

Wetland and Waters of the United States Delineation Report

Diamond Tail Solar
Northwest of Golden, New Mexico

December 30, 2022

Terracon Project No. 66227139



PREPARED FOR:
INVESTMENTS SP 4
Houston, Texas



Explore with us



1901 Sharp Point Dr, Ste C
Fort Collins, CO 80525-4429

P (970) 484-0359

F (970) 484-0454

Terracon.com

December 30, 2022

Cynthia Schuchner
PCR INVESTMENTS SP 4
1334 Brittmoore Road, Suite 2407
Houston, Texas 77043

E-mail: cschuchne@pcr.energy

Re: Wetland and Waters of the United States Delineation Report
Diamond Tail Solar Site
Northwest of Golden, New Mexico
Terracon Project No. 66227139

Dear Ms. Schuchner:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Natural Resources Assessment Report for the Diamond Tail Solar site. This analysis was performed in accordance with Terracon Proposal No. P66227139 dated August 1, 2022.

We appreciate the opportunity to work on this project. If you have questions or need additional information, please give Trevor Hartwig a call at 303-817-2989.

Sincerely,
TERRACON Consultants, Inc.

A handwritten signature in black ink that reads "Trevor Hartwig".

Trevor Hartwig
Staff Scientist

A handwritten signature in black ink that reads "Jennifer Peters".

Jennifer Peters
Environmental Program Manager

Explore with us

Table of Contents

1.0	INTRODUCTION	1
2.0	PRELIMINARY DATA GATHERING AND ANALYSIS	1
2.1	Topographic Map	1
2.2	National Wetlands Inventory Map	1
2.3	Soil Survey	2
2.4	Aerial Imagery	2
3.0	FIELD TECHNIQUES	2
3.1	Wetland Field Methods	3
3.1.1	Vegetative Community	3
3.1.2	Hydric Soils	4
3.1.3	Wetland Hydrology	4
3.1.4	Classification of Wetlands	4
3.2	Stream Observations	4
4.0	FIELD OBSERVATIONS RESULTS	5
4.1	Plant Communities Found.....	5
4.2	Wetlands	6
4.3	Streams	6
5.0	CONCLUSION AND RECOMMENDATIONS	6
6.0	REFERENCES	8

Appendix A. Figures 1-6

Appendix B. Photographic Log

Appendix C. Wetland Delineation Forms

Appendix D. Summary of Water Features

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) was retained by PCR INVESTMENTS SP 4 to conduct a wetland and waters of the United States (WOTUS) delineation for an approximately 5,400-acre site located approximately 2.25-miles northwest of the Town of Golden in Sandoval and Santa Fe Counties, New Mexico. The site consists of juniper grasslands and arid west desert habitats (Appendix A, Figure 2).

The purpose of performing this wetland and WOTUS delineation was to characterize the existing site conditions, observe the project area for suspected waterbodies including wetlands, streams, and open water features, and provide an opinion on the jurisdiction of the resources delineated.

The observations and opinions contained in this report are based on current guidance, regulations, data, and site conditions. Guidance, regulations, data furnished by others, and site conditions are dynamic and subject to changes beyond the control of Terracon. A future evaluation may yield differing results.

It is important to note that the findings presented in this report represent Terracon's professional opinion, based upon field observations made during the site visit and our experience with current regulatory guidance under the Clean Water Act (EPA 1972). To verify the delineation boundaries and jurisdictional classifications presented in this report, the USACE would need to review this report and determine jurisdiction of the features and identify if a permit is required for proposed impacts.

2.0 PRELIMINARY DATA GATHERING AND ANALYSIS

Prior to performing the delineation, maps and aerial photographs were reviewed to assist with identifying wetland areas, at the project site. Each source of data is described in detail below.

2.1 Topographic Map

United States Geological Survey (USGS) Golden quadrangle topographic map was reviewed to assess topographical features of the Project Site. The Site has an elevational range of approximately 6,200 to 6,360 feet above sea level. The proposed solar panel pads are located at the top of a mesa whereas the transmission line corridor traverses over several rolling hills before meeting up with the substation to the northwest (Appendix A, Figure 3).

2.2 National Wetlands Inventory Map

The U.S. Fish and Wildlife Service, National Wetland Inventory (NWI) Map of the project site was reviewed to identify potential wetland areas. The map depicts probable wetland areas based on

stereoscopic analysis of high-altitude aerial photographs and analysis of infrared bands from remotely sensed imagery (Appendix A, Figure 4). A total of 13 aquatic features that were found within the project area according to the NWI map. A list of the types of features and their quantities can be found below (Table 1).

Table 1. National Wetland Inventory Feature Types

Feature	Acronym	Number of Features in Project Area
R4SB3J	Riverine, Intermittent, Streambed, Cobble-Gravel, Intermittently Flooded	8
R4SB3A	Riverine, Intermittent, Streambed, Cobble-Gravel, Temporarily Flooded	2
R4SBC	Riverine, Intermittent, Streambed, Seasonally Flooded	2
R4SBJ	Riverine, Intermittent, Streambed, Intermittently Flooded	1

2.3 Soil Survey

Data from the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) soil survey for Sandoval and Santa Fe Counties, New Mexico was reviewed to identify the soil types and groups present within the project area. Soil groups help identify what soils have a higher potential runoff and are split into four groups: A, B, C, and D (Appendix A, Figure 5). Group A has a lower runoff potential and therefore are more hydric soils and Group D has highest runoff potential indicating a dryer soil. A total of 10 soil types were identified within the project boundary; no hydric soils were identified.

2.4 Aerial Imagery

A recent aerial image of the project site was reviewed to determine land use and evaluate vegetative cover. Based on aerial photography, the project site currently consists of undeveloped juniper forests with southwest desert landscape near Arroyo Una de Gato (identified as IT 1 and 2) and Arroyo Coyote (identified as IT 3 and 4), both arroyos traverse portions of the transmission line corridor (Appendix A, Figure 2).

3.0 FIELD TECHNIQUES

To characterize existing site conditions and determine presence of wetlands and other potentially jurisdictional waters, three Terracon environmental scientists conducted a reconnaissance and wetland and WOTUS delineation of the project site from October 11, 2022, to October 13, 2022.

Characteristics of jurisdictional waters and wetland areas were assessed utilizing the criteria detailed in sections 4.1 - 4.4 of this report.

The evaluation methods followed the routine on-site determination method referenced in the 1987 USACE Manual and 2010 Arid West Region Regional Supplement (USACE 2010), and under the guidance contained in the 2015 Navigable Waters Protection Rule (EPA 2021) that went back into effect on August 30, 2021. Data was collected from four sample points to characterize the representative vegetative communities, soils, and hydrology within the project area (Appendix A, Figure 6)

3.1 Wetland Field Methods

3.1.1 Vegetative Community

Potential wetland areas were visually observed to identify plant species and estimate percent cover for four strata of plant communities. Herbs were generally observed within a five-foot radius, shrubs/saplings within a fifteen-foot radius, and trees and vines within a thirty-foot radius at each sample point.

For each plant species observed, a wetland indicator status was determined based on the NRCS Plants Database (USDS 2022). Indicator categories for vegetation are presented below:

- **Obligate Wetland (OBL):** Occur almost always (estimated probability greater than 99%) under natural conditions in wetlands.
- **Facultative Wetland (FACW):** Usually occur in wetlands (estimated probability 67% - 99%) but occasionally found in non-wetlands.
- **Facultative (FAC):** Equally likely to occur in wetlands or non-wetlands (estimated probability 34% - 66%).
- **Facultative Upland (FACU):** Usually occur in non-wetlands (estimated probability 67% - 99%) but occasionally found in wetlands.
- **Obligate Upland (UPL):** Rarely occur in wetlands but occur almost always (estimated probability greater than 99%) under natural conditions in non-wetlands.

Species dominance was also evaluated. Dominant species were identified as those accounting for more than 20 percent coverage of the stratum. The number of dominant species with an indicator status of OBL, FACW, and/or FAC was compared to the total number of dominant species across all strata.

Typically, when more than 50 percent of dominant species have an indicator status of OBL, FACW, and/or FAC, hydrophytic vegetation is present. If the percentage of dominant species with

an indicator status of OBL, FACW, and/or FAC was less than 50 percent, prevalence index and morphological adaptations were evaluated to confirm if hydrophytic vegetation was present or absent.

3.1.2 Hydric Soils

Subsurface soil samples were collected using a soil probe. Samples were collected to a depth of approximately 16 inches below ground surface and were visually compared to Munsell Soil Color Charts (Munsell, 2009), which aided in the evaluation of hydric soil characteristics. The soil samples were further examined for hydric soil indicators including, but not limited to, histosol, thick dark surface, sandy gleyed matrix, sandy redox, loamy gleyed matrix, redox dark surface, and/or redox depressions. If these or other hydric soil indicators were observed in the subsurface soil sample, the observation location was considered to have hydric soil.

3.1.3 Wetland Hydrology

Visual indicators of wetland hydrology were evaluated. Examples of primary wetland hydrology indicators include, but are not limited to, surface water, high water table, soil saturation, water marks, sediment deposits, drift deposits, iron deposits, inundation visible on aerial imagery, sparsely vegetated concave surface, and water-stained leaves. If one or more primary or two secondary indicators were observed, the observation location was considered to have wetland hydrology.

3.1.4 Classification of Wetlands

A wetland determination was made at each water feature. To be classified as a wetland, a feature must have the following three wetland indicators: hydrophytic vegetation, hydric soils, and hydrology. If one or more indicators was not identified, the area was not considered a wetland. If all three wetland indicators were identified, the area was classified as wetland.

Additional observations were made throughout the wetland area to define the wetland/non-wetland boundary. Vegetation, soil, and hydrology data from at least one wetland and one upland location were recorded on a USACE Wetland Determination Form.

3.2 Stream Observations

If a potential jurisdictional waterbody was identified, observations of the characteristics listed below were also recorded.

- **Flow Characteristics:**

- Perennial: Contains water at all times except during extreme drought.
 - Intermittent: Carries water a considerable portion of the time but ceases to flow occasionally or seasonally.
 - Ephemeral: Carries water only during and immediately after periods of rainfall or snowmelt.
- **Ordinary High-Water Mark (OHWM)** - The limit line on the shore established by the fluctuation of the water surface. It is shown by such things as a clear line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, the presence of litter and debris or other features influenced by the surrounding area.
- **Bank Shape Descriptions:**
- Undercut: Banks that overhang the stream channel.
 - Steep: Bank slope of approximately greater than 30 degrees.
 - Gradual: Bank slope of approximately 30 degrees or less.
- **Aquatic Habitat Descriptions:**
- Pool: Deeper portion of a stream where water flows slower than in neighboring, shallower portions, smooth surface, and finer substrate.
 - Riffle: Shallow area in a stream where water flows swiftly over gravel and rock or other coarse substrate resulting in a rough flow and a turbulent surface.
 - Run: Section of a stream with a low or high velocity and with little or no turbulence on the surface of the water.

4.0 FIELD OBSERVATIONS RESULTS

Descriptions of the observed field conditions are listed in the subsections below. Representative photographs that provide an indication of the physical characteristics observed during the site visit can be found in Appendix B. Wetland determination data forms for each point are provided in Appendix C.

4.1 Plant Communities Found

The project site had two distinct plant communities, juniper grassland and arid west desert. The largest plant community that occupied the proposed solar array area was the juniper grassland, which was dominated by a mix of grasses including blue grama (*Bouteloua gracilis*) and side oats grama (*Bouteloua curtipendula*) along with woody shrubs including one-seed juniper (*Juniperus monosperma*) and cane cholla (*Cylindropuntia imbricata*). The arid west desert plant communities were dominated mostly by a similar variety of woody vegetation as the juniper grasslands but

there was significantly more bare ground and cactus species such as club cholla (*Grusonia clavate*) and plains prickly pear (*Opuntia polyacantha*).

4.2 Wetlands

No wetlands were observed within the site boundary and transmission line corridor. Two of the four sample points were found to have upland plants like sideoats grama (*Bouteloua curtipendula*) and oneseed juniper (*Juniperus monosperma*) but none of the sample points indicators for hydric soils. The sample points collected did have hydrology indicators that consisted of the primary indicators of drift and sediment deposit but there were no hydric soils or hydrophytic vegetation present. Photographs of the site are located in Appendix B and datasheets are located in Appendix C.

4.3 Streams

A total of ±14.64 acres of ephemeral and intermittent tributaries were mapped within the project area (Appendix D). Two arroyo intermittent tributary are located within the site. The Arroyo Una de Gato (IT-1 and IT-2) traverses the southern portion of the transmission line corridor while the other intermittent tributary, Arroyo Coyote (IT-3 and IT-4) traverses the northern portion of the transmission line corridor; both total approximately 8,381.79 linear feet. A total of 42 ephemeral tributaries (ET) were mapped within the project area and transmission line corridor. All of the ephemeral tributaries mapped inside the transmission line corridor had ordinary high water marks (OHWM) with established bed and bank along with all the ephemeral tributaries inside the proposed solar array area except for ET-4, 5, and 6. During the field visit all of these ephemeral tributaries had evidence of recent hydrology in the form of sediment and drift deposits due to a large scale rain event the week both. These ephemeral tributaries within the transmission line corridor and on the west side of the project area flow into the two intermittent arroyos. In total, approximately 46,299.9 linear feet of ephemeral tributaries were documented within the project area and a table with the information for these features can be found in Appendix D. Based on its connection to the Arroyo Una de Gato and Arroyo Coyote, it is Terracon's opinion that the intermittent arroyos and ephemeral tributaries with connection to the intermittent arroyos, excluding tributaries ET-4, 5, and 6, will likely to be considered jurisdictional by USACE.

5.0 CONCLUSION AND RECOMMENDATIONS

According to the Federal Register (33CFR §328.3(a)), WOTUS may include intrastate rivers and streams, including impoundments and other waters. Since the 2006 Supreme Court decision (*Rapanos v. U.S.*, 547 S. Ct. 715), the USACE and EPA have continued to assert jurisdiction over traditionally navigable waters, non-navigable tributaries of traditionally navigable waters (TNWs)

where the tributaries are relatively permanent waters (RPWs) (i.e., streams with perennial or intermittent tributaries), impoundments of TNWs and RPWs, and wetlands directly abutting and adjacent to such tributaries.

According to our preliminary site visit observations, two intermittent tributaries with two crossings totaling $\pm 8,381.79$ linear feet (± 12.67 acres) are present within the project area (Appendix D). It is Terracon's opinion that the intermittent tributaries Arroyo Una de Gato and Arroyo Coyote, are likely to be considered jurisdictional. The segments of intermittent tributaries Arroyo Una de Gato and Arroyo Coyote would be considered relatively permanent tributaries within the Rio Grande tributary system. Therefore, consistent with the rule and guidance IT-1, IT-2, IT-3, and IT-4 within the study area would likely be considered WOTUS and subject to USACE jurisdiction under Section 404.

Current USACE guidelines require a significant nexus evaluation for: (1) waterbodies and tributaries that are not relatively permanent waters (i.e., ephemeral), including adjacent wetlands if present; and (2) wetlands adjacent to, but not directly abutting, a traditionally navigable or relatively permanent water. A significant nexus exists if the aquatic features in question have more than a speculative or insubstantial effect on the chemical, physical, or biological integrity of a traditionally navigable water. Establishment of a significant nexus is necessary to establish jurisdiction as a WOTUS.

Following the Rapanos decision, the USACE and the EPA released a series of guidance documents summarizing the types of features that would typically be considered jurisdictional, features that would be evaluated on a case-by-case basis via significant nexus determinations, and features that are generally not considered jurisdictional even when a significant nexus may exist. The guidance document states that agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow);
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

All of the ephemeral tributaries, except for ET-4, ET-5, and ET-6, could be considered jurisdictional due to the connectivity to the potentially jurisdictional intermittent tributaries Arroyo Una de Gato and Arroyo Coyote as well as the observable hydrologic features. ET-4, ET-5, and ET-6 would not likely be considered jurisdictional under the prevailing guidance document because these tributaries do not have a direct connection downstream to a navigable water of the United States.

However, the USACE is the regulatory authority regarding jurisdiction of wetlands and other protected waters. The USACE makes the final determination regarding regulatory status of

waterbodies and the potential need for a permit. As a result, Terracon recommends a jurisdictional determination be made by the USACE and a permit be obtained prior to impacting any of these features.

6.0 REFERENCES

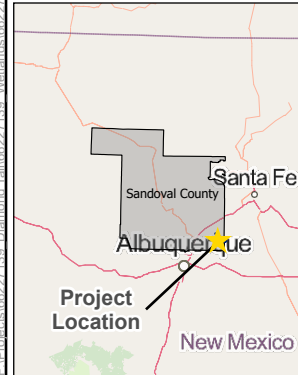
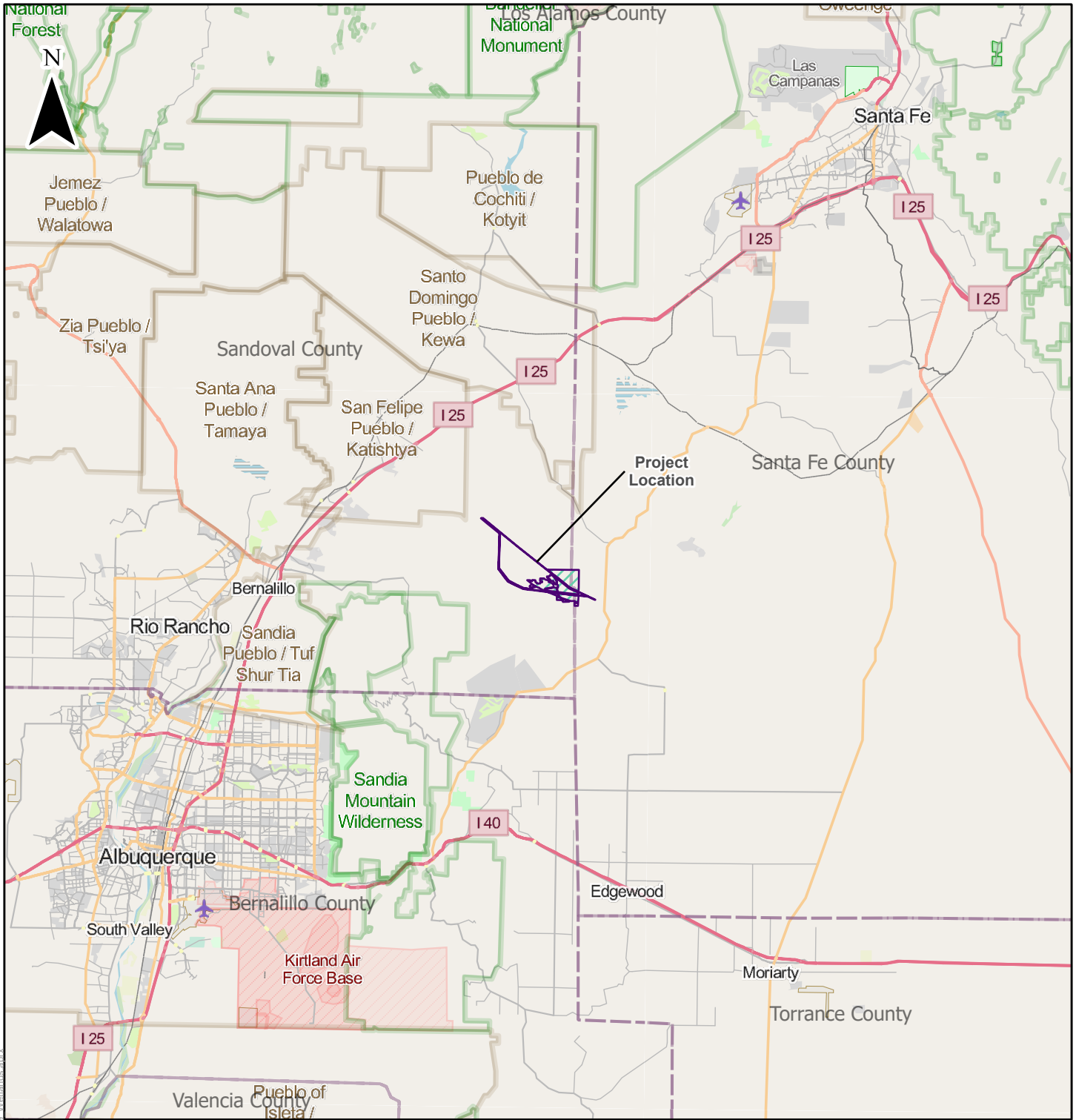
Environmental Protection Agency (EPA). 1972. Overview of Clean Water Act Section 404. Available at: <https://www.epa.gov/cwa-404/overview-clean-water-act-section-404>


United States Army Corps of Engineers (USACE). 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Available at: <https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/Website%20Organization/Arid%20West%20Regional%20Supplement.pdf>

EPA. 2021. Pre-2015 Regulatory Definition and Practice. Available at: <https://www.epa.gov/wotus/current-implementation-waters-united-states#Pre-2015>

USDA Natural Resources Conservation Service (NRCS). 2022. Plant List of Accepted Nomenclature, Taxonomy, and Symbols (PLANTS) Database. Available at: <https://plants.usda.gov/home>

Appendix A - Figures



Legend
 Study Area

Project No.:	66227139
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC



4172 Center Park Dr. Colorado Springs, CO 80916
 PH. (719) 597-2116 terracon.com

0 5 10
 Kilometers

0 5 10
 Miles

Coordinate System: NAD 83, UTM Zone 13
 Scale: 1:500,000

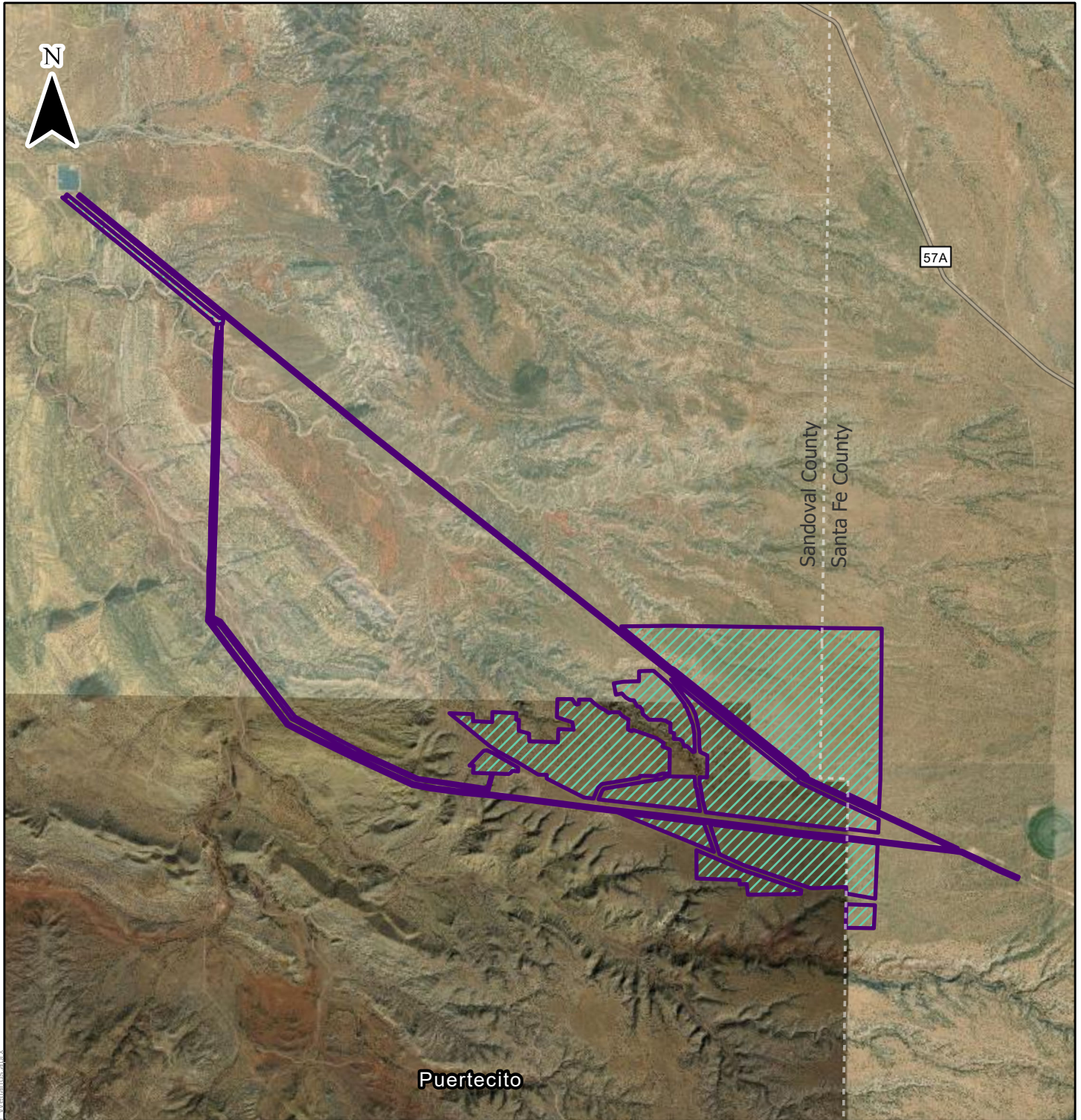
DATA SOURCES:
 ESRI Bing Map service layer (2022)

Exhibit 1

Vicinity Map

Diamond Tail
 Sandoval County, New Mexico
 Prepared for Conifer Power Company

F:\Projects\66227139_Diamond_Tail\66227139_Wetlands\66227139_Wetlands.aprx



F:\Projects\66227139_Diamond_Tail\66227139_Wetlands\66227139_Wetlands.aprx

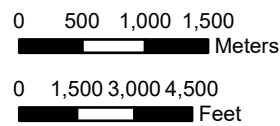


Legend

Study Area

Project No.:	66227139
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC

4172 Center Park Dr. Colorado Springs, CO 80916
PH. (719) 597-2116 terracon.com



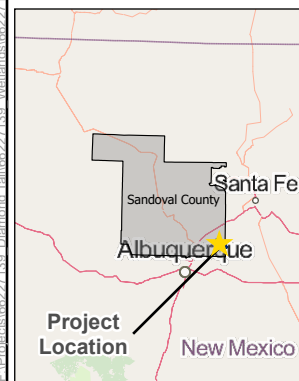
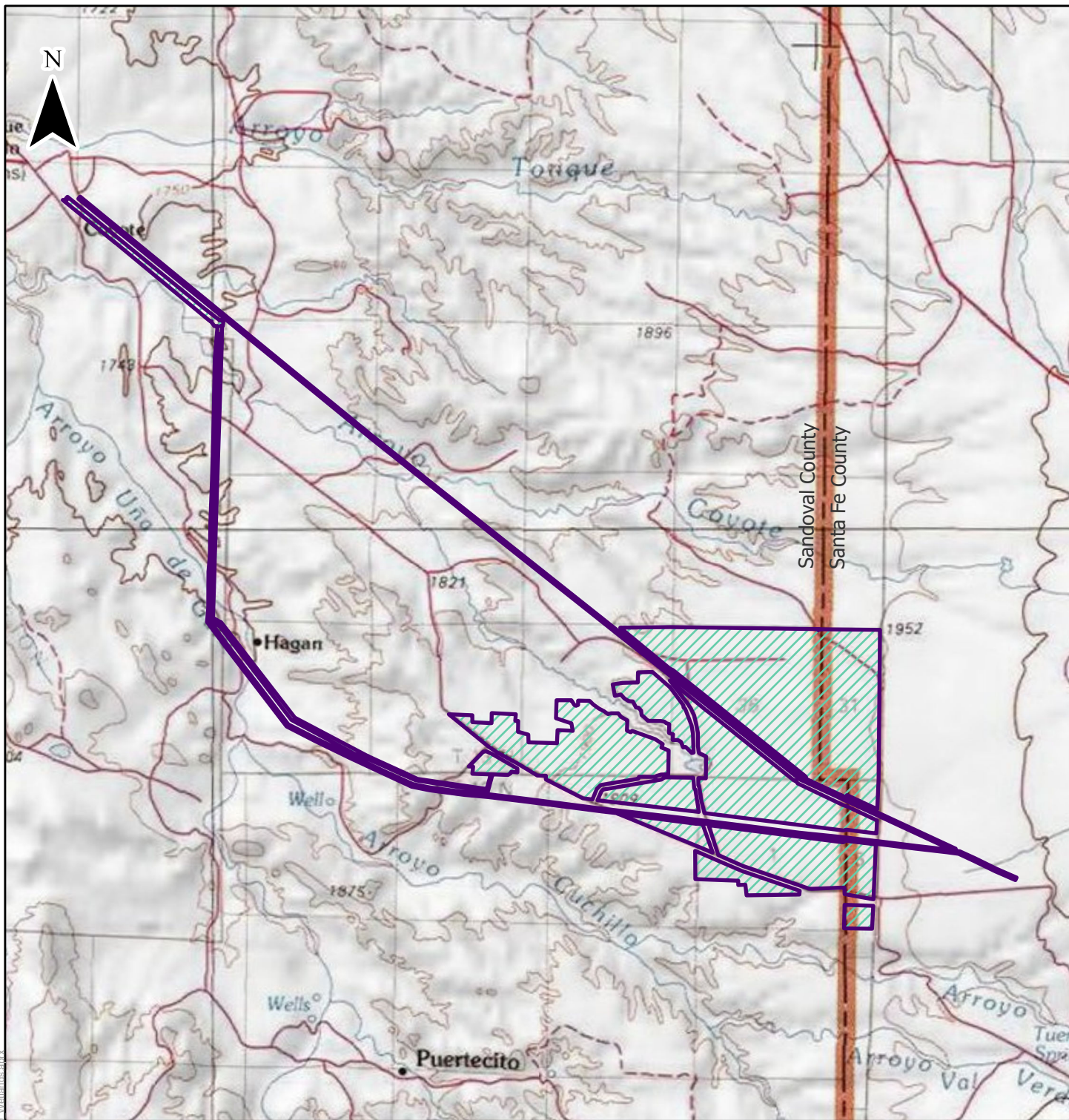
Coordinate System: NAD 83, UTM Zone 13
Scale: 1:60,000


DATA SOURCES:
ESRI Hybrid service layer (2022)
Colorado Parks and Wildlife (2022)

Exhibit 2

Aerial Imagery

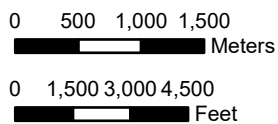
Diamond Tail
Sandoval County, New Mexico
Prepared for Conifer Power Company



Legend
 Study Area

Project No.:	23227128
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC

terracon
 4172 Center Park Dr. Colorado Springs, CO 80916
 PH. (719) 597-2116 terracon.com



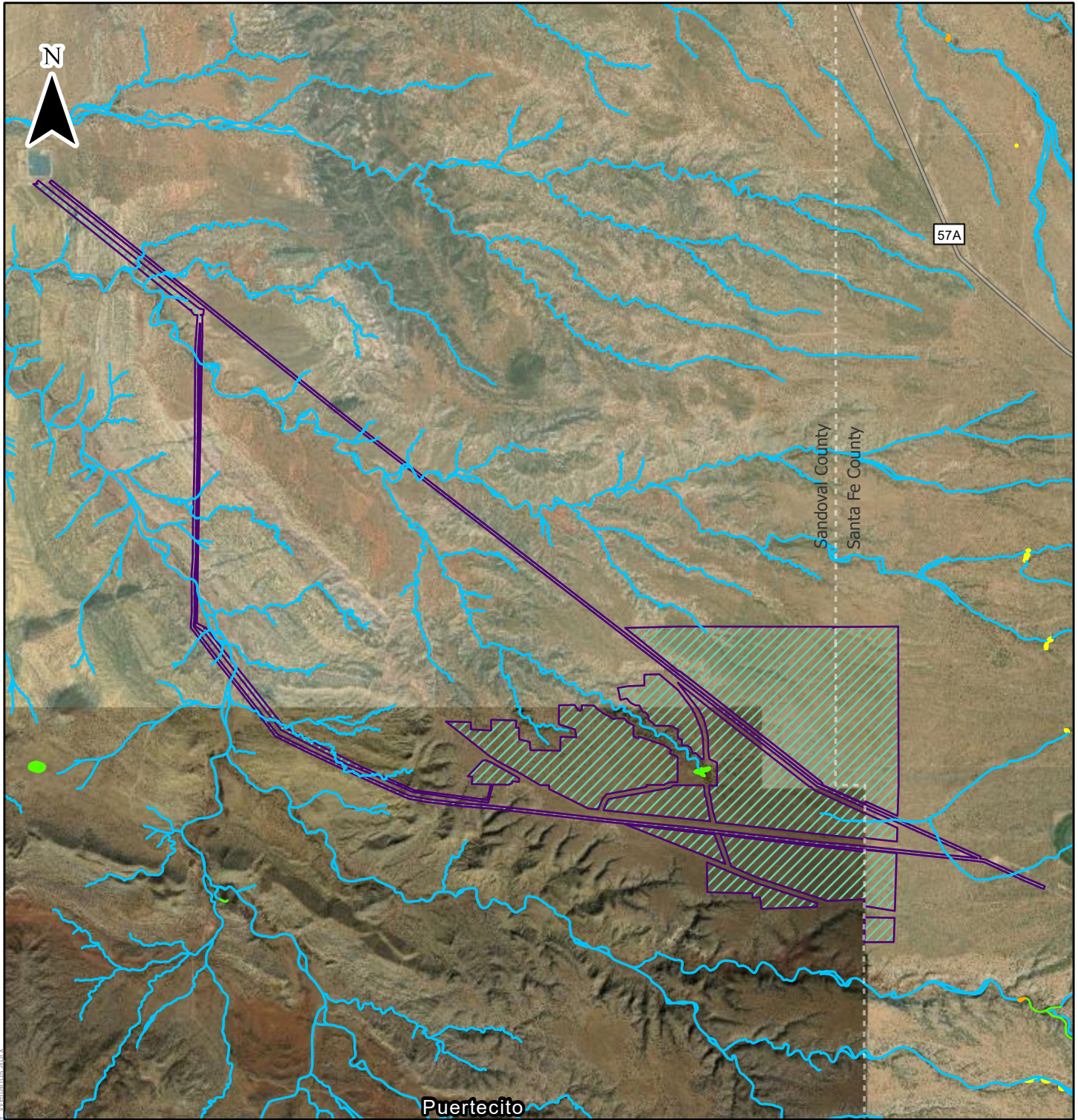
Coordinate System: NAD 83, UTM Zone 13
 Scale: 1:160,000

DATA SOURCES:
 USA TOPO service layer (2022)
 USGS QUAD NORTHWEST PUBLBLO, 2021

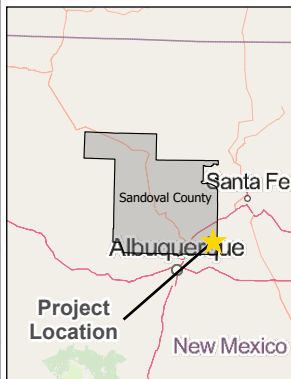
Exhibit 3

USGS Topographic Map

Diamond Tail
 Sandoval County, New Mexico
 Prepared for Conifer Power Company




F:\Projects\66227139_Diamond_Tail\66227139_Wetlands\66227139_Wetlands.aprx



- Legend**
- Study Area
 - Freshwater Pond
 - Freshwater Emergent Wetland
 - Riverine
 - Freshwater Forested/Shrub Wetland

Project No.:	66227139
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC



4172 Center Park Dr. Colorado Springs, CO 80916
PH. (719) 597-2116 terracon.com

0 500 1,000 1,500
Meters

0 1,500 3,000 4,500
Feet

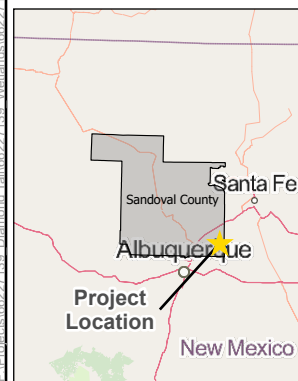
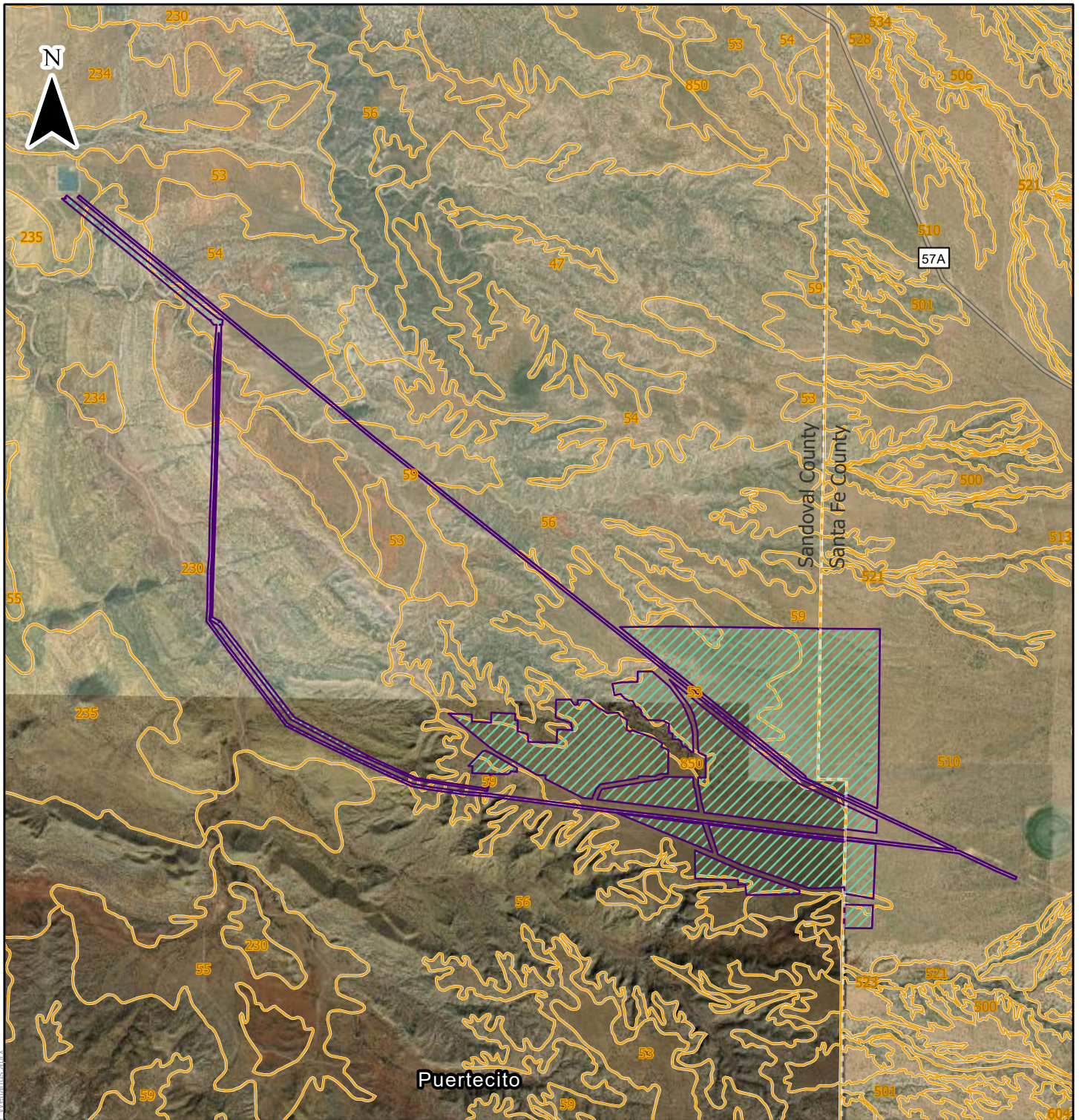
Coordinate System: NAD 83, UTM Zone 13
Scale: 1:70,000

DATA SOURCES:
ESRI Imagery service layer (2022)
Colorado National Wetland Inventory



Exhibit 4

National Wetland Inventory


Diamond Tail
Sandoval County, New Mexico
Prepared for Conifer Power Company



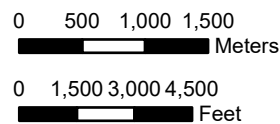
Legend

-  Study Area
-  USDA Soil Map Unit

Project No.:	66227139
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC



4172 Center Park Dr. Colorado Springs, CO 80916
PH. (719) 597-2116 terracon.com



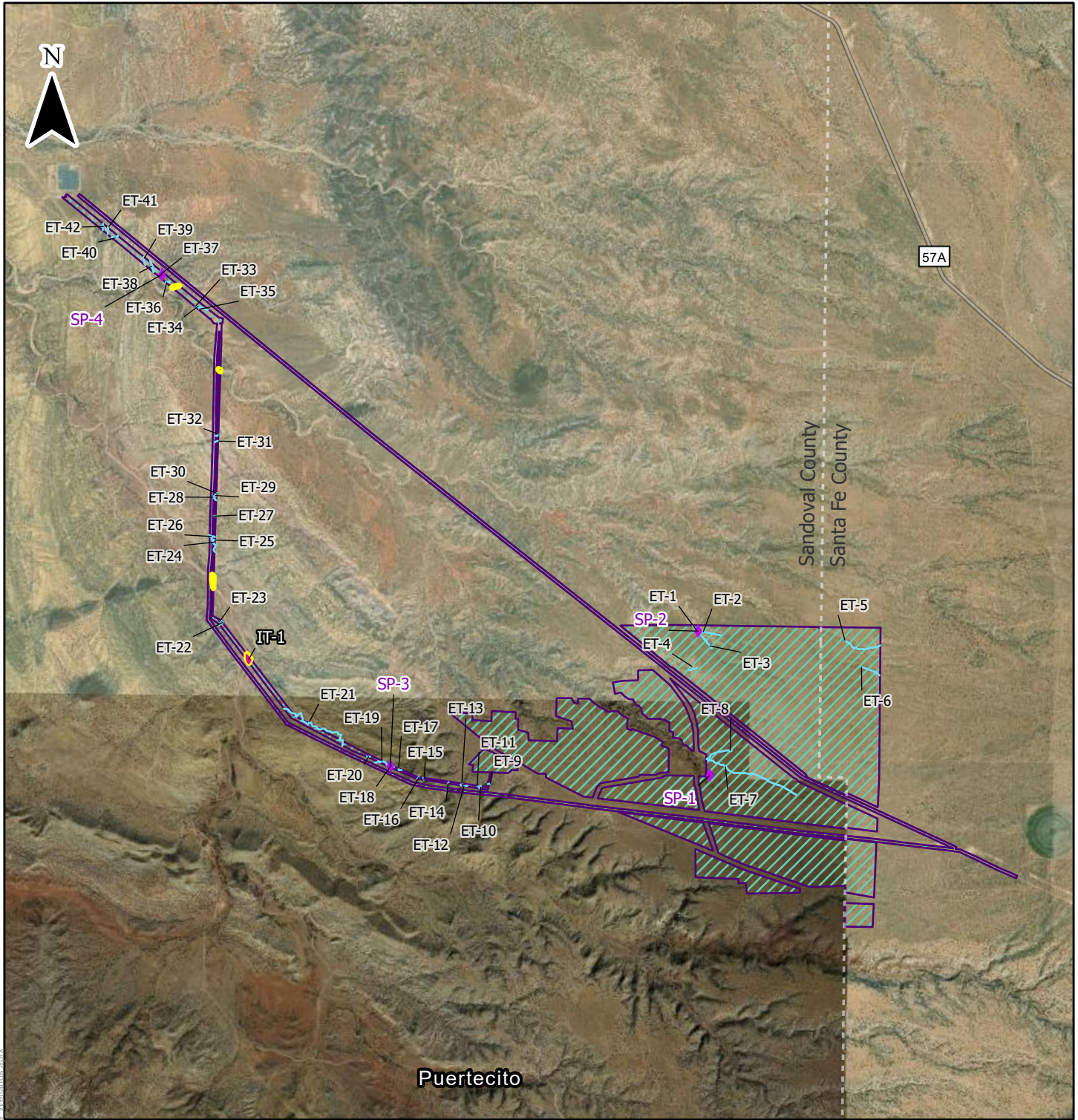
Coordinate System: NAD 83, UTM Zone 13
Scale: 1:60,000

DATA SOURCES:
ESRI National Geographic service layer (2022)
USDA Surgo Soil Hydrologic Class (2022)

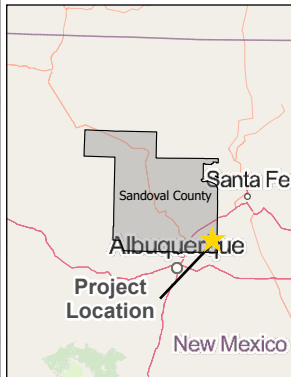
Exhibit 5

USDA Soil
Diamond Tail
Sandoval County, New Mexico
Prepared for Conifer Power Company

F:\Projects\66227139_Diamond_Tail\66227139_Wetlands\66227139_Wetlands.aprx



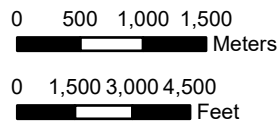
F:\Projects\66227139_Diamond_Tail\66227139_Wetlands\66227139_Wetlands.aprx



- Legend**
- Study Area
 - Ephemeral Tributary
 - Wash Crossing
 - Water Boundary
 - Wetland Sample Point

Project No.:	66227139
Date:	12/30/2022
Drawn By:	KMW
Reviewed By:	CC

4172 Center Park Dr. Colorado Springs, CO 80916
PH. (719) 597-2116 terracon.com



Coordinate System: NAD 83, UTM Zone 13
Scale: 1:60,000

DATA SOURCES:
ESRI Hybrid service layer (2022)

Exhibit 6

Field Data

Diamond Tail
Sandoval County, New Mexico
Prepared for Conifer Power Company

Appendix B – Photo Log



RPP1-North



RPP1-East



RPP1-South



RPP1-West



RPP2-North



RPP2-East



RPP2-South



RPP2-West



DP1-North



DP1-East



DP1-South



DP1-West



DP1-Soil



DP2-North



DP2-East



DP2-South



DP2-West



DP2-Soil



DP3-North



DP3-East



DP3-South



DP3-West



DP3-Soil



DP4-North



DP4-East



DP4-South



DP4-West



DP4-Soil

Appendix C – Wetland Delineation Datasheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Diamond Tail Solar City/County: Sandoval County Sampling Date: 10/11/22
 Applicant/Owner: PCR US Investments Corp State: NM Sampling Point: SP-1
 Investigator(s): Hartwig/Foss Section, Township, Range: S34 T13N R6E
 Landform (hillslope, terrace, etc.): Drainage Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): D Lat: 35.35304482 Long: -106.261890 Datum: _____
 Soil Map Unit Name: Witt-Harvey association, 1 to 7 percent slopes NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: DAREM: 11, Normal hydrologic conditions. APT: 16, Wetter than Normal hydrologic conditions.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Cylindropuntia imbricata (Tree cholla)</u>	<u>7</u>	<u>Y</u>	<u>UPL</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>60</u> x 5 = <u>300</u> Column Totals: <u>70</u> (A) <u>330</u> (B) Prevalence Index = B/A = <u>4.71</u>
2. <u>Juniperus Monosperma (Oneseed juniper)</u>	<u>3</u>	<u>Y</u>	<u>UPL</u>	
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Bouteloua gracilis (Blue grama)</u>	<u>40</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Bassia scoparia (Burning bush)</u>	<u>10</u>		<u>FAC</u>	
3. <u>Eriastrum diffusum (Miniature woollystar)</u>	<u>10</u>		<u>UPL</u>	
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>None</u>				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0</u>				

Remarks:
 Hydrophytic vegetation not present.

SOIL

Sampling Point: SP-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	10 YR 3/3	100	-	-	-	-	lm	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rocks/Cobble
 Depth (inches): 4

Hydric Soil Present? Yes No

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Diamond Tail Solar City/County: Sandoval County Sampling Date: 10/11/22
 Applicant/Owner: PCR US Investments Corp State: NM Sampling Point: SP-2
 Investigator(s): Hartwig/Foss Section, Township, Range: S34 T13N R6E
 Landform (hillslope, terrace, etc.): Wash Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR): D Lat: 35.318319 Long: -106.263282 Datum: _____
 Soil Map Unit Name: Harvey-Ildefonso-La Fonda association, 3 to 15 percent slopes NWI classification: Riverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: DAREM: 11, Normal hydrologic conditions. APT: 16, Wetter than Normal hydrologic conditions.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>Juniperus Monosperma (Oneseed juniper)</u>	<u>25</u>	<u>Y</u>	<u>UPL</u>	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>40</u> x 5 = <u>200</u> Column Totals: <u>40</u> (A) <u>200</u> (B) Prevalence Index = B/A = <u>5.00</u>
2. _____				
3. _____				
4. _____				
5. _____				
<u>25</u> = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				
1. <u>Tribulus terrestris (Puncturevine)</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Centaurea solstitialis (Yellow star-thistle)</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>15</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>15'</u>)				
1. <u>None</u>				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>85</u> % Cover of Biotic Crust <u>0</u>				

Remarks:
 Hydrophytic vegetation not present.

SOIL

Sampling Point: SP-2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	7.5 YR 4/4	100	-	-	-	-	sandy lm	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rocks/Cobble
 Depth (inches): 4

Hydric Soil Present? Yes No

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Diamond Tail Solar City/County: Sandoval County Sampling Date: 10/12/22
 Applicant/Owner: PCR US Investments Corp State: NM Sampling Point: SP-3
 Investigator(s): Hartwig/Foss Section, Township, Range: S34 T13N R6E
 Landform (hillslope, terrace, etc.): Wash Local relief (concave, convex, none): Convex Slope (%): 5
 Subregion (LRR): D Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Skyvillage-Sandoval-Rock outcrop complex NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: SP taken in wash/tributary. Higher than average rainfall 10/3-10/5.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____				
3. _____				
4. _____				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>30</u> x 5 = <u>150</u> Column Totals: <u>30</u> (A) <u>150</u> (B) Prevalence Index = B/A = <u>5</u>
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <u>Ericameria nauseosa (Rubber Rabbitbrush)</u>	<u>5</u>	<u>Y</u>	<u>UPL</u>	
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Bouteloua curtipendula (Sideoats Grama)</u>	<u>15</u>	<u>Y</u>	<u>UPL</u>	
2. <u>Dalea candida (White Prairie Clover)</u>	<u>10</u>	<u>Y</u>	<u>UPL</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>15</u>)				
1. <u>None</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>75</u>		% Cover of Biotic Crust _____		

Hydrophytic Vegetation Indicators:
 ___ Dominance Test is >50%
 ___ Prevalence Index is ≤3.0¹
 ___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
 ___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No

Remarks:
 Hydrophytic vegetation not present.

SOIL

Sampling Point: SP-3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	Sand							

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Rocks/Cobble
 Depth (inches): 6

Hydric Soil Present? Yes No

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Diamond Tail Solar City/County: Sandoval County Sampling Date: 10/13/22
 Applicant/Owner: PCR US Investments Corp State: NM Sampling Point: SP-4
 Investigator(s): Hartwig/Foss Section, Township, Range: S17 T13N R6E
 Landform (hillslope, terrace, etc.): Wash Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): D Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Harvey-Cascajo association NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No (If no, explain in Remarks.)
 Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes _____ No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes _____ No <input checked="" type="checkbox"/>
Remarks: SP taken in wash/tributary. Higher than average rainfall 10/3-10/5.	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>30</u>)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>None</u>				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>15</u>)				
1. <u>Juniperus monosperma (Oneseed Juniper)</u>		Y	UPL	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>5</u>)				
1. <u>Bouteloua curtipendula (Sideoats Grama)</u>		Y	UPL	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Dalea candida (White Prairie Clover)</u>		Y	UPL	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
_____ = Total Cover				
Woody Vine Stratum (Plot size: <u>15</u>)				
1. <u>None</u>				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____				

Remarks:
 Hydrophytic vegetation not present.

SOIL

Sampling Point: SP-4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 4/4	100	-	-	-	-	Clayey lm	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

Indicators for Problematic Hydric Soils³:

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Roots
 Depth (inches): 10

Hydric Soil Present? Yes No

Remarks:

No hydric soil indicators present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Appendix D – Summary of Aquatic Features

Ephemeral Tributary ID	Linear Feet (feet)	Area (acres)
ET-1	799.28	0.25
ET-2	1600.62	0.02
ET-3	1454.5	0.02
ET-4	753.58	0.01
ET-5	3528.04	0.04
ET-6	1828.4	0.08
ET-7	8748.84	0.3
ET-8	2484.3	0.11
ET-9	276.9	0.01
ET-10	322.86	0.01
ET-11	261.12	0.01
ET-12	334.18	0.02
ET-13	279.1	0.01
ET-14	149.24	0.01
ET-15	209.64	0.01
ET-16	224.9	0.01
ET-17	425.16	0.01
ET-18	347.7	0.02
ET-19	1913.64	0.04
ET-20	298.54	0.02
ET-21	8247	0.47
ET-22	404.62	0.02
ET-23	114.24	0.01
ET-24	1875.72	0.09
ET-25	229.3	0.01
ET-26	396.16	0.01
ET-27	202.82	0.01
ET-28	444.94	0.02
ET-29	111.14	0.01
ET-30	386.6	0.02
ET-31	355.54	0.01
ET-32	391.46	0.01
ET-33	1275.48	0.07
ET-34	113.48	0.01
ET-35	169.26	0.01
ET-36	393.46	0.02
ET-37	791.56	0.04
ET-38	1265.62	0.03
ET-39	815.68	0.04
ET-40	827.06	0.03
ET-41	645.76	0.02
ET-42	602.46	0.02
Total	46299.9	1.97

Intermittent Tributary ID	Linear Feet (feet)	Area (acres)
IT-1	2413.19	6.1
IT-2	3243.57	4.45
IT-3	836.97	0.71
IT-4	1888.06	1.41
Total	8381.79	12.67