

**CONFERENCE CALL AGENDA
BEACON SOLAR ENERGY PROJECT
(08-AFC-02)
WEDNESDAY, MAY 21, 2008 (10:00 a.m. to 12:00 p.m.)**

***Call-#: 888-385-9734 Passcode #: 23760
Call Leader: Bill Pfanner***

DOCKET	
08-AFC-2	
DATE	MAY 21 2008
RECD.	JUN 02 2008

Conference Call Objective:

Resolve issues raised by CDFG regarding additional information needs for completing Incidental Take Permit application for desert tortoise and Mohave ground squirrel.

Agenda

1. Introductions
 2. Need for full project description, cross-section and linear drawings depicting project activities; delineate acreage of habitat types.
 3. Results of 2008 surveys.
 4. Refinement of avoidance, minimization, and mitigation measures to avoid take.
 5. Compensation acreage to achieve fully mitigate standard. In addition to lands west of Highway 14:
 - a. Desert tortoise: 13.7 acres desert swale, 352.6 acres atriplex scrub
 - b. Mohave ground squirrel: additional information needed on presence in project area and extent of impacts so compensation can be established.
 6. Additional information on compensatory mitigation lands, including:
 - a. location and features of proposed compensatory mitigation lands
 - b. appropriate enhancement and endowment costs
 - c. mitigation monitoring and reporting plan
 - d. PAR analysis for acquisition and, endowment, enhancement.
 7. Other significant bio resources issues (if time allows): re-routing desert wash; addressing direct, indirect cumulative impacts to burrowing owl, desert kit fox, and other special status species.
 8. Next steps to satisfy information request from CDFG.
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**CONFERENCE CALL MEETING NOTES
BEACON SOLAR ENERGY PROJECT
(08-AFC-02)**

WEDNESDAY, MAY 21, 2008 (10:00 a.m. to 12:15 p.m.)

Participants

Name	Affiliation/Role on Project
Babula, Jared	CEC/Legal
Bachrach, Arrie	ENSR/ Deputy Project Manager
Blackford, Ashleigh *	USFWS/Raven mgmt expert
Edwards, Dale	CEC/ Environmental Office Manager
Graham, Bill	EDAW/ Project Director
Hohman, Judy *	USFWS
Karl, Alice	Desert tortoise expert
Leitner, Phil	Mohave ground squirrel expert
McCormick, Kim	2081/CESA permitting consultant
Palo, Gary	FPL/Project Director
Pfanner, Bill	CEC/Project Manager
Quon, Lyndon	EDAW/Supervising biologist
Sanders, Susan	CEC/ biologist
Stein, Kenny	FPL
Tenneboe, Annette	CDFG/CESA-CEQA review Kern Co.
Vance, Julie	CDFG

** joined conference call around 11:40*

Conference Call Objective:

Resolve issues raised by California Department of Fish and Game (CDFG) regarding additional information needs for completing Incidental Take Permit (ITP) application for desert tortoise (DT) and Mohave ground squirrel (MGS).

Permitting Path on ITP

Kenny wanted to know what “permitting path” we needed to follow on the ITP, given the precedent of the Victorville 2 project, where CEC incorporated the terms of the 2081 permit into their conditions of certification rather than CDFG issuing a separate permit. CDFG legal department has not yet reviewed the Memorandum of Understanding between CEC/CDFG on this topic, or given guidance to regional staff, so we will proceed at this time as if CDFG would be issuing the permit. Therefore the applicant will need to revise and resubmit the ITP application, responding to CDFG’s comment letter. Kenny wanted to know how that would affect schedule, since the last paragraph in CDFG’s response letter (dated April 29, 2008) requested a 30-day resubmittal. Julie said they specified the deadline to satisfy their regulations, but that it could be flexible and there were no penalties for it being more than 30 days after issuance of the comment letter. It is more important to resubmit when all the information is available and the application is complete than for it to be turned around in 30 days.

CDFG's Request for Full Project Description, Drawings Depicting Project Activities, Delineation of Habitat Acreage

Kenny referred to Figure 1 of the pdf handout showing the plant site boundary, and discussed the linear facilities (gas pipeline and T-lines). No staging or laydown areas are shown within the plant site boundary because the entire site will be graded and it is assumed everything within the boundary will be impacted. For the gas pipeline, all disturbances will be in the disturbed shoulder or on the roadway.

Julie asked if they had cleared this construction with Kern County, and what the depth of the gas line trench would be. Kenny said all disturbances will be in the shoulder or road and that the county is aware of this. The pipeline is small, 8" in diameter, and construction will be done quickly. T-line access will be primarily on existing Los Angeles Department of Water and Power (LADWP) dirt roads, with a few short access/stubs. All new disturbances were included in the impact calculations. Kenny will check to make sure all that information was clearly stated in the ITP application, and if not he will add it.

Julie noted that CDFG recently permitted the LADWP Barren Ridge project, and have had a number of DT fatalities due to raven predation, which were covered under the ITP. EDAW did some of the work on that, and on the nearby Pine Tree project. Julie also noted that LADWP has ITP coverage for ongoing maintenance of its roads.

Re-Routing Desert Wash

CDFG has some issues with the proposal to reroute the Pine Tree Creek desert wash. A flashy, wide, braided drainage like this may not do well being realigned into a right-angle turn, and they have concerns not just about loss of habitat values but about potential flooding issues. Changes in flooding patterns are a potential ITP issue because they may affect downstream hydrological and biological processes that may affect DT. CDFG is also concerned that DT may get stuck in the newly created trapezoidal channel if it is too steep-sided. Also, when CDFG issues the Streambed Alteration Agreement, they need to make sure there are no potential impacts to people living downstream. Susan noted that CEC has some of the same concerns.

Kenny said that they were a week or two away from submitting their Section 1602 Streambed Alteration Agreement (SAA) application. Some of the issues mentioned have already been addressed in the hydrological information submitted with the AFC, and more detailed information will be supplied with the SAA application. Kenny notes that the re-routed wash is entirely within plant site boundary, and has been carefully designed so that flows coming off the site after the project is built will not differ from current conditions. Thus, there will be no changes to the conditions experienced by the scattered residences of the area (Rancho Seco) north (downstream) of the plant site. The new channel was designed in consultation with Alice Karl to make sure that the slopes of the channel would allow DT to avoid being trapped. Kenny further agreed to include an erosion control plan in both the SAA and ITP applications, and to address whether a maintenance program will be necessary for the rerouted desert wash.

Kenny wanted to know who at CDFG would be the contact for the SAA. Julie Means will be working on it, and Beacon will arrange to have a site visit with her and will let us all know when that will be so we can attend if desired. Julie and Annette will be coordinating with Julie Means on this project also.

Susan suggested we have another conference call on the issue of the re-routed wash after the SAA application is submitted and include hydrologists on the call so we can get answers to some of the questions. We all agreed to do that. All parties further agreed that the ITP and SAA permit processes should proceed concurrently with the CEC process.

2008 Surveys

Lyndon gave a brief summary of the 2008 survey results. Lyndon said they have one more burrowing owl survey to finish, and one more floristic survey, possibly more depending on results. Julie wanted to know if there were any changes in vegetation mapping or significant plant findings. Lyndon said that many more species have been recorded in 2008 compared to 2007 because 2008 was a better rainfall year, and that they are refining the vegetation mapping, but they have no results that would change the basic conclusions of the AFC.

Kenny reviewed the areas that were covered in 2008, noting that these “new” areas had already been fairly thoroughly covered by Zone of Influence (ZOI) surveys in 2007, but they went back and covered them again. They did the entire gas pipeline ZOI surveys even though all disturbances will be in the shoulder. Lyndon said that they picked up a DT at the extreme ZOI for the gas pipeline, but the 2008 surveys found nothing unexpected. Burrowing owl surveys are indicating the same results as 2007. Kenny asked if it the ITP application can be resubmitted before completion of all surveys, and Julie said that was o.k.

Mohave Ground Squirrel

Julie expressed CDFG’s appreciation for the fact that the applicant made a good choice in selection of this site for development because the site has diminished value due to previous activities and agricultural uses and is already highly disturbed, and that will have significant bearing on how CDFG evaluates the project. However, CDFG has a procedural problem in not doing surveys for MGS, assuming presence, yet not providing avoidance or mitigation measures. Kenny clarified that the assumption of presence for MHG was only for the habitat west of SR 14, and that they didn’t do surveys inside the plant site boundary because there was absolutely no habitat available and therefore no purpose in doing presence/absence surveys.

Julie asked if they are seeking take coverage for MGS only west of SR 14, or the entire plant site. If they are looking for coverage on the plant site, CDFG must err on the conservative side, assuming that it is possible that a transient MGS, such as a

wandering male, could occur there and a take could occur. Kenny thought that was a good point, and wondered about the difference between getting coverage for impacts to a MGS crossing the site v. loss of MGS habitat.

Kenny said we should assume that take coverage is needed on the entire site, so Beacon Solar needs some guidance on mitigation and habitat suitability. Julie needed more information on habitat suitability, because while much of the site is barren, Annette's observations at the site and the AFC make it clear that some portions of the site have small mammal burrows. Julie requested a more detailed habitat description of the plant site boundary area, including vacant portions and vegetated portions that may support burrowing animals.

Kenny directed everyone's attention to Figure 6 in the handout, which provided as precise a depiction as possible of vegetative cover. He also pointed out that there were a few minor corrections to be made in the acreage totals for the habitat types, and those are included in the sheet labeled "New Table" in the handout that was sent out. This new table has permanent and temporary impacts for different habitat types.

Desert wash scrub (59 acres) fallow ag (1573 acres); fallow ag –disturbed atriplex – that was a mistake in AFC, ITP (omitted an 80-acre parcel that contains some atriplex) – should be 371.9. The approximately 13 acres of desert wash is captured within the 59 acres. That totals 2012 acres for the plant site. On the linear facilities, there was only a 0.8-acre difference, so assume worst case for option 2.

Phil discussed habitat suitability for MGS, and his conclusion was that the area west of SR 14 was habitat; but the area within the plant site boundary, including the degraded Pine Tree Creek desert wash, was not suitable habitat. When the site was developed for agriculture it was completely worked over and all vegetation removed. It probably was a natural saltbush community, and now the allscale is coming back, which often invades in fallow ag lands. This area supports little annual plant growth, and has low shrub diversity. MGS require annuals for forage and a more diverse assemblage of shrubs. In Phil's judgment, the lands in the plant site boundary could not support a population of MGS, and there is not even enough food to support an individual MGS for a day or two. Adjoining areas to the north and west are either barren or similar disturbed scrub. A little creosote scrub to the north is available but very little surrounding habitat. He has never encountered MGS in that kind of disturbed atriplex. He recently sent out an e-mail to other MGS permit holders asking if they had ever encountered MGS in those kind of habitats. Two permit holders said they had trapped in disturbed atriplex and had not found MGS, and no one said they had ever found MGS in such habitat.

Julie wanted to know if the forage assessment was made in 2007 or 2008. Phil said it was done in 2007, but as far as shrubs, those are still the same today. Phil has been back to the site in 2008. MGS are known to feed on atriplex leaves, but can't survive solely on those. The annuals are mostly erodium – while MGS eat the seeds, they need a diversity of food sources. The plant site boundary lacks a diversity of food sources.

Julie said we all agree that it is not ideal habitat for MGS, but the question is what is the likelihood of dispersing individuals entering the plant site from time to time? Kenny stated that he does not believe MGS are on or in the vicinity of the plant site, but asked what type of mitigation would be required by CDFG to fully mitigate for a take of a transient, dispersing MGS if that should occur?

Julie said CDFG evaluates mitigation requirements based on the habitat values of the site and determining how to replace the MGS that are taken. We are used to thinking about mitigation in terms of ratios, but need to get to that point by discussing what it takes to replace the loss. For example, if the goal is to mitigate 3:1 for 100 acres of impact, and enhancing that, then it increases the carrying capacity by 33%. What are you impacting, what quantity of animals is being impacted to replace it? If talking about low density or transient animals, what amount of habitat should be set aside to replace those lost animals?

Kim asked if the project requested take coverage for, hypothetically, two dispersing individual MGS, what type of mitigation would be appropriate? Julie responded that we need to know how close suitable habitat is located, and whether take coverage is being sought solely for construction or also for ongoing operations for 30 years of potential take. Kenny indicated that Beacon Solar will make this clear in the revised application. Phil spoke to the dispersal issue. Based on his research on behavior of dispersing MGS in radio-transmitter work with juveniles, he found they came to a playa and stopped. They won't cross large open areas. Looking at Figure 6, there just isn't much habitat to disperse from that isn't separated by wide swaths of barren terrain.

Julie noted that they have been surprised in the past with MGS being in areas where they have not been expected. Also, portions of the site appear to have a fairly well-established community of burrowing animals.

In an effort to start a dialogue on appropriate mitigation for "take" coverage within the plant site boundary, Kenny suggested, as an example, 0.5:1 ratio for certain vegetated areas. Jared cautioned that negotiations regarding mitigation must be conducted in a public meeting. Kenny noted that he appreciated and understood that comment, but was just seeking thoughts from CDFG to assist when they revise the ITP application and provide proposed MGS mitigation. No final decisions are being made now, just a discussion with experts present to help facilitate the thinking process.

Julie said that whatever compensation is proposed in the revised ITP for MGS will need to be accompanied by some biological justification and rationale.

Desert Tortoise

Kenny respectfully disagreed with the statement in the CDFG response letter that because some DT sign was detected, there might be DT dispersal in the area. Examining Figure 5, Kenny noted that no scat was found on the plant site and that the

only sign of DT within the plant site boundary was depredated juveniles C-13 and C-3. C-2 and C-11 were old bone fragments close to the wash. A Class 5 burrow was detected in the middle. In the surveys done this year and in 2007, they have not seen any sign that DT are using or have recently used the site. While there was quite a bit of activity west of SR 14, the highway acts as a barrier. If DT were dispersing across the plant site, biologists would have seen sign during the protocol surveys conducted in 2007 and 2008 but did not.

Julie asked how long ago the plant site area taken out of agricultural production. Arrie thought it was sometime in the mid-late 1980s. Julie also asked about the estimated ages of carcasses on the plant site. Alice Karl stated they were relatively recent with holes in them, so they probably were brought onto the plant site by ravens. Alice said that it is not uncommon to find DT juvenile carcasses all over the desert - C-11 is in the size limit that a raven would take. As far as the wash being a DT corridor, it could be that ravens are stopping there and dropping carcasses, and also these could have flowed in from upstream areas. Alice noted that desert washes often provide connectivity between habitats, but at this site there is nothing to connect to; moderately good habitat south, but north it is barren habitat with no possibilities of DT occurring;

Alice thought the plant site was poor habitat, and the likelihood of DT occurring there was low. It is not suitable habitat for population persistence or recovery. Julie noted that the ITP deals with take of individual animals, which translates into habitat sometimes, but even if we are talking about low quality habitat, some mitigation would still be required for any authorized take. There needs to be some metric and nexus for that in the ITP. And the ITP needs to address the impacts of the re-routed desert wash with respect to DT and any other habitats that might support transient individuals, if take coverage is desired for the entire plant site. Julie noted that any proposed mitigation for DT should discuss the anticipated low density of DT in the area, the anticipated number of individuals that might be taken and the manner of that take, and why the proposed mitigation will fully mitigate the take.

Kenny said that they will submit a revised ITP application that will address the mitigation issues for DT and MGS, and once they feel they have agency consensus, that would be a good time to finalize the Low Effect Habitat Conservation Plan (LEHCP).

(Judy Hohman and Ashleigh Blackford joined us at this point, and Kenny gave them a synopsis of the DT discussion). Judy noted that a member of her staff had seen DT wandering across a barren spot either within or adjacent to the project site from Hwy 14, and mentioned that DT are known to cross barren areas, especially playas. Kenny said that the area described by Judy may not have been the plant site but an area to the west of the plant site boundary (e.g., east of the highway and west of the railroad).

Ravens – Desert Tortoise – Evaporation Ponds

Ashleigh said USFWS had just completed a cooperative agreement for raven management among federal land managers and Kern and San Bernardino counties,

and USFWS had signed a Finding of No Significant Impact (FONSI) for it. The plan takes a two-fold approach, combining lethal take of ravens, and dealing with why so many ravens are now resident in desert areas. The plan looks for ways to get ravens in balance with other natural resources. The number of resident ravens in the desert has increased significantly due to human development that provides reliable food and water sources and nesting/roosting sites. This project will need to address the potential indirect impact of attracting ravens to whatever water body will be created, and minimize the chances of increased DT predation by ravens.

We discussed the size of the evaporation ponds and water quality monitoring. That information is included in the AFC, and information on the size of the pond, quality of water and constituents in the water also will be in the LEHCP and the revised ITP application. Julie noted that because the pond will be fenced and therefore is not accessible to terrestrial wildlife, the analysis will be relevant to migratory bird take issues.

Kenny said they were open to doing raven monitoring, and would like to coordinate with CDFG/CEC/USFWS on that. We agreed that a conference call with USFWS, especially Ashleigh who just worked on the raven management plan, would be useful to fine tune details on that. For example, Judy noted it would be useful to have baseline data on raven use of the project site before the project is constructed, to compare with raven use of the site after construction is completed. If raven use increases, then measures could be implemented to reduce that use to the baseline use that existed pre-construction.

Permit Process

Judy asked if Kern County would be issuing a grading permit for this project, because she wanted to make sure all permitting processes are as concurrent as possible. Kenny indicated that he thought a county grading permit would not be needed because the CEC approval process covers this; however, he indicated that he would need to confirm this.

Bill noted that at the upcoming June 11, 2008 site visit and informational hearing, the CEC staff will present an issues identification report to the commissioners. Staff will issue data requests, and a data response workshop will be held before CEC staff prepares its staff assessment. Those discussions will all take place in a public workshop forum.

Gary asked if the AFC has been submitted to other agencies for review. Bill noted that all appropriate agencies were sent the AFC and asked to send comments. Judy said that the USFWS may not comment on it because they typically do not comment on CEQA documents and have their own federal regulatory responsibilities. They appreciate efforts to coordinate with them now, but USFWS may not be able to be formally involved with the CEC process until they begin work on the LEHCP due to workload/staff limitations.

Jared confirmed that the applicant will work directly with USFWS on the federal LEHCP as needed, and we will all work to make sure the applicant, CDFG, CEC, and USFWS coordinate as much as possible. This will be done as part of the CEC data request process, which is a public and transparent process.

Details on Mitigation Lands, Funding

As far as specifics of compensation; Kenny's experience is that all agencies will agree upon the mitigation, and the permits will include a condition that specifies the general area in which the compensation lands will be located and when they will be secured.

Julie agreed that the project can proceed with ground disturbance once the permits are issued and the applicant has provided a letter of credit or other security acceptable to CEC/CDFG/USFWS that will cover acquisition, endowment and enhancement costs for the compensation acreage. CDFG requires that compensation land acquisition must be completed within 18 months of ITP issuance. Kenny indicated a preference, based on precedent with other power projects, that the timing for completing the acquisition of compensation lands be linked to when construction is commenced -- for example, within 12 months after initial ground disturbance. Judy said USFWS solicitors have advised that mitigation should occur concurrently with take and that USFWS has allowed 12 months from federal ITP permit issuance to complete acquisition of compensation lands, if financial security is provided prior to ground disturbance.

Julie noted that it will help in their ITP application review if the applicant identifies the general geographic area and the habitat quality of the compensation lands, to provide CDFG with sufficient information to determine that the proposed mitigation is feasible and fully mitigates the take. This is particularly important because it may be difficult to find compensation lands.

Kim noted that it is the obligation of the applicant to locate and acquire the compensation lands, regardless of cost. Gary said that it is not likely they would acquire the lands prior to obtaining their CEC license. Julie wanted to know how soon they would be doing ground-breaking after approval. Kenny said they would want to go to construction right away. Kim noted that the sooner CEC/CDFG/USFWS can identify the mitigation needs, the sooner the applicant can start securing compensation lands.

Conclusion

We all agreed this was a productive call, and that is it useful to conduct this resource agency coordination early in the AFC process. Susan will arrange conference calls to get the experts together to discuss technical details of the re-routed Pine Tree Creek desert wash and the proposed raven management plan.

Tables From the BSEP Application for Certification (AFC)/2081 Application

Table 5.3-8 Anticipated Permanent and Temporary Impacts to Plant Communities

Vegetation Communities and Other Cover	Total Permanent Impact Acreage	Total Temporary Impact Acreage	Total Impact Acreage
Mojave Creosote Bush Scrub			
Option 1	4.1	0.9	5.0
Option 2	4.9	0.9	5.8
Mojave Desert Wash Scrub	59.0	0.0	59.0
Developed	7.2	60.0	67.2
Fallow Agricultural-Ruderal	1,573.8	0.9	1,574.7
Fallow Agricultural-Disturbed Atriplex Scrub	371.9	0.0	371.9
Total acres (with Option 1)	2,016.0	61.8	2,077.8
Total acres (with Option 2)	2,016.8	61.8	2,078.6

Table 5.3-10 Anticipated Mitigation for Impacts to Potential Habitat for Special Status Wildlife Species

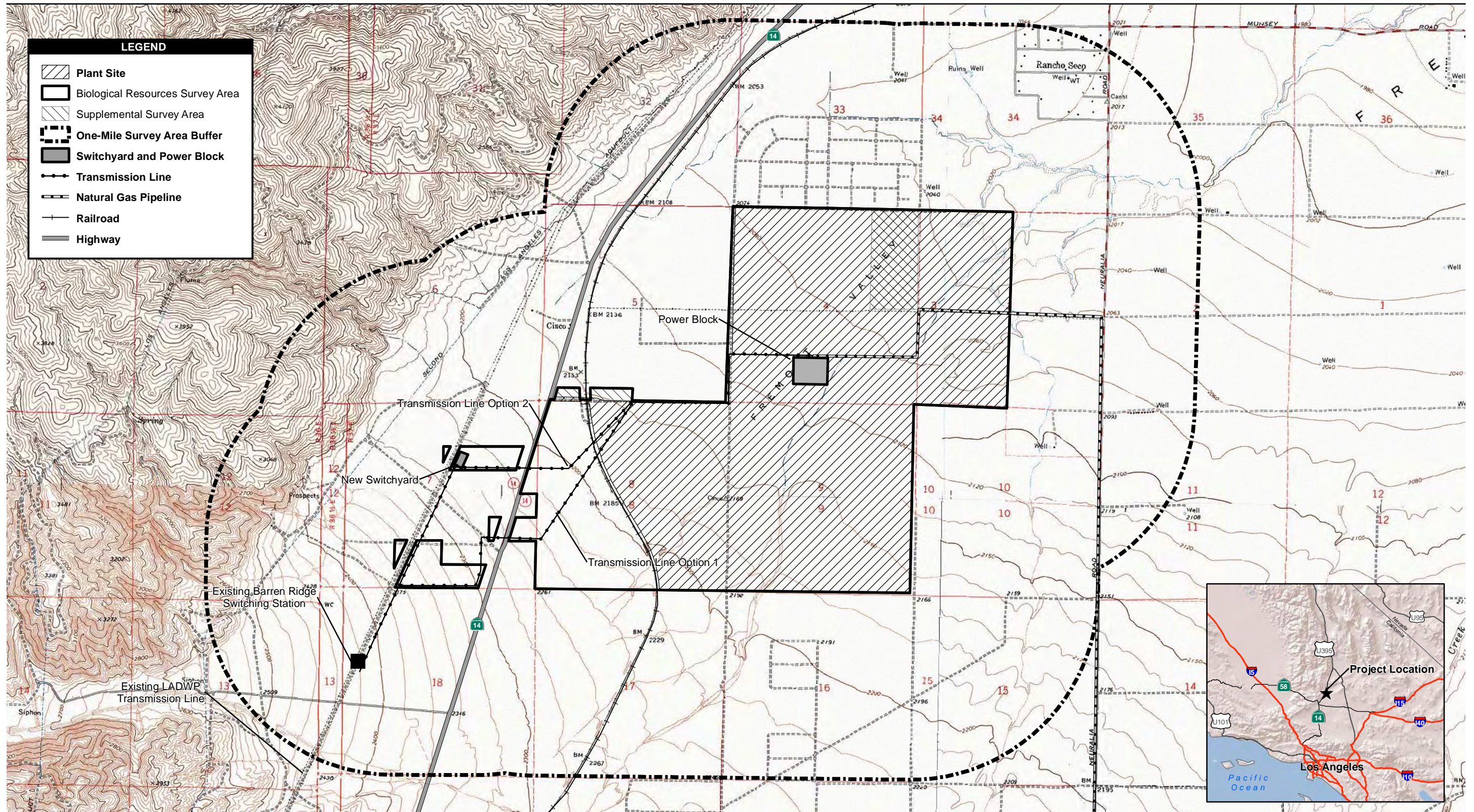
Listed Species	Mitigation Ratio	Total Impact¹	Total Mitigation Acreage
<u>With Transmission Line Option 1</u>			
Desert Tortoise	1:1	5.0	5.0
Mohave Ground Squirrel	2:1	5.0	10.0
Western Burrowing Owl	6.5 - 19.5:1 ²	3 pairs	19.5 - 58.5
Total			29.5 – 68.5
<u>With Transmission Line Option 2</u>			
Desert Tortoise	1:1	5.8	5.8
Mohave Ground Squirrel	2:1	5.8	11.6
Western Burrowing Owl	6.5 - 19.5:1 ²	3 pairs	19.5 - 58.5
Total			31.1 – 70.1
¹ The temporary impacts are considered permanent in this desert ecosystem. ² Per CBOC/CDFG guidelines.			

New Table
**Anticipated Permanent and Temporary Impacts to Plant Communities, Waters of the State and
Developed Areas by the Proposed Beacon Solar Energy Project**

	Vegetation Communities and Other Cover	Total Permanent Impact Acreage	Total Temporary Impact Acreage²	Total Impact Acreage
PLANT SITE	Mojave Desert Wash Scrub	59.0	0.0	59.0
	Developed (Existing Access Road)	7.2	0.0	7.2
	Fallow Agricultural-Ruderal	1,573.8	0.0	1,573.8
	Fallow Agricultural-Disturbed Atriplex Scrub	371.9	0.0	371.9
	Waters of the State ¹	13.7	0.0	13.7
	<i>Subtotal Plant Site</i>	<i>2,011.9¹</i>	<i>0.0</i>	<i>2,011.9¹</i>
LINEAR FACILITIES	<i>Transmission Line Options</i>			
	Mojave Creosote Bush Scrub			
	Option 1	4.1	0.9	5.0
	Option 2	4.9	0.9	5.8
	Fallow Agricultural-Ruderal	0.0	0.9	0.9
	<i>Natural Gas Pipeline</i>			
	Developed (road/road shoulder)	0.0	60.0	60.0
	<i>Subtotal Linear Facilities (with Option 1)</i>	<i>4.1</i>	<i>61.8</i>	<i>65.9</i>
<i>Subtotal Linear Facilities (with Option 2)</i>	<i>4.9</i>	<i>61.8</i>	<i>66.7</i>	
Total Acres All Areas with Transmission Option 1		2,016.0¹	61.8	2,077.8¹
Total Acres All Areas with Transmission Option 2		2,016.8¹	61.8	2,078.6¹

¹ Acreage of waters of the state not added to total as area is counted within other vegetation communities.

² For purposes of analysis, all temporary impacts are considered to be permanent impacts, due to the relatively slow rate of natural recovery of desert ecosystems, following temporary disturbances.



Source: TetraTech 2007; Kern County 2007; USGS 2007; WorleyParsons 2007

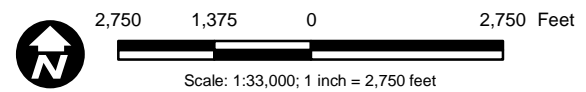
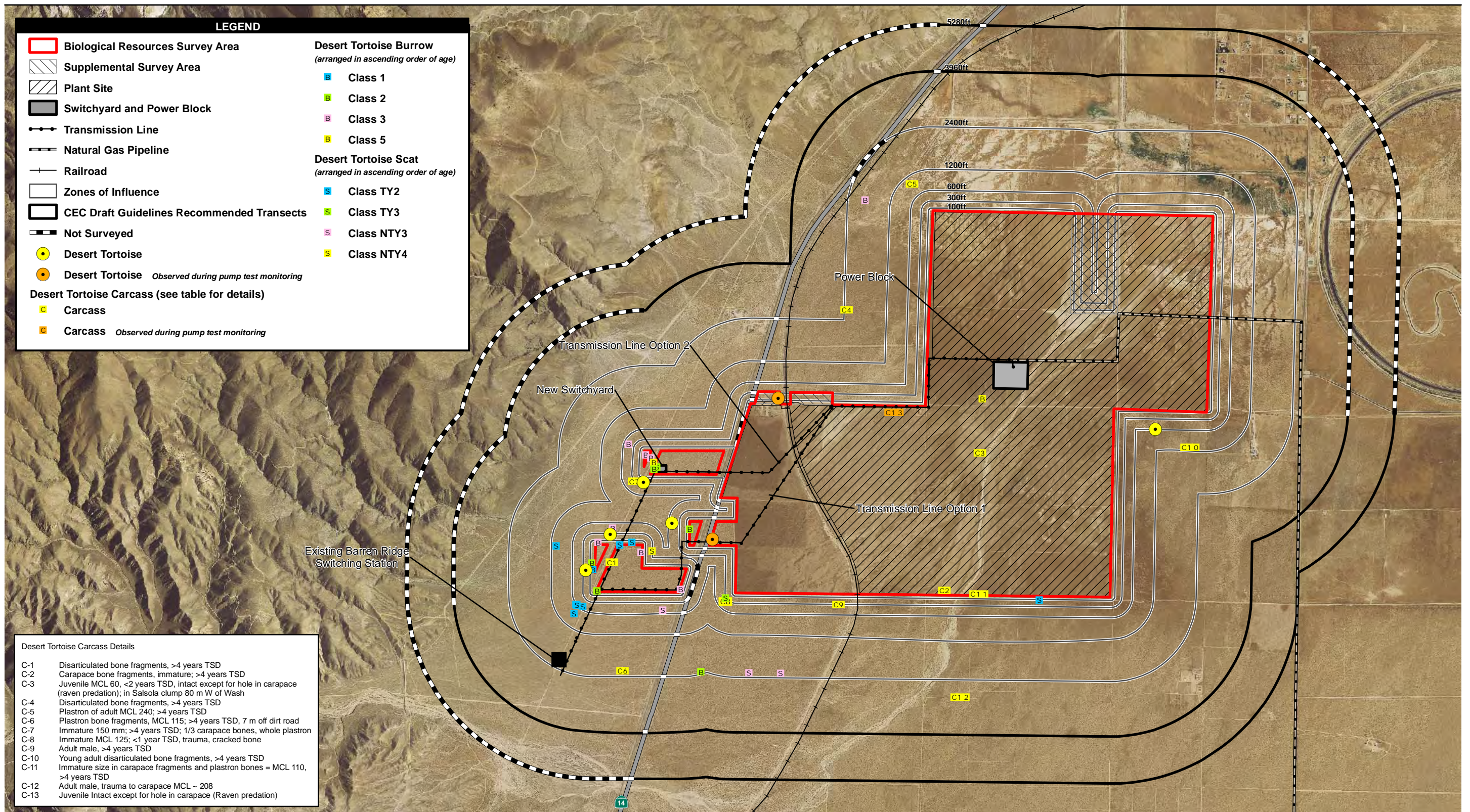


Figure 1
Project Site Boundary and
Survey Area



Source: TetraTech 2007; Kern County 2007; USGS 2007; CNDDDB 2007; Peggy Wood 2007; EDAW 2007; NAIP 2005; WorleyParsons 2007

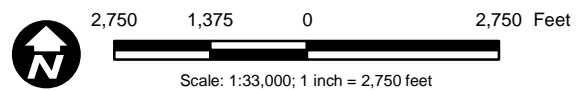
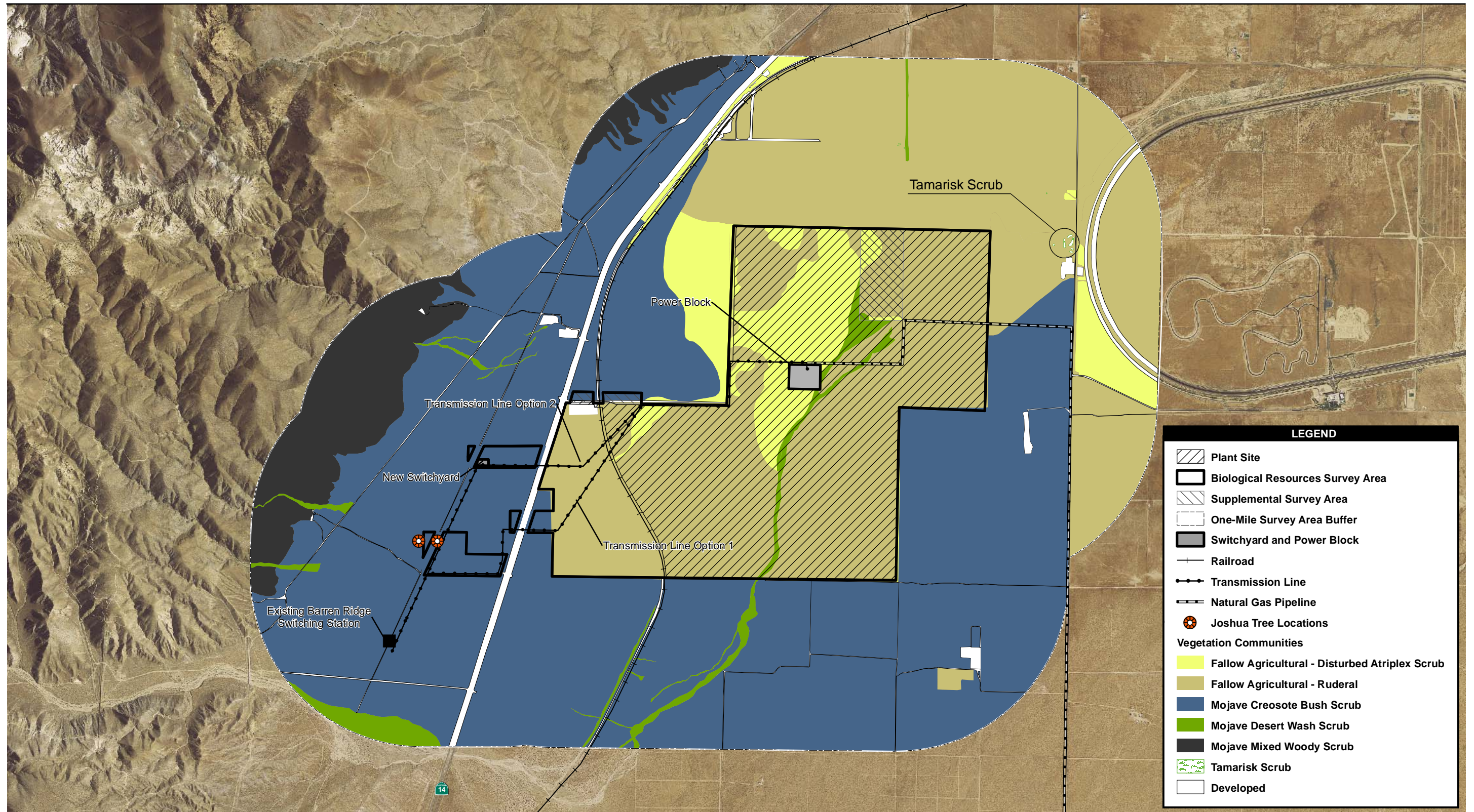


Figure 5
Desert Tortoise and Sign



Source: NAIP 2005; EDAW 2007; TetraTech 2007; WorleyParsons 2007; Kern County 2007

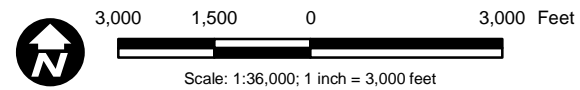


Figure 6
Vegetation Communities

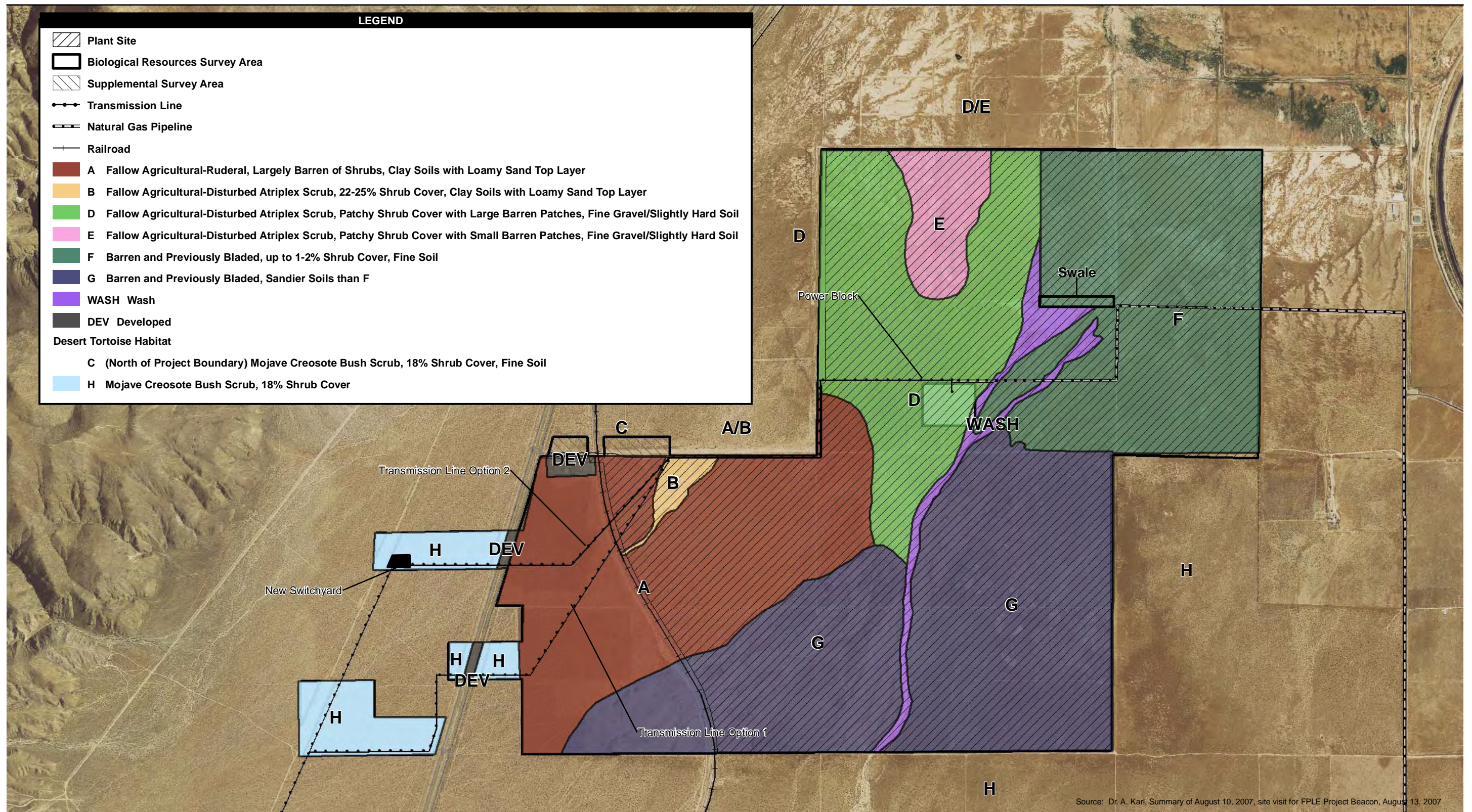


Figure 7
Habitat Types in the Survey Area

Source: NAIP 2005; EDAW 2007; WorleyParsons 2007

1,750 875 0 1,750 Feet

Scale: 1:21,000; 1 inch = 1,750 feet