Volume 2013 Article 53

2013

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Texas Antiquities Permit Number 6663

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ABSTRACT

In September 2013, American Archaeology Group LLC conducted an archaeological survey of three tracts of land along Nolan Creek totaling 8.68 acres for the City of Belton's planned low water dam removal and replacement dam installed, development of a parking lot and trail for kayakers, and removal of a low water bridge crossing. These improvements are being funded by a Texas Parks & Wildlife Department grant. The investigation consisted of a pedestrian survey supported with mechanical trenching. No archaeological sites were identified during the survey. American Archaeology Group LLC recommends that construction within the project area should be allowed to proceed as planned without archaeological monitoring. No artifacts were recovered; therefore, no curation was arranged.

ACKNOWLEDGEMENTS

American Archaeology Group LLC is grateful to those whose cooperation and assistance made the completion of this project possible. Mr. Aaron Harris, Grants & Special Projects Coordinator for the City of Belton served as our primary contact with the City of Belton, and provided our survey team with engineering maps of the project area and on-site assistance in identifying the survey areas. He also took a keen interest in protecting and preserving local cultural resources. Mr. Gary Lacey, P.E. of Recreation Engineering & Planning is thanked for his assistance in providing more detailed information about the proposed impacts. Mr. Byron Sinclair and Mr. Efrain Romero, backhoe operator, both employees of the City of Belton are thanked for their assistance in logistical support of the project in a timely manner. Herbert G. Uecker served as the Principal Investigator and Michael R. Bradle and Robert L. Bradle conducted the fieldwork for the archaeological survey. Ms. Marie Archambeault, of the Texas Historical Commission Archeology Division, served as our reviewer and Ms. Sarah Birthchet of the History Programs Division of the Texas Historical Commission provided insight for potential historic buildings.

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INTRODUCTION

In September 2013, American Archaeology Group LLC conducted an archaeological survey of three tracts of land along Nolan Creek totaling 8.68 acres for the City of Belton's planned low water dam removal and replacement dam installed, development of a parking lot and trail for kayakers, and removal of a low water bridge crossing. The project is depicted on the *Belton* 7.5' U.S.G.S topographic Zone 14 quadrangle map (Figure 1). The UTM coordinates for the approximate center of the two tracts are Northing 3437618 and Easting 646217. The project was funded by the City of Belton and a grant from the Texas Parks & Wildlife Department and was conducted under the auspices of Texas Antiquities Permit Number 6663 in order to comport with provisions of the Antiquities Code of Texas (ACT) and in compliance with 36CFR800, and Section 106 of the national Historic Preservation Act. The investigation consisted of a pedestrian survey supported with mechanical trenching. No archaeological sites were identified during the survey. American Archaeology Group LLC recommends that construction within the project area should be allowed to proceed as planned without archaeological monitoring. No artifacts were recovered; therefore, no curation was arranged.

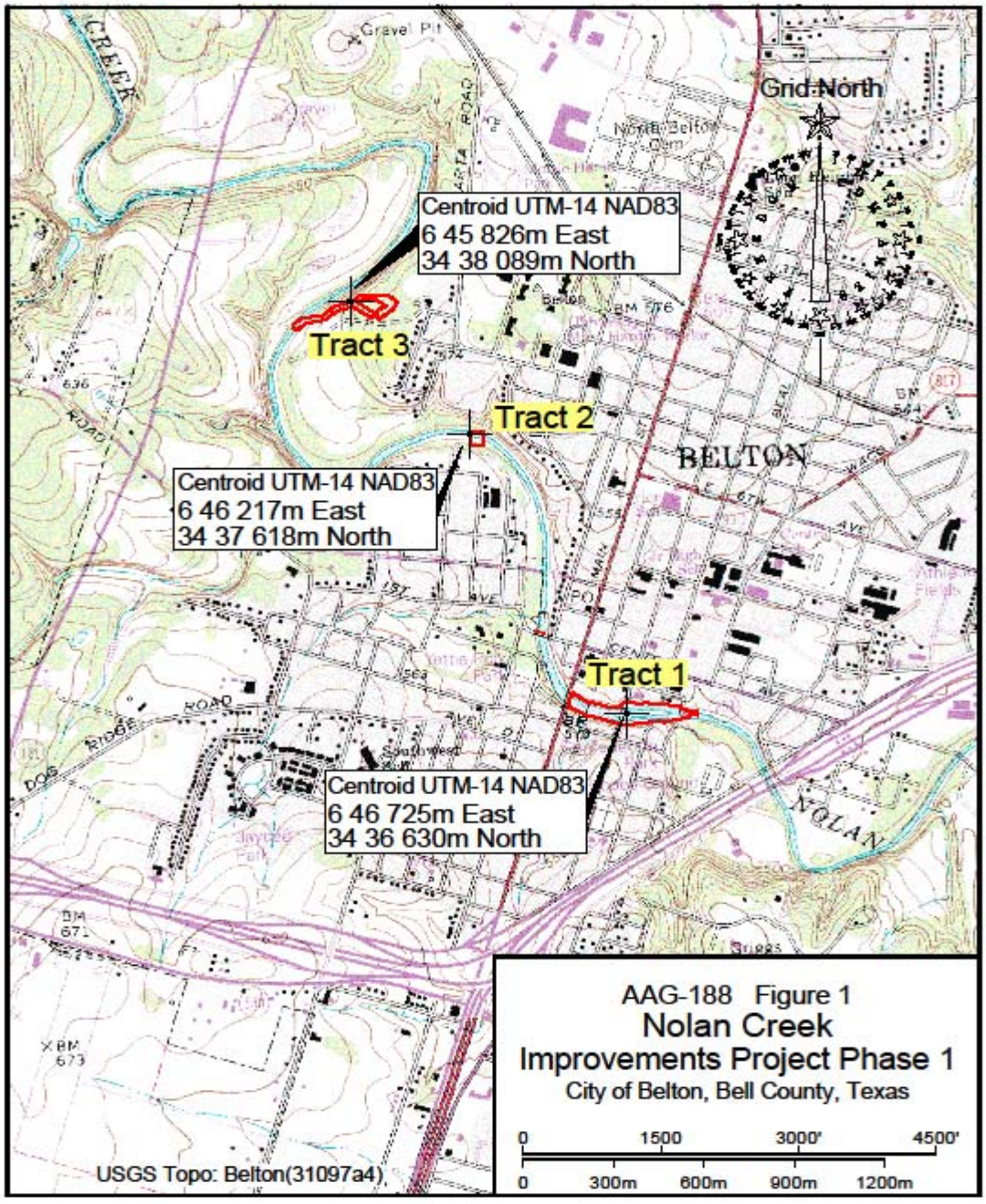

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Figure 1. Project Area Location.

ENVIRONMENTAL SETTING

General

Bell County is located within the Balconian biotic province includes the Gulf coastal plain from the Atlantic Ocean to eastern Texas. The size and location of this province is described below by Blair (1950:112):

> The Balconian province, as here defined, takes in most of the Edwards Plateau as limited by Sellards, Adkins and Plummer (1933): (Figs. 3 and 4), the Lampasas Cut Plain and Comanche Plateau of Raisz (1939 [cited as 1946 in Blair]), and the Central Mineral or Llano Uplift region. That part of the Edwards Plateau lying west of the Pecos, and often referred to as the Stockton Plateau, is not included, but is referred to instead as the Chihuahuan province.

Climate

The Balconian climate is characterized by a decrease in rainfall from east to west. Bell County is located in the eastern half of the province which has been classified by Thornwaite (1948) as dry subhumid, mesothermal with average annual potential evapotranspiration of between 39.27 and 44.88 inches. The annual rainfall for Bell County is 34 inches, the January minimum temperature is 37 degrees Fahrenheit, the July maximum temperature is 96 degrees Fahrenheit, and the growing season is 258 days (Kingston and Harris 1983).

Soils

There are three soil series in the study area, two of which are described in the Soil Survey of Bell County, Texas (Huckabee, Jr. et al. 1977):

Bosque clay loam, frequently flooded (Bf) is a soil that is primarily located on bottom lands along major rivers. This soil series consists of: a surface layer of 0-45 inches grayish-brown (10YR5/2) clay loam; 45-80 inches grayish silty (10YR6/2) clay (Huckabee et al. 1977:8-9).

Doss-Real complex, 1 to 8 percent slopes (DrC) is a soil that is found along ridges consisting of gravelly clay loam with bedrock near the surface. Typical soil profiles of this soils are 0-18 inches clay loam; 18-22 inches limestone bedrock (NRCS 2013).

Venus clay loam, 1 to 3 percent slopes (VeB) is a gently sloping soil on long and narrow terraces of flood plains. This soil series consists of: 0-6 inches (10YR 4/2) grayish –brown clay loam; 6-13 inches (10YR 4/2) very dark brown clay loam; and 13-27 inches brown (10YR 5/3) clay loam; 27-57 inches light brown clay loam (Huckabee et al. 1977:32-33).

Flora and Fauna

According to Blair (1950:113), the most characteristic plant association of this province is a scrub forest of Mexican cedar (*Juniperus mexicana*), Texas oak (*Quercus texana),* stunted live oak (*Quercus virginiana*), and various less numerous species.

The project area is also located well within the Prairies Vegetation Region and the Edwards Plateau Vegetation Region (Gould 1962). Vegetational species characteristic of the region include Plateau live oak (*Quercus fusiformus*), Texas oak (*Quercus texana*), ash juniper (*Juniperus ashei*), honey mesquite (*Prosopis glandulosa*), cedar elm (*Ulmus crassifolia*), cottonwood (*Populus deltoides*), pecan (*Carya illinoinensis*), elm (*Ulmus* sp.), sumacs (*Rhus* sp.), Texas persimmon (*Diospyros texana*), agarita (*Berberis trifoliolata*), Texas stillingia (*Stillingia texana*), yucca (*Yucca* spp.), Texas prickly pear (*Opuntia Lindheimeri*), yaupon (*Ilex vomitoria*), and American beautyberry (*Callicarpa americana*). Grasslands include seep mulhy (*Muhlenbergia reverchnoii*), Canadian wild rye (*Elymus canadensis*), dichanthelium (*Dichanthelium* spp.), Texas grama (*Bouteloua rigidiseta*), and red grama (*Bouteloua hirsuta*). The project area is now primarily overgrown with juniper and mixed oaks and grasses.

The project area is located well within the Balconian Biotic Province which is characteristically represented by a general mixture of fauna from nearby surrounding provinces (Blair 1950). Typical species found within the project area include White-tailed deer (*Odocoileus virginianus*), cotton-tailed rabbit (*Sylvilagus floridanus*), nine-banded armadillo (*Dasypus novemcinctus*), black-tailed jack rabbit (*Lepus californicus*), raccoon (*Prycon lotor*), hispid cotton rat (*Sigmodon hispidus*), wild turkey (*Melagris gallopavo*), morning dove (*Zenaida macroura*), scissor-tailed flycatcher (*Tyrannus forficatus*), northern bobwhite (*Colinus virginianus*), western coach whip (*Masticophis flagellum testaceus*), and the bull snake (*Pituophis melanoleucus sayi*).

ARCHAEOLOGICAL BACKGROUND

Bell County is located in the North Central Texas cultural-geographical region as defined by Biesaart et al. (1985:76). This area is referred to as Central Texas by most archaeologists and is rich in archaeological sites.

Summaries relevant to the prehistory of Bell County and vicinity have been prepared by various archaeologists, primarily as a result of work at Fort Hood in Bell and Coryell counties, Texas (Guderjan et al. 1980; Skinner et al. 1981, 1984; Thomas 1978; Roemer et al. 1985; Carlson et al. 1986), Belton Reservoir (Shafer et al. 1964), the Youngsport site (Shafer 1963), and Stillhouse Hollow Reservoir (Shafer et al. 1964; Sorrow et al. 1967). Summaries of the region have been published by Suhm (1960), Weir (1976), and Prewitt (1981, 1985). Most recently, two thorough articles concerning Central Texas were published in Volume 66 of the *Bulletin of the Texas Archeological Society*. These works, entitled "Forty Years of Archeology in Central Texas," by Michael B. Collins (1995) and "Implications of Environmental Diversity in the Central Texas Archeological Region" by Linda Wootan Ellis, G. Lain Ellis, and Charles D. Frederick (1995), represent a major synthesis of the vast amount of collected data for the region. The following discussion is taken primarily from the works cited above.

Paleoindian Period

According to Willey and Phillips (1958:80), problems exist with the term “Paleoindian;” nevertheless, the term is used ubiquitously in the archaeological literature, often to refer to prehistoric cultures oriented toward big game procurement as a primary means of subsistence. Collins (1995:381) posited instead that during Clovis times, Paleoindians exploited a diverse range of fauna that not only included large herbivores such as mammoth, bison, and horse, but also included smaller animals such as turtles, land tortoises, alligators, mice, badgers, and raccoons. The results of excavation of a cultural pavement at Kincaid Rockshelter suggest that the Paleoindian inhabitants of the site returned there repeatedly as part of a regular hunting and gathering strategy, in contrast with the migratory subsistence pattern of nomadic hunters who only pursued big game. Thus, it is probable that the Clovis diet included a broad array of plants (Collins 1990; Collins et al. 1989).

According to Skinner et al. (1981:13), the Paleoindian period is one of the least understood time periods in Central Texas prehistory, primarily because so few sites have been excavated. For example, as of 1985, only two Paleoindian sites had been reported for Bell County (Biesaart et al. 1985:125). Evidence of Paleoindian cultures consists primarily of surface-collected materials found over much of Central Texas. At Fort Hood, distinctive Paleoindian projectile points were found in multi-component surface sites and as isolated finds (Carlson et al. 1986:125). Generally, it is believed that this period lasted from about 10,000 B.C. until 6000 B.C. Diagnostic artifacts of the period include dart points of the *Angostura, Clovis, Folsom, Golondrina, and Plainview* types as defined by Suhm and Jelks (1962) and Turner and Hester (1985).

These early sites are often found on old terraces of major river drainages and may be more distant from major streams than some more recent occupations (Bryan 1931). Some rockshelters, such as the Levi site, were intensively occupied even though they are located a considerable distance from major rivers. The only example of a rockshelter in Central Texas immediately adjacent to a major drainage known to contain Paleoindian occupation is the Horn Shelter (41BQ46) in Bosque County, Texas (Redder 1985). Collins (1999) reported on the Gault Site, a major Clovis site in Bell County that is still being studied.

Archaic Period

The Archaic is a comparatively lengthy cultural period, which persisted in Central Texas from approximately 8500-1250 years Before Present (B.P.). According to Prewitt (1981:71), "The Archaic Stage dominates all other remains in Central Texas." Prewitt (1981) has subdivided the Archaic into eleven phases. Johnson (1987) has questioned the validity of the phase concept as used by Prewitt, especially the phases occurring before the Middle Archaic. Carlson et al. (1986:15) grouped these into Early, Middle, Late, and Terminal Periods.

According to Prewitt (1981:77-78), during the Early Archaic there was a "strong orientation toward the gathering aspect rather than the hunting, and a mobile population was of low density." These characteristics apparently were predominant during the Circleville, San Geronimo, and Jarrell phases (8500-5000 B.P.). In the Middle Archaic, food gathering apparently became very specialized as evidenced by the presence of numerous burned rock middens/mounds (Prewitt 1981:78-80). Prewitt divides the Middle Archaic into the Oakalla, Clear Fork, Marshall Ford, and Round Rock phases (5000-2600 B.P.). It appears that considerably fewer burned rock middens were formed during the Late Archaic than in the earlier Archaic. The archaeological record indicates that while bison were important in the diet of prehistoric peoples, they were not necessarily the principal food source during this time (Prewitt 1981:80-81). The Late Archaic occurred during the San Marcos and Uvalde phases (2600-1750 B.P.). The terminal Archaic, according to the classification by Carlson et al. (1986), includes the Twin Sisters and Driftwood phases (1750-1250 B.P.). An increase in the importance of gathering and an apparent peak in site density seem to have occurred during Prewitt's (1981:82) Driftwood phase. A majority of the sites in Williamson County are Archaic in age, which, according to Prewitt (1981:Figure 3), lasted from 8500-1250 B.P. This interpretation is supported by Collins' (1995:383) assertion that "two-thirds of the prehistory of Central Texas is 'Archaic' in character."

Late Prehistoric Period

This period has been characterized in the archaeological literature as the Neo-American Stage (Suhm et al. 1954), the Neo-archaic (Prewitt 1981), and the Post-Archaic (Johnson and Goode 1994). The Late Prehistoric is typically divided into the Austin (1250-650 B.P.) and Toyah (650-200 B.P.) phases. Technological changes are the primary distinguishing characteristic of this stage. The archaeological record indicates that during this period, the bow and arrow became the principal weapon for hunting and warfare, and that the use of ceramics and the practice of horticulture first appeared in Central Texas and the surrounding regions.

According to Collins (1995:385), during the Late Prehistoric of Central Texas, the bow and arrow were the first of these cultural innovations to be adopted, followed by pottery, and finally agriculture though it was of relatively minor importance. Until the onset of these Late Prehistoric adaptations, most cultural groups continued to practice hunting and gathering as their principal means of subsistence, as had their ancestors throughout the Archaic and Paleoindian periods. However, in about 800 B.P., evidence for a different subsistence adaptation appears in the archaeological record and this cultural time boundary marks the separation between the late Archaic and the Austin and Toyah phases of the Late Prehistoric period (Collins 1995:385).

The most obvious of the changes that emerged at the beginning of the Late Prehistoric period was the introduction of the bow and arrow and decreased use of the *atlatl* or spear thrower. Otherwise, life ways in the Late Prehistoric were probably quite similar to those in the earlier Archaic period (Prewitt 1981:74; Weir 1976). A chronological model of bison presence and absence periods on the southern plains suggests that bison were present during the Toyah phase but not during the preceding Austin phase (Dillehay 1974).

Historic Period

Collins (1995:386) divides the Historic period of Central Texas into three sub-periods: early, middle, and late. During the first two, vestiges of both indigenous and European peoples and cultures were present; however, in the third the indigenous peoples had virtually disappeared. The early Historic sub-period in Central Texas began in the late 17th century with the first documented arrival of Europeans. Bell County is situated within the historic range of the Tonkawa Indians who inhabited the area in the 16th Century (Newcomb 1986). By the 19th Century, they had broken ties with the Comanche and Wichita and were associated with the Lipan Apache (Aten 1983:32). They have been described as typical southern Plains Indians who were hunters and gatherers and who lived along the streams and rivers of Central Texas.

During this period, Texas was occupied by numerous aboriginal groups including the Caddo, Jumano, Tonkawa, Comanche, and Lipan Apache (Newcomb 1986). Trade is known to have existed between the Jumanos and the Caddos. The Lipan Apaches and subsequently the Comanches entered the region from the Plains while following key animal resources as they

migrated into Texas. Contact period occupations are often identified by the occurrence of glass beads, gun parts, gun flints, metal projectile points, and European manufactured ceramics. The archival search did not locate any Historic Indian sites in Bell County; Texas. In adjacent Coryell County, a blue glass bead was found with one of the burials at 41CV1, a group burial along the Leon River (Jackson 1931), and a steel arrow point has been reported as an isolated find on Horse Creek in the extreme east corner of Coryell County (Campbell 1952).

Historically, Bell County was first settled in 1834 and 1835 by colonists who settled along Little River. The area was abandoned during the "Runaway Scrape" of 1836, reoccupied, and deserted again after the fall of Fort Parker in June 1836. The early settlements were constantly harassed by hostile Indians and, although several forts were established, by 1838 all settlers had left the county. On May 26, 1839, the Indians suffered a decisive defeat at what is referred to as the "Famous Bird Creek Fight" about one and a half miles northwest of the present site of Temple, Texas. However, settlement did not return to the Bell County area until after 1843.

Bell County was created on January 22, 1850 and was named for Peter H. Bell. Nolan Springs was chosen as the county seat and named Nolanville, but on December 16, 1851 the name was changed to Belton. Early settlement was along the creeks and rivers. William Pepper and his family were living on the west side of present-day Kegley Road when the 1850 census was taken. The Kegleys, Carpenters, and others settled near Pepper Creek during the 1850s, and some members of these early families are buried at Eulogy Cemetery. Early histories of Bell County refer frequently to the Shallowford Crossing on the Leon River as an important transportation route for wagon traffic. The exact location of this crossing has not been identified, but it substantiates the importance of this part of Bell County during its early settlement. By 1860, most of the land had been taken. The last serious Indian raid occurred in 1859. With the Indian problem apparently resolved, settlement increased and the county grew from 4799 in 1860, to 9771 in 1870, and to 20,518 in 1880. The number of farms in the county increased from 640 in 1869, to 2231 in 1871, and to 4249 in 1889. Bell County is chiefly an agricultural region with cotton and corn the leading crops. The construction of Fort Hood led to a population increase in the county from 44,863 in 1940 to 74,145 in 1950.

PREVIOUS INVESTIGATIONS

The efforts of members of the Central Texas Archaeological Society and Bell County Archeological Society have made notable contributions. These include articles in the form of bulletins, newsletters, special reports, and unpublished manuscripts on file at TARL or with society members. Bell County has been the subject of intensive investigations by members of the Central Texas Archeological Society. As a result of the above-mentioned investigations, "Bell County is one of the better known Central Texas counties and has provided significant information toward the understanding of prehistoric chronologies in this part of Texas" (Young 1987:9).

In the site files at TARL are numerous pieces of correspondence from landowners and artifact collectors documenting and describing sites and artifacts found in Bell County. Also present are copies of unpublished manuscripts, some of which do not provide information concerning author and date of preparation. Information regarding previous work in other parts of Bell County appear in the various references cited above, especially the Fort Hood series.

At the time of this survey there were no archaeological sites recorded in the project area. Surveys by Bradle and Moore (1998), Moore, Bradle and Nordt (1996a, 1996b); Moore and Bradle (1996) recorded 8 prehistoric and historic sites on Pepper Creek, 2 sites (1 prehistoric and 1 historic) on Fryers Creek, and 1 site containing prehistoric and historic materials on an unnamed tributary that flows into Bird Creek. Three of these sites (41BL1066, 41BL1069, 41BL1070) have been subjected to Phase II testing (Bradle et al. 1997). Bradle et al. (2003) surveyed 101.2 acres, of which the northern half of the current project traverses across. One site (41BL1202) was recorded as a mid-twentieth century farmstead that was not considered eligible for inclusion on the National Register of Historic Places (NRHP) nor worthy of designation as a State Archaeological Landmark (SAL).

An archeological reconnaissance of a proposed wastewater collection and treatment improvement in 1982 and 1984 by the Texas Department of Water Resources (Fox and Whitsett 1984) recorded eight prehistoric sites prehistoric sites (41BL259 - 41BL264 and 41BL278 - 41BL279). According to Fox and Whitsett (1984:6), "some site-specific investigations have been done in Bell County (Watt 1936; Shafer 1963), but as yet detailed archeological investigations have not been conducted in the Temple-Belton area." Except for testing at 41BL260 by Wayne C. Young (1987) of the Texas State Department of Highways and Public Transportation, Highway Design Division (now Texas Department of Transportation) in 1987, and the three tested sites mentioned above, no additional site-specific investigations were identified during the literature search for this project. In 1975, Texas Department of Transportation conducted two small surveys through the project area, including right adjacent to the historic barn but neither included any information on the barn nor did they record any sites.

Godwin (2006) surveyed the Belton Harris Community Park nearby and recorded one site, 41BL1238 with both an archaic and historic urban scatter that was disturbed and determined to be ineligible for the NRHP and SAL designations. This area is immediately southeast of Tract 2 of the

current study on a higher terrace. In 2013, Sergio Iruegas surveyed the Nolan Creek Pedestrian and Bike Trail Extension Project and recorded 41BL1367 that contained both a lithic and historic scatter. This area is further southeast of Tract 2 of the current study area.

Uecker (2011) surveyed an area that crosses Nolan Creek that overlaps the northeastern portion of Tract 3 of the current study, and no sites were encountered. Previous Environmental Protection Agency linear surveys were conducted in 1976 and 1984 along the south side of Nolan Creek near Tract 1 and no sites were encountered.

FIELD METHODS

Background Research

Before entering the field, AAG conducted a background investigation. Site records at the Texas Archeological Research Laboratory (TARL) in Austin, Texas were checked for previously recorded sites in the project area and vicinity. In addition, site reports documenting work in the region were examined for information concerning archaeological surveys and other work relevant to the project area. The project was discussed with representatives of the City of Temple to ensure that the field crew was aware of the correct route for the proposed sewer line.

Field Survey

The fieldwork was accomplished in September 2013 using the pedestrian survey method supported by backhoe trenching. Surface visibility was approximately 50% therefore backhoe trenching was utilized to maximize subsurface inspection. In addition to intensive surface inspection, nine (9) backhoe trenches were excavated in order to provide a more expansive view of subsurface soil deposits and all were negative. The depths of the backhoe trenches varied from 16 centimeters (near surface bedrock exposure) to 2.54 meters below the surface. No cultural material was encountered in the backhoe trenches. Additionally, nearby creek bank exposures afforded ample opportunities to look for any observable subsurface deposits. No cultural materials or deposits were observed along the creek bank. There also appeared to be fill deposits present too.

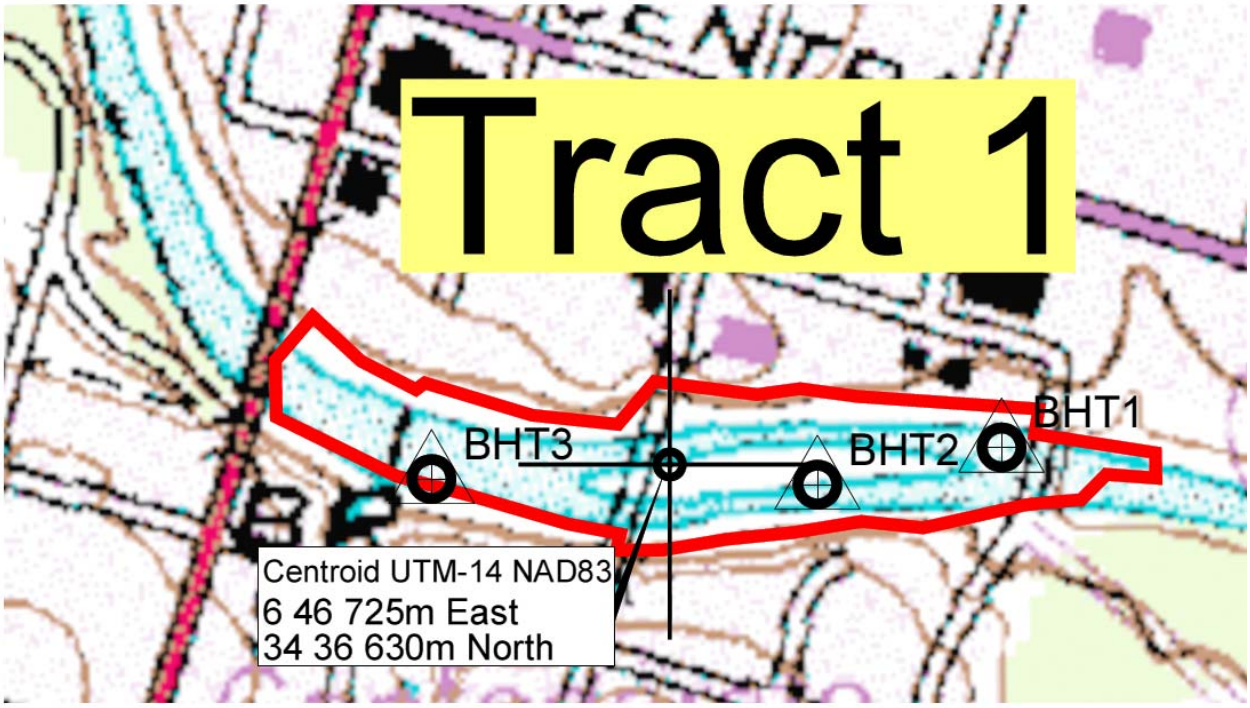

Figure 2. Location of Tract 1.

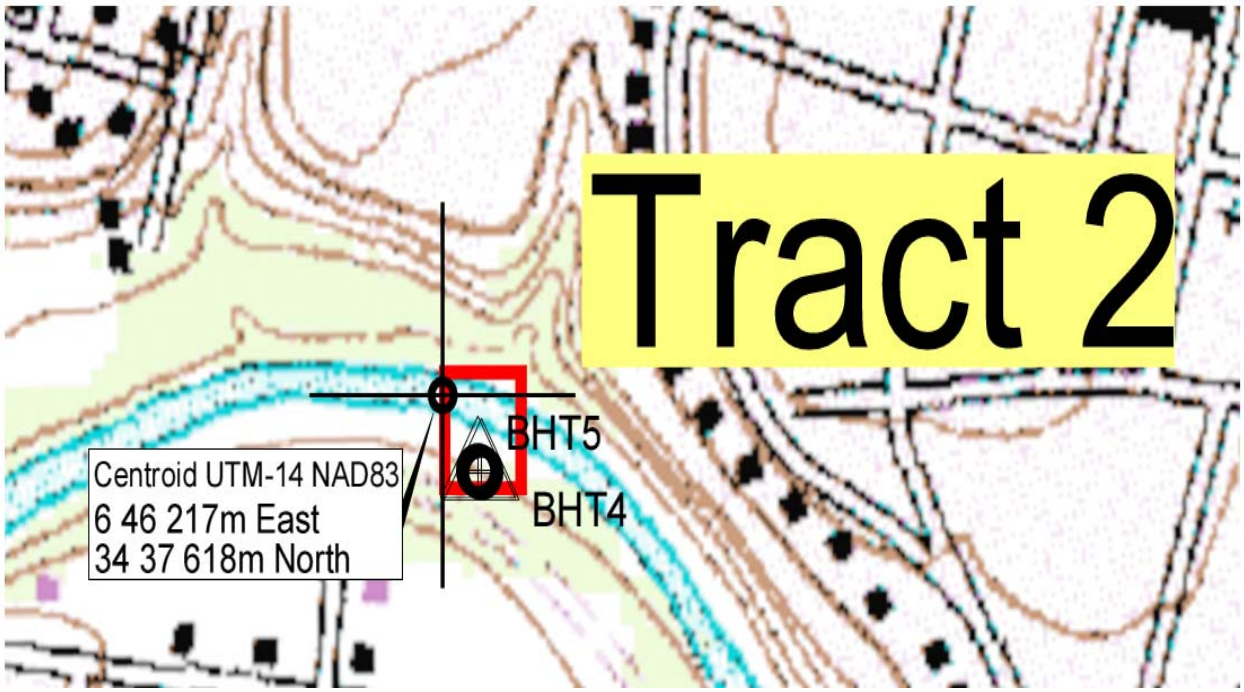

Figure 3. Location of Tract 2.

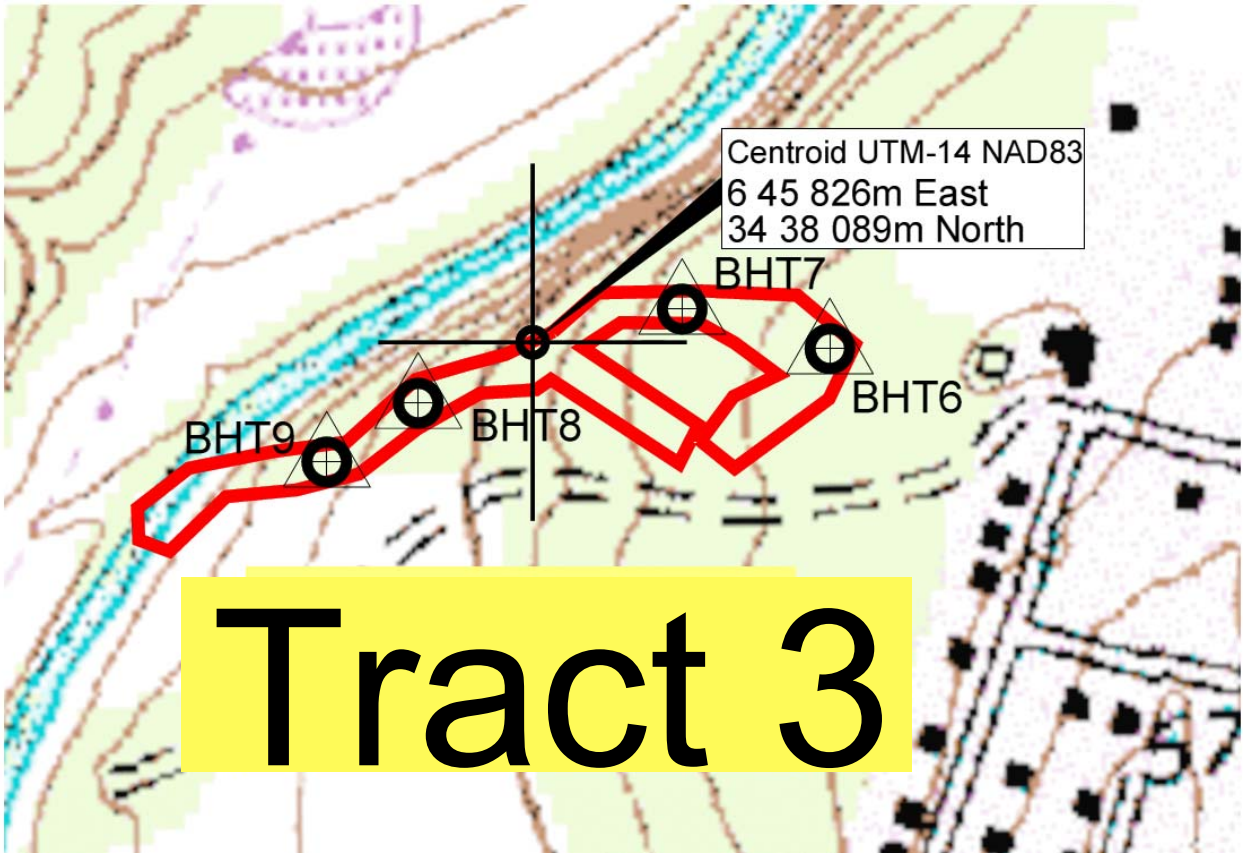

Figure 4. Location of Tract 3.

RESULTS AND CONCLUSIONS

Archival Research

The site records at TARL revealed no sites had been recorded in the project area. Large-scale federal projects such as Belton Reservoir, Stillhouse Reservoir, and Fort Hood have recorded the vast majority of sites in Bell County (see *Archaeological Background* and *Previous Investigations* above). Recent projects by American Archaeology Group LLC personnel have provided the majority of new data regarding prehistoric and historic utilization of the general project area (see *Previous Investigations* above).

Field Survey

The field survey did not identify any historic or prehistoric archaeological sites within any of the three tracts surveyed. Tract 1 is located primarily along the north side of Nolan Creek beginning at the Main Street bridge and eastward to the low water crossing. The Penelope Street bridge crosses this tract at the mid-point. The southern side of Nolan Creek is a high limestone bluff. The only area that could be tested for any potential subsurface deposits was the southwestern portion of this tract which contained thin clay and silt deposits on top of limestone bedrock.

BHT 1 and 2 were excavated on the north side of Nolan Creek into what appeared to be a terrace with potential soil depth. However, both BHT 1 and 2 contained mixed silty sand deposits and clay but contained brick, glass, plastic, and asphalt debris from previous filling activities. BHT3 was very shallow and contained a thin silty and sand deposit with clay on top of limestone bedrock. No historical buildings were located with or immediately adjacent to this tract.

Figure 5. Western view of Tract 1 from east end.

Figure 6. Eastern view of Tract 1 from bridge crossing. Note extensive gravel deposits.

Figure 7. South view of Tract 1.

Figure 8. North view of low water dam in Tract 1, note restored Gin adjacent to the project area.

Figure 9. Front view of historic Gin restored and currently operated as a restaurant.


Figure 10. Photograph of BHT1.

Tract 2 is located northwest of Tract 1 in the bend of Nolan Creek where an existing concrete bridge is located. This area is actually very small and confined to the actual bridge crossing. The existing bridge already impacted the soil deposits on both sides of Nolan Creek and the new pedestrian bridge will be smaller and fit the same footprint. Therefore, AAG concentrated its efforts on excavating one backhoe trench (BHT4) on the south side where adjacent deposits could be tested. This tract is located near Lion's Field, a small park that has a baseball field and basketball courts. An existing hike and bike trail cuts through this area and crosses the bridge in Tract 2.

Figure 11. Northwestern view of concrete bridge at Tract 2.Note extensive ersosion.

Figure 12. Eastern view of Nolan Creek from Tract 2.

Figure 13. Photograph of BHT4.

Tract 3 is located northwest of Tract 2 and is east of Nolan Creek. This tract will be developed with a short trail to arrange access to Nolan Creek for kayakers, and a small parking lot.

Figure 14. North view of Tract 3 proposed parking lot area. Note limestone bedrock.

Figure 15. South view of Tract 3 adjacent to new subdivision.

Figure 16. Western view of Tract 3.

Figure 17. Photograph of BHT7.

RECOMMENDATIONS

The survey of the proposed Nolan Creek Improvements Project in Bell County, Texas performed for the City of Belton did not identify any historic or prehistoric sites in the project area. American Archaeology Group LLC recommends that construction be allowed to proceed as planned. It is always possible that buried cultural materials can be missed during any Phase I survey. Therefore, should any sites be found during the construction of the Nolan Creek improvements, all work within the site area should cease until the situation can be evaluated by the Archeology Division, Texas Historical Commission, in consultation with American Archaeology Group LLC, and the City of Belton.

REFERENCES CITED

Aten, Lawrence E.
1983 *Indians of the Upper Texas Coast.* Academic Press.

Barnes, Virgil E.
1970 Geologic Atlas of Texas: Waco Sheet; in 15-minute Digital Gat Quads, NE; Texas Commission on Environmental Quality; Austin, Texas.

Biesaart, Lynne A., Wayne R. Roberson, and Lisa Clinton Spotts
1985 *Prehistoric Archeological Sites in Texas: A Statistical Overview.* Office of the State Archeologist, Special Report 28.

Blair, W. Frank
1950 The Biotic Provinces of Texas. *Texas Journal of Science 11(1): 93-116.*

Bradle, Michael R., Lee C. Nordt, and Herbert G. Uecker
1997 *Phase II Archaeological Test Excavations at Sites 41BL1066, 41BL1069, and 41BL1070 in Bell County, Texas.* American Archaeology Group, Inc., Report of Investigations Number 17.

Bradle, Michael R. and William E. Moore
1998 *A Phase I Cultural Resources Survey of the Pea Ridge Sewer Trunk Line, Bell County, Texas.* American Archaeology Group, Inc., Report of Investigations Number 16.

Bradle, Michael R., Gilbert T. Bernhardt, and Herbert G. Uecker
2003 *Archaeological Survey of the Reinvestment Zone Detention Pond #2 for the City of Temple, Bell County, Texas.* American Archaeology Group, Inc., Report of Investigations Number 54.

Bryan, F.
1931 Notes on the Archeology of Central Texas. *American Anthropologist 33(1):16-31.*

Campbell, Thomas Nolan
1952 Note written by T. N. Campbell dated October 24, 1952. On file at the Texas Archeological Research Laboratory in Austin, Texas.

Carlson, David L., Shawn B. Carlson, Frederick L. Briuer, Erwin Roemer, Jr., and William E. Moore

1986 *Archaeological Survey at Fort Hood, Texas Fiscal Year 1983, The Eastern Training Area.* United States Army Fort Hood, Archaeological Resource Management Series, Research Report 11.

Collins, Michael B.

1990 The Archaeological Sequence at Kincaid Rockshelter, Uvalde County, Texas. In *Transactions of the 25th Regional Archeological Symposium for Southeastern New Mexico and Western Texas*, pp. 25-33. Midland Archeological Society, Midland.

1995 Forty Years of Archeology in Central Texas. *Bulletin of the Texas Archeological Society 66:361-400.*

1999 Rethinking the Peopling of the Americas. Heritage 17(4): 6-11.

Collins, Michael B., G. L. Evans, Thomas Nolan Campbell, M. C. Winans, and C. E. Mear

1989 Clovis Occupation at Kincaid Shelter, Texas. *Current Research in the Pleistocene 6:3-4.*

Dillehay, Tom D.

1974 Late Quaternary Bison Population Changes on the Southern Plains. *Plains Anthropologist 19(65):180-196.*

Ellis, Linda Wootan, G. Lain Ellis, and Charles D. Frederick

1995 Implications of Environmental Diversity in the Central Texas Archeological Region. *Bulletin of the Texas Archeological Society 66:401-426.*

Fox, Daniel E., and W. Hayden Whitsett

1984 An Archeological Reconnaissance of Proposed Wastewater Collection and Treatment Improvements, Cities of Temple and Belton, Bell County, Texas C-48-1535. Texas Department of Water Resources.

Godwin, Molly F.

2006 An Archaeological Survey of the Belton Harris Community Park, Bell County, Texas. Antiquities Planning & Consulting, Heritage Management Series Survey Report 55. Kyle.

Gould, F. W.

1962 *Texas Plants: A Checklist and Ecological Summary.* Texas Agricultural Experiment Station, Bulletin MP-585. College Station.

Guderjan, Thomas H., George B. Thomas, and Howard R. Cramer
1980 Existing Data Inventory of Cultural Resource and Paleontological Information, Fort Hood, Texas. Soil Systems, Inc. Marietta, Georgia.

Huckabee, J.W., Thompson, D.R., Wyrick, J.C., and Pavlat, E.G.
1977 *Soil Survey of Bell County, Texas.* United States Department of Agriculture-Soil Conservation Service. United States Government Printing Press, Washington, D.C.

Jackson, A. T.
1931 Excavation of a Burial Site on Fred Acree Farm, Coryell County, Texas, January 29 to February 3, 1931. Unpublished manuscript on file at the Texas Archeological Research Laboratory in Austin, Texas.

Johnson, Eileen
1977 Animal Food Resources of Paleoindians. *The Museum Journal 17:65-77.*

Johnson, LeRoy, Jr.
1987 A Plague of Phases: Recent Sociocultural Taxonomy in Texas Archeology. *Bulletin of the Texas Archeological Society 57:1-26.*

Johnson, LeRoy, Jr., and Glenn T. Goode
1994 A New Try at Dating and Characterizing Holocene Climates, as well as Archeological Periods, on the Eastern Edwards Plateau. *Bulletin of the Texas Archeological Society 65:1-51.*

Kingston, Michael T., and Ruth Harris (editors)
1983 *The Texas Almanac and State Industrial Guide: 1984-1985.* The Dallas Morning News.

Moore, William E., Michael R. Bradle, and Lee C. Nordt
1996a *An Archaeological Survey for the City of Temple, Texas Improvements and Extensions to the Pepper Creek Trunk Sewer Line and Lift Station Project in Bell County, Texas*. Brazos Valley Research Associates, Contract Report Number 42.

1996b *An Archaeological Survey of the Fryers Creek Sewer Line Extension in Bell County, Texas.* Brazos Valley Research Associates, Contract Report Number 41.

Moore, William E., and Michael R. Bradle
1996 *An Archaeological Survey of the Stratford-Hickory Road Connection in Bell County, Texas.* Brazos Valley Research Associates, Contract Report Number 43.

Natural Resources Conservation Service (NRCS)
2013 Custom Soil Resource Report for Bell County, Texas: DrC-Doss-Real complex, 1 to 8 percent, issued October 29, 2013. United States Department of Agriculture.

Newcomb, William W., Jr.
1986 *The Indians of Texas: From Prehistoric to Modern Times.* The University of Texas Press. (Seventh Paperback Printing)

Prewitt, Elton R.
1981 Cultural Chronology in Central Texas. *Bulletin of the Texas Archeological Society 52:65-89.*

1985 From Circleville to Toyah: Comments on Central Texas Chronology. *Bulletin of the Texas Archeological Society 54:201-238.* (for 1983)

Raisz, Erwin
1946 *Map of the Landforms of the United States.* Harvard University. Cambridge.

Redder, Albert J.
1985 Horn Shelter Number 2: The South End a Preliminary Report. *Central Texas Archeologist 10:37-65.*

Roemer, Erwin, Jr., Shawn Bonath Carlson, David L. Carlson, and Frederick L. Briuer
1985 *Archaeological Surveys at Fort Hood, Texas, The Fiscal Year 1982 Range Construction Projects.* United States Army, Fort Hood Archaeological Resource Management Series, Research Report Number 10.

Sellards, E. H. Adkins, W. S. and F. B. Plummer
1933 *The Geology of Texas: Volume I, Stratigraphy.* The University of Texas Bulletin 3232. Austin.

Shafer, Harry J.
1963 Test Excavations at the Youngsport Site: A Stratified Terrace Site in Bell County, Texas. *Bulletin of the Texas Archeological Society 34:57-81.*

Shafer, Harry J., Dee Ann Suhm, and J. D. Scurlock
1964 *An Investigation and Appraisal of the Archeological Resources of Belton Reservoir, Bell and Coryell Counties, Texas: 1962.* Texas Archaeological Salvage Project, Miscellaneous Papers, No. 1. The University of Texas at Austin.

Skinner, S. Alan, Frederick L. Briuer, George B. Thomas, Ivan Show, and Eli Mishuck
1981 *Initial Archaeological Survey at Fort Hood, Texas, Fiscal Year 1978.* United States Army, Fort Hood Archaeological Resource Management Series, Research Report Number 1.

Skinner, S. Alan, Frederick L. Briuer, W. A. Meiszner, Ivan Show, and Eli Mishuck
1984 *Archaeological Survey, at Fort Hood, Texas, Fiscal Year 1979.* United States Army, Fort Hood Archaeological Resource Management Series, Research Report Number 2.

Shine, Hugh
2009 Personal communication on November 17, 2009.

Sorrow, William M., Harry J. Shafer, and Richard E. Ross
1967 *Excavations at Stillhouse Hollow Reservoir.* Papers of the Texas Archeological Salvage Project, Number 11. Austin.

Suhm, Dee Ann
1960 A Review of Central Texas Archeology. *Bulletin of the Texas Archeological Society 29:63-107.*

Suhm, Dee Ann, and Edward B. Jelks
1962 *Handbook of Texas Archeology: Type Descriptions.* Texas Archeological Society, Special Publication Number 1 and Texas Memorial Museum, Bulletin Number 4.

Suhm, Dee Ann, Alex D. Krieger, and Edward B. Jelks
1954 An Introductory Handbook of Texas Archeology. *Bulletin of the Texas Archeological Society 25.* (entire volume).

Thomas, George B.
1978 A Survey and Assessment of the Archeological Resources of Fort Hood, Texas. *Bulletin of the Texas Archeological Society 49:195-240.*

Turner, Ellen Sue, and Thomas R. Hester
1985 *A Field Guide to Stone Artifacts of Texas Indians.* Texas Monthly Press.

Tyler, George W.
1936 *The History of Bell County.* The Naylor Company, San Antonio.

Uecker, Herbert G.
2011 A Cultural Resources Survey for the City of Belton West Ninth Avenue Extension and Overpass Construction Project, Bell County, Texas. South Texas Archeological Research Services LLC, Report of Investigations No. 180.

United States Geological Survey
1965 *Belton* 7.5 minute Quadrangle (Revised 1993); in Waco / College Station CD Rom; MAPTECH; Amesbury, MA.

Watt, Frank A.
1936 A Prehistoric Rockshelter Burial in Bell County, Texas. *Central Texas Archeologist 2:5-27.*

1937 A Gravel Pit Burial near Little River. *Bulletin of the Central Texas Archeological Society 3:80-82.*

Weir, Frank A.
1976 The Central Texas Archaic. Unpublished Ph.D. Dissertation, Washington State University. Pullman. On file at the Texas Archeological Research Laboratory in Austin, Texas.

Wilbarger, John Wesley
1985 *Indian Depredations in Texas: Original Narrative of Texas History and Adventure.* (Reprint originally published by the author in 1889). Eakin Press: State House Books.

Willey, Gordon R., and Philip Phillips
1958 *Method and Theory in American Archaeology.* The University of Chicago Press, Chicago.

Young, Wayne C.
1987 *Archaeological Testing of Site 41BL260 Bell County, Texas.* Texas State Department of Highways and Public Transportation, Highway Design Division.

APPENDIX I: RESEARCH DESIGN AND SCOPE OF WORK

Records Check

As mentioned, during this initial phase of the investigation, the AAG staff contacted the Texas Archeological Research Laboratory (TARL), in Austin, Texas, to determine if any archaeological sites had been previously recorded within the current project area. The contents of the AAG library were also examined as part of the project background search and much of the preliminary archival work was accomplished in-house. Since AAG had conducted considerable archaeological work in the vicinity of the project area on previous occasions, the AAG staff was already familiar with the much of the general project background data.

Permit Application

Before beginning any fieldwork, AAG collaborated with the THC Archeology Division review staff concerning the level of effort that would be required for the investigation and the results were made available to the client before the survey commenced. Fieldwork began after issuance of permit 3762.

Survey Methods

The entire project area will be 100% intensively surveyed using the pedestrian survey method supported by augering and/or backhoe trenching and examination of eroded and disturbed areas where cultural materials may be visible on the surface. Backhoe trenching may be used to examine deep soils to determine if cultural deposits are deeply buried. Herbert G. Uecker will act as the Principal Investigator. Auger testing and backhoe trenching will meet and exceed the Minimum Survey Standards for Texas established by the THC.

In areas of poor visibility and environmental settings that have potential for buried cultural materials, shovel testing will be required and tests will be concentrated in areas of high site probability and randomly across the project area. All excavated fill will be screened through ¼-inch hardware cloth. Shovel tests will be manually excavated to sterile clay or bedrock when possible.

The survey crew will be equipped with shovel test forms, notebooks, cameras, compasses, and a project area map for accurate plotting of shovel tests, backhoe trenches, and archaeological sites. In addition to shovel testing as a means of identifying buried sites, select areas in alluvial settings or areas with some appreciable soil depth will be subjected to backhoe trenching. All sites identified in the project area will be mapped in the field and plotted on a topographic map. Site locations will also be determined through the use of a Global Positioning System (GPS). Each site will be recorded using the official State of Texas Archaeological Site Form. In no case will the survey crew work outside of the project area as depicted on the project area map provided by the client.

Only diagnostic artifacts will be collected from the surface. All artifacts recovered through shovel testing will be collected. These specimens will be bagged and recorded on a field sack log. They will be analyzed and prepared for eventual curation at TARL, unless a petition to discard is prepared and accepted.

The draft report will be submitted to AD-THC for review. Once the report has been approved by the State Historic Preservation Officer (SHPO), copies will be delivered to AD-THC and the client. AAG will maintain copies of the notes, photographs, site forms, and any other records produced from the project deemed to be a work product.

Scope of Work

I. Conduct background check for previously recorded archaeological sites in the project area and the vicinity. Review the relevant literature.

II. Discuss the project with the AD-THC reviewer assigned to this project before entering the field.

III. Obtain antiquities permit from AD-THC.

IV. Consult with representative of the sponsor before beginning the field survey.

V. Perform a 100% pedestrian survey of the project area to include shovel testing, and examination of all exposed area such as creek banks for buried or displaced artifacts.

VI. Check for deeply buried sites through the use of backhoe trenching in areas with deep soils.

VII. Analyze all artifacts recovered and prepare them for curation at TARL.

VIII. Prepare a draft report and submit copies to the AD-THC and the sponsor for review.

IX. Make all required changes, correct any mistakes, and submit final report and turn in artifacts for curation.

APPENDIX II: BACKHOE TRENCH LOG

BHT	DEPTH	RESULTS	DESCRIPTION
1	1.30m	Negative	0-13cm 10YR5/2 clay loam; 13-56cm 10YR5/2 brown clay-modern brick fragment, aluminum can and plastic; 56cm-1.30m 10YR5/3 brown clay mixed; limestone bedrock.
2	2.54m	Negative	0-13cm silty sand with pebbles; 13-86cm 10YR5/2 brown clay, asphalt debris; 86cm-2.54m 10YR5/3 mixed clays, water table present at limestone bedrock gravels.
3	24cm	Negative	0-24cm brown silty clay 10YR5/2; bedrock limestone.
4	1.09m	Negative	0-34cm 10YR5/2 brown clay; 34-1.09m 10YR6/2 clay; bedrock and gravels
5	22cm	Negative	0-22cm brown 10YR4/2 silty clay; limestone bedrock.
6	21cm	Negative	0-21cm brown 10YR4/2 silty clay; limestone bedrock.
7	16cm	Negative	0-16cm brown 10YR4/2 silty clay; limestone bedrock.
8	24m	Negative	0-24cm brown 10YR4/2 silty clay; limestone bedrock.
9	19cm	Negative	0-19cm brown 10YR4/2 silty clay; limestone bedrock.