AN ARCHAEOLOGICAL SURVEY FOR MCLENNAN COUNTY ELECTRIC COOPERATIVE, INC. 1990-1991 WORK PLAN SYSTEM: PHASE I: TWO UTILITY LINES IN MCLENNAN COUNTY, TEXAS

by

William E. Moore

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by

William E. Moore (Principal Investigator)

Prepared for

McLennan County Electric Cooperative, Inc. 100 North Main Street Post Office Box 357 McGregor, Texas 76657

by

Brazos Valley Research Associates 106 West 26th Street - Suite 38 Bryan, Texas 77803

ABSTRACT

An archaeological survey was conducted along two sections of county right-of-way in McLennan County, Texas by Brazos Valley Research Associates (BVRA). Fieldwork was performed on October 1, 1990. A pedestrian survey accompanied by shovel testing failed to produce evidence of a prehistoric or historic site in the project area. A single untyped arrow point and a biface observed on the surface in Survey Area A are regarded as isolated finds. It is recommended that no additional archaeological work is necessary, and McLennan County Electric Cooperative, Inc. be allowed to proceed with construction.

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INTRODUCTION

The McLennan County Electric Cooperative, Inc. plans to convert single-phase number 4 aluminum conductor steel reinforced (ACSR) line to three-phase number 4 ACSR line along a twenty foot right-of-way of approximately 2.3 miles (Survey Area A) in McLennan County, Texas. In addition, a new line may be created by tying into an existing line along a twenty foot right-of-way of approximately 1.6 miles (Survey Area B). These projects may affect the surface and subsurface of an area in which there is a high possibility for prehistoric sites. Therefore, an archaeological survey was recommended by the Texas Historical Commission. In order to fulfill this obligation, McLennan County Electric Cooperative, Inc. contracted with BVRA of Bryan, Texas to conduct the fieldwork and prepare a report documenting the results of the survey. The arrow point and all records of this project are permanently curated at TARL in Austin, Texas.

Both areas surveyed are part of the McLennan County Electric Cooperative, Inc. 1990-1991 work plan, 740 C, Code 316 (Electric Power Engineers, Inc. 1990). The Rural Electrification Association (REA) is the federal agency regulating this project, while the Texas Historical Commission serves in an advisory role. William E. Moore was the Principal Investigator. The field crew consisted of Roger G. Moore, Albert J. Redder, and Darcy Hoff.

The location of the project area is depicted in Figure 1. Survey Area A follows a light duty road south of North Bosque River and crosses Davis and Schoolhouse branches (Figure 1). Most of the area is in the uplands with elevations as high as 570 feet. Survey Area B follows Highway 6, a light duty road, and Highway 185 (Figure 1). It crosses an unnamed tributary of Schoolhouse Branch and is mostly in the uplands above Schoolhouse Branch and Tennant Branch. The elevation of this area reaches 550 feet in places.

ENVIRONMENTAL SETTING

McLennan County lies within the prairie region of central Texas with the western one-fourth, including the project area, in the Grand Prairie (Templin et al. 1958:Figure 2). The Grand Prairie is a plain underlain by limestone. It is hard rock prairie and is different from the Blackland Prairie to the east as it is more rolling and contains major proportions of stony and shallow soils. In McLennan County the boundary between the Grand Prairie and Blackland Prairie is obscure but it follows the eastern limit of the limestone outcrops and the soils are underlain by limestone within a depth of four feet (Templin et al. 1958:5). The project area is located within the Denton-San Saba-Purves and Tarrant-Brackett soil associations (Soil Conservation Service 1974). These associations are described as moderately deep and shallow soils of uplands over limestone. The depth of limestone below these soils varies from 6 to 40 inches.

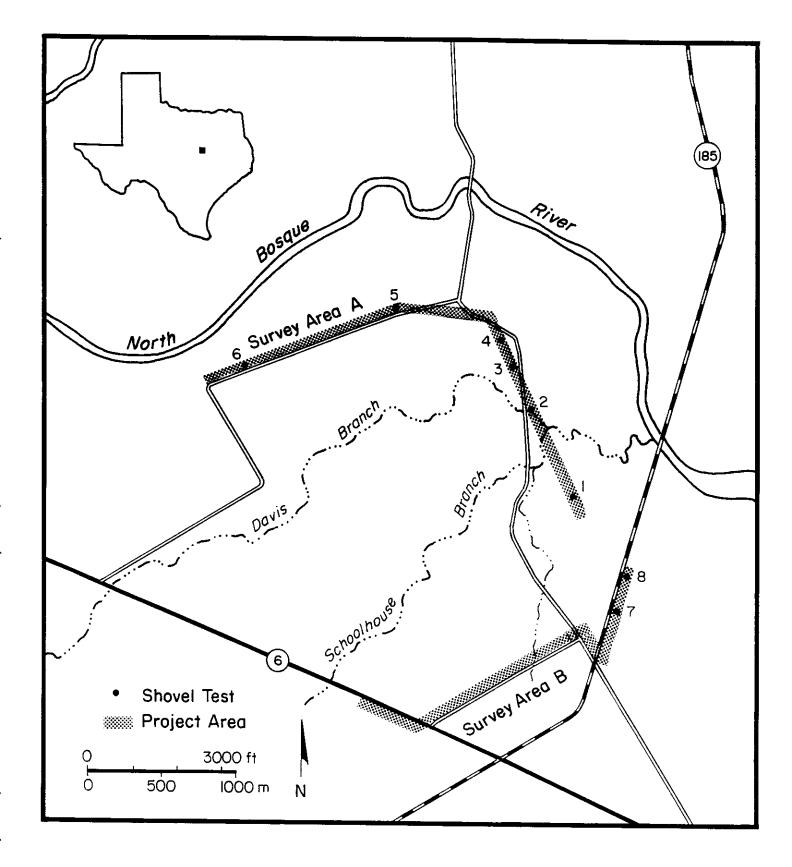


Figure 1. Project Area and Shovel Test Locations.

The climate of McLennan County is characterized by warm summers and mild winters. The average minimum January temperature is 38 degrees Fahrenheit, and the average maximum July temperature is 96 degrees Fahrenheit. An average of 31.26 inches of rain falls in the county annually. The growing season is estimated at 253 days (Kingston and Harris 1983:245).

PREVIOUS INVESTIGATIONS

The project area is located in the North Central Texas Region as defined by Biesaart et al. (1985:76) in a statistical overview published by the Texas Historical Commission. This is an area well documented in terms of numbers of sites when compared to other regions in Texas. When the statistical overview was compiled in 1985, a total of 2678 sites (13.25% of the state) was recorded in the entire region. Only one other region (Central Texas) reported more sites or had a higher percentage statewide. In terms of county statistics; however, thirteen counties in the region had as many or more reported sites as McLennan County in 1985 (Biesaart et al. 1985:83). Only 85 sites were reported for the county in 1985, a total of 3.17% of the region. The reader is referred to the overview for more statistical information concerning McLennan County and its relation to the rest of Texas. At the present time the total number of recorded archaeological sites, prehistoric and historic, is 234 (Rosario Casarez, personal communication September 28, 1990). Since the statistical overview is no longer being compiled, it is not possible to state what percentage of the total site number is prehistoric.

According to Biesaart et al. (1985:166), all periods of Texas prehistory are documented in McLennan County. Sites classified as General Archaic and Late Prehistoric are most numerous with 75 examples comprising 88.24% of the total for the county. Information for McLennan County sites comes primarily from surface collections (76 sites) with little data from excavation (6 sites).

Archaeological work in the area has been largely the result of early efforts by avocationals, university and state avocational field schools, and federally sponsored projects. In the 1930s the Central Texas Archeological Society made surface collections and excavated sites in the Waco area. Their findings have been published in their journal, *Central Texas Archeologist*. The only article in this series that pertains to the Waco Lake area discusses the Lookout Point site (41ML33), and was authored by one of the most active members of the society, Frank Watt (1967). Site 41ML33 produced artifacts from the Early Archaic through Late Prehistoric periods.

Two sites near Waco Lake were excavated by field schools. The Chupik site, located near the confluence of Aquilla Creek and the Brazos River ten miles north of Waco Lake, was investigated by the University of Texas in 1972. Pottery from this site has been classified as early Caddoan Alto Focus affiliation (Prikryl and Jackson 1985:18). Prior to work by the field school the site was recorded and surface collected by Watt (1941). The results of this project have not been published.

The Asa Warner site on the Brazos River seven miles southeast of Waco Lake was examined by the Texas Archeological Society field school in 1974. Artifacts from this site demonstrated that late Caddoan Frankston Focus ceramics overlie earlier Caddoan ceramics similar to those of the Sanders Focus (Watt 1956). Burials associated with *Perdiz* points and a dart point were recorded. The data from this site have not been published (Prikryl and Jackson 1985:18).

In 1984, Waco Lake was inventoried and assessed by Prewitt and Associates, Inc. (Prikryl and Jackson 1985). This study was restricted to 1250 acres which will be inundated by the enlargement of the lake. In addition, 476 acres of Corps of Engineers fee lands within the Waco Lake reservation were surveyed. Limited testing was also conducted. Eighty-three sites were assessed. It was determined that the recorded sites span a long period of time beginning in the early Archaic period and extending through the Late Prehistoric to the twentieth century. Prior to this survey, an overview of the study area was conducted in preparation for the fieldwork. This was undertaken in August and September of 1984 (Prikryl and Prewitt 1984).

Several other major reservoir projects have been conducted in the region. These, plus those projects mentioned above, are described in detail by Prikryl and Jackson (1985).

CULTURE HISTORY

The project lies within the northern edge of the Central Texas Archeological Region as defined by Suhm (1960:63) and Prewitt (1981:71). The North-Central Texas region is only 2.4 miles east of the project area (Lynott 1977:11). The following discussion is taken, in part, from a more detailed discussion of the region by Prikryl and Jackson (1985).

Paleoindian

Occupation in the region dates to Paleoindian times estimated at 11,500 B.P. to 8500 B.P. Probably these early groups practiced a generalized hunting and gathering subsistence strategy as discussed by Johnson (1977:65) and Bryant and Shafer (1977:19-20). Projectile point types representative of this period in the area include *Clovis*, *Folsom*, *San Patrice*, and *Plainview*. They occur most often as isolated surface finds or in mixed contexts. According to Prikryl and Jackson (1985:22), the "overall infrequency of Paleoindian artifacts suggests that the population density at this time was low."

Archaic

The Archaic Stage began about 8500 B.P. and extended to 1250 B.P. It was a time marked by a hunting and gathering economy with a shift to an emphasis on gathering. Weir (1976:114-115) believes that population densities were much higher in Archaic times, and he suggests that a population peak occurred in Central Texas during the middle Archaic when burned rock usage reached its zenith. Archaic sites usually contain stemmed dart points with lanceolate forms sometimes present. Artifact assemblages typically consist of chipped and

ground stone in the form of knives, scrapers, gouges, and perforators. Ground stone artifacts are mainly manos and metates indicative of plant processing activities. Prikryl and Jackson (1985:24) state that the terminal Archaic is the best known of all Archaic subdivisions in the Waco Lake region.

Late Prehistoric

Around 1250 B.P. a major change in technology occurred with a shift from dart points to arrow points and the occasional use of pottery in Central Texas. It is believed that the nomadic hunting and gathering lifeway of the Archaic continued through the Late Prehistoric. Diagnostic artifacts of this period are arrow point types Scallorn, Granbury, Perdiz, and Cliffton. Known pottery types from Late Prehistoric sites in the area include Leon Plain and specimens resembling Caddoan types belonging to the Alto and Sanders foci. Late in this period during the Toyah Phase end scrapers, flake blades, drills, and four-beveled knives are suggestive of Plains affiliation (Shafer 1971).

Historic Indian

Several Indian groups are believed to have lived in the region in historic times and include the Wichita, Tonkawa, Caddo, and Deleware. The Wichita is the best documented group in the Waco Lake area. Known sites include the Waco Indian village (Watt 1969), the Stansbury site (Jelks 1970:281; Stephenson 1970:110-111), and the Stone site (Jelks 1970:278; Gregory 1973:218).

These sites resemble those of the Norteno Focus, which has been assigned to historic sites belonging to Wichita-speaking groups in northeast Texas (Duffield and Jelks 1961:69-75). Native American diagnostic artifacts are *Fresno* arrow points and ceramic types *Womack Engraved*, *Emory Punctated*, and *Womack Plain*. Trade artifacts include glass beads, gun flints, and gun parts.

European Settlement

The history of McLennan County has been documented in a number of sources. These works are general in nature and not directly applicable to the project area. County histories that have been published include Baker (1936), Kelley (1972), and Poage (1981). The area was first settled in 1836 when traders and surveyors from the Upper South arrived following independence from Mexico. In 1846, 8321 acres of land in what is now the lake basin were patented. Settlement was accelerated by the entry of Texas into the Union in 1846 and establishment of an army post at Fort Graham on the Brazos River in 1848. The county was named for Neil McLennan who was the first Euroamerican to build a permanent home and plant crops in the county (Poage 1981). The town of Waco was laid out in 1849, and the county was created from Robertson County in 1850. Following the Civil War, the era of the small farmer emerged (1880-1917). In 1900, the average farm in the Bosque Valley was 89 acres. Many of these were sharecroppers or tenant farmers who produced cotton. The uplands were not suitable for

cotton and in those areas stock raising was practiced. With the arrival of the railroad the area grew. Now it is a county with a population of more than 100,000 people with an economy based on recreation, minerals, agriculture, and business.

METHODS

Prior to the field survey a check was made of site records at TARL to identify known sites in the project area. A literature search was conducted to locate published reports describing previous archaeological work as well as books documenting the general history of the county.

Fieldwork consisted of a 100% pedestrian survey across both survey areas (Figure 1). Each right-of-way was walked by two persons maintaining transects to provide sufficient coverage of the area. All exposed areas such as road cuts, ditches, and animal burrows were inspected for cultural materials. Shovel testing was carried out in areas of high probability for site occurrence and in the vicinity of observed prehistoric materials on the surface. The approximate location of the eight shovel tests is depicted in Figure 1. All excavated fill was screened through 1/4 inch hardware cloth. Shovel test forms were not filled out, and Munsell readings were not taken for the eight shovel tests, all negative. The surey was documented by field notes and color photography. Field observations were also noted on a USGS 1:24000 scale topographic map, Speegleville, Texas. One arrow point, believed to be an isolated find, was collected in the vicinity of Shovel Test 6 (Figure 1).

RESULTS AND CONCLUSIONS

Survey Area A

Approximately 2.3 miles of twenty-foot right-of-way were surveyed and shovel tested (Numbers 1-6). The six shovel tests were negative, and no prehistoric sites were found to be within the right-of-way. A biface, an arrow point (Figure 2), and two flakes were found on the surface in an upland setting of about 550 feet elevation. A single shovel test (Number 6) in the vicinity of the arrow point revealed limestone less than 20 centimeters below the surface. No cultural materials were found in the test. The presence of lithic materials on the surface is evidence of aboriginal utilization of the area during late prehistoric times. However, the low number of widely scattered artifacts confined to the surface suggests that use of this area was temporary. No site number was assigned, and the artifacts are viewed as isolated finds. The survey crew was restricted to the twenty-foot right-of-way and not allowed to examine that part of the landform closest to the river. It is possible that a site exists in that area, and the few artifacts observed within the right-of-way represent its extreme southern boundary.

The arrow point cannot be assigned to a known type as this time. It is not complete as both barbs and the distal tip are broken by bending fractures. The blade has been extensively reworked, and one of its surfaces appears to exhibit a remnant of an impact fracture. This

artifact was probably burned or made from a heat treated flake of chert. Its measurements are: length 20.8 mm, stem length 10.2 mm, thickness 2.9 mm, basal width 6.7 mm, and juncture width 7.7 mm. It weighs 0.8 grams.



Figure 2. Arrow Point from Survey Area A (Actual Size).

A 20th century barn with fence and outbuildings and a 20th century house were observed just outside the right-of-way. Neither of these structures were considered to be architecturally significant.

Survey Area B

Approximately 1.6 miles of twenty-foot right-of-way were surveyed and shovel tested (Numbers 7-8). No prehistoric sites were found to be within the right-of-way. Several modern structures were observed outside the survey area. No significant historic materials were located within the right-of-way. The two shovel tests were negative.

RECOMMENDATIONS

It is recommended that McLennan County Electric Cooperative, Inc. be allowed to proceed with their plans to upgrade and install utility poles along both sections of right-of-way surveyed by Brazos Valley Research Associates on October 1, 1990. The presence of an archaeologist during construction is not considered necessary. If cultural materials are unearthed in either of the survey areas the Texas Historical Commisssion must be notified immediately, and work should terminate until the situation has been evaluated.

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