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# Cultural Resources Survey of the Cross Roads Special Utility District US Hwy 259 Water Well and Pump Station Rusk County, Texas

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# A Cultural Resources Survey of the Cross Roads Special Utility District US Hwy 259 Water Well and Pump Station Rusk County, Texas

Antiquities Permit #7433 Final Report

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#### ABSTRACT

In July 2015 Deep East Texas Archaeological Consultants (DETAC) conducted a cultural resource management survey of the proposed Cross Roads Special Utility District's US Highway 259 water well in Rusk County, Texas under Texas Antiquities Permit #7433. Proposed construction includes clearing and leveling a 0.4 hectare (1.0 acre) property to drill a water well and associated pumping structures. The visual inspection of the area found a dilapidated building which was used as a plant shop in the 1970's or later. The building appears to be made of modern materials and is surrounded with debris associated with potting plants. A total of 6 shovel tests were excavated across the property. No cultural material was found in the shovel tests. No artifacts were collected or curated. No further investigations are recommended at this location. However, if any artifacts, bones, or cultural materials are found or recovered during clearing or leveling the area, then all construction should stop and DETAC contacted to evaluate the potential impact to cultural resources important to the State of Texas. Based on the field work, DETAC is requesting concurrence with the determination of "no effect" to NRHP eligible properties for the proposed water well and pump station.

# TABLE OF CONTENTS

Section	Page
Abstract	ii
Table of Contents	iii
List of Figures	iii
INTRODUCTION	1
DEFINITION OF STUDY AREA	.1
PREVIOUS RESEARCH AND CULTURAL HISTORY	.3
RESEARCH DESIGN AND METHODOLOGY	.4
RESULTS	.5
SUMMARY AND RECOMMENDATIONS	.9
REFERENCES	.10

# LIST OF FIGURES

Figure		Page
1.	Project area on Kilgore SE 7.5' Quad	2
2.	Project area photographs	6
	Project area shovel tests and surface features	

### LIST OF TABLES

Table		Page
1.	Shovel Test Data	. 8

# APPENDIX

A Previously recorded archaeological sites and surveys within one mile of the project area.

#### INTRODUCTION

In July 2015, DETAC (Deep East Texas Archaeological Consultants) conducted a cultural resources survey of the proposed water well for the Cross Roads Special Utility District in Rusk County, Texas (Figure 1). The proposed water well will be built east of US Highway 259 and south of the Bighead Creek bridge. The survey was conducted at the request of the Cross Roads Special Utility District in compliance with the Section 106 of the National Historic Preservation Act administered by the US Department of Agriculture Rural Development (USDA-RD) and in compliance with the Texas Antiquities Code. The report was reviewed by the Texas Historical Commission (THC) under Texas Antiquities Permit #7433.

The purpose of this survey was to locate, describe and record any cultural resources within the project area boundaries. The report was prepared following the short report format outlined by the Council of Texas Archaeologist (CTA) (2005a). A dilapidated building was found on the property. Based on the construction and content, the building was a business to sell plants in the late twentieth century. The building does not appear to be more than 50 years old; therefore, it was not recorded as an archaeological site. No other cultural material was found during the survey, no artifacts were curated. Based on fieldwork, DETAC recommends a determination of "no effect" to NRHP eligible cultural resources or to State Archaeological Landmarks (SAL) for the proposed water well and pump station project.

#### DEFINITION OF STUDY AREA

The projects area includes a 63.7 square meter (m) (209 foot (ft)) square property totaling 0.4 hectares (ha) (1.0 acres (ac)). The corners of the property were staked by land surveyors. Along with survey stakes and pins, the property is delineated by a fenceline to the north and a tree line to the south. The western boundary is the US Highway 259 corridor. The eastern boundary was marked with surveyor pins and stakes. Vegetation was mostly mature pine trees with a moderate understory of various bushes and shrubs. Ground cover was pine straw and leaf litter. Soils were described as Cuthbert fine sandy loam, 25 centimeters (cm) (10 inches (in)) deep over clay (NRCS 2015).

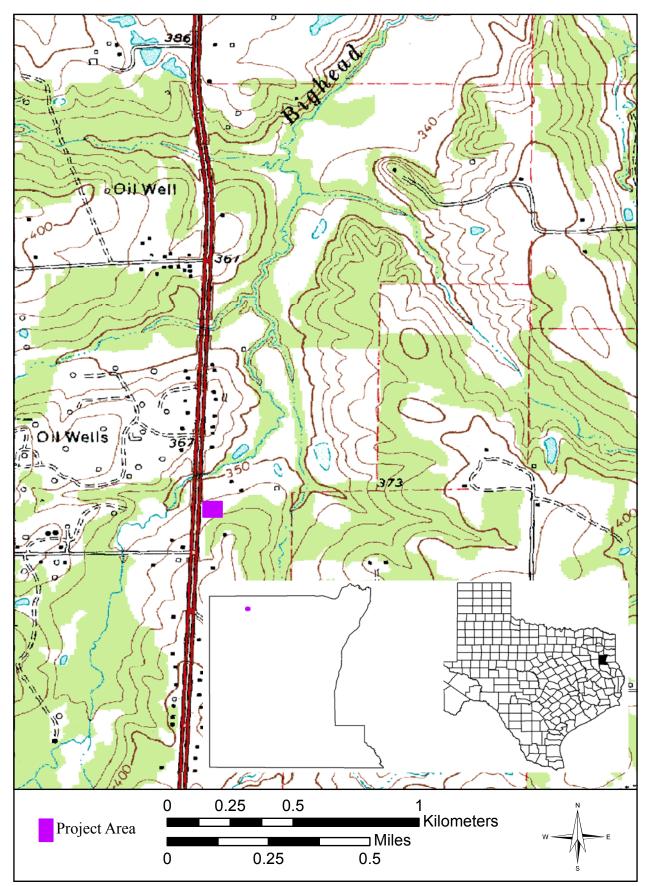


Figure 1. Project area on Kilgore SE 7.5' Quad.

#### PREVIOUS RESEARCH AND CULTURAL HISTORY

Overall, Rusk County has been part of broad studies and investigated in both larger examinations and numerous small surveys. The closest large-scale investigations were conducted primarily for the several strip mines under the Environmental Protection Agency and Railroad Commission in Rusk and the surrounding counties (e.g., Sherman 2001). Small-scale surveys were conducted for several pipelines and road improvements throughout the area as well (e.g., Drake 2000).

In addition to the fieldwork referenced above, several documents have added significantly to available information on the archaeological record in this region. The documents of primary importance are D.A. Story's (1990) and J.A. Guy's (1990) discussions of the Gulf Coastal Plain. More recently, Perttula (2004:370-407) describes the Caddoan archaeology of northeast Texas which encompasses the area between the Red River in the north, the Trinity River in the west and the Angelina River in the south

The occupation of the area ranges from the Paleoindian (ca. pre-7000 B.C.) to Archaic foraging cultures (ca. 7000-200 B.C.), Early Ceramic (Woodland) (ca. 200 B.C. -A.D. 800), the sedentary Caddoan occupation (A.D. 800 - 1680), and ends in the historic Euro American settlement. The Paleo-Indian period (ca. 10,000-7000 B.C.) is characterized by small, mobile bands of hunters and gatherers that consumed a variety of native plants and animals (Story 1990). The Archaic (7000-200 B.C.) refers to huntergatherers who implemented more regionally specialized approaches toward exploiting their environment (Story 1990). The Early Ceramic (200 B.C.-A.D. 800) stage, also referred to as the Woodland period, represents an increasing utilization of the environment by local groups to include a greater reliance on cultigens, prolonged occupations at specific locales indicating an increasingly sedentary lifestyle, and the emergence of social and ritual ceremonies (Story 1990). The prehistory of northeast Texas in the Late Prehistoric period essentially concerns the Caddoan culture (A.D. 800-1600). This culture is an indigenous development strongly influenced by the Mississippian tradition of the Lower Mississippi Valley (Story 1990). Larger aggregates of people became sedentary and constructed villages with public ceremonial areas and cemeteries found in association with large mounds. A stratified social structure developed, corresponding to the chiefdom level as first defined by Service (1962, 1975).

Extensive commercial networks were also established. The Historic period (1680present) describes both the history behind the current cultural setting of the area and marks a transition from the native populations domination of the area, to the American immigrants establishment of farms, towns, and counties. Although the area was populated by farmers and plantations, Kilgore was not founded until 1872 when a railroad town was established on land sold to the International-Great Northern Railroad. The town was prosperous until the Great Depression and the collapse of the Cotton market. The population was less than 500 in 1929 but exploded to 12,000 by 1936. Large oil companies purchased smaller operations and independent drillers by the beginning of World War II effectively ending the boom. Today, the timber and oil industries play a prominent role in the area's commercial enterprises (Long 2010).

#### RESEARCH DESIGN AND METHODOLOGY

The investigations were performed in compliance with the survey standards described by the Texas Historic Commission (2015) and report guidelines set forth by the CTA (2005b). All fieldwork and reporting comply with the ethics standards of the Texas Archaeological Society and the Register of Professional Archaeologists. No State Antiquities Landmarks will be affected by the proposed construction.

Before initiating fieldwork, DETAC conducted a records and literature review using the Texas Archaeological Site Atlas (THC 2015). The atlas contains an updated database with published and unpublished data regarding cultural resource surveys, location maps, and cultural resources records In addition, these records show State Archaeological Landmarks (SAL) and NRHP eligibility of previously recorded sites.

DETAC conducted an intensive pedestrian survey of the project area. To locate sites, the pedestrian survey relied on shovel testing and visual examination. Shovel testing included excavating an area approximately 30 cm in diameter in 10 cm (4 inch) levels down to the clay substrate or 80 cm (32 inches). The excavated matrix was screened through a 0.635 cm (0.25 inch) wire mesh screen. Notes were made about soil color, texture, and shovel test depth. Visual examination of the exposed subsurface was a

continuous effort between shovel tests. Surface inspection photographs and shovel test locations were recorded with Ashtech GPS units with sub-meter post-processing accuracy.

#### RESULTS

The literature search and records review of the Texas Archaeological Site Atlas (2015) revealed one documented archaeological survey and three archaeological sites within 1.6 km (1 mi) of the project area. The survey was conducted for the Federal Highway Administration along the Kilgore Bypass (Weir 1986). This survey revisited 41RK162, The Harris Cabin, and associated outbuildings from the 1840's. Two other archaeological sites, 41RK181 and 41RK182 were documented as prehistoric artifact scatters along Bighead Creek between 200 and 600 m (650 and 1970 ft) of the project area by Jack Hughes in 1940.

DETAC archaeologists conducted a visual examination of the property and shovel tested the project area. The visual examination found the property was in a stand of mature pine trees with a moderate understory of various bushes, shrubs, and vines. Ground cover was leaf litter and pine straw. The topography has a gentle slope from the northwest corner upward to the southeast corner. The slope increases between the central portion of the property and the southeast corner. The central portion of the property was cleared of vegetation and a test water well was drilled. A power line right-of-way passes through the eastern portion of the project area from north to south and a dilapidated building was found surrounded by debris in the north-central portion of the property (Figure 2 and Figure 3).

The building is a single story, earth-fast frame structure, with a dirt floor and vertical board walls. The roof was corrugated tin and plastic. The building has garage doors on the east and west side with one large room between them. Windows were 9x9 or horizontal lights in aluminum frames along the north and west walls of the building. Aluminum frame windows were not common place until the 1970's (Staveteig 2008). The interior of the room is littered with debris from potting plants (e.g., plastic and earthen plant pots of various sizes, buckets, plastic pallets, fragments of wood boards, etcetera. There is a second room south of the initial room with a continuous shelf around



Interior of building, note flower pots and pallets



Water well on northeast corner of the building

Figure 2. Project area photographs.



South elevation of building (looking north)



Project area looking east. Note building to north (left) and figure standing at test well.



Shovel test profile

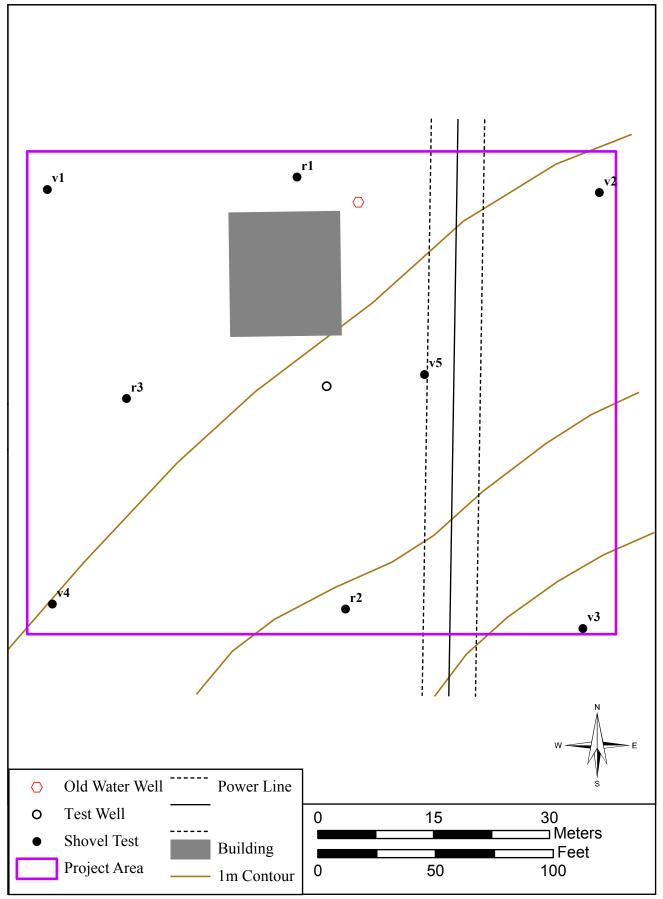


Figure 3. Project area shovel tests and surface features

the south side of the room. Window openings were large and covered with remnants of chicken wire; no frames or glass were observe around the second room. Dry-pressed Whitecastle Brick was observed around the base of the house along with other paving stones. Other modern cultural features included the bed of a 1970's pickup truck filled with scrap metal in the powerline right-of-way and a water well roughly 80 cm (32 in) in diameter line with modern dry-pressed brick near the northeast corner of the building.

A total of eight shovel tests were excavated across the property (Figure 3). Shovel testing found 10 to 30 cm (4 to 12 in) of light brown, reddish brown, and grayish brown sandy loam (Table 1). No cultural material was observed in the shovel testing or during the surface inspection of exposed areas beyond modern debris.

Shovel Test	Depth (cmbs)	Color	Texture
v1	30	Reddish brown	Sandy loam
v2	10	Light brown	Sandy loam
v3	10	Light brown	Sandy loam
v4	30	Light brown	Sandy loam
v5	10	Light brown	Sandy loam
r1	20	Red brown	Sandy loam
r2	20	Grey brown	Sandy loam
r3	20	Red brown	Sandy loam

Table 1. Shovel Test Data

#### SUMMARY AND RECOMMENDATIONS

The proposed Cross Roads Special Utility District water well will include clearing the one acre property, demolishing the building, removing the debris, and filling the old water well before constructing the proposed water well and pump facility. The observed building appears to be less than 50 years old. It is made of modern materials and debris observed in the building suggest it was used as a place for selling potted plants. Texas Antiquities Permit #7433 was obtained by DETAC for the cultural resources survey of the proposed water well and pump facility.

Shovel testing found shallow soils with no prehistoric cultural material. No previously recorded archaeological sites will be impacted and the surface inspection and shovel testing did not reveal any evidence of past prehistoric or historic period occupations. No artifacts were curated.

In conclusion, the investigations did not document any cultural resources. Based on the investigations, there is little chance of encountering cultural resources in the project areas. DETAC is requesting a concurrence with the determination of "no effect" to NRHP eligible properties or State Archaeological Landmarks for the proposed water well and pump facility.

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