ARCHAEOLOGICAL INVESTIGATIONS FOR THE SHACKELFORD WATER SUPPLY CORPORATION WATER DISTRIBUTION IMPROVEMENTS PROJECT IN CALLAHAN, EASTLAND, SHACKELFORD, AND STEPHENS COUNTIES, TEXAS

Antiquities Permit 5537



By
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BVRA Project Number 10-02

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ABSTRACT

An archaeological survey for a water distribution line, pump station, and storage tank in Callahan, Eastland, Shackelford, and Stephens counties was performed by Brazos Valley Research Associates (BVRA) under Antiquities Permit 5537 on February 8 and 9, 2010. The area investigated consisted of 34.81 acres. No archaeological sites were found, and no artifacts were collected. Copies of the report are on file at the Texas Historical Commission (THC), Texas Archeological Research Laboratory (TARL), Texas State Library, the Shackelford Water Supply Corporation (WSC), Jacob & Martin, Ltd., and BVRA.

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DEFINITION OF STUDY AREA

The Shackelford WSC proposes to install approximately 14.26 miles of new water line along State Highway 6, Farm-to-Market Road 1853, and Farm-todiameter, and the water lines will be usually centered in an easement typically twenty feet wide on private property immediately adjacent to the highway or county road right-of-way that they parallel within Eastland, Callahan, Shackelford, and Stephens counties (Figure 1). The pipe will be placed in a trench two feet wide and with three feet of cover. One pump station and storage tank is also planned for construction, and these proposed improvements will be located on a site adjacent to the water line easement with a footprint of 100 x 100 feet. In addition, there will be an elevated storage tank with a footprint of 150 x 150 feet. The water line will cross Battle Creek by directional boring. This will occur approximately 15 feet within the property line on the south side of the highway. The entry point will be at least 20 feet from the county road on the west bank of the creek. The entry point will disturb a 4 by 10 foot area to a depth of 36 inches. The exit point will be at least 75 feet from the center of the creek on its east bank. It will disturb a 4 by 10 foot area to a depth of thirty-six inches. The engineers have decided not to use the alternate route. The survey was confined to the private property, as that is where the water line will be installed. In addition, cut banks within the highway right-of-way were examined while walking to the Area of Potential Effect (APE). The agency involved in this project is USDA-RD, and the representative is Joe Powell. The proposed construction areas are depicted on four United States Geological 7.5' topographic maps. They are Albany (3299-424), Bernie Lake (3299-144), Indian Knoll (3299-411), and Moran (3299-412). The project area is depicted on these topographic quadrangles. These maps are found in Appendix I to this report. The location of the boring and the two shovel tests is depicted in Figure 2.

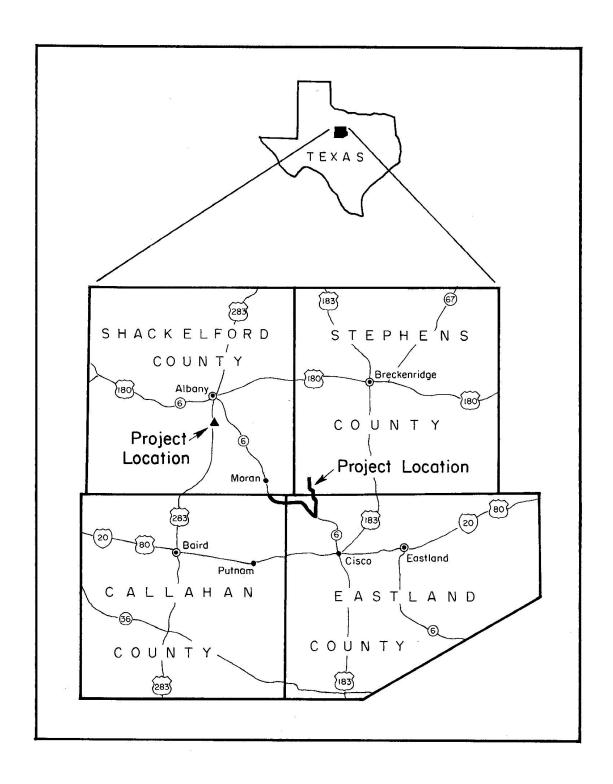


Figure 1. General Location

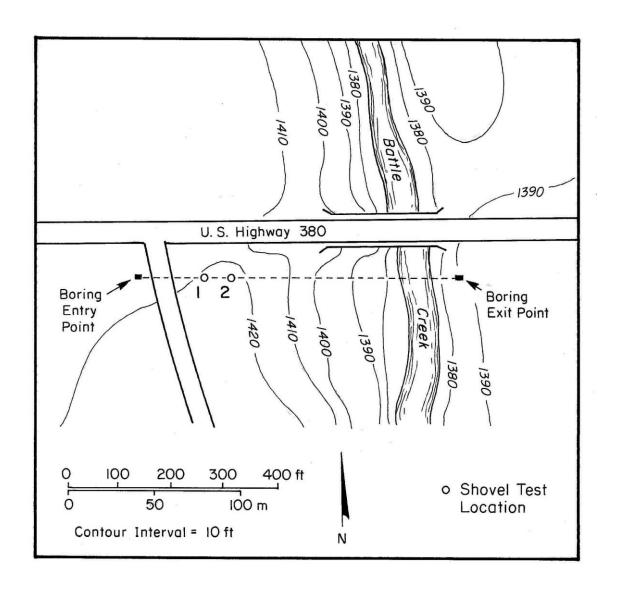


Figure 2. Shovel Tests and Boring Beneath Battle Creek

MANAGEMENT SUMMARY

This project was performed in order to identify any cultural resources that might be present within the route of the proposed water distribution line and the footprint of the proposed pump station and storage tank. The Sponsor for this project is the Shackelford WSC, and the engineering firm working with the Sponsor is Jacob & Martin, Ltd. BVRA is the archaeological firm that was hired to perform this service. William E. Moore was the Principal Investigator, and he conducted the field survey with assistance from Mark Gardenhire and one of his employees (Tyler George). The project was carried out on February 8 and 9, 2010 and involved sixteen person hours by the Principal Investigator, travel included. A digital camera used to document segments of the project area, and field notes were taken.

RESEARCH DESIGN

Prior to entering the field, the site records at TARL and the Atlas were checked for the presence of previously recorded archaeological sites in the project area and vicinity as well as previous projects and surveys in the area. The entire project area was driven and investigated by a 100% Pedestrian Survey. Most of the area consists of rocky soils with sandstone bedrock at or near the surface, and surface visibility in most areas was 100%. Figure 3 illustrates the presence of sandstone bedrock observed near Battle Creek and throughout the APE.

The primary focus of this study was an investigation of Battle Creek, the only major creek that will be crossed by the water line. The west bank was examined by a Pedestrian Survey and two shovel tests. The east bank of Battle Creek was examined by a Pedestrian Survey, and no shovel tests were necessary because of the shallow rocky soils and disturbance present. The cut bank on the west bank of Battle Creek revealed a clay soil that extended to the bottom of the hill. This is the only area where deep soils were observed. The surface visibility at the top of this landform was 100%, and there was a thin scatter of small cobbles and miscellaneous rocks. Two shovel tests were dug within the APE on the top of this landform in an attempt to see if any of the materials observed on the surface were present beneath the surface. These tests revealed sterile clay that is consistent with what was observed in the cut bank. The location of these tests is depicted in Figure 1. Since the surface visibility was 100%, shovel testing was not necessary to evaluate this landform. The east bank of Battle Creek was examined by a Pedestrian Survey, and no shovel tests were necessary because of the shallow rocky soils and disturbance present.

The other streams are minor tributaries that are not viewed by BVRA as high probability areas. However, some lithic scatters and guarry sites have been found in areas away from streams in this part of Texas, especially in the uplands. Therefore, both banks of these tributaries and segments of the uplands were walked and visually inspected on the surface. As stated above, the cut banks were inspected while walking from the highway to the APE. The areas examined using this method are depicted on the project area maps in Appendix I. The cut banks of the areas examined were also examined for evidence of buried materials. Previously recorded prehistoric site 41CA7 is recorded at TARL as being on the north side of State Highway 380 and on the west bank of Battle Creek. No cultural materials were observed eroding from the cut bank below the hill, and no evidence of a site was found on top of the hill within the highway right-of-way. No attempt was made to investigate across the fence because this was not part of the project area, and we did not have permission from the landowner to do so. A local collector said that he had never seen any artifacts in this area. Photographs of the project area were taken with a digital camera.



Figure 3. Sandstone Bedrock Exposure Near Battle Creek

RESULTS

Examination of the files at TARL in Austin, Texas and the Atlas revealed no sites have been recorded within any portion of the project area. In addition, no previous archaeological projects or surveys had been conducted within the current project area. One previously recorded prehistoric site (41CA7) is recorded opposite the project area on the west bank of Battle Creek. This site was originally visited by R. E. Forrester sometime between 1937 and 1955. He described the site as a lithic scatter with large sandstone hearths. Artifacts observed and collected include manos, dart points, and a corner-tang knife. He also mentions a Paleo-Indian presence, but does not list any artifacts found at the site dating to this period. The description of the location of this site is difficult to interpret based on the sketchy site form, but BVRA believes the TARL plotting is not correct. These early sites were plotted on highway maps and then to 15' topographic quadrangles. Later, efforts were made by TARL staff to plot them on the newer 7.5' topographic quadrangles. Based on the statement by a local collector, and our visual inspection of the cut bank below the site and viewing the area across the fence, it is my opinion that site 41CA7 is not on the landform across from the current project area, at least not in the immediate vicinity of the highway.

The only major creek crossing in the project area is Battle Creek. As stated above, no cultural materials were found on either bank of this stream. Although Eubanks Creek is a major stream in the area, the water line will not cross it. Both banks of Eubanks Creek have been severely disturbed through railroad grade construction. If the boring beneath Battle Creek is conducted within the present easement at the depth planned by the engineers, it will be too deep to affect a prehistoric site. There are several unnamed tributaries that cross the proposed route of the water distribution line. The channels of most of these are caused by runoff during periods of rain. According to Mark Gardenhire, there are no springs in the area. Therefore, the possibility of some of these tributaries being spring-fed appears to be remote. Both banks of each of these tributaries were walked and inspected for surface evidence of a prehistoric or historic site. Surface visibility was virtually 100% and shallow bedrock was present in several areas. prehistoric sites are not typically found adjacent to these kinds of drainages. The site of the proposed pump station and storage tank is on rather heavily wooded flat terrain with no nearby source of water, and no evidence of a site was observed. The site of the proposed elevated storage tank is on a steep slope of a high hill with no nearby source of water. No evidence of a site was observed, and prehistoric sites are not usually found on slopes.

RECOMMENDATIONS

No evidence of a prehistoric or historic site was found as a result of this survey. It is recommended that the client be allowed to proceed with construction as planned. Should evidence of an archaeological site be encountered during the construction associated with this project, all work must stop until the THC can evaluate the situation. If additional routes are added, the THC must be notified, as archaeological survey in these areas may also be required. This survey was conducted in accordance with the Minimum Survey Standards as outlined by the THC.

APPENDIX I PROJECT AREA DEPICTED ON TOPOGRAPHIC QUADRANGLES

