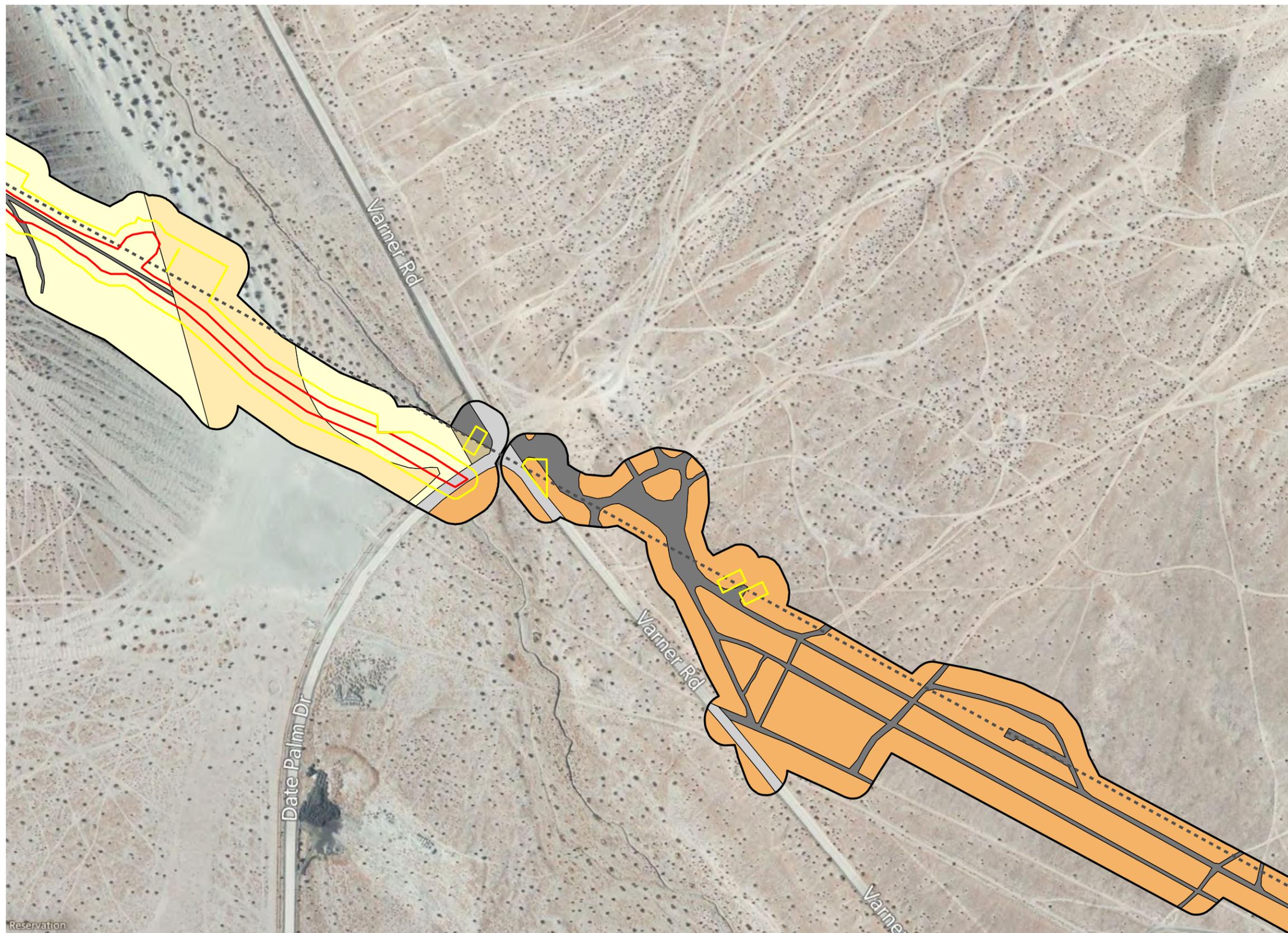
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Project Impacts

Path 42 Electrical Transmission Line Project



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Project Impacts

Path 42 Electrical Transmission Line Project

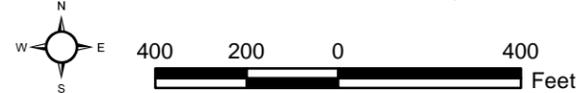
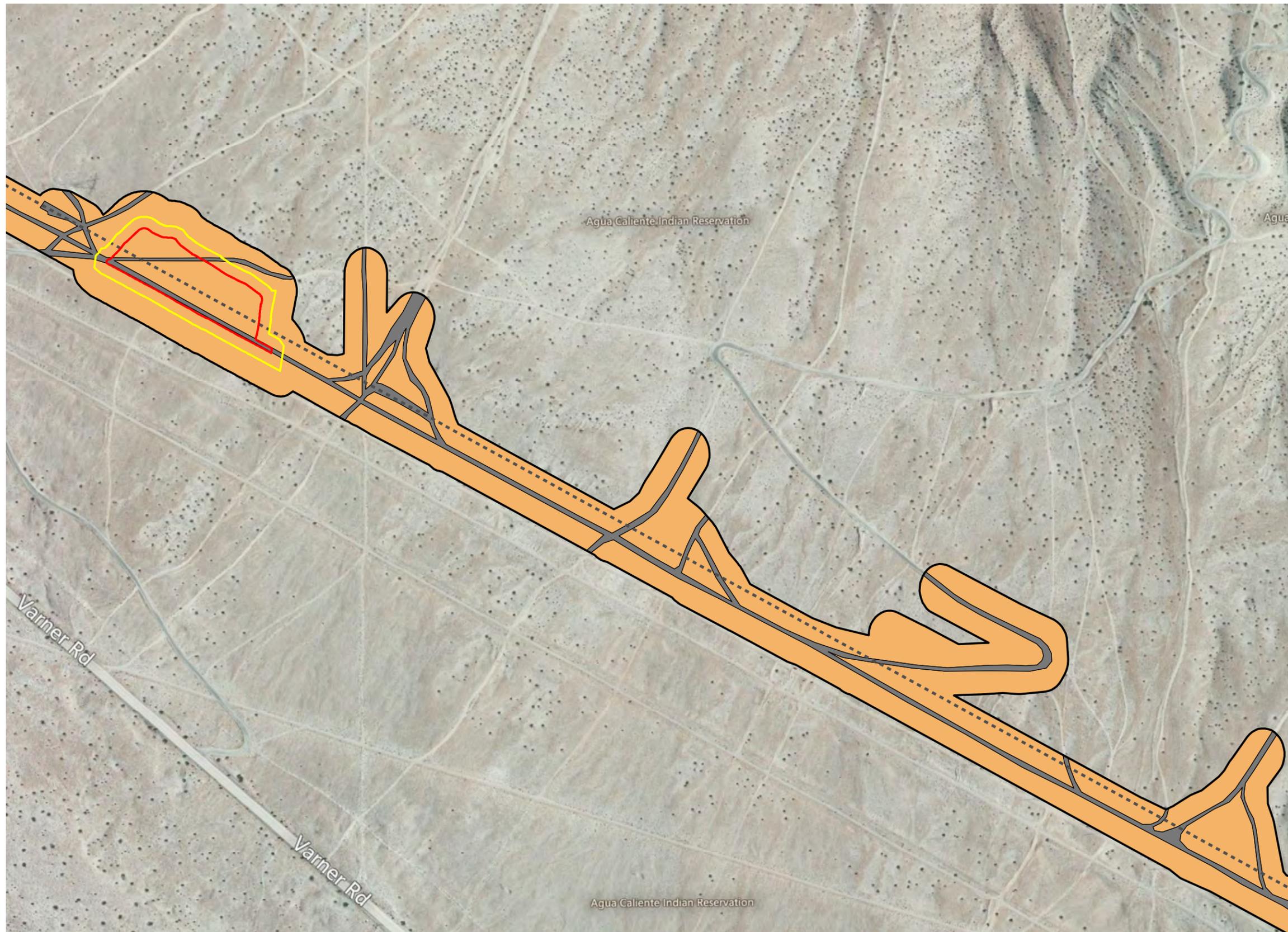


Exhibit 6K



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Project Impacts

Path 42 Electrical Transmission Line Project

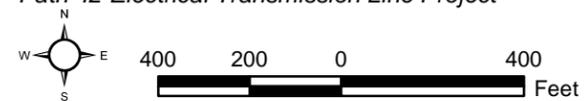
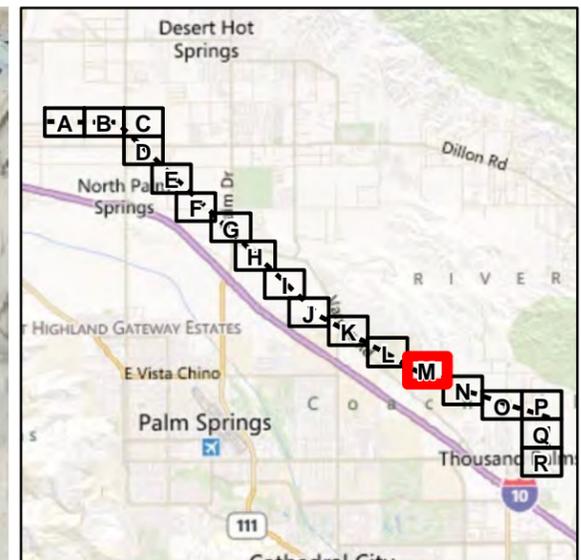
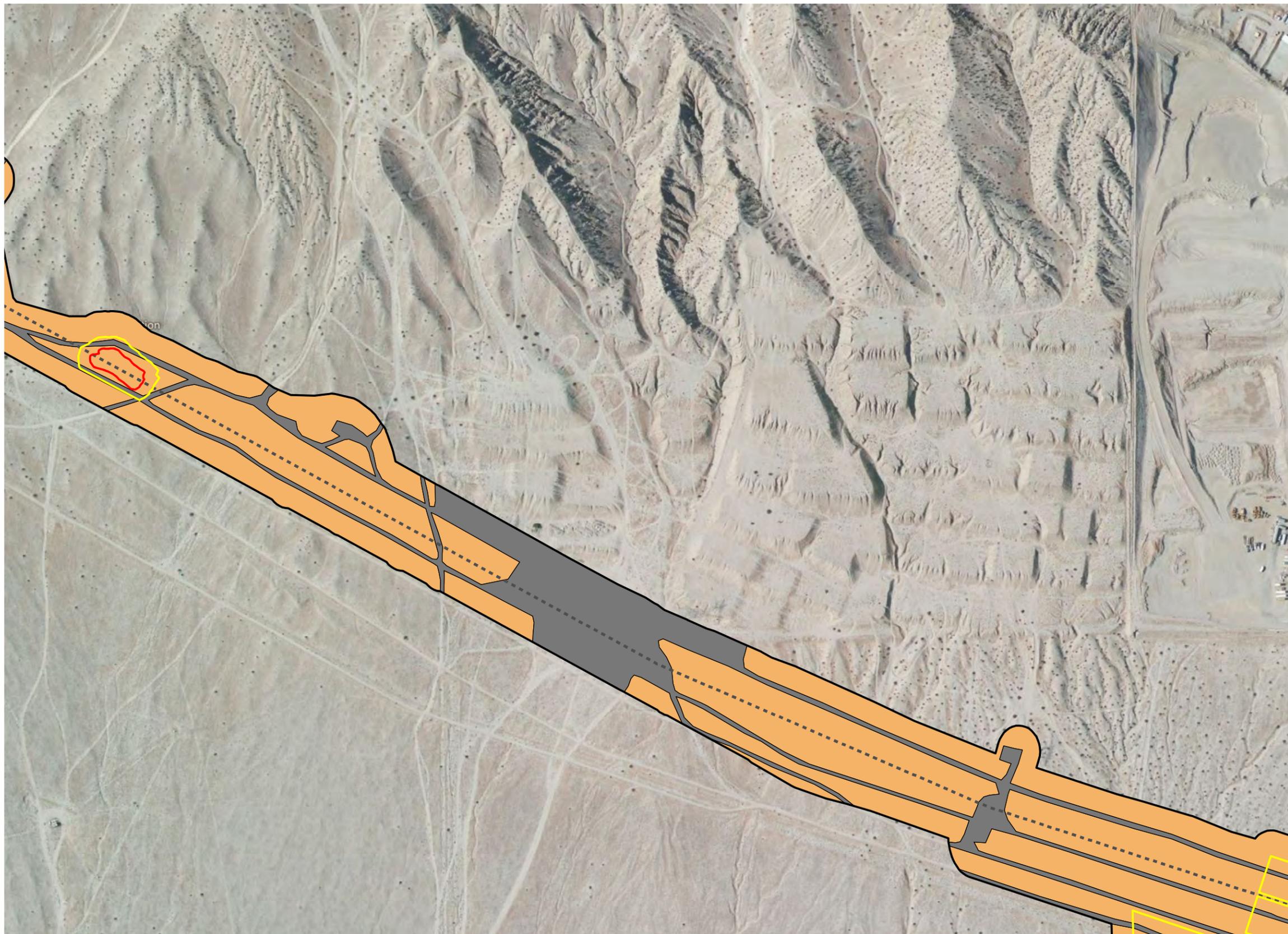


Exhibit 6L





- Survey Area
- Project Alignment
- Impact Areas**
- Permanent
- Temporary
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
- Active Desert Sand Fields
- Ephemeral Desert Sand Fields
- Sonoran Creosote Bush Scrub
- Desert Saltbush Scrub
- Desert Dry Wash Woodland
- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

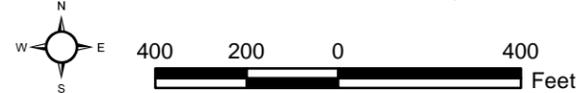
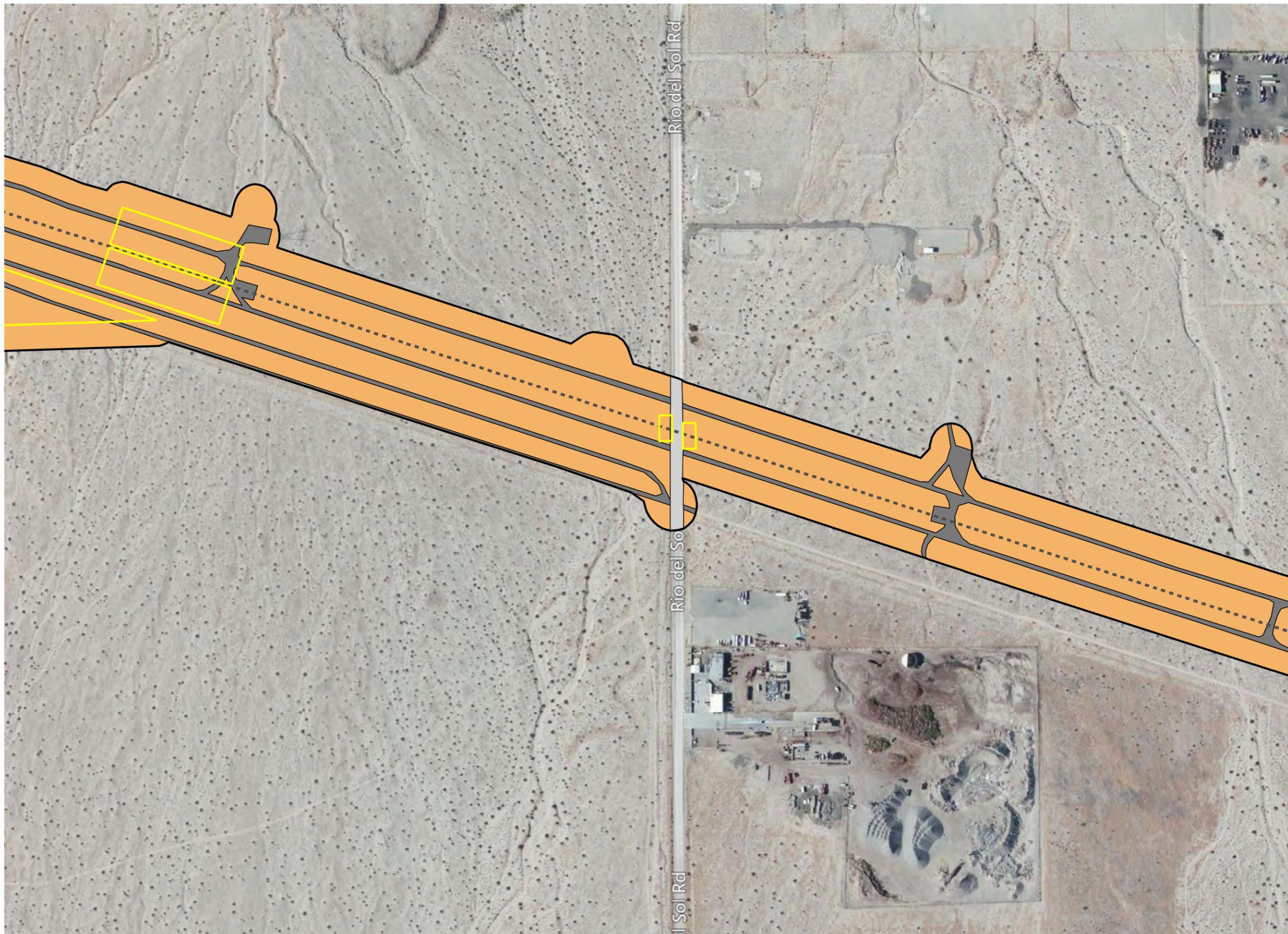


Exhibit 6M





- Survey Area
- Project Alignment
- Impact Areas**
- Permanent
- Temporary
- Vegetation Types and Other Areas**
- Stabilized and Partially Stabilized Desert Dunes
- Active Desert Sand Fields
- Ephemeral Desert Sand Fields
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- Desert Saltbush Scrub
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- Ephemeral Wash
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Project Impacts

Path 42 Electrical Transmission Line Project

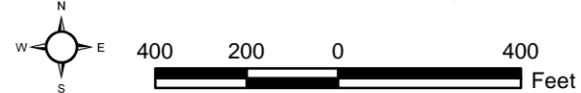
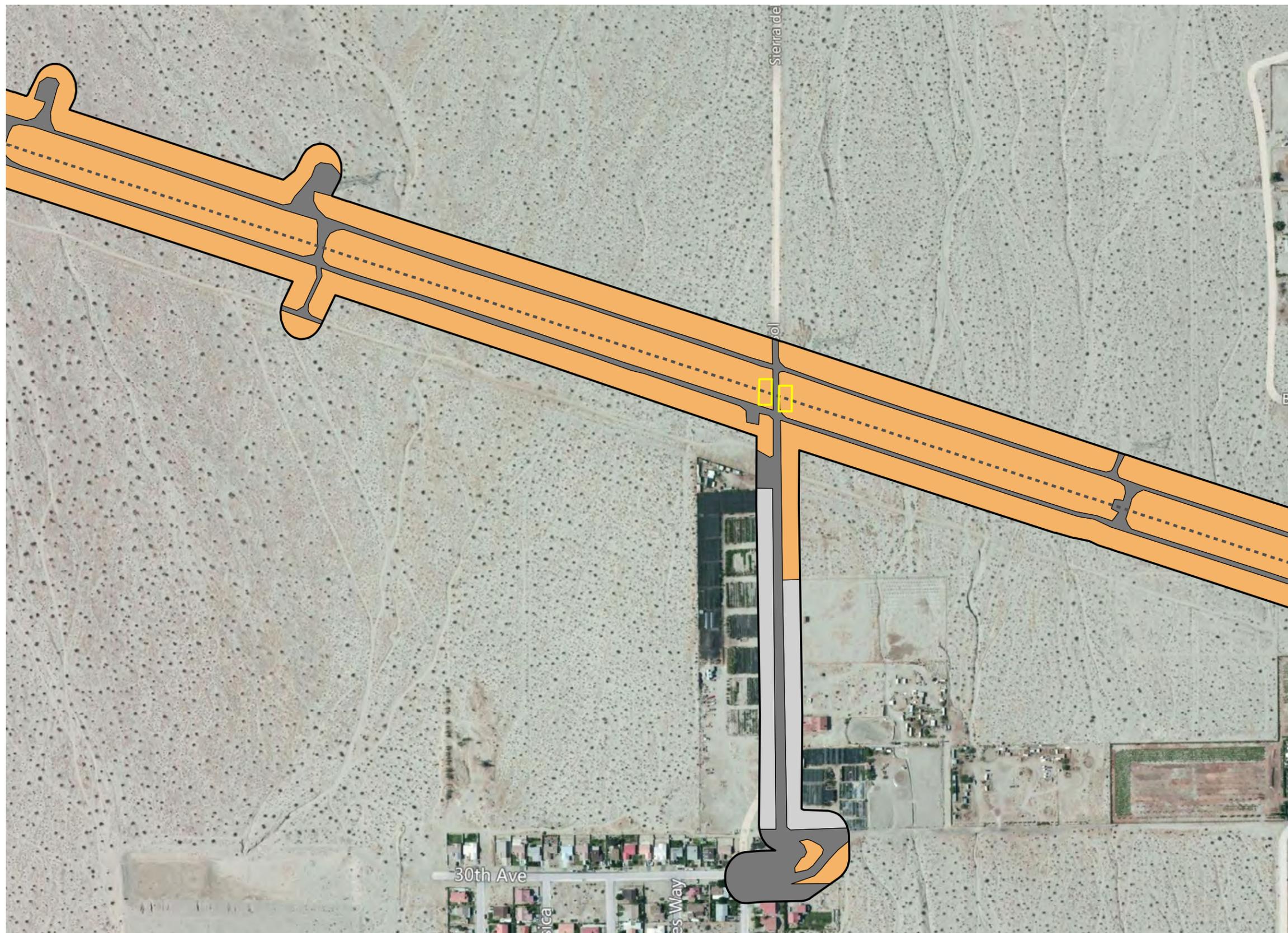


Exhibit 6N



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- Survey Area
- Project Alignment
- Impact Areas**
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- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

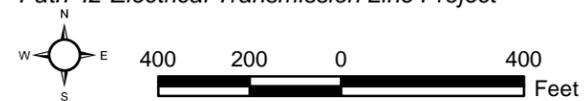
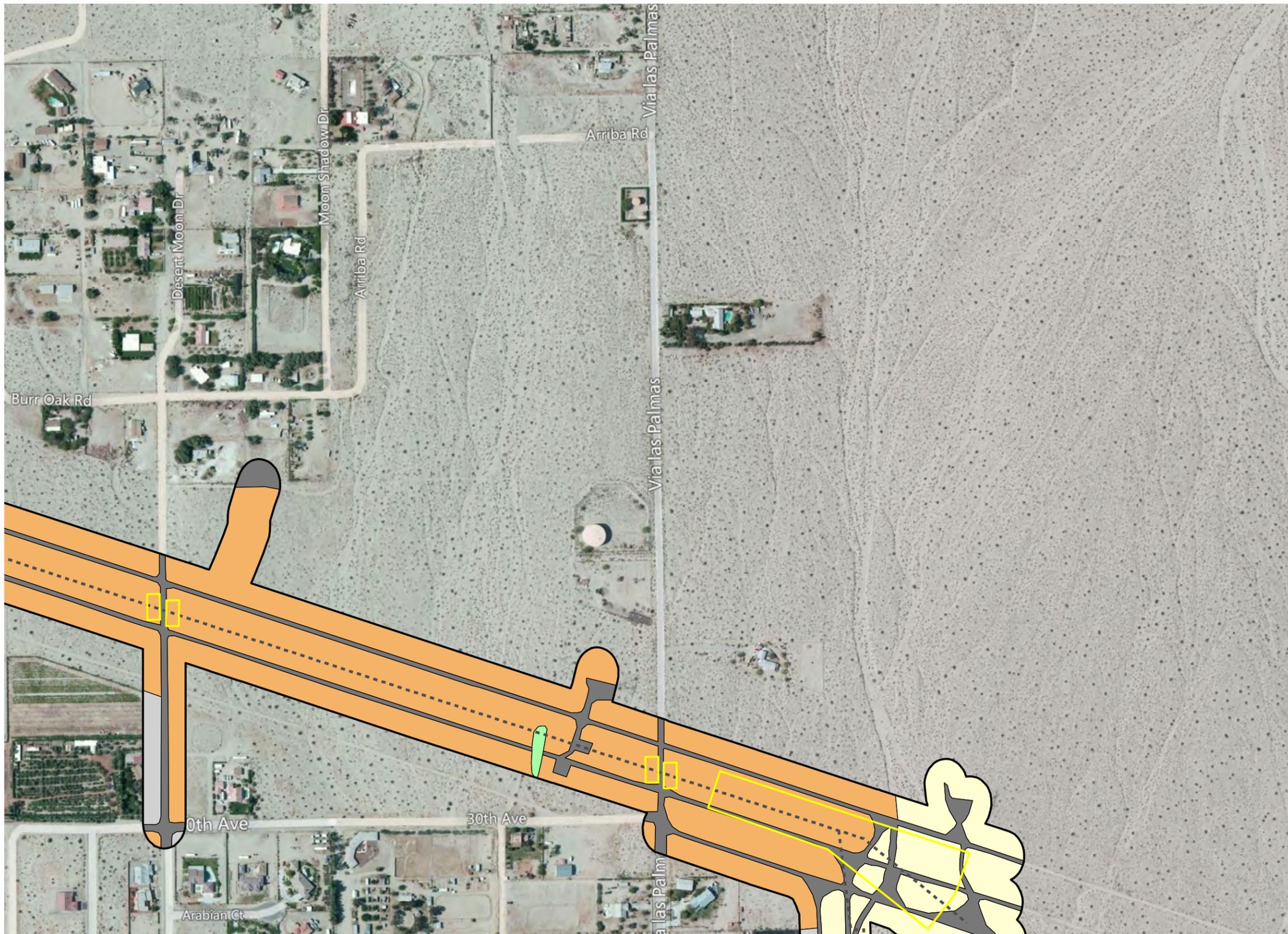


Exhibit 60



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Project Impacts

Path 42 Electrical Transmission Line Project

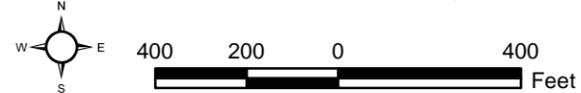
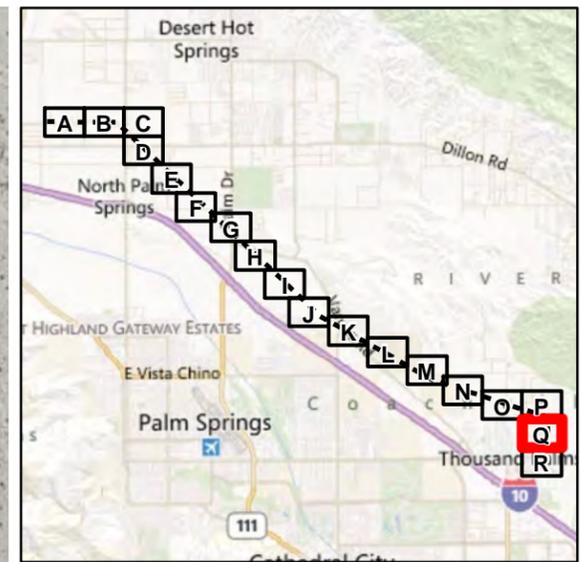
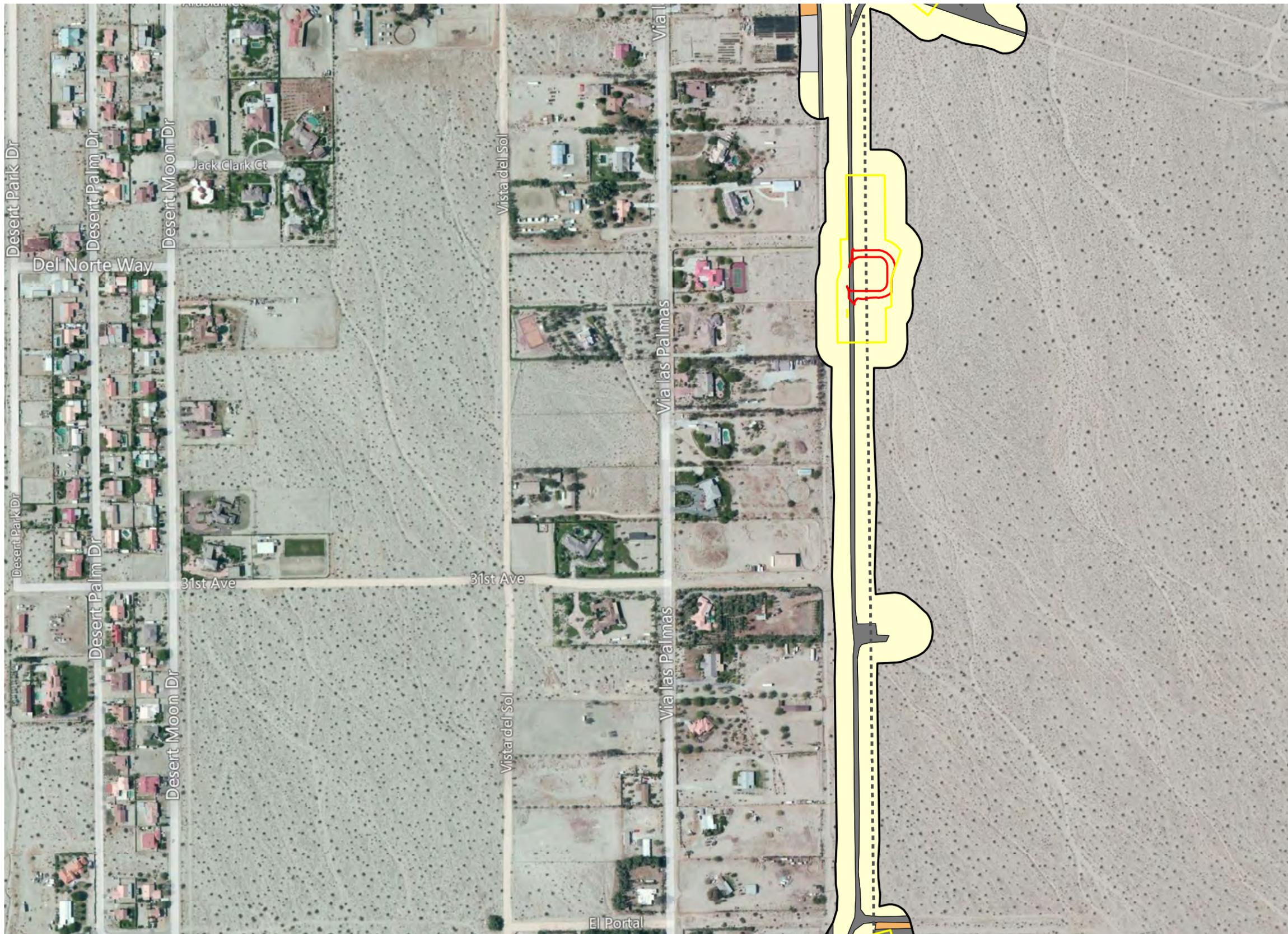


Exhibit 6P



(Rev: 5-13-2013 JAZ) R:\Projects\Edison\135\Graphics\Constraints\lex6_vegImpacts.pdf

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- Desert Dry Wash Woodland
- Ephemeral Wash
- Disturbed/Unvegetated
- Developed

Project Impacts

Path 42 Electrical Transmission Line Project

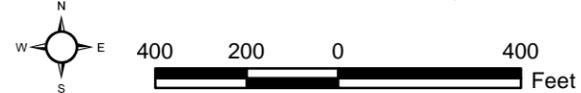
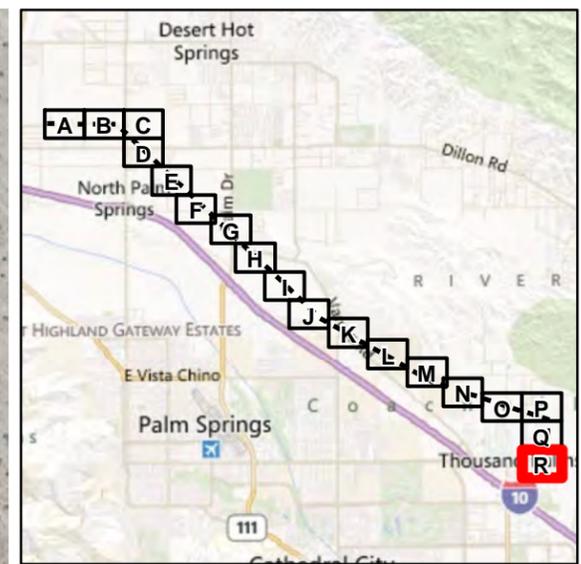


Exhibit 6Q



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Project Impacts

Path 42 Electrical Transmission Line Project

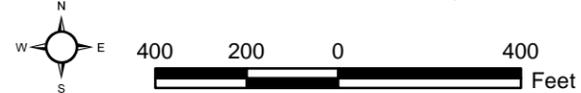


Exhibit 6R



ATTACHMENT A

SITE PHOTOS



Ephemeral desert sand field vegetation type.



Ephemeral desert sand field (foreground) and active desert sand field (background).



Highly eroded drainage mapped as desert saltbush scrub with saltbush (*Atriplex sp.*) dominating eroding banks.



Low density Sonoran creosote bush scrub vegetation type.



Sonoran creosote bush scrub dominates the Survey Area.



Stabilized and partially stabilized desert dune vegetation type.

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Site Photos

Path 42 Electrical Transmission Line Project



Appendix A



