

July 27, 2020

Rob Sitterley
President & CEO
AR-TX Redi
2900 Saint Michael Drive, 5th Floor
Texarkana, TX 75503

**Re: Environmental Desktop Analysis
Cabe Gurdon Properties Shovel Ready Certification
Bowie County, TX**

Dear Mr. Sitterley:

Quanta Environmental Solutions (Quanta Environmental) completed a desktop analysis for the Cabe Gurdon Properties Shovel Ready Certification (Project) located in Bowie County, Texas. The purpose of this desktop analysis is to identify environmental constraints relating to construction of the Project. The level of effort required to permit the Project is based upon the identified environmental constraints. The Project consists of an approximately 847-acre site spread across two properties situated across I-30 west of Texarkana, Texas. The Project site is proposed to be harvested of timber then grubbed prior to receiving a shovel ready certification. The goal for the property is to develop as much of the 847 acres as possible. The results of the desktop analysis are presented below.

Desktop Analysis Methods

A variety of publicly available resources were used for this desktop analysis. The following resources were used to evaluate expected environmental conditions within the Project site:

- Current and historical aerial imagery,
- National Hydrography Dataset (NHD) maintained by the U.S. Geological Survey (USGS),
- National Wetland Inventory (NWI) maintained by the U.S. Fish and Wildlife Service (USFWS),
- Watershed Assessment, Tracking and Environmental Results System (WATERS) maintained by the Environmental Protection Agency (EPA),
- Current and historical USGS Topographic Maps,
- USFWS Information for Planning and Consultation (IPaC) system,
- Natural Resources Conservation Service (NRCS) Web Soil Survey data,
- Flood Maps maintained by the Federal Emergency Management Agency,
- Protect Areas Database of the U.S. (PAD-US) maintained by the USGS,
- Texas Commission on Environmental Quality, and
- Texas Parks and Wildlife Department.

Desktop Analysis Results

Site Description

The Project site is located approximately 15 miles west of Texarkana in Bowie County, Texas. The topography is slightly variable from approximately 350 to 360 feet above mean sea level (MSL). No state or federal parks or refuges were identified adjacent to the site. However, the Red River Army Depot was identified which is a military facility that provides various resources to the U.S. Army. Further discussion of the site is available in the cultural resources technical memo, Attachment 1.

Waters of the United States

An assessment of the potential waters of the United States, including wetlands (WOTUS), was conducted using aerial imagery, NHD data, NWI data, and topographic maps. According to NHD and NWI data, the Project site encompasses multiple intermittent riverine systems and multiple forested and emergent wetlands. Topographic maps and aerial imagery agree with the NHD and NWI datasets. Field surveys will be needed to validate the NWI data.

During the desktop analysis, data from the EPA was used to help identify any impaired waters that the Project may impact. No 303(d) Listed Impaired Waters are located within the Project area.

The project area is located within the FEMA Federal Insurance Rate Map (FIRM) panel: 48037C0305D (FEMA, 2020). According to the FEMA FIRM panel, the Project area contains both Zone A and Zone X floodplain hazards. The area classified as Zone A closely follows the path of Panther Creek from the northeast corner of the Project area to the southwest corner. Zone A is classified as having a 1% annual chance of a flood occurring in the area. Zone X encompasses the remainder of the project area and is classified as an area of minimal flood hazard.

Soils

Quanta Environmental performed a review of existing soil surveys using NRCS soil data. Three soil map units were identified within the Project site. Two of these series are identified as having a hydric component. These hydric soils comprise 99.3% of the Project area and support multiple wetlands within the Project's vicinity. Using the NRCS database, a preliminary review of potential prime farmland within the Project area occurred to help identify impacts, if any. Further review of this data shows that the Project should not impact any prime farmlands.

TABLE 1 – SOIL DATA WITHIN PROJECT AREA

Map Unit Symbol	Map Unit Name	Hydric Component	Slope	Percent of AOI
1	Adaton-Muskogee complex	Adaton, 70%	0-1%	53.9%
4	Annona loam	Alusa, 10%	1-3%	0.7%
36	Sawyer silt loam	Adaton, 10%	0-3%	45.4%

Threatened and Endangered Species

Using the USFWS IPac system, a review of species protected under the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA), and Bald and Golden Eagle Protection Act was conducted. The system identified 4 species of concern (3 threatened or endangered and 1 migratory bird) that have the potential to occur within the Project area.

TABLE 2 – FEDERALLY LISTED THREATENED OR ENDANGERED SPECIES WITHIN THE PROJECT AREA

Common Name	Scientific Name	Status
Birds		
Least Tern	<i>Sterna antillarum</i>	Endangered
Piping Plover	<i>Charadrius melodus</i>	Threatened
Red Knot	<i>Calidris canutus rufa</i>	Threatened

The Least Tern, Piping Plover, and Red Knot are associated with aquatic habitats like sandy beaches, bays, and salt flats. Since the Project area appears to be a pine plantation, suitable habitat is not likely present for these species. Therefore, no impacts are anticipated.

The American Kestrel (*Falco sparverius*) favors open areas with short vegetation cover with trees nearby. Since the Project area appears to be forested it is unlikely that this species would occur within the Project area. Therefore, no impacts are anticipated.

Cultural Resources

Quanta Environmental conducted a cultural resources archival background check consistent with Section 106 of the National Historic Preservation Act (NHPA 1992, as amended) and with the Texas Natural Resources Code Title 9, Chapter 191 (Texas Antiquities Code, TAC). There are no archaeological sites, historic-age structures, NRHP-eligible properties or districts, cemeteries, historic markers, State Archeological Landmarks (SALs), State Historic sites, or Registered Texas Historic Landmarks (RTHLs) in the archival areas. However, the Project is located in a known Caddo Nation occupation area and artifacts have been found in the surrounding region where previous excavations have taken place. The Project area has not been previously surveyed for archaeological sites. Since there is a high potential for archaeological sites within the Project area, a 100% systematic pedestrian archaeological survey supported by shovel testing is recommended. For further details regarding the cultural resources review is available in the Technical Memo, see Attachment 1.

Permitting Requirements

Quanta Environmental understands that the goal is for the site to be developed with design to be completed later. Field surveys will be required to identify impacts to WOTUS and the permits associated with these impacts. Impacts to WOTUS will occur in phases based on the development plan for the site. Various phases will require different permitting requirements based on their impacts to WOTUS; based upon available data, each phase is likely to impact WOTUS. The type

and extent of the impacts will determine the level of permitting required. Impacts requiring an Clean Water Act, Section 404 Individual Permit will trigger a federal nexus requiring consultation with the U.S. Fish and Wildlife Service and Texas State Historic Preservation Office (approximately a 12-month process). Minor impacts to WOTUS could be permitted under the Nationwide Permit system with or without notification to the USACE (a 3-month or 1-month process, respectively). Any development within the floodplain will require floodplain permitting (1-month process after engineering is completed). All phases of development will require development of a stormwater pollution prevention plan. Field surveys results combined with phases of development, both the areal extent of the phase and the actions during the phase, are required to accurately identify required permits.

Conclusion

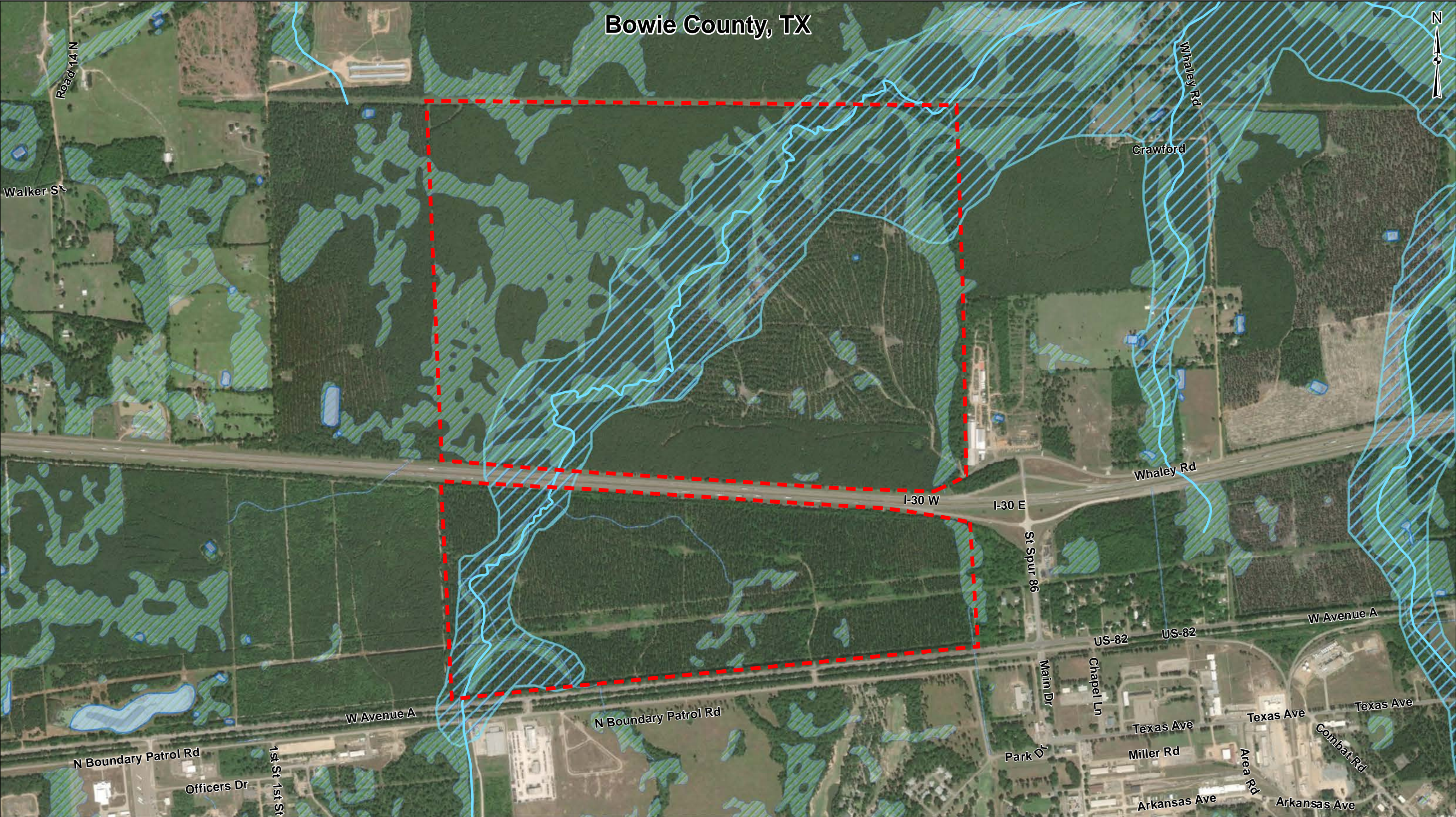
The Project is anticipated to permanently impact WOTUS. Impacts to rare, threatened, or endangered species are not anticipated due to the lack of suitable habitat. Field surveys will be necessary to confirm desktop findings. Field surveys may identify additional resources that could increase permitting requirements. Should you have any questions regarding these results, please contact Jarrad Davis at 832.791.5254 or jdavis@quantaenv.com.

Sincerely,

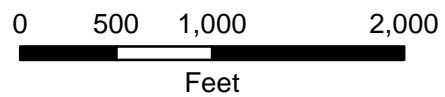


W. Jarrad Davis
Senior Scientist

JD/hfs
T10072



	Property Boundary		NWI Wetlands
	NHD Flowline		Flood Hazard Areas
	NHD Waterbody		



QUANTA ENVIRONMENTAL

PREPARED BY:

QPSE

QUANTA SERVICES COMPANY

ARTX - REDI Potential Waters of the U.S.	
JOB NUMBER: T10072	DRAWING NUMBER: FIGURE 1



TECHNICAL MEMORANDUM

ARTX REDI Project – L10072

July 27, 2020

INTRODUCTION

Quanta Environmental Solutions, Inc. (Quanta Environmental) is supporting ARTX REDI in providing cultural resource coordination for 847 acres, located near Whaley, Texas, which will be used for timber clearing and the harvesting of pine logs.

Quanta Environmental conducted a cultural resources archival background check consistent with Section 106 of the National Historic Preservation Act (NHPA 1992, as amended) and with the Texas Natural Resources Code Title 9, Chapter 191 (Texas Antiquities Code, TAC). The purpose of this technical memorandum is to briefly summarize the status of archaeological investigations and project cultural resources as of July 7, 2020, and to make formal regulatory recommendations for the Project consistent with Section 106 of the NHPA and the TAC. This technical memorandum provides the results of background archival research for the Project and regulatory recommendations consistent with Section 106 of the NHPA and the TAC.

SOILS

Soils in the archival area of the ARTX REDI Project are primarily Sawyer silt loam and Adaton-Muskogee complex. The Sawyer silt loam consists of very deep, moderately well drained soils formed in loamy clayey marine sediments of the Tertiary age. The Adaton-Muskogee complex is 70% Adaton series, which consists of poorly drained soils formed in silty materials, and 20% Muskogee series, which consist of moderately well drained soils formed in silty materials and in underlying clayey sediments. These soils have low potential for recent Holocene alluvial deposition that would exhibit the potential for buried archaeological sites. Google Earth aerial photography (Google Earth 2018) indicates TX REDI Project location to be mainly dense forest at least back to 1995.

HYDROGRAPHY

The ARTX REDI Project area is located adjacent to and north of US Highway 82, just north west of Whaley, TX and 3 miles east of New Boston, TX. Interstate 30 runs approximately east/west through the project area. The upper portions of a small ephemeral stream of Panther Creek runs diagonally through the project area, from the south west corner to approximately the north east corner of the project. Panther Creek begins as an ephemeral stream and becomes a perennial creek, after leaving the project area, just before it joins up with Barkman Creek, which in turn feeds into Red River. About 20% of the project area is freshwater wetlands.

ARCHIVAL RESEARCH

A records and literature search was conducted for the proposed Project location to identify any previously conducted surveys, archaeological sites, or other cultural resources within 500 feet of proposed project infrastructure (archival area). Quanta Environmental reviewed the electronic databases of the Texas Historical Commission (THC) Historic Sites Atlas (ATLAS) and other historic reference materials as



determined necessary. The database was queried to identify known cultural sites and high probability areas for the presence of archaeological sites, historic structures, NRHP-eligible properties or Districts, State Archeological Landmarks (SALs), Registered Texas Historic Landmarks (RHTLs), State Historic sites, cemeteries, historic markers and previously conducted archaeological surveys located within or adjacent to the project.

No previous surveys, archaeological sites, or other cultural resources have been recorded within 500 feet of the proposed ARTX REDI Project area.

However, within 500 feet of the south boundary of the project is the Red River Army Depot. The depot was established in 1941 as an ammunition storage facility, but was expanded during WWII to include receiving, storing and issuing general supply. It also became a major point for combat vehicle repair, rebuilding, and maintenance. In 1995, its scope and work force was reduced and now produces timber and provides maintenance operations, and rebuilding combat vehicles (Red River Army Depot 2020; TSHA 2020).

CONCLUSIONS and RECOMMENDATIONS

No cultural resources are present within 500 feet of the proposed Project. There are no archaeological sites, historic-age structures, NRHP-eligible properties or districts, cemeteries, historic markers, State Archeological Landmarks (SALs), State Historic sites, or Registered Texas Historic Landmarks (RHTLs) in the archival areas.

However, the ARTX REDI Project is located in a known Caddo Nation occupation area and artifacts have been found in the surrounding region where previous excavations have taken place. In addition to the documented presence of the Caddo Nation (A.D. 900-1800), numerous prehistoric age archaeological sites are documented in the County. There is readily available fresh water in the Project. And the current Project is unsurveyed for archaeological sites. Though subject to surface disturbances in the form of logging and pine plantation, there is a high potential for sites within the project area. ARTX REDI Project is recommended for a 100% systematic pedestrian archaeological survey supported by shovel testing according to Council of Texas Archeologists (CTA) survey standards, consistent with Section 106 of the NHPA and the TAC.

REFERENCES CITED

2019 SoilWeb: An online soil survey browser for USDA-NRCS Detailed Soil Survey Data (SSURGO), Electronic streaming database, <https://soilseries.sc.egov.usa.gov/> accessed July 7, 2020.

2020 National Hydrography Dataset (NHD) Electronic Database, <https://www.usgs.gov/core-science-systems/national-geospatial-program/data-tools> accessed July 7, 2020.

2016 National Cooperative Soil Survey, United States Department of Agriculture (USDA), Electronic Database, <https://soilseries.sc.egov.usa.gov/> accessed July 7, 2020.

2020 Texas Historical Commission Historic Sites ATLAS. Electronic resource, <https://atlas.thc.state.tx.us/>, accessed July 7, 2020.

2018 Google Earth Pro Aerial Imagery, streaming database, accessed July 7, 2020.

2020 Red River Army Depot, <https://redriver.army.mil> accessed July 8, 2020

2020 TSHA, Texas State Historical Association, <https://tshaonline.org> accessed July 8, 2020