APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): July 6, 2010.

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: **Sacramento District,** Tonapah Solar Energy, LLC, Crescent Dunes Solar Energy Project, SPK-2009-01526.
Name of water being evaluated on this JD form: Channels 1, 2, 3, 4, and 5

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: NV County: Nye City: 12 miles northeast of Tonopah
Center coordinates of site (lat/long in degree decimal format): Lat: 38.2281 **N**, Long: -117.3536 **W**
Universal Transverse Mercator: 11.
Name of nearest waterbody: Peavine Creek.
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: _____.
Name of watershed or Hydrologic Unit Code (HUC): 1606003.
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different JD form. List other JDs: _____

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):
☒ Office (Desk) Determination. Date: July 6, 2010.
☐ Field Determination. Date(s): _____.

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "*navigable waters of the U.S.*" within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [*Required*]
☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: _____.

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are no** "*waters of the U.S.*" within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [*Required*]

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
      ☐ TNWs, including territorial seas
      ☐ Wetlands adjacent to TNWs
      ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
      ☐ Non-RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
      ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
      ☐ Impoundments of jurisdictional waters
      ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
      Non-wetland waters: _____ linear feet _____ width (ft) and/or _____ acres.
      Wetlands: _____ acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List** and **Pick List**
      Elevation of established OHWM (if known): _____.

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
   Explain: **The waters identified at Channels 1, 2, 3, 4, and 5 are intrastate isolated waters, located in the Southern Big Smoky Valley, an internally drained basin with an unnamed terminal playa at its lowest point. Channel flows**

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

terminate and infiltrate within the project area or flow to Peavine Creek which loses definition 15.1 miles south-southwest of the Gravel Pit study area. The last observation of jurisdictional features (scour, bed/bank, ordinary high water mark, etc) on Peavine Creek is 5.7 miles northeast of the basin's unnamed terminal playa.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs: NOT APPLICABLE

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS**: NOT APPLICABLE**

C. SIGNIFICANT NEXUS DETERMINATION: NOT APPLICABLE

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE: NOT APPLICABLE

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[4]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: _____.
☐ Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: _____ linear feet _____ width (ft).
☐ Other non-wetland waters: ____ acres.
Identify type(s) of waters: _____.
☐ Wetlands: ____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☒ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:
☐ Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☒ Non-wetland waters (i.e., rivers, streams): **16,803** linear feet **1 to 4** width (ft).
☐ Lakes/ponds: _____ acres.
☐ Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
☐ Wetlands: _____ acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): _____ linear feet _____ width (ft).
☐ Lakes/ponds: _____ acres.
☐ Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
☐ Wetlands: _____ acres.

SECTION IV: DATA SOURCES.

[4] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Figures 1 through 6, Crescent Dunes Solar Energy Project, Waters of the U.S. Jurisdictional Determination, prepared for Tonopah Solar Energy, LLC, by JBR Environmental Consultants, Inc., May 18, 2010.

☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
- ☒ Office concurs with data sheets/delineation report.
- ☐ Office does not concur with data sheets/delineation report.

☐ Data sheets prepared by the Corps: _____.

☐ Corps navigable waters' study: _____.

☐ U.S. Geological Survey Hydrologic Atlas: _____.
- ☐ USGS NHD data.
- ☐ USGS 8 and 12 digit HUC maps.

☐ U.S. Geological Survey map(s). Cite scale & quad name: _____

☐ USDA Natural Resources Conservation Service Soil Survey. Citation: _____.

☐ National wetlands inventory map(s). Cite name: _____.

☐ State/Local wetland inventory map(s): _____

☐ FEMA/FIRM maps: _____.

☐ 100-year Floodplain Elevation is: _____ (National Geodectic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): Figure 2, Crescent Dunes Solar Energy Project, Waters of the U.S. Jurisdictional Determination, prepared for Tonopah Solar Energy, LLC, by JBR Environmental Consultants, Inc., May 18, 2010
or ☒ Other (Name & Date): Photo Points 1 through 19, Crescent Dunes Solar Energy Project, Waters of the U.S. Jurisdictional Determination, prepared for Tonopah Solar Energy, LLC, by JBR Environmental Consultants, Inc., May 18, 2010 .

☐ Previous determination(s). File no. and date of response letter: _____.

☐ Applicable/supporting case law: _____.

☐ Applicable/supporting scientific literature: _____.

☐ Other information (please specify): _____.

B. ADDITIONAL COMMENTS TO SUPPORT JD: On May 18, 2010, a delineation was prepared for the project area. A site visit was not conducted to verify the delineation.

The project is in the Southern Big Smoky Valley, a 2,030 square mile internally drained basin, with an unnamed playa located between Lone Mountain and the Mounte Cristo Range at its lowest point. The project area is broken into three study areas: South Study Area (3,099 acres), North Study Area (3,620 acres), and Gravel Pit Area (327 acres). No wetlands were found in the study areas. The main USGS mapped ephemeral wash, Peavine Creek, runs through the Gravel Pit Area, north of the South and North Study Areas.

Two ephemeral washes (Channels 1 and 2) were found in the South Study area and three ephemeral washes (Channels 3, 4, and 5) were found in the Gravel Pit area. No washes with jurisdictional features (scour, bed/bank, ordinary high water mark, etc) were found in the North Study area. The washes were described as follows:

Channel	Location	Length	Width	Acres	Photo Point
1	South Study Area	6045 ft	1.7 ft	0.24	1 and 2
2	South Study Area - Transmission Corridor	1320 ft	1.0 ft	0.03	14
3	Gravel Pit Area	4350 ft	4.0 ft	0.40	15
4	Gravel Pit Area	4285 ft	2.5 ft	0.25	16 and 17
5	Gravel Pit Area	803 ft	2.5 ft	0.05	18 and 19

Channel 1 ends inside the South Study area and does not continue beyond the project boundary. Channel 2 extends beyond the project boundary but ends 4.15 stream miles from the South Study Area transmission line corridor, prior to reaching Peavine Creek (Channel 3). The Gravel Pit Area contains three channels with jurisdictional features, but only Channel 3 flows beyond the project area, 15.1 miles, where it loses its jurisdictional features (scour, bed/bank, ordinary high water mark, etc) in a flat, dry valley, 5.7 miles northeast of the basin's unnamed terminal playa.

The annual average precipitation in Tonopah, NV is 4.95 inches. The total average snowfall is 14.4 inches. Rainfall is fairly evenly distributed throughout the year. The wettest month of the year is March with an average rainfall of 0.69 inches. Channels 1, 2, 3, 4, and 5 have limited or intermittent surface water flow during snow runoff or significant rainfall events and do not support recreation, fishery, commercial, or industrial uses. No interstate or foreign commerce connections were found that would be adversely affected as a result of degradation or destruction of these waters.

Therefore, the Corps has determined that these waters are non-jurisdictional because they are intrastate, isolated, non-navigable waters with no interstate or foreign commerce connection.

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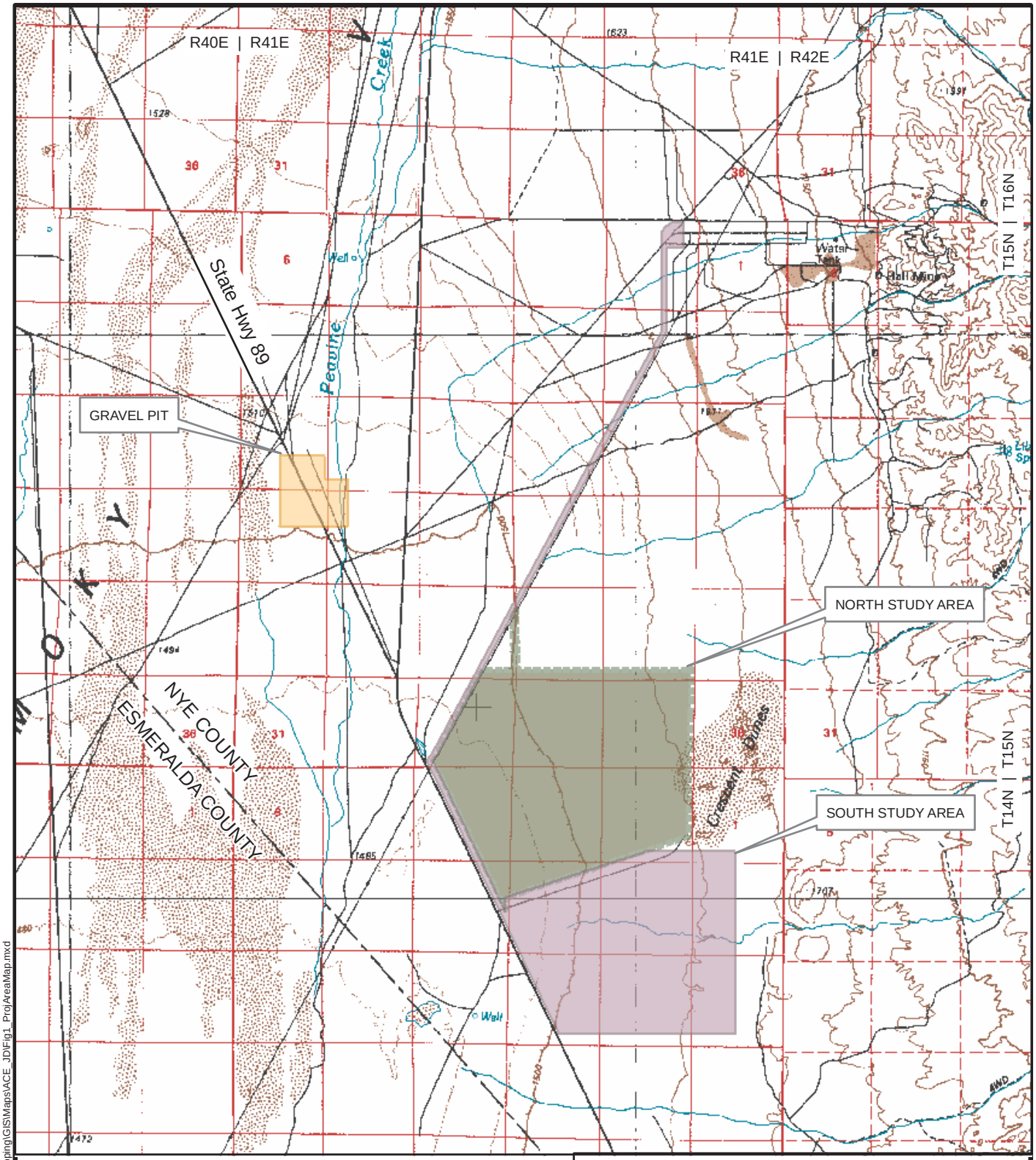

TONOPAH SOLAR ENERGY JURISDICTIONAL DETERMINATION

FIGURE 1
PROJECT MAP

DRAWN BY	DATE DRAWN
MD	MAY 4, 2010

SCALE: 1:96,000

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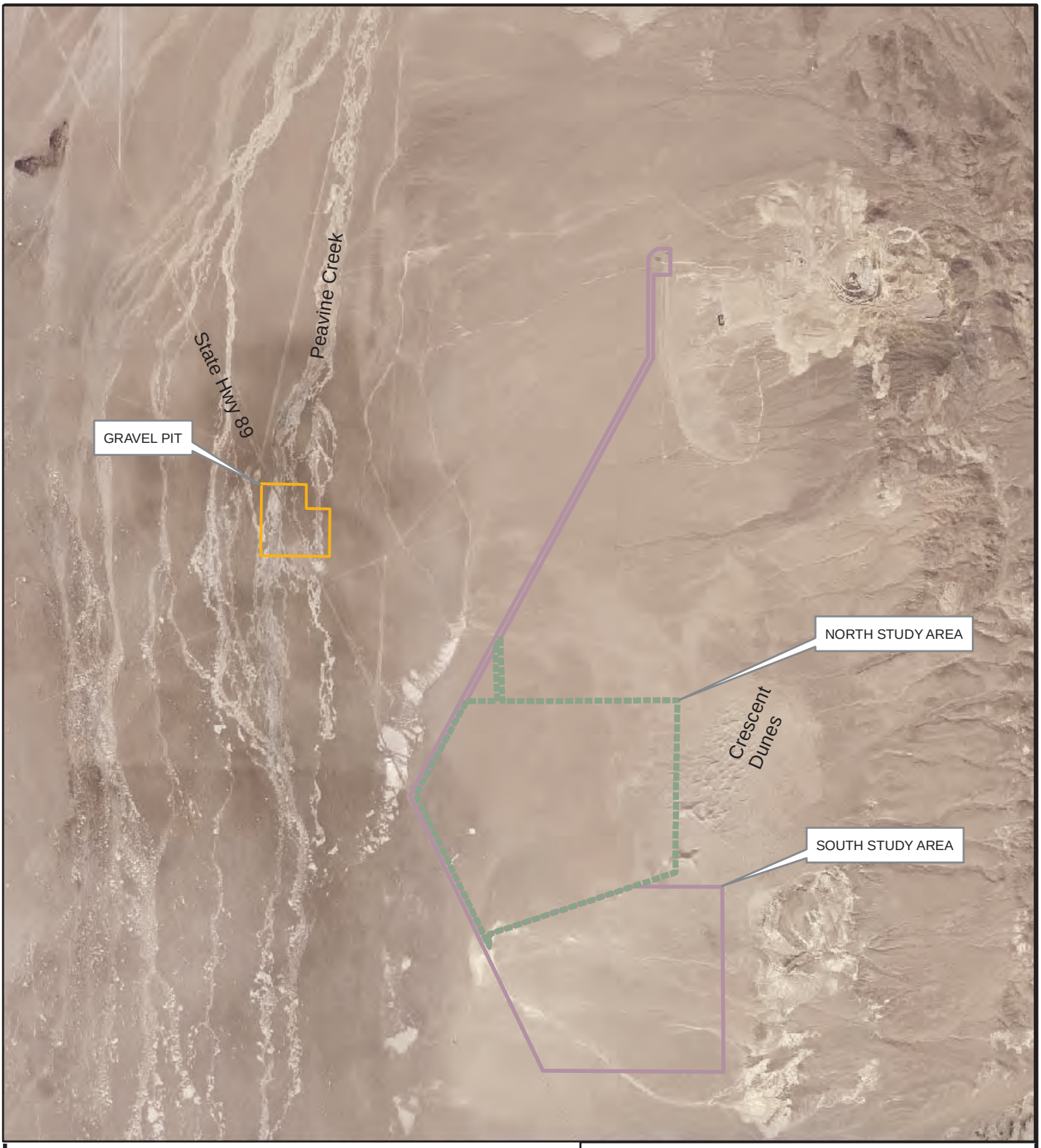

Base Image: NAIP Aerial, 2006

Legend

- North Study Area
- South Study Area
- Gravel Pit

N

8,000 4,000 0 8,000 16,000 Feet

1 inch = 8,000 feet

TONOPAH SOLAR ENERGY JURISDICTIONAL DETERMINATION

FIGURE 2
PROJECT AERIAL

DRAWN BY	DATE DRAWN
MD	MAY 4, 2010

SCALE 1:96,000

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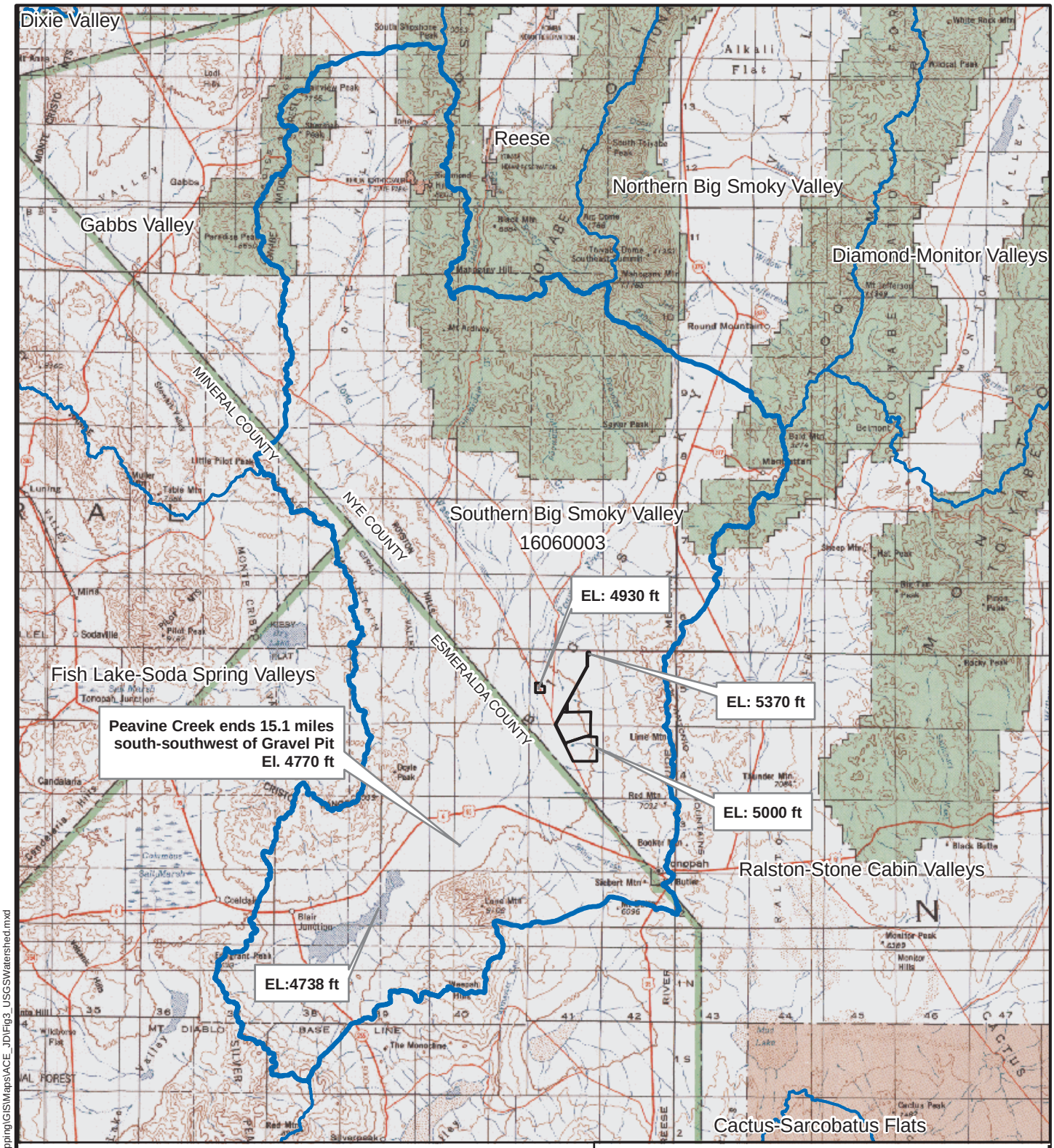

Base Image: USGS 500k Topographic DRG

Legend

- Project Area
- USGS Hydrologic Unit

N

60,000 30,000 0 60,000 120,000 Feet

1 inch = 60,000 feet

TONOPAH SOLAR ENERGY JURISDICTIONAL DETERMINATION

FIGURE 3
USGS WATERSHED BASIN

DRAWN BY	DATE DRAWN
MD	MAY 4, 2010

SCALE 1:720,000

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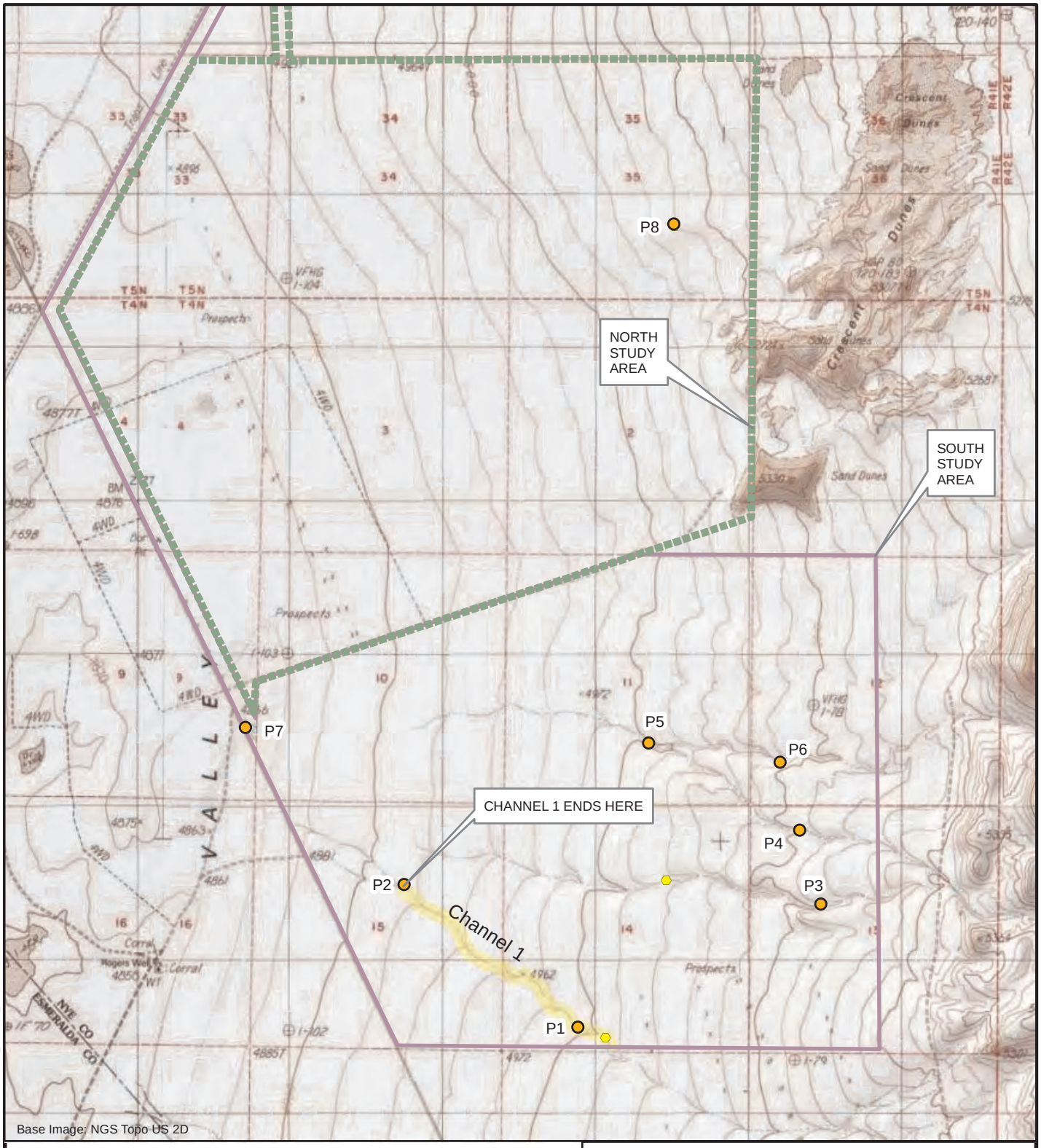

Legend

- Sample Point
- Photo Point
- Isolated Channel with OHWM
- South Study Area
- North Study Area

Channel	Length (ft)	Width (ft)	Area (ac)
1	6045	1.7	0.24

N

3,000 1,500 0 3,000 6,000 Feet

1 inch = 3,000 feet

TONOPAH SOLAR ENERGY JURISDICTIONAL DETERMINATION

FIGURE 4
CHANNELS WITHIN NORTH & SOUTH STUDY AREA

DRAWN BY	DATE DRAWN
MD	MAY 4, 2010

SCALE 1:36,000

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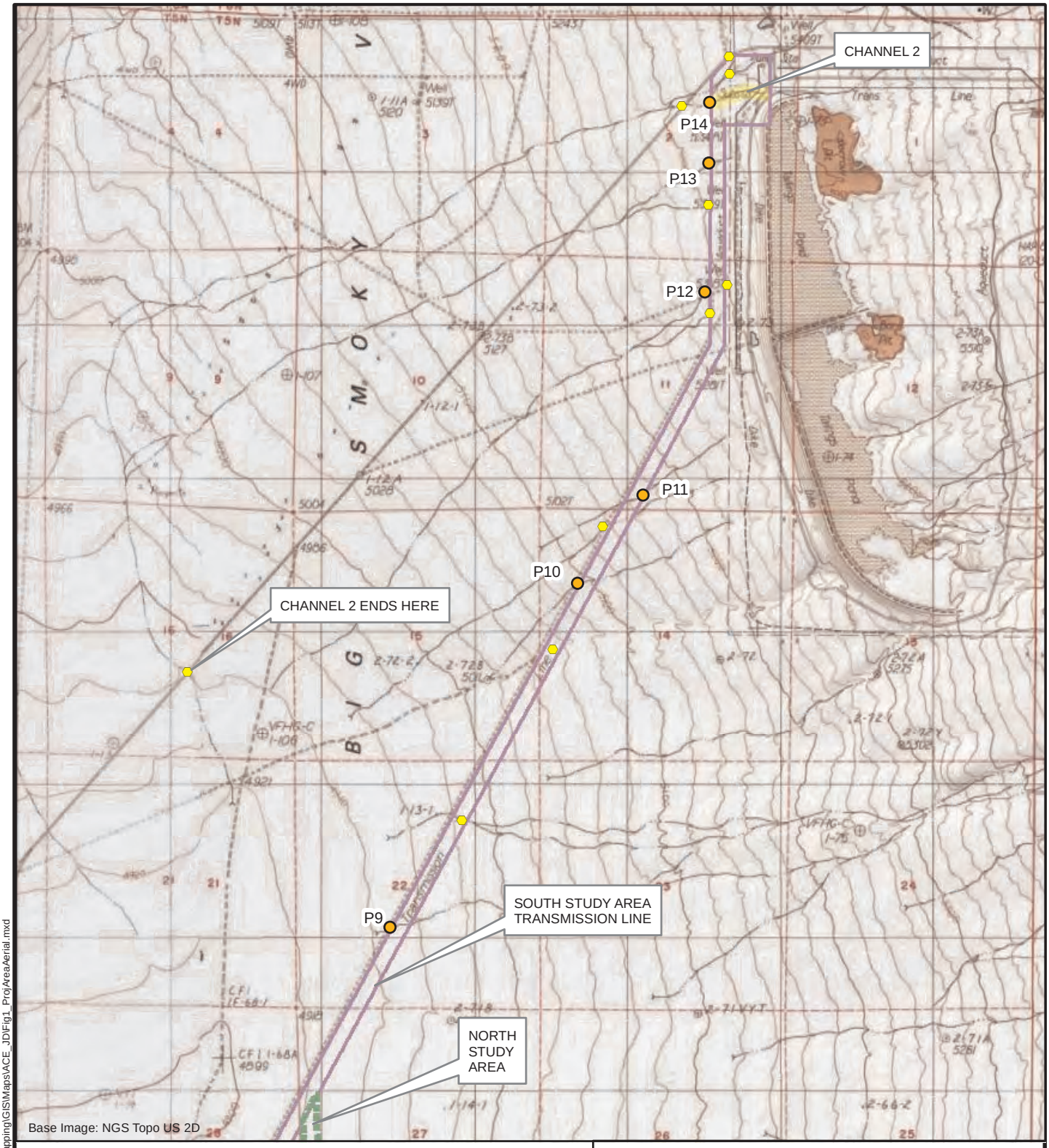

Legend

- Sample Point
- Photo Point
- Isolated Channel with OHWM
- South Study Area
- North Study Area

Channel	Length (ft)	Width (ft)	Area (ac)
2	1320	1.0	0.03

N

3,000 1,500 0 3,000 6,000 Feet

1 inch = 3,000 feet

TONOPAH SOLAR ENERGY JURISDICTIONAL DETERMINATION

FIGURE 5
CHANNELS WITHIN SOUTH STUDY AREA

DRAWN BY	DATE DRAWN
MD	MAY 4, 2010

SCALE 1:36,000

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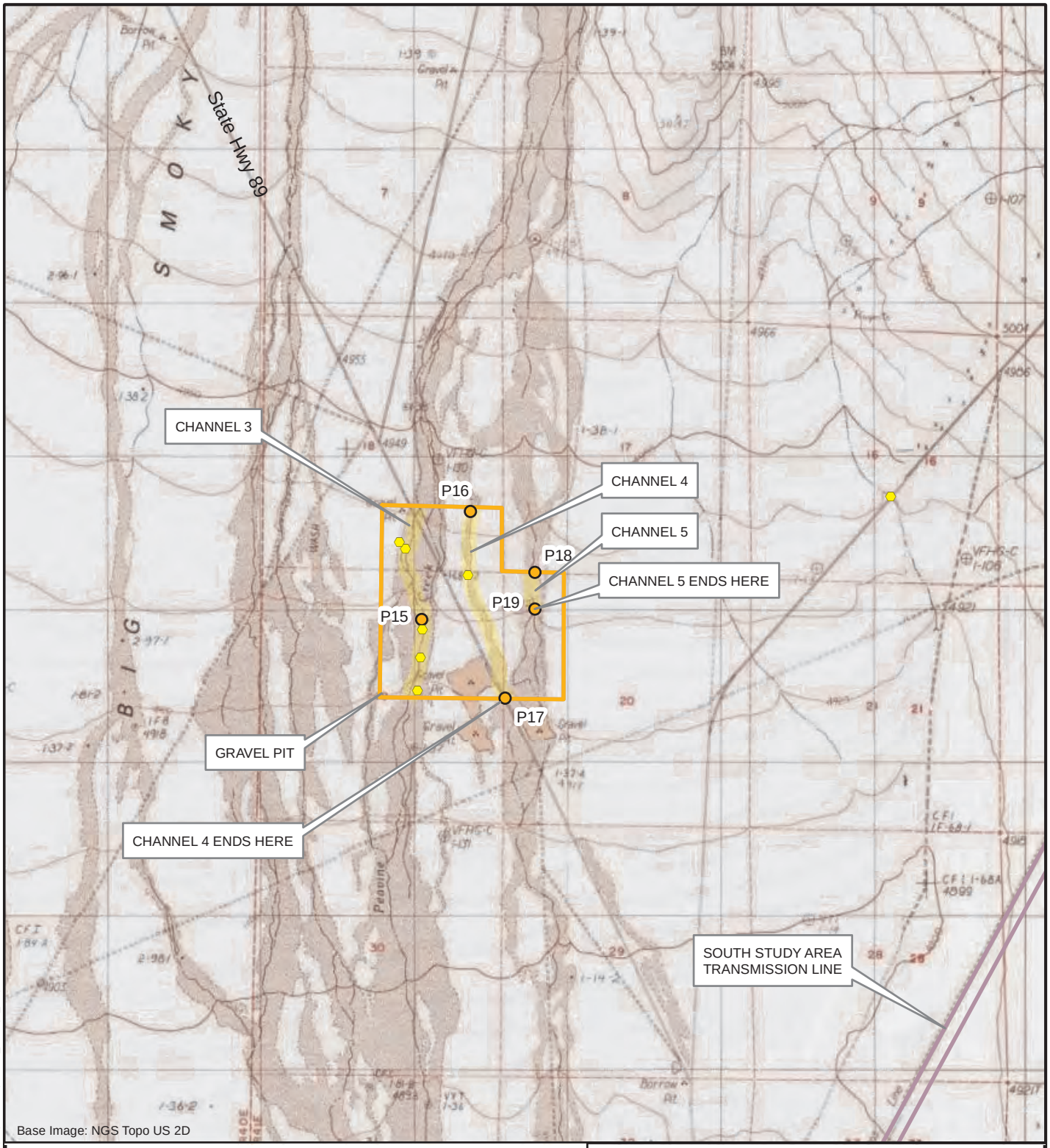

Legend

- Sample Point
- Photo Point
- Gravel Pit
- Isolated Channel with OHWM
- South Study Area

Channel	Length (ft)	Width (ft)	Area (ac)
3	4350	4.0	0.40
4	4285	2.5	0.25
5	803	2.5	0.05

N

3,000 1,500 0 3,000 6,000 Feet

1 inch = 3000 feet

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SolarReserve

TONOPAH SOLAR ENERGY JURISDICTIONAL DETERMINATION

FIGURE 6
CHANNELS WITHIN THE GRAVEL PIT

JBR

DRAWN BY	DATE DRAWN
MD	MAY 4, 2010

SCALE 1:36,000

Photo Point 1
Channel 1 at South Study Area, downstream view

Photo Point 2
Channel 1 at South Study Area, downstream view

Photo Point 3
Channel feature with no OHWM, downstream view

Photo Point 4
Channel feature with no OHWM, upstream view

Photo Point 5
Channel feature (left of the two-track road) with no OHWM, downstream view. Approximately 3,500 feet downstream of Photo Point 4

Photo Point 6
Channel feature, right of two track road, with no OHWM, upstream view

Photo Point 7
Culverts across Highway 89, downstream view, no drainages or channels lead to the culverts

Photo Point 8
Channel feature with no OHWM, downstream view

Photo Point 9
Channel feature with no OHWM, upstream view

Photo Point 10
Channel feature with no OHWM, downstream view

Photo Point 11
Channel feature with no OHWM, downstream view

Photo Point 12
Channel feature with no OHWM, upstream view

Photo Point 13
Channel feature with no OHWM, upstream view

Photo Point 14
Channel 2 at South Study Area transmission line corridor, upstream view

Photo Point 15
Channel 3 at Gravel Pit Area, upstream view

Photo Point 16
Channel 4 at Gravel Pit Area, downstream view

Photo Point 17
Terminus of Channel 4 at Gravel Pit Area, downstream view

Photo Point 18
Channel 5 at Gravel Pit Area, downstream view

Photo Point 19
Terminus of Channel 5 at Gravel Pit Area, downstream view