DOCKET	
09-AFC-7	
DATE	JUN 15 2010
RECD.	JUN 16 2010

June 15, 2010

Alan Solomon
Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

RE: **Palen Solar Power Project, Docket No. 09-AFC-7**
Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations
Technical Area: Biological Resources

Dear Mr. Solomon:

Attached please find the Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for the Palen Solar Power Project.

If you have any questions on this submittal, please feel free to contact me directly.

Sincerely,

Alice Harron
Senior Director, Development

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May 27, 2010

Ms. Susan Sanders
California Energy Commission
1516 Ninth Street
Sacramento, California 95814

Subject: Palen Solar Power Project (09-AFC-7) – Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for Biological Resources

Dear Ms. Sanders:

On behalf of Palen Solar I, LLC, AECOM is submitting preliminary results of biological surveys conducted in spring 2010 for desert tortoise (*Gopherus agassizii*; DT), rare plants, jurisdictional waters, and incidental wildlife occurrences for the Palen Solar Power Project. This information was requested at the Palen and Blythe Staff Workshops conducted on April 28 and 29, 2010.

Preliminary survey results for DT, rare plants and jurisdictional waters were submitted to the CEC on May 7, 2010. The results provided herein supersede the results provided on May 7, 2010. The preliminary survey results are presented in figures and tables attached. Table 1 and Figure 1 present a summary of observations of DT sign and DT occurrences noted during spring 2010 surveys. Table 2 and Figure 2 present the rare plant population counts observed during spring 2010 surveys. Figure 3 presents the results of a formal jurisdictional delineation of waters of the State. Table 3 and Figure 4 present incidental wildlife occurrences observed during protocol surveys for DT, rare plants, western burrowing owl, and jurisdictional waters. Results from the fall and spring 2009 surveys are not included in the tables and figures for DT, rare plants or incidental wildlife occurrences. However, the jurisdictional waters figure does include results from the 2009 surveys and a table presenting the results of both survey years is provided in the figure. Please note that the results provided in Tables 1 through 3 and Figures 1, 2 and 4 are simply the results of our observations within the 100 percent coverage study area and associated buffers. These tables and figures do not represent total impacts within disturbance areas because we surveyed wider corridor widths and additional areas for contingency in the engineering design that ultimately will not be disturbed.

Figure 5 presents the additional disturbance areas surveyed in 2010 for an access road, transmission line corridor, and additional project components that are outside the 2009 project footprint. Therefore, the total Project Disturbance Area has been revised to be 4,051.1 acres. This total is still preliminary and subject to further refinement in the engineering design. A revised total disturbance area will be provided in final technical reports to be submitted to the CEC in early June.

Figure 6 present preliminary direct impacts to all cover types, including state waters, resulting from the revised Project Disturbance Area. These impact calculations are still preliminary and subject to further refinement in the engineering design. Revised impact calculations will be provided in final technical reports to be submitted to the CEC in early June.

Please let us know if you have any questions.

AECOM

Sincerely,

Mr. Bill Graham
Principal

Enclosure: Table 1. Palen Solar Power Project Desert Tortoise Observations Spring 2010
Table 2. Palen Solar Power Project Rare Plant Population Counts Spring 2010
Table 3. Palen Solar Power Project Incidental Wildlife Occurrences
Figure 1. Preliminary Results Desert Tortoise Spring 2010 Surveys
Figure 2. Preliminary Results Botany Rare Plants Spring 2010 Surveys
Figure 3. Preliminary Results State Waters Spring 2010 Surveys
Figure 4. Preliminary Results Incidental Wildlife Occurrences Spring 2010 Surveys
Figure 5. Preliminary Disturbance Areas May 2010
Figure 6. Preliminary Impacts to Cover Types May 2010
CD. Raw Data Files in Excel and Shapefiles

cc. Alice Harron, Solar Millennium
Elizabeth Ingram, Solar Millennium
Scott Galati, Solar Millennium Counsel
Mark Luttrell, AECOM

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Table 1. Palen Solar Power Project Desert Tortoise Observations Spring 2010

Description	Proposed Project Study Area	Reconfigured Alternative Project Study Area	Proposed Project/Reconfigured Alternative Study Area[1]	Buffer	Incidental Observations Outside Buffer Area	Grand Total
Adult Tortoise	1			3	3	7
Active Tortoise Burrow or Pallet - Class 1				2		2
Tortoise Burrow or Pallet - Class 3 (deteriorated, definitely tortoise)	1			2		3
Possible Tortoise Burrow or Pallet (Class 4 or 5)		1		6		7
Tortoise Scat	5			10	3	18
Tortoise Bone Fragment - Mineralized	2	5		5	1	13
Tortoise Bone Fragment - Not Mineralized	3	37	1	26	1	68
Tortoise Carcass (shell bone falling apart; growth rings on scutes are peeling)				1		1
Tortoise Tracks				2	1	3

[1]This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.

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Table 2. Palen Solar Power Project Rare Plant Population Counts Spring 2010

Species	Proposed Project Study Area	Reconfigured Alternative Project Study Area	Proposed Project/Reconfigured Alternative Study Area[2]	Buffer	Incidental Observations Outside Buffer Area	Grand Total
Four wing saltbush				920		920
Cottontop cactus	1					1
Harwood's milkvetch				152		152
Harwood's wollystar		1		37		38
Ribbed cryptantha	6,750	337	30	68,859		75,976
Utah milkvine					11	11

[1] Note that each point on the figure may represent multiple individuals

[2]This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.

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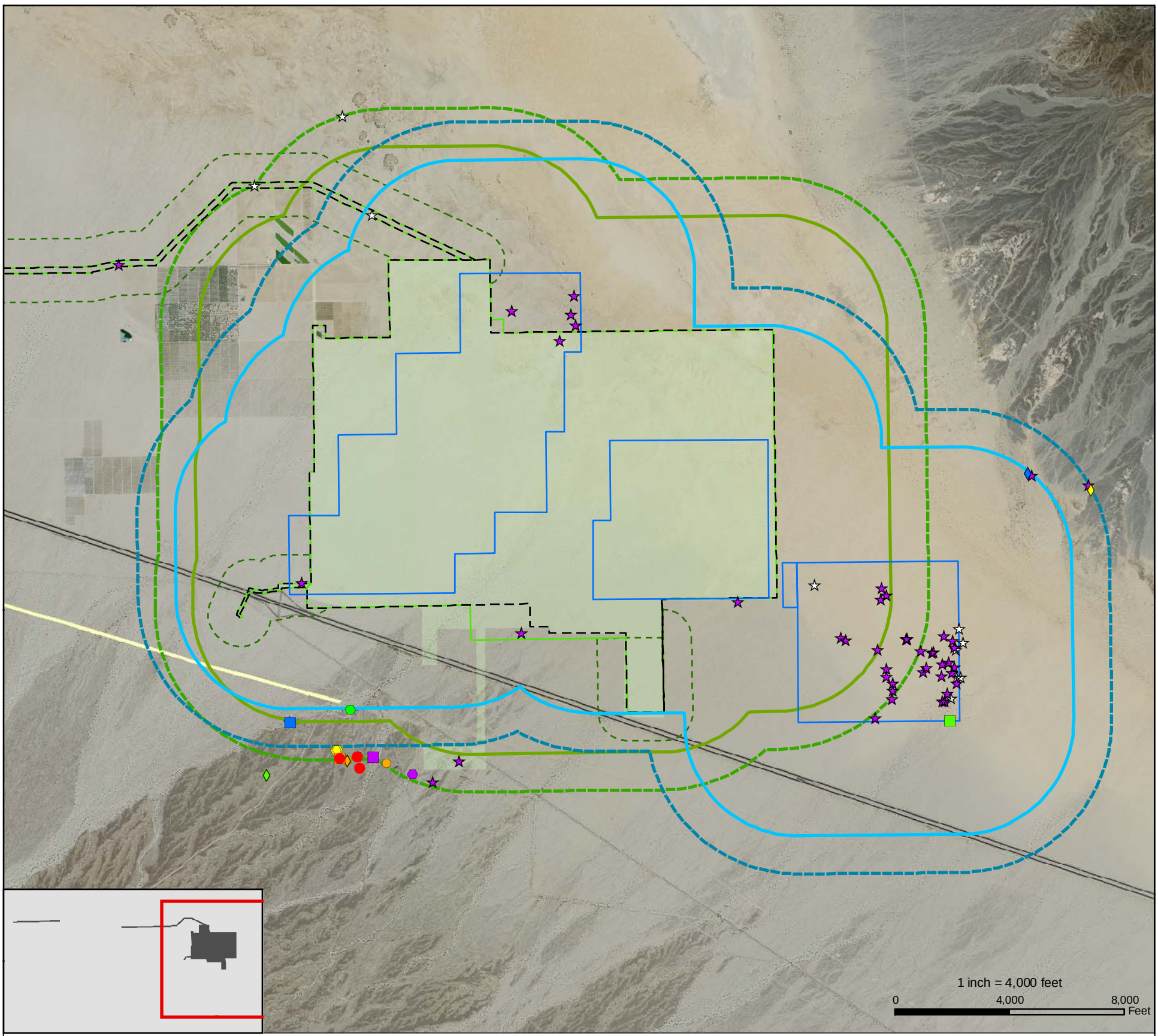
Table 3. Palen Solar Power Project Incidental Wildlife Occurrences

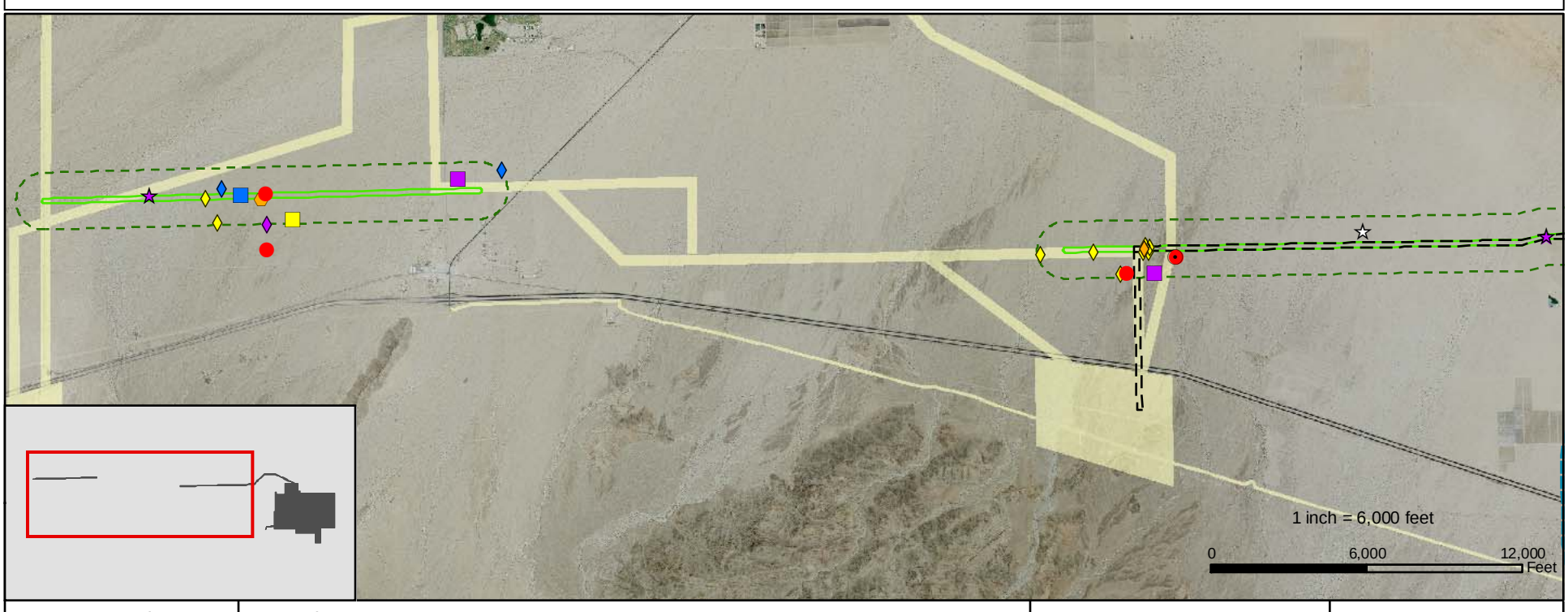
Species	Proposed Project Study Area	Reconfigured Alternative Project Study Area	Proposed Project/Reconfigured Alternative Study Area[1]	Buffer	Incidental Observations Outside Buffer Area	Grand Total
American Badger Den or Burrow	1	25	1	2	2	31
Ferruginous Hawk				1		1
Kit Fox Burrow or Complex	2	7		4	2	15
Loggerhead Shrike	2	1		3	3	9
Mojave Fringe-toed Lizard	5	310		62	11	388
Unidentified Woodpecker Species – Nest Cavity				1		
Northern Harrier		2		3		5
Swainson's Hawk	1	1		1		3

[1]This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.



DT Observations (Spring 2010)

- Adult Tortoise
- Juvenile Tortoise
- Tortoise Burrow (Active) - Class 1
- Tortoise Burrow - Class 2
- Tortoise Burrow - Class 3
- Tortoise Burrow - Class 4
- Tortoise Burrow - Class 5
- Tortoise Pallet (Active) - Class 1
- Tortoise Pallet - Class 2
- Tortoise Pallet - Class 4
- Tortoise Pallet - Class 5
- Tortoise Scat - Class 1
- Tortoise Scat - Class 2
- Tortoise Scat - Class 3
- Tortoise Scat - Class 4
- Tortoise Scat - Class 5
- Tortoise Carcass - Class 4
- Tortoise Bone Fragment (Class 5) - Not Mineralized
- Tortoise Bone Fragment (Class 5) - Mineralized
- Tortoise Tracks



Map Location

Legend

- Proposed Project Study Area
- Project Disturbance Area
- 1-mile - Project Buffer Transect
- 3/4-mile - Project Buffer Transect
- 1000-ft - Project Buffer Transect
- Alternative Disturbance Area
- Alternative 3/4mile - Buffer Transect
- Alternative 1mile - Buffer Transect
- Study Area (Surveyed in 2009)
- First Solar Study Area

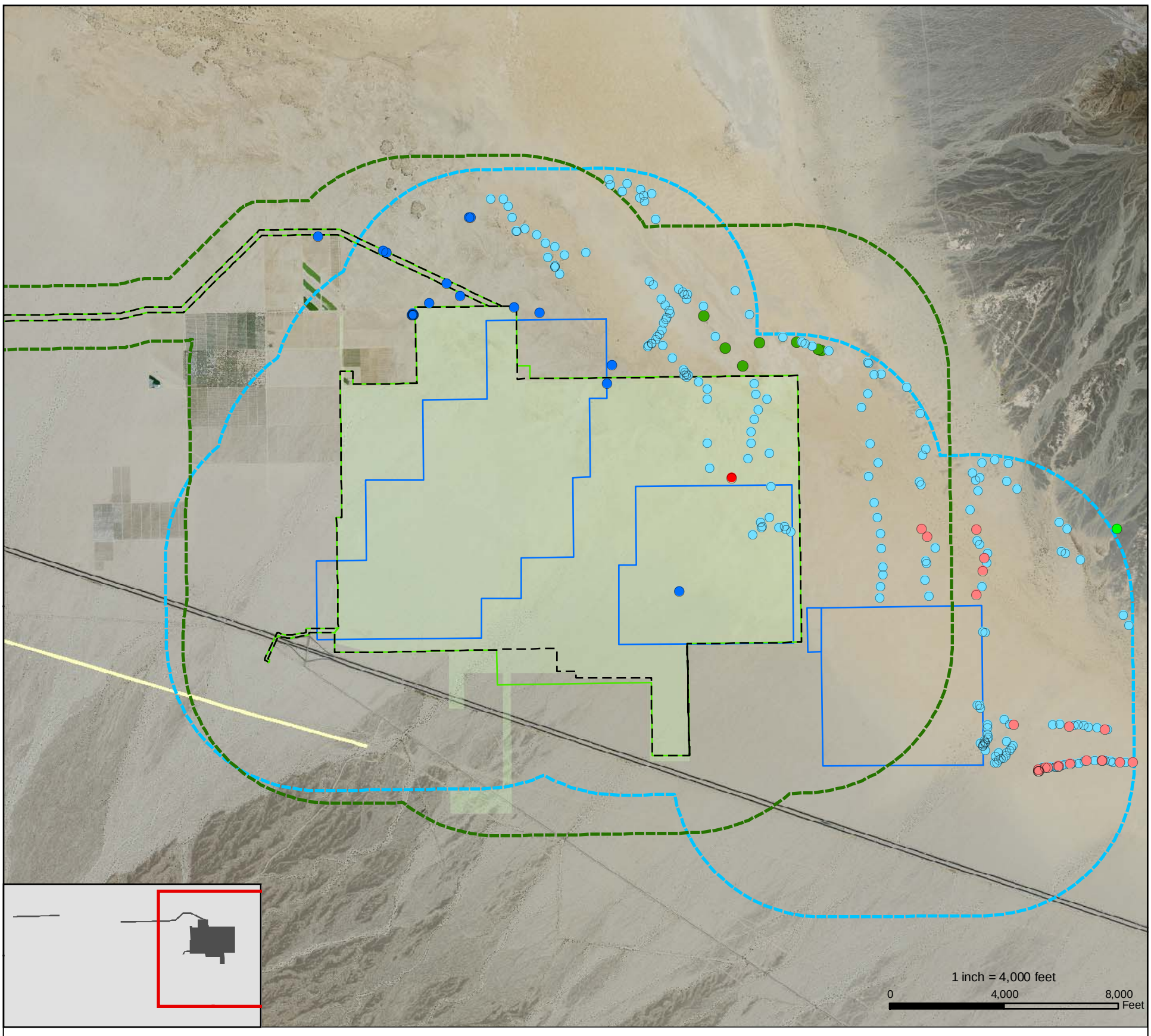
Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

Palen Solar Power Project
Figure 1
Preliminary Results
Desert Tortoise
Spring 2010 Surveys

AECOM

Date: May 2010

Path: P:\2009\09080081 Sol Mil Palen\6.0 GIS\6.3 Layout\Reports\CEC_Data_Requests\Spring2010_Results_May2010\PSPP_DETOSurveyResults_Spring2010.mxd, 05/26/10, SteinB



Rare Plant Observations

CNPS 1B and 2

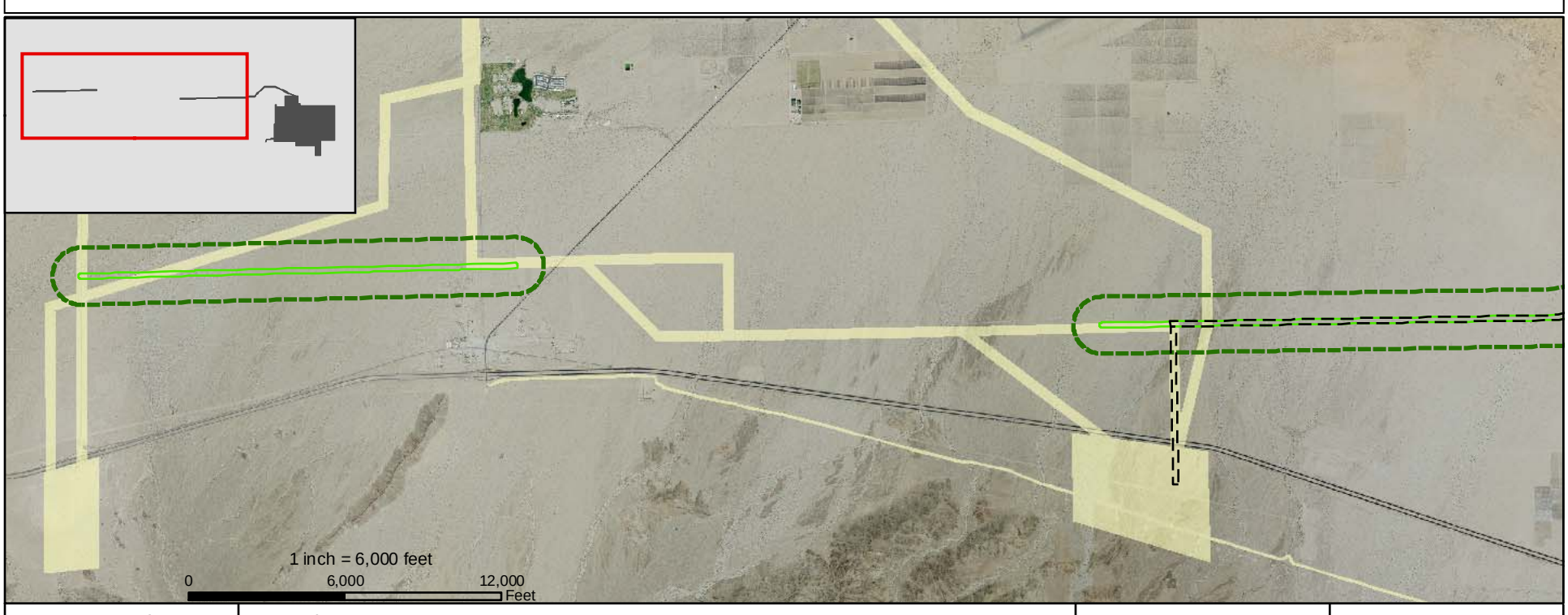
- Harwood's milkvetch
- Harwood's woollystar
- four wing saltbush

CNPS List 4

- Utah milkvine
- ribbed cryptantha

BLM-requested Cactus Species

- cottontop cactus



Map Location

Legend

- Project Disturbance Area
- Proposed Project Study Area
- Proposed Project BRSA
- Study Area (Surveyed in 2009)
- First Solar Study Area
- Alternative Disturbance Area
- Reconfigured Alternative BRSA

Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

Palen Solar Power Project

Figure 2
Rare Plant
Spring 2010 Surveys

AECOM

Date: May 2010

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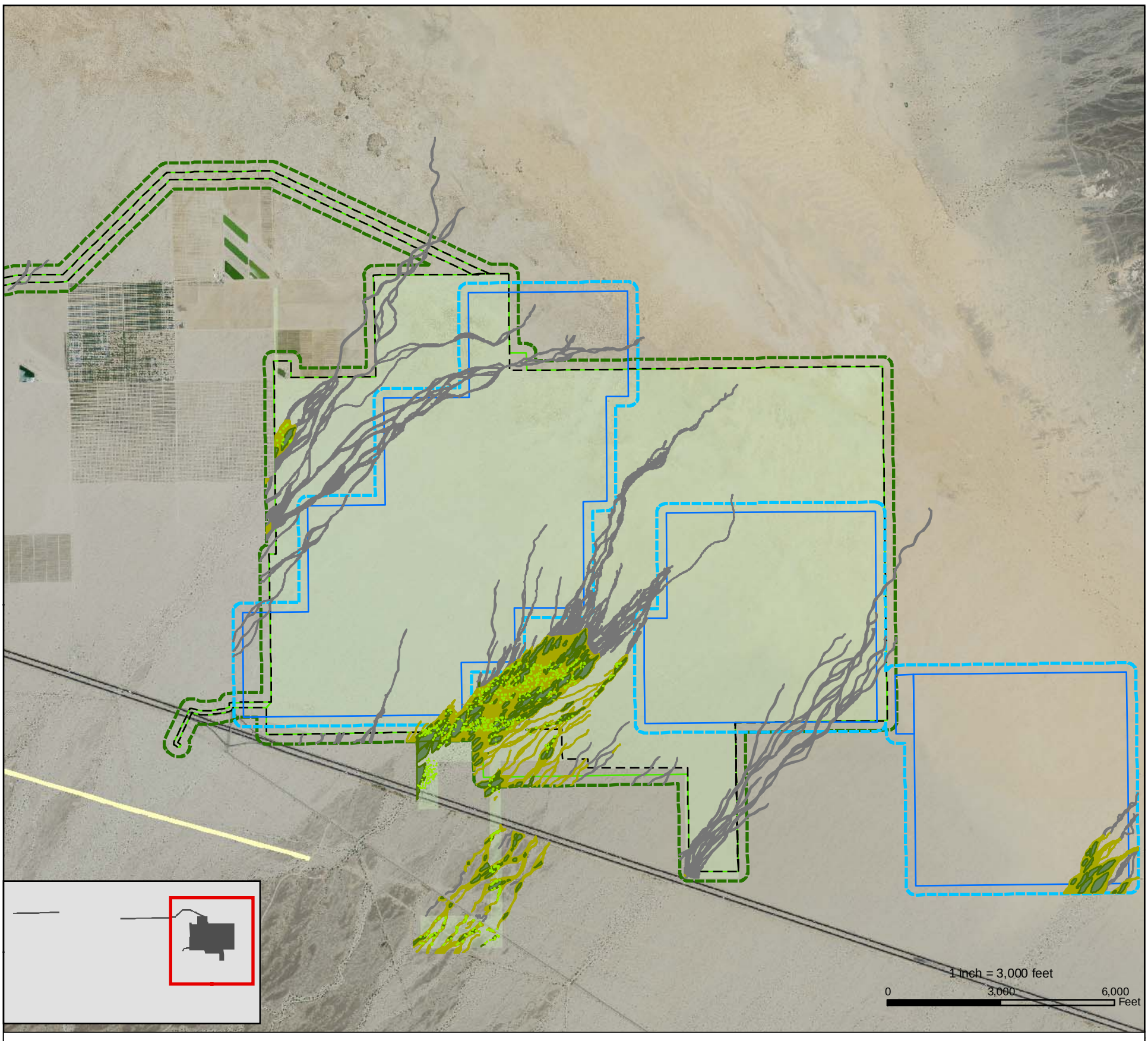

Jurisdictional Waters of the State of California

Desert Dry Wash Woodland

- Wash Dependent Vegetation
- Riparian Interfluve
- Vegetated Ephemeral Dry Wash

Other Waters

- Unvegetated Ephemeral Dry Wash

Jurisdictional Waters of the State		Project Disturbance Area	Buffer	Reconfigured Alternative Disturbance Area	Buffer
Desert Dry Wash Woodland	Wash Dependent Vegetation	1.3	0.2	0.01	0.1
	Riparian Interfluve	43.6	23.5	6.8	5.3
	Vegetated Ephemeral Dry Wash	99.1	61.1	13.6	11.8
Unvegetated Ephemeral Dry Wash	Unvegetated Ephemeral Dry Wash	164.0	28.7	44.5	22.8

Map Location

Legend

- Proposed Project Study Area
- Proposed Project DARSA
- Project Disturbance Area
- Reconfigured Alternative Disturbance Area
- Reconfigured Alternative DARSA
- Study Area (Surveyed in 2009)
- First Solar Study Area

*Note: The Reconfigured Alternative Disturbance Area encompasses the disturbance caused by construction of the solar power blocks only and is not a complete engineering design.

Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

Palen Solar Power Project
Figure 3
Preliminary Results
State Waters
Spring 2010 Surveys

AECOM

Date: May 2010

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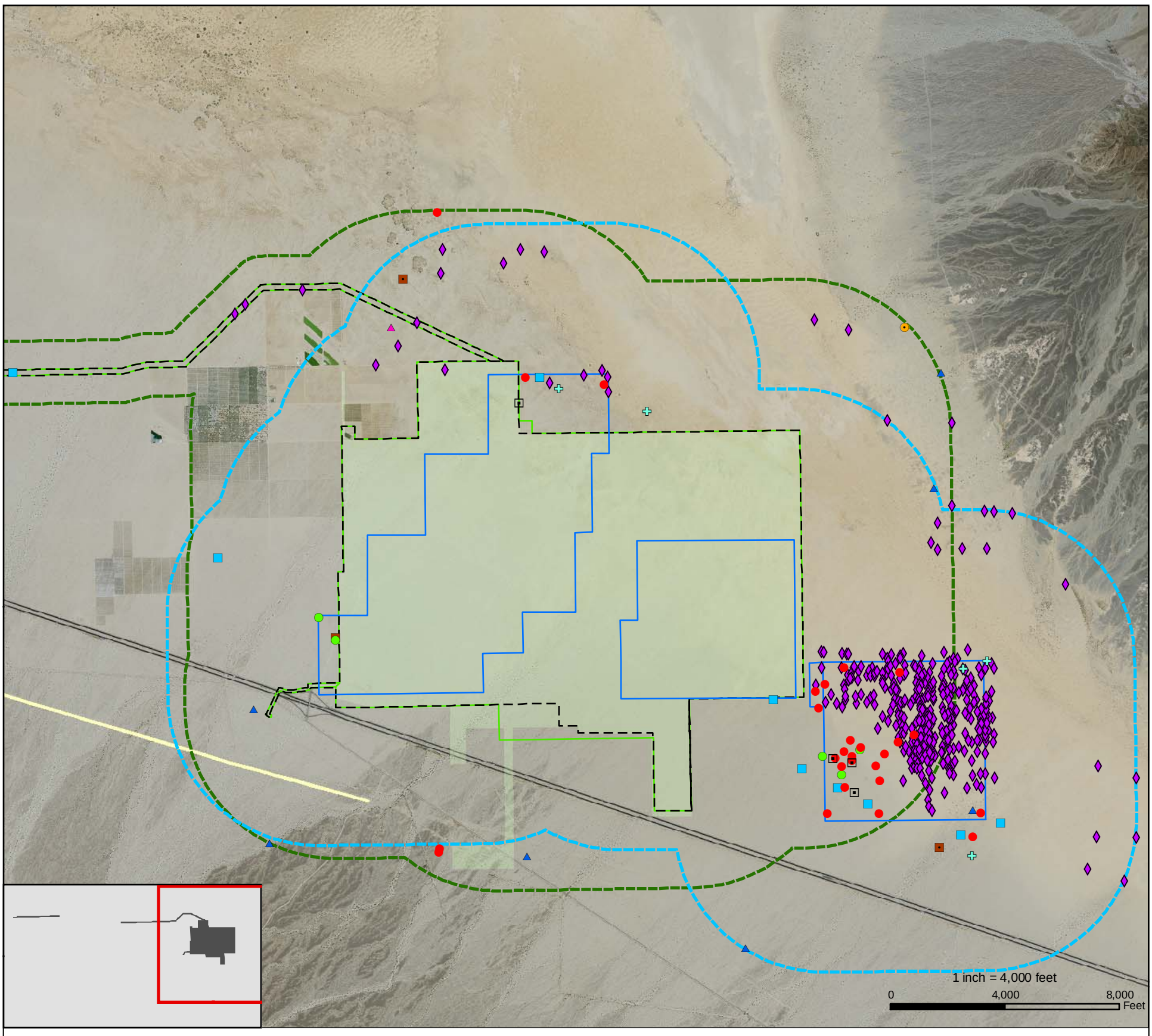
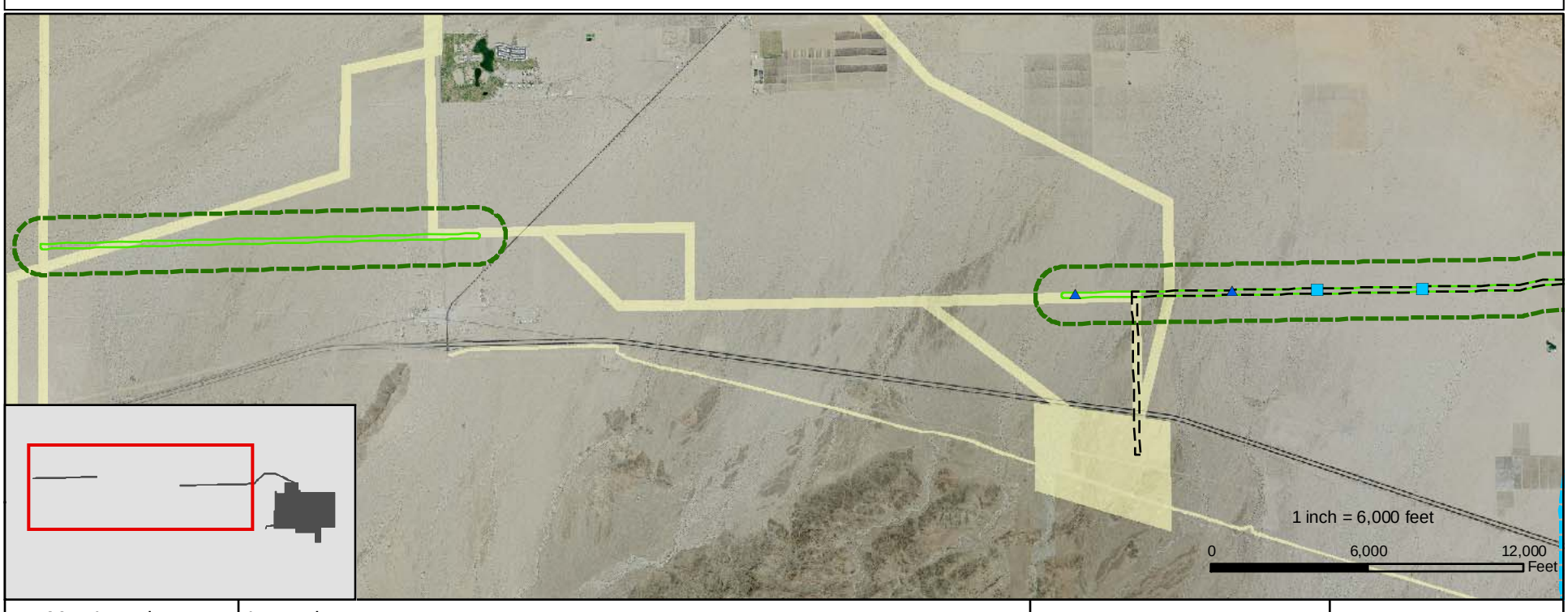


Sensitive Wildlife Observations

- American Badger Den
- Mojave fringe-toed lizard
- American Badger Predation Burrow
- Ferruginous Hawk
- Kit Fox Burrow
- Kit Fox Complex
- Loggerhead Shrike
- Nest Cavity - Unidentified Woodpecker Species
- Northern Harrier
- Swainson's Hawk



Map Location

Legend

- Proposed Project Study Area
- Project Disturbance Area
- Project Disturbance BRSA
- Reconfigured Alternative Disturbance Area
- Reconfigured Alternative BRSA
- Study Area (Surveyed in 2009)
- First Solar Study Area

Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

Palen Solar Power Project

Figure 4
Incidental Wildlife Observations
Spring 2010 Surveys

AECOM

Date: May 2010

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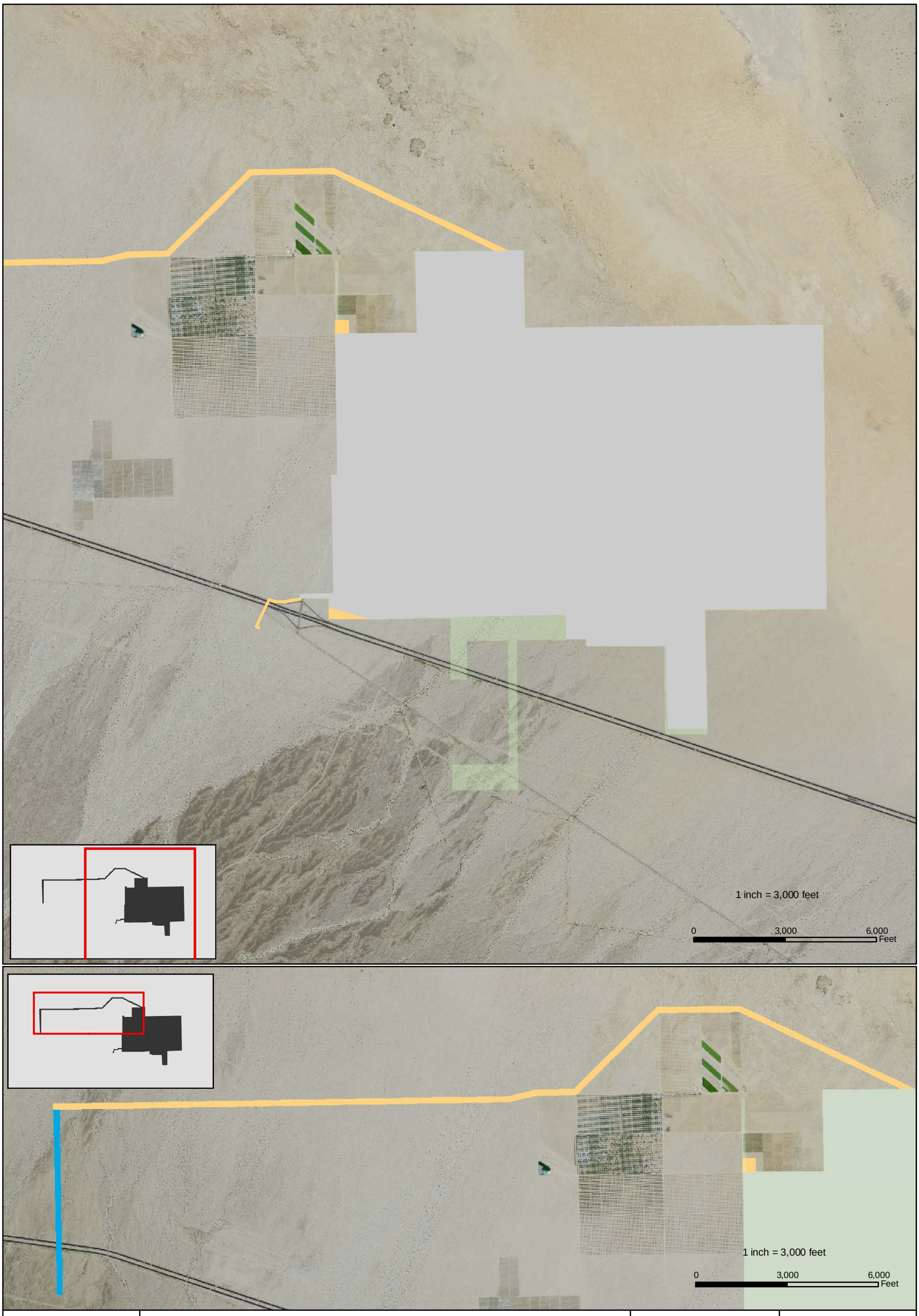

Map Location

Legend

- Disturbance Area (3,870.8 acres)
- Additional Disturbance Areas 2010 (152.3 acres)
- First Solar Overlap Area (28 acres)
- Disturbance Area 2009

Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

Palen Solar Power Project
Figure 5
Preliminary Disturbance Areas
Spring 2010 Surveys

AECOM

Date: May 2010

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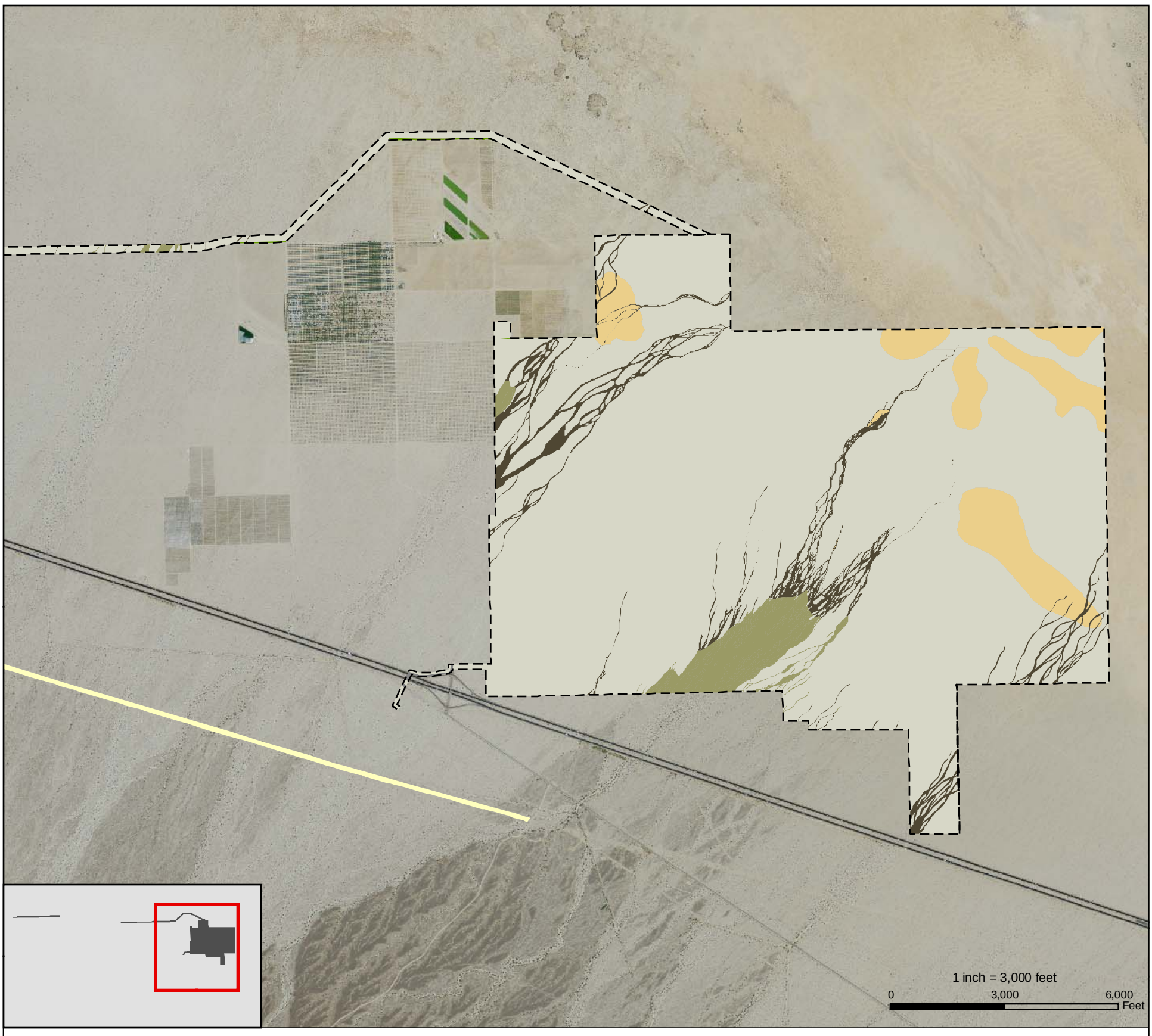

Vegetation Communities

Riparian

- Desert dry wash woodland (147.5 acres)
- Unvegetated ephemeral dry wash (164.0 acres)

Upland

- Sonoran creosote bush scrub (3421.9 acres)
- Stabilized and partially stabilized desert dunes (284.7 acres)

Other

- Agriculture (3.0 acres)
- Developed (1.9 acres)

Map Location

Legend

- Project Disturbance Area
- First Solar Study Area

Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

Palen Solar Power Project
Figure 6
Preliminary Impacts to Cover Types
May 2010

N W E S

AECOM

Date: May 2010

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STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:
APPLICATION FOR CERTIFICATION
for the *PALEN SOLAR POWER PROJECT*

Docket No. 09-AFC-7
PROOF OF SERVICE
(Revised 5/14/2010)

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DECLARATION OF SERVICE

I, Carl Lindner, declare that on, June 15, 2010, I served and filed copies of the attached Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for Biological Resources**,** dated May 27, 2010.

The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: **[http://www.energy.ca.gov/sitingcases/solar_millennium_palen]**.

The document has been sent to the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(*Check all that Apply*)

For service to all other parties:

__X_ sent electronically to all email addresses on the Proof of Service list;

__ by personal delivery or by overnight delivery service or depositing in the United States mail at Camarillo, California with postage or fees thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

For filing with the Energy Commission:

__X_ sending an original paper copy and one electronic copy, mailed respectively, to the address below (preferred method);

OR

_____ depositing in the mail an original and 12 paper copies, along with 13 CDs, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 09-AFC-7
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

Carl E. Lindner