AN ARCHAEOLOGICAL SURVEY FOR THE BRYAN TOWNE CENTRE BRAZOS CENTER POND PROJECT IN CENTRAL BRAZOS COUNTY TEXAS

Antiquities Permit 4533



By William E. Moore and Edward P. Baxter

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BVRA Project Number 07-09

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ABSTRACT

An archaeological survey for the Bryan Towne Centre, Brazos Center Pond Project, was performed by Brazos Valley Research Associates (BVRA) on May 22-25, 2007 under antiquities permit 4533. The project area consists of 10 acres and is located adjacent to Carters Creek in central Brazos County. The field survey examined the subsurface through shovel testing and probing and backhoe trenching. The surface was examined for evidence of historic sites and prehistoric artifacts in areas where the ground was disturbed. The entire project area is located in a floodplain setting consisting of sandy loam overlying firm clay between 30 cm and 80 cm below the existing ground surface, clay loam over clay between 20 cm and 30 cm, and clay at the surface. No archaeological sites were found; however, a historic iron bridge was present, having been brought to the project area in 1985 from its original location across Carters Creek. The bridge has been identified by the Texas Historical Commission (THC) as a unique example of a Warren pony truss bridge that was constructed in 1914. It is a single lane bridge that is eligible for listing on the National Register of Historic Places. This historic bridge will not be affected by the construction of the pond or associated trail. No artifacts were collected.

ACKNOWLEDGMENTS

The authors are appreciative of the help provided by CSC Engineering & Environmental Consultants, Inc. throughout this project. Rick Conlin provided maps, obtained permission to enter the property, answered our many questions regarding the project, and visited the project area with the Project Archaeologist. He also arranged for a backhoe and operator (Tim Metzer). At the state level, Jean Hughes (Assistant Head of Records) at TARL in Austin, Texas, checked the TARL files for previously recorded sites in the project area and vicinity. The figures were prepared in-house by Edward P. Baxter. Technical support was provided by Jennifer McMillan, and Nora Lynne Rogers edited the manuscript.

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INTRODUCTION

The City of Bryan proposes to develop 5 acres within a 10-acre tract of land in central Brazos County (Figure 1). Currently, this area is wooded and serves as a nature trail for the enjoyment of visitors to the Brazos Center. The unpaved trail passes marked trees and traverses a low area containing wetlands. It is located immediately behind the Brazos Center parking lot and stops just before it encroaches on Carters Creek to the east. The project area is depicted on the USGS 7.5' Bryan East topographic quadrangle (Figure 2). This topographic map was created in 1962 and photo revised in 1980. Construction plans consist of clearing, removing earth for a nearby construction project, and creating a pond in the area left vacant by earth removal. In addition, a trail parallel to the pond will be constructed. The Warren pony truss bridge constructed in 1914 will be left in place and incorporated into the pedestrian walkways for recreational use of the pond.

Brazos County contains significant archaeological sites, both prehistoric and historic. Recognizing the potential for the presence of significant prehistoric sites in the area, the City of Bryan requested that a cultural resources survey be conducted prior to development of this tract. In order to fulfill this requirement, CSC Engineering & Environmental Consultants, Inc. retained BVRA to conduct an archaeological survey, which was performed under Texas Antiquities Permit 4384.



Figure 1. General Location

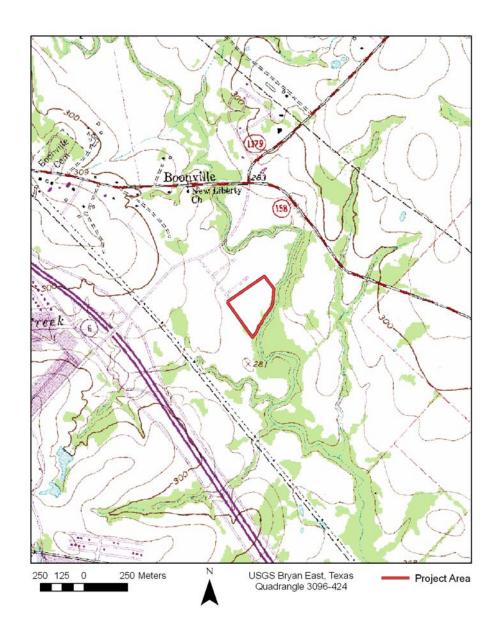


Figure 2. Project Area

ENVIRONMENTAL SETTING

The project area is located within the West Gulf Coastal Plain section of the Coastal Plain physiographic province as defined by Fenneman (1938:100-120). Fenneman subdivides this province according to the age of the geological formations (Gulf series) that roughly parallel the Texas coastline. The area is hilly and situated within the East Texas timber belt. Gould (1969) describes it as an area characterized by gently rolling to hilly topography with light colored soils that are acid sandy loams or sands. The climate is sub-humid to humid, and the weather is considered to be predominately warm. Annual rainfall for Brazos County is 39.21 inches. A January minimum average temperature of 42 degrees Fahrenheit and a July maximum average temperature of 95 degrees Fahrenheit combine to produce a growing season of 274 days (Kingston and Harris 1985:180). The altitude varies from 200-400 feet.

The project area is located on a tract of land that parallels Carters Creek. The elevation across the 10-acre tract is 272 feet. At the time of this survey, the majority of the area surveyed consisted of a thickly wooded area with frequently flooded bottomlands occupying a major portion. A small section has been cleared and contains grass that is mowed regularly.

The vast majority of soils in the project area consist of Sandow Loam, frequently flooded (Sa) as defined and described in the Brazos County soil survey (Chervenka 2003). The project area is depicted on Sheet 27 of the soil survey. According to Chervenka (2003:75), this nearly level soil is found on flood plains along streams. The native vegetation associated with Sa soils consists of hardwood forests of hickory, elm, ash, pecan, and oak with an understory of mid and tall grasses. Sa soils are deep and moderately well drained. Runoff is slow, permeability is moderately slow, and available water capacity is high. Depth to the water table is 3.6 feet to 6 feet (perched). A typical profile is described by Chervenka as follows:

Surface layer: 0-6 inches – grayish-brown, slightly acid loam

Subsurface layer: 6-15 inches – grayish-brown, slightly acid loam

Subsoil: 15-80 inches – moderately acid and slightly acid loams



Figure 3. View of Developed Area



Figure 4. View of Natural Area

METHODS OF INVESTIGATION

Background Research

The field survey was supplemented by an examination of site records and other documents and reports at TARL and in the BVRA library. The records at TARL and the Texas Archeological Sites Atlas were checked for a listing of known sites and surveys in the project area and vicinity. Relevant archaeological reports documenting work in Brazos County were reviewed in order to become familiar with the kinds of prehistoric and historic sites known to be present in the area. BVRA was awarded antiquities permit 4533 which allowed work to be performed on property owned by the City of Bryan.

Field Survey

Edward P. Baxter (Project Archaeologist) performed the field survey. A 100% Pedestrian Survey following rigid transects was not possible due to thick woods and other forms of vegetation. The area was examined by shovel testing and a backhoe. Eighteen shovel tests were excavated randomly across the project area, and two backhoe trenches were dug in those areas where it was possible to use a backhoe without cutting trees and clearing vegetation. Most of the shovel tests and one of the backhoe trenches were placed within the footprint of the proposed pond. At the time of this survey, frequent rains had saturated the project area making it especially difficult to use the backhoe in low-lying areas. In some areas shovel tests were terminated at shallow depths due to the presence of firm clay or standing water. All areas where the ground surface was visible were checked for exposed cultural materials. Each shovel test was approximately 30 cm x 30 cm in size. All excavated earth was screened through quarter-inch hardware Data obtained from shovel tests were recorded on a shovel test loa cloth. (Appendix I), and the approximate location of each test was plotted on a version of the topographic quadrangle Bryan East (Figure 5). All shovel tests were backfilled after evaluation and mapping. The two backhoe trenches were dug to a depth of 7 feet and were 2 feet wide and 30 feet long. Profiles of the trenches were drawn in the field (Appendix II). The project was documented with field notes, a shovel test log, and digital photography. In-depth research was conducted to learn as much as possible about the historic bridge that is present within the greater project area.

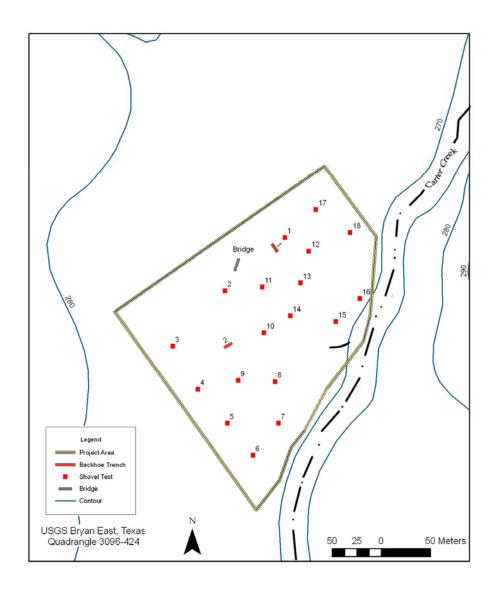


Figure 5. Location of Shovel Tests and Backhoe Trenches

ARCHAEOLOGICAL BACKGROUND

A check of the records at TARL revealed that significant sites have been recorded in the region. The project area has not been examined by a professional archaeologist, but several relevant cultural resources investigations have been performed in the vicinity. Examples of work performed in central Brazos County include investigations by BVRA (Moore 2001, 2004; Moore and Baxter 2005, 2007) and Archaeology Consultants, Inc. (Moore and Warren 1993).

In 1993, Archaeology Consultants, Inc. conducted an archaeological survey of the proposed Bush Presidential Library Center (Moore and Warren 1993). This study investigated 203 acres and recorded two prehistoric sites (41BZ124 and 41BZ125). Site 41BZ124 was found to be a possible single component site with only a few flakes recovered. Historic artifacts dating to the 20th century were found mixed with the prehistoric materials. Site 41BZ125 was found to have been destroyed by construction of George Bush Drive. It yielded only a few flakes, one biface, and one dart point that dates to the Archaic period. The biface and dart point were found on the surface within the highway right-of-way. Virtually all of the shovel tests in the site area were negative. Additional work was not recommended at either site. This project was to the south and east of the current project area along White Creek.

The largest archaeological survey in the area was a 945-acre tract that was examined by BVRA prior to construction of the Traditions Golf and Country Club by the City of Bryan (Moore 2001). This facility has been constructed and is adjacent to the current project area just across a tributary of Turkey Creek to the north. This study found one prehistoric site with a historic component (41BZ131) and three sites containing only prehistoric components (41BZ132 - 41BZ134). All of the prehistoric sites were found to be located on landforms containing sandy soils adjacent to streams. Based on artifacts observed in a private collection and those recovered during subsurface testing, the area had been occupied from sometime during the Paleo-Indian period through the Late Prehistoric periods of Texas Paleo-Indian artifacts include Plainview. Angostura, and an Early prehistory. Stemmed type from 41BZ131. Archaic artifacts include Morrill, Pedernales, Godley, and Gary from 41BZ131 and Carrollton from 41BZ132. The Only evidence of Late Prehistoric occupation was the single Scallorn arrow point found at site 41BZ131. The only two identifiable projectile points found by BVRA were the Carrollton point found during subsurface testing and the Morrill point found on the surface. At site 41BZ132, a probable intact feature consisting of fire-cracked rock, burned chert flakes, and the Carrollton dart point was destroyed by the backhoe. This site is evidence that habitation sites containing features are present in the area. Two sites were found in the uplands. Site BZ133 was found at an elevation of 332 feet, and site 41BZ134 was found at an elevation of 270 feet. Neither site produced diagnostic artifacts or features.

In 2004, BVRA conducted an archaeological survey for the Turkey Creek Trail project to the north and east of the current project area (Moore 2004). This study examined approximately 10 acres, and no archaeological sites were found.

In 2004 and 2005, BVRA conducted an archaeological survey for the West Side Facility sewer project between the confluences of Thompson's Creek and Turkey Creek with the Brazos River. This study examined 61 acres and found one prehistoric site (41BZ158). This site is located on a sandy hill overlooking Thompson's Creek. Numerous flakes were found during extensive shovel testing and backhoe trenching. No diagnostic artifacts were recovered, and no features were observed. Therefore, it was recommended that construction be allowed to proceed.

In 2007, BVRA examined approximately 358 acres along Turkey Creek where the Texas A&M Health Sciences Center is to be constructed (Moore and Baxter 2007). One prehistoric site (41BZ164) was found in the project area. This site yielded flakes and was found to be very disturbed through clearing activities prior to this survey. In addition, a previously recorded historic site (41BZ89) was assessed and found to be virtually destroyed. Site 41BZ89 was the location of a former homestead that contained frame house, double-pen barn, and log crib at the time it was recorded and tested by the Texas Department of Transportation (Archaeological Studies Staff n.d.).

In the 1980s, work was performed along Carters Creek by archaeologists from Texas A&M University. Shawn Carlson (1983) conducted an investigation at the Richard Carter site (41BZ74), the earliest known historic occupation in Brazos County. The Carter family occupied this site from circa 1831 to 1883.

Other projects that have been conducted in Brazos County include the White Creek Archaeological Project (Thoms 1993b) and the Brazos Valley Slopes Archaeological Project (Thoms 1993a). The references cited sections of the reports mentioned above provide information regarding these projects and other work in Brazos County. It is beyond the scope of this negative report to discuss these projects in detail.

RESULTS AND CONCLUSIONS

The current survey examined the entire 10-acre tract and found no evidence of a prehistoric site. It is believed that this low-lying area was not a suitable location for prehistoric utilization except possibly on a temporary basis that would be difficult to find through random shovel testing and backhoe trenching. At the time of this survey, a nature trail was present in the wooded area. It was built by the Youth Conservation Corps in 1981.

One historic bridge is present within the project area (Figure 6). The following description is taken from an article in the Bryan-College Station Eagle (Nunnelee 1985) and measurements taken on site. This bridge is a good example of a Warren pony truss bridge that was constructed as a single lane bridge in 1914 to span Carters Creek on Bird Pond Road south of College Station. This steel bridge was determined by the THC to be eligible for listing in the National Register of Historic Places. As a result of this determination, it was moved to the Brazos Center in 1985 to preserve it after it was no longer considered a useful bridge. It was originally used to replace a wooden bridge that had been damaged by a flood that occurred in the winter of 1913 and spring The bridge today is 50 feet long, 13.5 feet wide, and 6 feet tall. It of 1914. consists of three sections that were produced as riveted components during their original construction and bolted together to form the bridge that was used to cross the creek. According to research conducted by Nunnelee, the bridge consisted of a 50-foot center truss span with 25-foot approach spans at each end. Today, only the center span remains. The Warren Truss was patented in 1848 by James Warren and Theobald Manzani. Warren trusses can span distances of 50 to 400 feet. According to LaVerne Harrington, a deputy State Historic Preservation Officer, "bridges replaced under the federal replacement program qualify for preservation if they are at least 50 years old and have some historical significance. Such bridges can be destroyed only if there is no prudent or feasible alternative." She also said that this bridge is "more graceful" and longer than bridges of similar design.

The project area is located near the original site of the now defunct community of Boonville, the first county seat of Brazos County. The former town site and cemetery is located approximately 375 meters to the north (Figure 2). The town was built around a square with space intended for a courthouse and was named after Mordecai Boon, a nephew of Daniel Boone. No evidence of this community was found within the project area. A book by Margaret Lipps van Bavel (1986) discussing the history of Boonville is present in the Bryan Public Library and the Brazos Center.



Figure 6. View of Warren Pony Truss Bridge

RECOMMENDATIONS

No archaeological sites were found as a result of this survey. The one historic bridge will not be affected by this project. Therefore, it is recommended that construction be allowed to proceed as planned. Should evidence of a prehistoric or historic site be encountered during construction, work should cease in the area of the find until the situation can be evaluated by the THC. A plaque next to the bridge is viewed by BVRA as a useful interpretative exhibit for visitors to the Brazos Center.

REFERENCES CITED

Archaeological Studies Staff

n.d. Archaeological Test Excavations at Site 41BZ89, Brazos County, Texas. Unnumbered testing report on file at the Texas Department of Transportation, Austin.

Carlson, Shawn Bonath

1983 Archeological and Historical Investigations at the Richard Carter Site (41BZ74), Brazos County, Texas. Archeological Research Laboratory, Reports of Investigations Number 2. Texas A&M University.

Chervenka, Glen

2003 Soil Survey of Brazos County, Texas. Published by the United States Department of Agriculture and Natural Resources Conservation Service in cooperation with Texas Agricultural Experiment Station and Texas State Soil and Water Conservation Board.

Fenneman, Nevin M.

1938 Physiography of Eastern United States. McGraw Hill, New York.

Gould, F. W.

1969 Texas Plants: A Checklist and Ecological Summary. The Agricultural and Mechanical College of Texas, College Station.

Kingston, Mike, and Ruth Harris (editors)

1985 Texas Almanac and State Industrial Guide. A. H. Belo Corporation, Dallas.

Lips van Bavel, Margaret

1986 Birth and Death of Boonville: First Town of Brazos County. Nortex Press, Austin.

Moore, William E.

- 2001 An Archaeological Survey of the Tradition Golf and Country Club at University Ranch in Central Brazos County, Texas. Brazos Valley Research Associates, Contract Report 68.
- 2004 An Archaeological Survey for the Turkey Creek Trail Project in Brazos County, Texas. Brazos Valley Research Associates, Contract Report 139.

- Moore, William E., and James E. Warren
 - 1993 An Archaeological Survey of the Bush Presidential Library Center Project, Brazos County, Texas. Archaeology Consultants, Inc., Report 312.
- Moore, William E., and Edward P. Baxter
 - 2005 An Archaeological Survey for the West Side Facility Project in Brazos County, Texas. Brazos Valley Research Associates, Contract Report 138.
 - 2007 An Archaeological Survey for the Texas A&M Health Sciences Center in Central Brazos County, Texas. Brazos Valley Research Associates, Contract Report 177.

Nunnelee, David

1985 Rickety Bridge Makes National Historic Listing. Bryan-College Station Eagle, Saturday, August 24, 1985.

Thoms, Alston V. (editor)

- 1993a The Brazos Valley Slopes Archaeological Project: Cultural Resources Assessments for the Texas A&M University Animal Science Teaching and Research Complex, Brazos County, Texas. Reports of Investigations Number 14, Archaeological Research Laboratory, Texas A&M University.
- 1993b The White Creek Archaeological Project: Cultural Resources
 Assessments for the Proposed Texas A&M University Wastewater
 Treatment Plant, Brazos County, Texas. Reports of Investigations
 Number 13, Archaeological Research Laboratory, Texas A&M
 University.

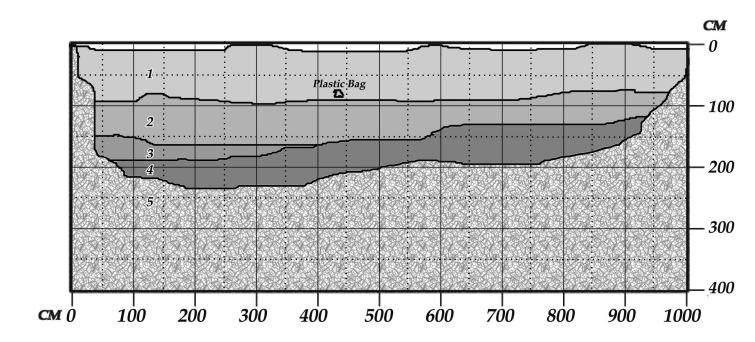
Appendix I Shovel Test Log

Bryan Towne Centre Brazos Center Pond

Shovel Test	Depth (cm)	Artifacts	Soils	Comments
1	80	0	Sandy clay loam / clay	Natural scenic nature area
2	80	0	Sandy clay loam / clay	Developed park area
3	30	0	Clay loam / clay	Developed park area
4	50	0	Sandy clay loam / clay	Developed park area
5	20	0	Clay	Natural scenic nature area
6	20	0	Clay	Natural scenic nature area
7	20	0	Clay	Natural scenic nature area
8	20	0	Clay	Natural scenic nature area
9	20	0	Clay	Natural scenic nature area
10	40	0	Sandy clay loam / clay	Natural scenic nature area
11	10	0	Clay / water	Natural scenic nature area
12	50	0	Sandy clay loam / clay	Natural scenic nature area
13	20	0	Clay	Natural scenic nature area
14	20	0	Clay	Natural scenic nature area
15	20	0	Clay loam / clay	Natural scenic nature area
16	30	0	Clay loam / clay	Natural scenic nature area
17	40	0	Sandy clay loam / clay	Natural scenic nature area
18	30	0	Sandy clay loam / clay	Natural scenic nature area

APPENDIX II BACKHOE TRENCH PROFILES

BACKHOE TRENCH 1 NORTHEAST WALL PROFILE



Zone 1: Brown Sandy Clay Loam.

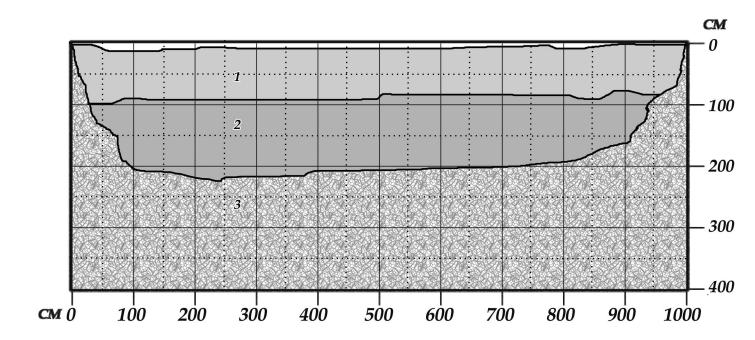
Zone 2: Dark Brown Clay.

Zone 3: Brown Sandy Clay Silt.

Zone 4: Dark Brown Firm Clay.

Zone 5: Unexcavated.

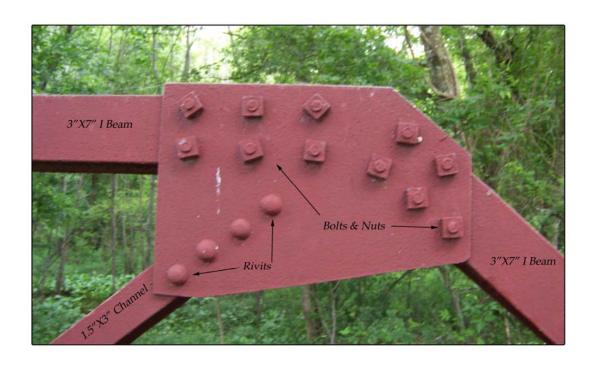
BACKHOE TRENCH 2 NORTHWEST WALL PROFILE



Zone 1: Brown Sandy Clay Loam.

Zone 2: Brown Compacted Silty Clay.

APPENDIX III CONSTRUCTION DETAILS OF WARREN PONY TRUSS BRIDGE



View of Rivets, Beams, Bolts, and Nuts



View of Corner Construction



View of Planking