An Intensive Pedestrian Survey for Fort Sam Houston Linear Park Trail in Bexar County, Texas

by
Antonia L. Figueroa

REDACTED

Principal Investigator
Paul Shawn Marceaux

Texas Antiquities Permit No. 7031

Prepared for:
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Center for Archaeological Research
The University of Texas at San Antonio
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Archaeological Report, No. 446

Center for Archaeological Research
Preserving Cultural Resources
The University of Texas at San Antonio

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Abstract:

In October of 2014 and May 2016, the Center for Archaeological Research (CAR) at The University of Texas at San Antonio (UTSA) conducted an archaeological survey of the 5.4-km Fort Sam Houston Linear Park Trail for Bain Medina Bain, Inc. The archaeological work included a 100 percent pedestrian survey of the proposed trail along with shovel testing and backhoe trenching. The principal goal of the survey was to identify and document all prehistoric and/or historic archaeological sites that may be impacted by the proposed park trail. The survey, conducted under the requirements of the Texas Antiquities Code, was performed under Texas Antiquities Permit No. 7031 with Dr. Paul Shawn Marceaux serving as Principal Investigator and Antonia Figueroa serving as Project Archaeologist.

During investigations, CAR staff excavated 87 shovel tests and three backhoe trenches. Site 41BX305 was revisited, and one new site, 41BX2058, was documented. At site 41BX305, 10 shovel tests were excavated, and as a result, the site boundaries were extended. Archaeological work conducted in the 1970s indicated a Middle Archaic component at the site. Although significant prehistoric material was recovered in the current investigations, no diagnostic artifacts were identified. The highest frequency of artifacts occurred beyond depth of impacts associated with the proposed trail. Further work at the site was not recommended. The CAR staff identified site 41BX2058 during the current survey and excavated eight shovel tests to define the site. The presence of historic and prehistoric material, as well as evidence of animal burrowing, indicate the site has been disturbed, and further work on the site was not recommended. The CAR recommended installation of the proposed Fort Sam Houston Linear Park Trail proceed as planned. However, CAR recommended monitoring during future utility installation near the parking lot of John James Park.

Artifacts and records generated during this project were prepared for curation according to Texas Historical Commission (THC) guidelines and are permanently curated at the CAR at UTSA.

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Acknowledgements:

We could not have completed this project without the efforts of the hardworking CAR field crew that consisted of Colt Dresser, Alex McBride, Jason Perez, and Sarah Wigley. Several contacts during the Fort Sam Houston survey were vital, including Stephen Whatley (Joint Base San Antonio-Lackland), as well as Russell Rincon and Hernan Jaramillo (Bain Medina Bain, Inc.). We would also like to thank the City of San Antonio Parks and Recreation Department and Mark Denton with the Texas Historical Commission. Thanks to Raymond Mauldin of CAR for helping with logistics and the project in many ways. Melissa Eiring processed the artifacts and records for the project. Clint McKenzie analyzed the historic artifacts. Rick Young provided the figures for the report, and Kelly Harris edited the final document. Laura Carbajal aided with the GIS/GPS data and produced numerous maps.

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Chapter 1: Introduction and Project Summary

In 2014, the Center for Archaeological Research (CAR) of The University of Texas at San Antonio was contracted by Bain Medina Bain, Inc. to provide services to the City of San Antonio (COSA) and Joint Base San Antonio (JBSA). The CAR conducted an archaeological pedestrian survey, along with shovel tests and backhoe trenching, of the proposed Fort Sam Houston Linear Park Trail in San Antonio, Bexar County, Texas. Figure 1-1 shows the 5.4-km project area on the San Antonio East 7.5-minute USGS quadrangle map. The principal goal of the survey was to identify and document all prehistoric and/or historic archaeological sites that may impacted by the proposed park trail.

Figure 1-1. The project area on the San Antonio East 7.5-minute USGS quadrangle map (red line represents the planned trail route).

The COSA and the federal government (Fort Sam Houston) own the land impacted by the project; therefore, the project falls under historic preservation laws and specifically the mandates of the Antiquities Code of Texas. Moreover, due to the involvement of federal funds, this project also falls under Section 106 of the National Historic Preservation Act (NHPA) of 1966. The work was coordinated through the COSA Office of Historic Preservation in compliance with the City's Unified Development Code Chapter 35. The project area is located along a waterway, and as such, a 404 Nationwide Permit was issued by the U.S. Army Corps of Engineers (USACE). This archaeological investigation was performed under Texas Antiquities Permit No. 7031, with Antonia L. Figueroa serving as the Project Archaeologist. Dr. Raymond Mauldin was the initial Principal Investigator; Dr. Paul Shawn Marceaux took over as Principal Investigator in May 2015.

The Area of Potential Effect (APE) is a proposed trail system (with a 15-m easement) along portions of Salado Creek within the boundaries of Fort Sam Houston and COSA Parks and Recreation properties. Impacts include excavations of up to 1.2 m associated with retaining walls in select locations. Additional impacts in the project area (John James Park) will consist of excavation for a 61-cm (24-in.) drainage pipe. This will require excavations from 1.8-2.0 m deep.

This report presents the results of the archaeological survey. Following this introductory chapter, Chapter 2 outlines the project background and reviews the environmental setting and previous archaeological work in the project area. The field and laboratory methods are summarized in Chapter 3, while the results of the archaeological work are discussed in Chapter 4. Finally, a summary and recommendations are presented in Chapter 5.

Chapter 2: Project Setting

The project area is located in east San Antonio, Bexar County, Texas, just west of the North I-35 and NE I-410 Loop interchange (Figure 2-1). The proposed trail is within the grounds of Fort Sam Houston and on COSA-owned John James Park and Jack White Park. The southern and northern portions of the proposed trail run along the banks of Salado Creek beginning at John James Park, south of Rittiman Road, and heading south to Jack White Park off Seguin Road. This chapter presents a brief overview of the project setting. The initial discussion concerns aspects of the physical environment of the region, with a focus on the project area. This is followed by a short review of the culture history of the region. The chapter concludes with a discussion of previous archaeological investigations near the project area.

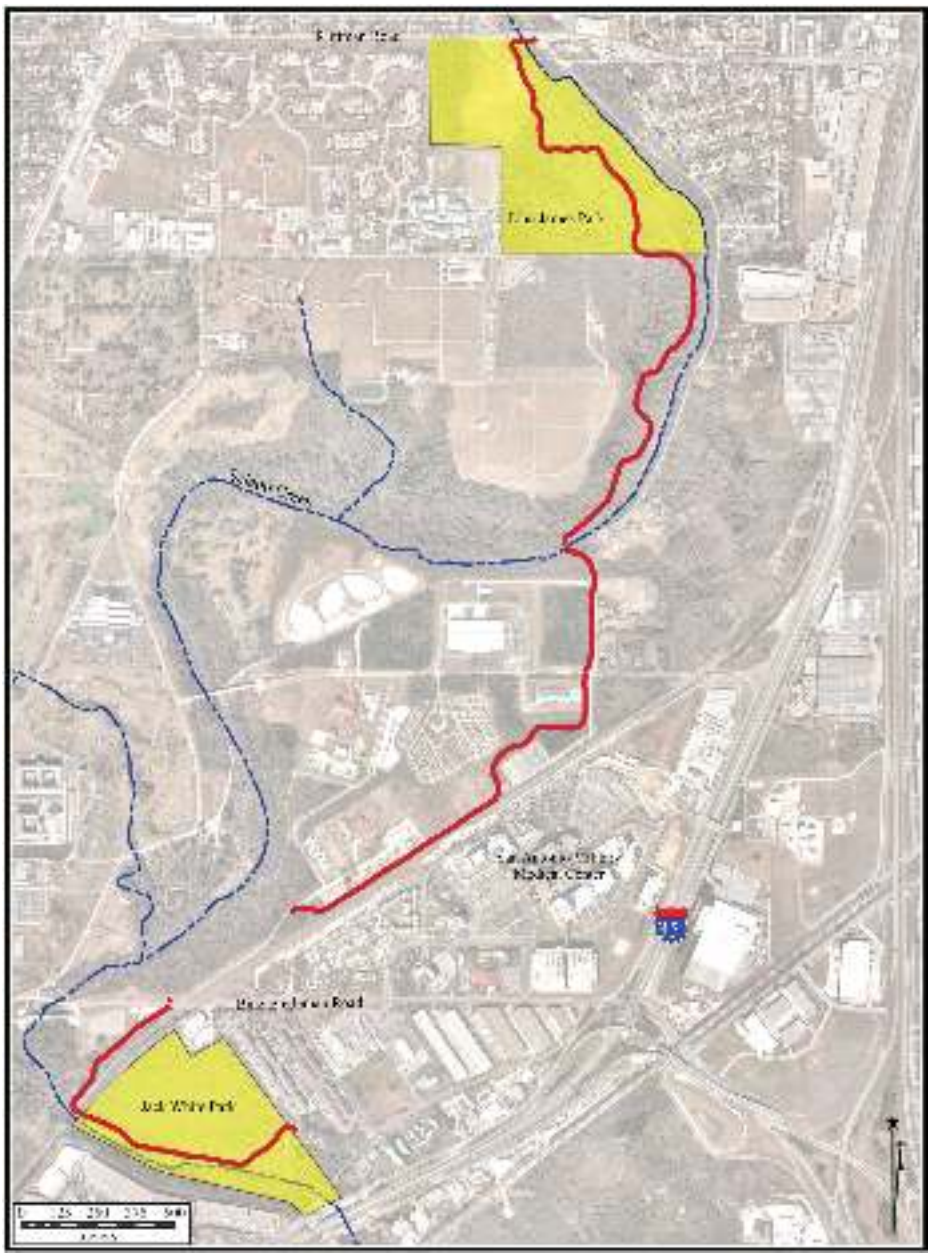

Figure 2-1. The APE (red line represents the planned trail route) located in east San Antonio, Texas.

Project Setting

Bexar County is located at the juncture of three major physiographic regions: the Edwards Plateau in the north and northwest parts of the county; the Blackland Prairie in the east-central section; and the Gulf Coastal Plain in the south (Presley 2003). The Gulf Coastal Plain, where the project is located, is associated with the Tamaulipan Biotic Province. Biotic provinces are defined based on their floral and faunal associations, physiography, soil type, and climate (Presley 2003).

Potter and Black (1995) have defined the Salado Creek System by Upper, Middle, and Lower reaches. The three sections of the Salado watershed are classified by stream gradient and depositional patterns. The project area is within the Middle Salado watershed (Potter and Black 1995). The Middle Salado is defined as a 25-linear-km portion of the drainage that begins at its confluence with Panther Springs and ends 20 km above its confluence with the San Antonio River.

There are at least three vegetation communities along the project corridor. For further information or descriptions, please consult the Web Soil Survey website (National Resource Conservation Service [NRCS] 2015). Tallgrass/hardwood savannah vegetation community is present in the central portion of the project area, south of John James Park. Tallgrasses dominate the understory in this vegetation community, which has less than 20 percent canopy cover (NRCS 2015). Grasses present include Virginia wildrye (*Elymus virginicus*), eastern gamagrass (*Tripsacum dactyloides*), switchcane (*Arundinaria gigantea*), and switchgrass (*Panicum virgatum*). Hardwood species that make up the overstory include water oak (*Quercus nigra*), willow oak (*Quercus phellos*), cedar elm (*Ulmus crassifolia*), and pecan (*Carya illnoinensis*).

The Historic Climax Plant Community (HCPC) is found mostly within Fort Sam Houston where buildings and parking lots are present, and this vegetation community is comprised primarily of midgrasses with 5-10 percent woody canopy cover (NRCS 2015). Midgrasses include false Rhodesgrass (*Chloris crinite*), multi-flower false Rhodesgrass (*Chloris pluriflora*), little bluestem (*Schizachyrium scoparium*), and pink pappusgrass (*Pappophorum bicolor*). Woody species present include mesquite (*Prosopis glandulosa*), whitebrush (*Aloysia gratissima*), snakewood (*Condalia* spp.), and wolfberry (*Lycium carolinianum*).

Tallgrass savannah, set mostly in Jack White Park, includes grasses (85-90 percent), woody species (1-2 percent), along with forbs (5-10 percent), and shrubs (2-6 percent; NRCS 2015). Canopy cover in this ecological community is less than 5 percent (NRCS 2015). Grasses in the area include little bluestem (*Schizachyrium scoparium*), big bluestem (*Andropogon geradii*), indiangrass (*Sorghastrum nutans*), wildrye (*Elymus* spp.), and Texas wintergrass (*Nasella leucotricha*). Woody species include live oak (Q*uercus fusigormis*), cedar elm (*Ulmus crassifolia*), and hackberry (*Celtis* spp.).

According to the National Weather Service (NWS 2014), with records starting in 1885, the average decade temperature for San Antonio has increased from 67.9ºF in the 1880s to 70ºF in the 2000s. Precipitation for San Antonio can vary significantly from year to year, and for example, records, which began in 1871, indicate the average was 57.89 cm in 1871 and 100.08 cm in 2013 (NWS 2014).

Culture History

The project area lies at the intersection of two broad archaeological regions, Central Texas and South Texas. There are few known archaeological sites with long sequences of stratified deposits in South Texas; therefore, the prehistoric sequence developed for Central Texas is often used as a framework for describing the prehistory of South Texas. The following culture history emphasizes both Central and South Texas. This discussion on culture history is based primarily on the chronologies developed by Collins (2004), Johnson and Goode (1994), and Black (1989) for Central Texas, with observations from Hester (2004) for South Texas. Four major periods define South Central Texas: Paleoindian, Archaic, Late Prehistoric, and Historic. These periods are further divided into sub-periods that are based on particular subsistence strategies and material culture. A brief description of each period follows to illustrate the archaeological potential of the region.

Paleoindian

The Paleoindian period (11,500-8800 BP) is divided into early and late sub-periods. Each sub-period is characterized by particular projectile point styles and subsistence patterns (Collins 2004). The period begins at the close of the Pleistocene with the earliest evidence of humans in the Central Texas region. The climate during this period was generally cooler and wetter than the present. Clovis and Folsom point types, bifacial Clear Fork tools, and finely flaked end scrapers characterize the early Paleoindian period (Black 1989). Clovis is the earliest defined cultural assemblage and is, for the most part, consistent across the North American continent.

Archaic

The Archaic period (8800-1200 BP) is identified as a period of intensification of hunting and gathering and a move toward greater exploitation of local resources. As a result, a broadening of the material culture is evident, including changes in projectile points and the "extensive use of heated rock" in cooking (Collins 1995:383). Food processing technologies appeared to have broadened as features, such as hearths, ovens, and middens, increase in frequency during this time (Black and McGraw 1985). Large cemeteries also appeared during this period signaling the likely establishment of regional "territories" (Black and McGraw 1985:38). Collins (2004) and Johnson and Goode (1994) subdivided the Archaic into Early, Middle, and Late sub-periods. These sub-periods are distinguished by variances in climate conditions, resource availability, subsistence practices, and diagnostic projectile point styles (Collins 2004; Hester 2004).

In Central Texas, the Early Archaic dates from 8800-6000 BP (Collins 2004). Changing climate and the extinction of megafauna appear to have initiated a behavioral change for hunter-gatherers. Because of the necessary economic shift away from big game hunting, local resources in Central Texas, such as deer, fish, and plant bulbs, were more intensively exploited.

The Middle Archaic, 6000-4000 BP (Collins 2004), appears to have been a period of increasing population, based on the large number of sites documented from this time in Central Texas and adjacent regions (Weir 1976). Projectile point variation at the Jonas Terrace site suggests a period of "ethnic and cultural variety, as well as group movement and immigration" (Johnson 1995:285).

The final interval, the Late Archaic, in Central Texas dates from 4000-1200 BP (Collins 2004). During this period, large cemeteries were formed indicating an increasing population and the subsequent establishment of territories (Black and McGraw 1985).

Late Prehistoric

The Late Prehistoric period (1200-350 BP) in Central Texas marks a distinctive shift from the use of the atlatl and dart to the use of the bow and arrow (Black 1989; Collins 2004; Hester 2004). The Late Prehistoric is subdivided into early and late phases termed Austin and Toyah Phases, respectively (Prewitt 1981). Temporal diagnostics, including Scallorn and Edwards arrow points, define the Austin Phase (1200-650 BP; Prewitt 1981). It appears that the use of burned rock middens may have reached its peak during this phase (Black and Creel 1997). The subsequent Toyah Phase spans 650-350 BP and includes the first occurrence of pottery in South Texas (Black 1989). Characteristic artifacts of this phase include Perdiz and Cliffton arrow points (Black 1986). Material culture associated with the Late Prehistoric period indicates increasing complexity in subsistence patterns and very large prehistoric populations (Black 1989; Collins 2004).

Historic Period

The Historic period in South Texas begins with the arrival of Europeans. Although the Historic period theoretically begins in Texas with the shipwreck of the Narvaez expedition along the Texas coast in 1528, the majority of the inhabitants of Texas were Native Americans until the late eighteenth century (Favata and Fernandez 1993). René Robert Cavelier, Sieur de La Salle, established a French settlement, Fort St. Louis, along Matagorda Bay on the Texas coast in 1685. Hunger, disease, and escalating hostilities between the French and the Karankawas, subsequently destroyed the colony (Foster 1998). In 1690, as a result of the discovery of the remains of the La Salle colony, the Spanish began securing the northern border of New Spain, expanding their interests in East Texas to counter any French expansion across the Mississippi River. Europeans successfully settled in the region in early AD 1700 (Taylor 1996). The southward incursion of the Comanche and Apache and the northward expansion of Spanish influence led to the displacement of many of the area's indigenous groups. Decimated by disease brought by Europeans, many of the remaining groups sought refuge in the numerous Spanish missions established early in the eighteenth century. The move to the missions significantly affected the hunter-gatherer way of life and the material culture. Artifacts from the Historic period reflect European influences and include metal, glass, and ceramics along with pre-Hispanic Goliad wares and lithic arrow points, tools, and gunflints (Taylor 1996).

Early Texas (1800-1836)

In 1803, the La Segunda Compania Volante de San Carlos del Alamo de Parras from Coahuila occupied the Presidio de San Antonio de Bexar (Cox 2005). The soldiers were assigned quarters in the abandoned Mission San Antonio de Valero. It was at this time that the former mission became known as the Alamo.

Discontent with New Spain in the Northern provinces led to the Hidalgo revolt in 1810. Mexico became independent from Spain in 1821. With independence came internal strife that led to the 1824 Constitution that "merged Texas and Coahuila into one state [...] with San Antonio de Bexar as its capital" (Cox 1997:15). Spain's attempt to regain control of Mexico in 1829 failed. Stephen F. Austin asked San Antonio to provide support for his effort to make Texas a separate entity in 1833.

In 1835, Santa Anna became the President of Mexico, which increased internal divisions and led to revolt (Cox 1997:16). Santa Anna responded by sending out General Cos and his troops to "put down a minor civil war in Coahuila" and "then [move] north to reinforce the garrisons in Texas," placing Cos and his men at San Antonio (Cox 1997:16). Beginning in October of 1835, Austin and his "Army of the People" attempted to retake San Antonio by siege, but it was not until December of 1835 that Cos and his troops were pushed out of San Antonio (Cox 1997:16). Two months later, Santa Anna and the Mexican army arrived forcing the Texans to retreat to the Alamo, and subsequently, be defeated by Santa Anna on March 6, 1835 (Cox 1997:16). The victory was short lived. Later that same year, Santa Anna was defeated and captured at the Battle of the San Jacinto.

The Republic of Texas (1836-1845)

General Manuel Mier y Terán took a tour of Texas in 1827 and 1828. The general reinforced existing garrisons and established new ones as he feared the Americans might rebel. Discontent grew stronger with the 1830 decree that banned immigration into Texas. General Antonio Lopez de Santa Anna began making changes such as the reduction of state militias with the hope of eliminating armed opposition to the emerging centralist government (Texas State Historical Association [TSHA] 2015b). During this unsettling time in Mexico City, Americans in Texas began to think of new ways to govern Texas. Sam Houston was inaugurated as the first president of the Republic of Texas in October 1836, and by December 1836, the newly formed Texas Congress set the boundaries for the republic (Nance 2010). Mexico refused to recognize the independence of Texas, thus a formal state of war continued.

In 1836, Santa Anna and his forces crossed the Rio Grande and headed for San Antonio (TSHA 2015b). Santa Anna arrived in San Antonio in February of 1836 in preparation for a battle. The Mexican troops attacked the Alamo where Texas defenders fought back. On March 6, 1836, the Texas defenders were defeated and killed. In 1842, the Mexican General Adrian Woll captured San Antonio, but this time the Texans resisted. Santa Anna was captured under Houston's command. Two treaties were signed. The public treaty noted that violence would stop and the Mexican army would head back south of the Rio Grande. In the second treaty, Mexico recognized Texas's independence, and the Rio Grande became the Republic's boundary (TSHA 2015b).

The State of Texas (1845-1900)

In 1845, the United States Congress approved the Texas State Constitution, and Texas was admitted as a state (Nance 2010). This act, coupled with disagreements over the Rio Grande as a boundary and the sale of California to the United States, resulted in war between the United States and Mexico (1846-1848; Bauer 2010). In early 1846, General Zachary Taylor advanced to the Rio Grande, occupying land that the Mexican government viewed as its own. War was declared in May of that year. After a series of battles, the United States military occupied Mexico City in August of 1847. In May of 1848, the ratification of the Treaty of Guadalupe Hidalgo by the Mexican government signaled the end of hostilities establishing the Rio Grande as a boundary, and the treaty gave to the United States present-day Arizona, California, New Mexico, Texas, and parts of Colorado, Nevada, and Utah in exchange for $15 million (Bauer 2010; Pletcher 2010).

With the boundaries of Texas now established, the new state soon found itself embroiled in controversy over its position on slavery. The majority of the population within the state was derived from the south, and while ranching and subsistence farming were major economic activities, cotton-based agriculture was the primary cash crop (Cox 1997:19). In 1846, Texas had more than 30,000 black slaves, many associated with cotton production. At the outset of the Civil War, thousands of Texans fought on both sides, with effects seen throughout Texas, including shortages of commodities in San Antonio. The last land battle of the Civil War, the Battle of Palmito Ranch, was fought near Brownsville on May 13, 1865 (TSHA 2015b). Less than a month later, General Gordon Granger arrived in Galveston with Union forces on June 19, 1865, signaling the end of the Civil War (Fox et al. 1997).

On November 30, 1869, a new state constitution was voted on, and in 1870, Edmund J. Davis became the first Republican governor of Texas (Moneyhon 2010). In 1873, construction of the Texas and Pacific Railway began, and the 201-km route spanning from Longview to Dallas began service in 1873 (Werner 2010). By 1881, the Texas and Pacific Railway reached West Texas. In 1894, the first indicator of oil production began in Corsicana. Teddy Roosevelt began recruiting men in 1898 for the First Volunteer Cavalry to fight in the Spanish-American war in Cuba (TSHA 2015a).

The Twentieth Century

This section provides a brief overview of the twentieth century but only to the 1970s. Several changes occurred to the Texas industries during the twentieth century. For instance, the cotton industry flourished from 1900 to 2000 (TSHA 2015c). Thomas M. Campbell was elected as governor of Texas in 1906. This marked a progressive period in Texas politics, which included controlling corporate influence. A pure food and drug bill was passed under Campbell's office. However, prohibition continued to be an issue. The effects of the Mexican Civil war seeped over the border into Texas,

and the Texas Rangers were sent into the Lower Rio Grande Valley in 1913 to protect Texans (TSHA 2015c). During this time, few United States troops crossed into Mexico with the exception of John J. Pershing's pursuit of Pancho Villa into northern Mexico.

During 1917-1918, the United States participated in World War I (TSHA 2015c). Nearly 200,000 Texans participated in the war. Also around this time, Texans adopted a prohibition amendment to the state constitution. Still considered a rural state, one-third of the population of Texas resided in cities. The economy of Texas suffered in the 1920s due to the price of agricultural products. It was not until the onset of World War II that the economic condition improved for the state. More than 750,000 Texans, including 12,000 women, served in World War II. Texas became the home of 15 training posts and several prisoner of war camps. Demographics in Texas changed at this time as 60 percent of the population moved to urban locales (TSHA 2015c).

The industrial base of Texas began to grow and diversify during the 1950s and 1960s (TSHA 2015c). Industries such as petroleum production and refineries became vital to Texas economy. Texas also became home to high tech firms that focused on electronics and computers. In 1958, Jack Kilgy, an engineer at Texas Instruments in Dallas invented the integrated circuit, the central part of computers (TSHA 2015c). In the early 1960s, Harris County was chosen for the site of the National Aeronautics and Space Administration's (NASA) manned spacecraft center.

History of Fort Sam Houston

In 1876, on land donated by the City of San Antonio, the United States Army began construction of the Post at San Antonio (JBSA 2014). Only a year after its founding, the Army expanded the supply depot, known as the Quadrangle, to include the Headquarters, Department of Texas. Houses were built for the officers who worked at Headquarters in 1880 (JBSA 2014). As the Army's role in western expansion grew, so did the Post at San Antonio. By 1890, the installation added an Infantry Post, and at this time, it was given the name Fort Sam Houston (JBSA 2014).

Fort Sam Houston continued to expand at the turn of the century, adding a Calvary Post and a Light Artillery Post. To keep up with the increasing number of soldiers, the Army, again, expanded the post's boundaries and buildings. Associated construction and additional land purchases made it the largest post in the Army (JBSA 2014). During the Mexican Revolution (1910-1920), Fort Sam Houston was an ideal location for assembling and sending out troops to the United States border with Mexico. To accommodate the number of troops needed to deal with events in Mexico, the Army established Camp Wilson, later Camp Travis, to the east of Fort Sam Houston in 1916. Camp Travis became an induction center to train and then demobilize troops sent to France during World War I (JBSA 2014).

From the end of World War I through the end of World War II, the Army focused its attention on the post's infrastructure. The growing role of the post as a training and demobilization point required more room and facilities to support the troops. Among the necessary improvements was a 418-bed hospital, opened in 1938, and the hospital was expanded during World War II to accommodate an additional 200 beds by 1942 (JBSA 2014). Before the end of World War II, the Army would annex four surrounding buildings and construct a new one in order to meet the medical needs of its soldiers, and with this expansion, Brooke General Hospital became Brooke Hospital Center in 1945 (JBSA 2014).

In 1946, the Army relocated its Medical Field Service School to Fort Sam Houston and "Brooke Hospital Center and several other medical activities on the post were all organized as Brooke Army Medical Center (BAMC)" (JBSA 2014). The construction and dedication (1996) of a new hospital has helped turn BAMC into a "state of the art medical center," and the 2005 inclusion of Fort Sam Houston as a part of Joint Base San Antonio "consolidated medical training for all branches of the military on the old post" (JBSA 2014).

Previous Archaeological Investigations

Several archaeological sites have been recorded along Salado Creek. There are many sites in the area though only four are in close proximity to the APE (41BX422, 41BX1209, 41BX1408, and 41BX1679) and one (41BX305) is located within the proposed trail corridor.

In 1977, the CAR conducted a survey and testing of site 41BX305 for the John James Park in the northern portion of the project area, just south of Rittiman Road (Frkuska et al. 1977; Katz 1977). Three zones were identified during the survey. Zones were based on artifact presence or absence, topography, and nature of the soil (i.e. disturbances). Zone 1 of the survey area was classified as a dump and fill area (Frkuska et al. 1977) that had been disturbed. According to Frkuska et al. (1977:3), archaeological material in this zone was "mixed and of questionable provenience." The second zone was parallel to Salado Creek at elevations of 201 m and 204 m. Parts of this area close to the creek are highly eroded with exposed lithic material. A surface scatter of lithic material and burned rock was documented in this zone and identified as 41BX305 (Frkuska et al. 1977). Due to the heavy vegetation, archaeologists could not evaluate Zone 3, though archaeological resources could

exist in the area. At the time of this initial survey, site 41BX305 was recorded as approximately 28,000 m^2 in size. Looter excavations had disturbed the southern portion of the site. Material on the surface of the site consisted of lithic material such as cores, tools, and flakes (Frkuska et al. 1977). Cultural material was not collected, but photographs were taken and are on file at CAR. Results of the survey recommended National Register of Historic Places (NRHP) testing of the site (Frkuska et al. 1977:8).

During the subsequent testing phase, CAR staff revisited and reassessed all three zones for archaeological potential (Katz 1977). The dump area, designated as Zone 1, showed no evidence of cultural material on the surface. Furthermore, it was assumed that the zone was "too far from the creek" (Katz 1977:1) for prehistoric activity. However, it was noted that there was a possibility for subsurface material. Zone 2 was further divided into upper and lower portions. The upper (northern) portion, where 41BX305 was located, was a flat terrace at an elevation of 204 m. The lower (southern) portion is defined by a knoll and gully where flooding and dumping occur (Katz 1977).

Testing of the site consisted of 15 test units and 11 shovel tests (Katz 1977). Test units were placed along four lines (15 m apart) that were orientated north and south in Zone 2. Two features (Feature 1 and Feature 2) were encountered during the testing phase. Feature 1 was found in Unit B-2, below 40 cm, and consisted of a single layer of burned rock. Charcoal, lithic debitage, and tools (Almarge projectile point) were also found in association with the feature. Feature 2 was found in Unit C-3 at 40 cm, similar to the depth of Feature 1. Feature 2 was several layers of burned rock that were interpreted as a hearth (Katz 1977:8). Charcoal samples from Feature 2 were submitted for radiocarbon dates. Results from radiocarbon assays indicate that Feature 2 dated to 1230 ± 50 BP, the Late Prehistoric period (1200-350 BP). Moreover, Katz (1977) concludes Feature 1 and the diagnostic artifacts from the same level are of the same age, although the diagnostic Almarge projectile point dates to the Middle Archaic (Turner and Hester 1999). Other diagnostic projectile points recovered from excavations include Pedernales, Montell, and Castroville specimens that also date to the Middle to Late Archaic (Turner and Hester 1999). Shovel testing was conducted to determine the horizontal extent of the site. Results indicated the amount of cultural material decreased the further south one moved away from the creek. In conclusion, CAR staff recommended further work be conducted on the site to determine the vertical extent of the site and its potential for NRHP eligibility (Katz 1977).

In 1978, the CAR conducted surveys on Fort Sam Houston, Camp Bullis, and other U.S. Army properties in the San Antonio area. At Fort Sam Houston, the survey documented a number of archaeological sites and various elements of the existing military complex (Gerstle et al. 1978). During this survey, 41BX422 was located west of the proposed trail. At the time of documentation, the site, 40-x-60 m in size, was described as a thin scatter of flakes, two core fragments, and a uniface (Gerstle et al. 1978). Due to disturbances, further work was not recommended at the site.

Prewitt and Associates, Inc. conducted a survey of 113 hectares at Fort Sam Houston in 2000 (Scott 2000). During this survey, four new sites were documented, and previously recorded sites were reassessed. Site 41BX1408 was one site discovered during the survey, and it was described as an Historic period dump located in a depression (THC 2014). According to the THC Archaeological Sites Atlas (2014), the size of the site is only 15-x-15 m. Two shovel tests and one shovel probe were conducted on the site. Cultural material collected from excavations date from the early to mid-twentieth century. The site was determined ineligible for the NRHP, and further work was not recommended (THC 2014).

Site 41BX1209, a prehistoric site, was recorded in 1996 (Quigg and Abbott 1997). It was described as an open campsite located adjacent to Salado Creek over roughly 6,000 m^2 in size. Disturbances to the site included plowing and a paved road. Nineteen lithic artifacts were recovered from the site that was situated within middle Holocene deposits (Quigg and Abbott 1997). Quigg and Abbott (1997) recommended further work at the site. When Prewitt and Associates, Inc. (Scott 2000) revisited the site, no cultural material was observed on the surface, and subsurface investigations were not conducted. As indicated in the THC Archaeological Sites Atlas (2014), the site was considered ineligible for the NRHP in 2003.

In 2006, Blanton and Associates, Inc. conducted an intensive pedestrian archeological survey south of the APE and connected to the Salado Hike and Bike Trail (Young 2008). Two sites were recorded, 41BX1678 and 41BX1679. The prehistoric designation of 41BX1678 is based on the surface and subsurface recovery of a core, cortical chunk, and patinated flake. However, 41BX1678 is located within the boundaries of the Willow Springs Golf Course, and as such, it is likely that the integrity of the site was compromised by the construction of the golf course. Site 41BX1679, the Jack White House, is located east of the proposed trail. According to Young (2008:18), the house was built in 1874 and belonged to A. C. "Jack" White, manager of the Plaza Hotel located in downtown San Antonio. Six shovel probes were conducted around the house, which revealed there was little soil (less than 5 cm), and no potential for encountering buried archaeological deposits (Young 2008). Further work on the site was not recommended.

Chapter 3: Field and Laboratory Methodology

CAR conducted a 100 percent pedestrian survey of the project area and shovel testing for the Fort Sam Houston proposed trail system. During archaeological investigations, 87 shovel tests were excavated along the proposed trail, along with three backhoe trenches. This survey was conducted according to the THC guidelines for a linear survey with a corridor less than 30-m wide. This chapter outlines the field and laboratory methods followed during the archaeological investigations.

Field Methods

Shovel Testing

Based on the 5.4-km linear survey area, excavation required to fulfill the THC minimum survey standards was at least 54 shovel tests at a density of 16 shovel tests per 1.6 km. Shovel tests were excavated every 100 m along the trail corridor. Shovel tests were 30 cm in diameter and, when possible, extended to a depth of 60 cm below the surface (cmbs). They were excavated in 10-cm increments, and all soil from each level was screened through ¼-inch hardware cloth. A soil sample was collected from each level. All encountered artifacts were recovered with appropriate provenience for laboratory processing, analysis, and curation. A shovel test form was completed for every excavated shovel test. Data collected from each shovel test included the final excavation depth, a tally of all materials recovered from each 10-cm level, and a brief soil description (texture, consistency, Munsell color, and inclusions). The location of every shovel test was recorded with Trimble Geo XT GPS unit. Shovel test locations were sketched onto aerial photographs as a backup to GPS provenience information. Any additional observations considered pertinent were included as comments on the standard shovel test excavation form. Positive shovel tests were units that contained cultural material at least 50 years old.

Disturbances associated with the planned trail construction are limited and are not to exceed the shovel test depth. However, the undisturbed portions of the trail were located in areas that lacked deeper sediments.

Backhoe Trenching

Backhoe trenching occurred at three locations. Trenches were excavated where deep soils were anticipated along the creek banks. Backhoe trenches did not exceed depths of 1.5 m below the surface (mbs). All were approximately 5 m in length. Sections of trench walls that revealed unique stratigraphy were profiled to record soil stratigraphy and any cultural material. All trench walls were photographed. Trench locations were recorded with a GPS unit and hand-plotted on aerial maps. Standardized forms were filled out for each backhoe trench with details of the trench and observations.

Laboratory Methods

All cultural materials and records obtained and/or generated during the project were prepared in accordance with 36 CFR part 79 and THC requirements for State Held-in-Trust collections. Artifacts processed in the CAR laboratory were washed, air-dried, and stored in 4-mm, zip-locking, archival-quality bags. Materials needing extra support were double-bagged. Acid-free labels were placed in all artifact bags. Each label contained provenience information and a corresponding lot number. Labels were produced by a laser printer. Tools and ceramics were labeled with permanent ink over a clear coat of acrylic and covered by another acrylic coat. In addition, a small sample of unmodified debitage from each lot was labeled with the appropriate provenience data. Artifacts were separated by class and stored in acid-free boxes. Digital photographs were printed on acid-free paper, labeled with archivally appropriate materials, and placed in archival-quality sleeves. All field forms were completed with pencil. Upon completion of the project, all collected materials will be housed at the CAR.

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Chapter 4: Results of Field Work

In October of 2014 and May 2016, the CAR at UTSA conducted a 100 percent pedestrian survey as well as shovel testing and backhoe trenching for the Fort Sam Houston Linear Park Trail. Although the majority of the proposed trail was located within Fort Sam Houston, the northern portion and southern portions are located on COSA property. Archaeological work conducted by CAR included the excavation of 87 shovel tests (STs) and three backhoe trenches (BHTs). Figure 4-1 illustrates the project area with the shovel tests and backhoe trenches excavated along the trail. Twenty-eight STs were positive for cultural material (Figure 4-1; Table 4-1). Two isolated finds (ST 3 and ST

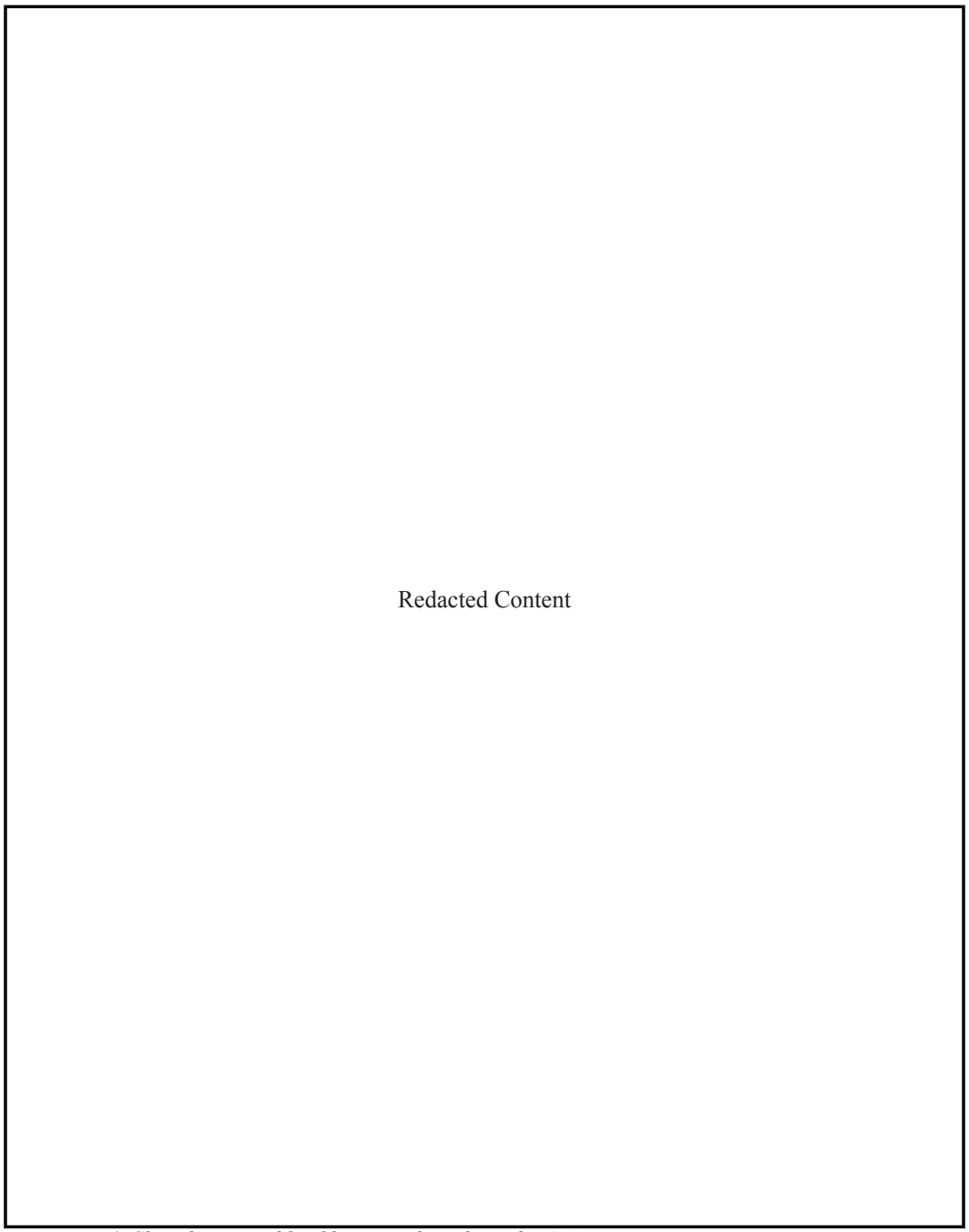

Figure 4-1. Shovel tests and backhoe trenches along the APE.

Table 4-1. Positive Shovel Tests

Section	ST	Material Type
1	3	P
1	4	M
1	5	P
1	6	P
1	10	M
1	12	M
2	15	P
2	18	P
3	26	M
5	37	P
6	53	O
6	54	M
1	63	P
1	64	P
1	65	P
1	66	P
1	68	P
1	69	P
1	70	P
1	71	P
1	72	P
1	73	P
2	74	M, P
2	75	P
2	77	P
6	82	O
6	83	O
3	88	M

M: modern, O: organic, P: prehistoric

15) were encountered as well as modern material (glass and ceramic). Shovel Tests 53, 82, and 83 contained charcoal and mussel shell but were negative for other material. Of the 28 positive STs, seventy percent contained prehistoric material. Site 41BX305 was revisited, and one newly recorded site, 41BX2058, was investigated. Three BHTs were excavated, and one was positive for cultural material (see Section 1 results). In this chapter, the project will be discussed in sections starting from Section 1, the northern portion of the project area that begins in John James Park, and concluding with Section 6, the southern portion of the proposed trail located north of Jack White Park.

Section 1: John James Park

The John James Park encompasses the northern portion of the proposed trail. Twenty-seven shovel tests (STs 1-12, 58-66, and 68-73) were excavated along the corridor of the trail in Section 1 (Figure 4-2). Shovel Test 67 was not excavated. One isolated find (ST 3) and site 41BX305 were located in this part of the project area. Table 4-2 presents the depth of these shovel tests and, if applicable, the presence of cultural material. Shovel Test 3 was positive for cultural material with the presence of a biface fragment. Five additional shovel tests were excavated north, east, south, and west of ST 3; however,

no additional cultural material was encountered. The cultural material in ST 3 was designated as an isolated find.

41BX305

During the initial shovel testing, ST 6 was placed on the originally documented southern boundaries of 41BX305. An additional 10 shovel tests (STs 63-66 and 68-73) were excavated to determine the vertical and horizontal extents of the site. Shovel tests excavated outside the APE were done so to address secondary effects that occur in the area, which include pedestrian traffic off of the main trail. As a result of the CAR investigations, the boundaries of the site were extended (see Figure 4-2). Figures 4-3 through 4-5 show that the site surroundings are sparsely vegetated and that the trail dissects the southwestern edge. The soil matrix of the site ranged from dark gray (10YR 4/1) to black (10YR 2/1) clay loam. The results of shovel testing at 41BX305 are presented in Table 4-3. Cultural material recovered from the site included debitage (n=256), burned rock (542.4 g), charcoal (1.9 g), lithic tools (n=11), and mussel shell (0.8 g). It appears the majority of debitage (45 percent) was in ST 6, and burned rock was most prevalent in ST 66 (219.9 g).

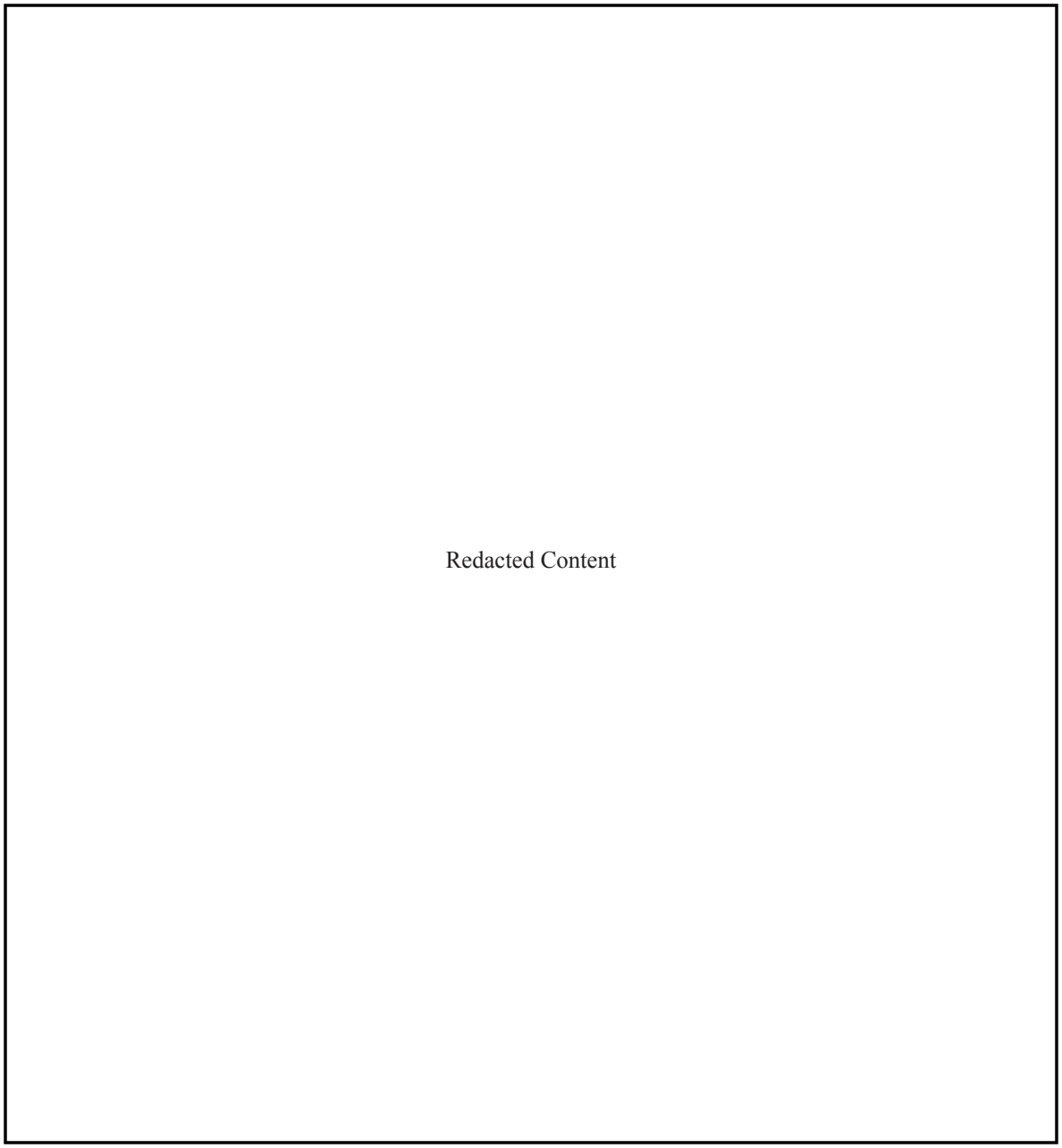

Figure 4-2. Map of Section 1 of the project area.

Table 4-2. Shovel Tests in Section 1: John James Park

ST	Site	Terminal Depth (cmbs)	Cultural Material
1	NA	60	No
2	NA	50 (gravel)	No
3	NA	60	Yes
4	NA	60	Yes
5	NA	60	Yes
6	41BX305	60	Yes
7	NA	60	No
8	NA	50	No
9	NA	60	No
10	NA	60	Yes
11	NA	60	No
12	NA	36 (gravel)	Yes
58	NA	60	No
59	NA	60	No
60	NA	60	No
61	NA	60	No
62	NA	60	No
63	41BX305	60	Yes
64	41BX305	60	Yes
65	41BX305	60	Yes
66	41BX305	60	Yes
68	41BX305	60	Yes
69	41BX305	60	Yes
70	41BX305	60	Yes
71	41BX305	60	Yes
72	41BX305	60	Yes
73	41BX305	60	Yes

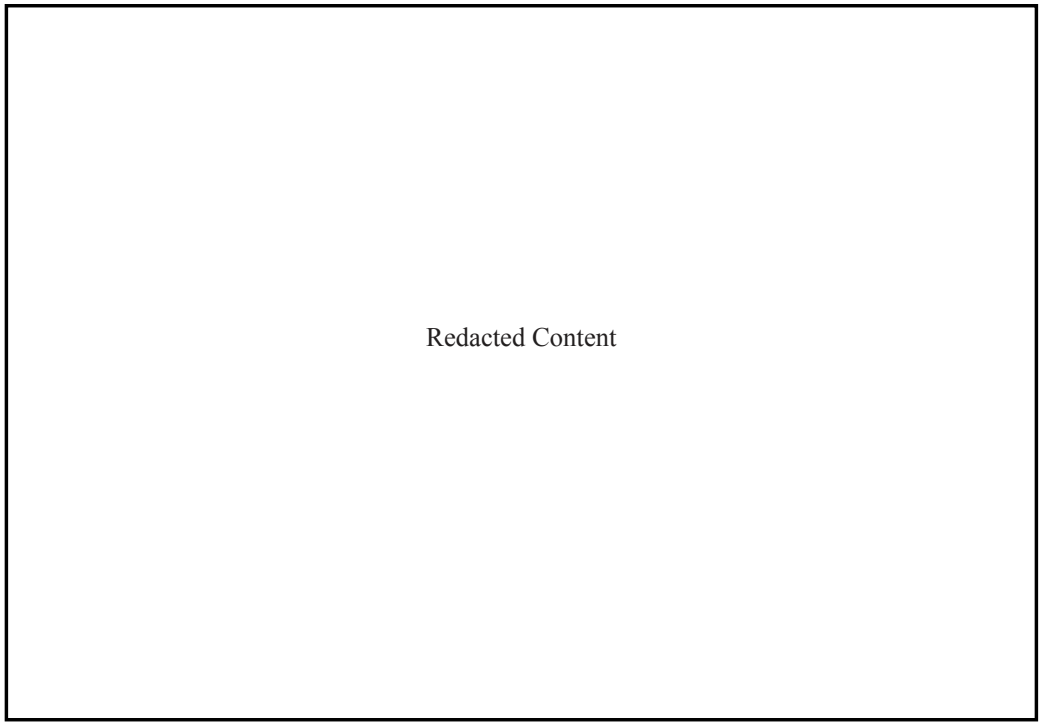

Figure 4-3. Vegetation and environment of 41BX305, facing north, (blue dot on inset map represents approximate location of photographed area).

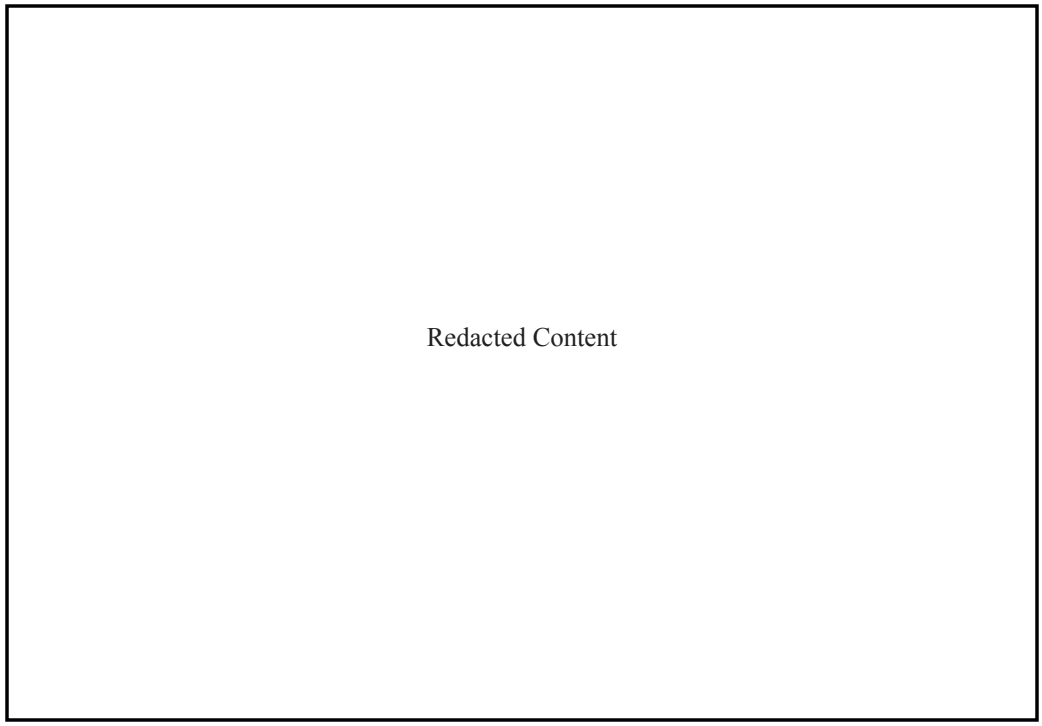

Figure 4-4. The trail that dissects site 41BX305, facing west, (blue dot on inset map represents approximate location of photographed area).

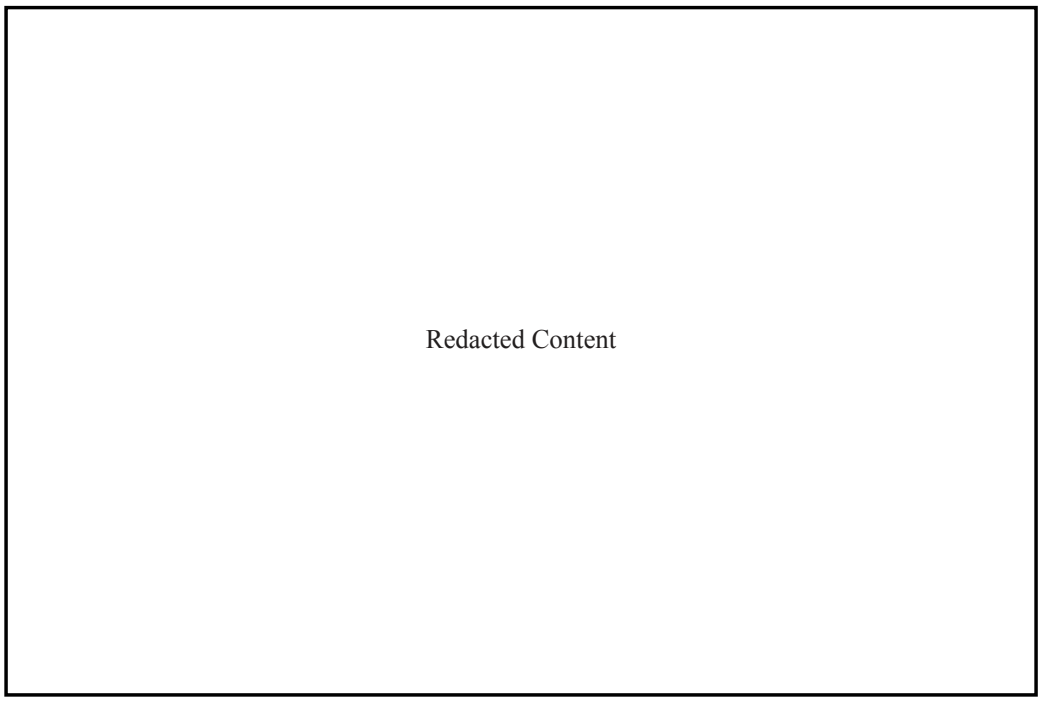

Figure 4-5. ST 71 during revisit of site 41BX305 (blue dot on inset map represents approximate location of photographed area).

Table 4-4 presents the vertical distribution of material recovered from 41BX305. As shown in the table, it appears the majority of material is occurring in Level 6, and impacts made by improvements are not anticipated to reach this depth. No diagnostic artifacts were encountered during shovel test excavations of the site. Further work was not recommended at the site.

Backhoe Trenches

The CAR excavated three backhoe trenches (BHTs) in Section 1 in areas with anticipated deeper soils and the potential for archaeological deposits (see Figure 4-2). BHTs 1 and 2 were dug west of the creek crossing and proposed trail in order to avoid utilities. BHT 1 was 4 m in length and 70 cm in width. It reached a depth of 120 cm, and three soil zones were identified. Figure 4-6 depicts the trench profile and the three soil zones. Zone 1 was a very dark grayish brown (10YR 3/2) silty loam that ranged in depth from the surface to approximately 60 cmbs. Zone 2 (approximately 40-cm thick) was only evident on the southern portion of the profile and was a brown (10YR 4/8) clay loam with 50 percent gravel. Zone 3 was a light yellowish brown (10YR 6/4) sandy clay with 80 percent gravel that varied in depth but extended to the bottom of the trench. No cultural material was recovered from this backhoe trench.

BHT 2 was 5 m in length and 70 cm in width. Excavations of BHT 2 reached a depth of 140 cmbs. Figure 4-7 shows the east wall profile of the backhoe trench. Four soil zones were identified during the excavation of this backhoe trench. Zone 1 was a very dark grayish brown (10YR 3/2) silty loam that extends from the surface to about 12 cm. A very dark grayish brown (10YR 3/2) clay loam defines Zone 2 and was approximately 40-cm thick. Zone 3 was a dark grayish brown (10YR 4/2) silty loam with 70-80 percent gravel inclusions. This zone extended from beneath Zone 2 to approximately 120 cmbs. The final zone, Zone 4, was a yellowish brown (10YR 5/4) silty loam with 80-90 percent gravel inclusions. No cultural material was recovered from this backhoe trench.

BHT 3 was excavated in Section 1 as well but further south of site 41BX305. Access to this location was made possible by a paved path. Oriented east to west, the trench was 5 m in length and 70 cm in width. Figure 4-8 shows the southern wall of the backhoe trench. Four soils zones were identified during the excavations. Zone 1 was a very dark grayish brown (10YR 3/2) silty loam that was only a 2-cm thick. Zone 2 was very dark grayish brown (10YR 3/2) clay loam that extended beneath Zone 1 to approximately 65 cmbs. Zone 3 was a dark grayish brown (10YR 4/2) silty loam that was 65-cm thick. In Zone 4, a yellowish brown (10YR 5/4) silty loam was present that ranged in depth from 100 cmbs to 150 cmbs with 80-90 percent gravel inclusions. A lithic core was present in the wall of the backhoe trench profile at 78 cmbs, and two edge-modified flakes were encountered in the back dirt. Impacts from the proposed trail are not anticipated to exceed the depth of cultural materials; therefore, further work was not recommended in this area.

Table 4-3. Cultural Material Recovered from 41BX305

ST	Type	Lv. 1 (0-10 cmbs)	Lv. 2 (10-20)	Lv. 3 (20-30)	Lv. 4 (30-40)	Lv. 5 (40-50)	Lv. 6 (50-60)	Total
6	Burned Rock	3.1 g	0.8 g	21.1 g	20.8 g	0	14 g	59.8 g
	Debitage	4	11	33	25	0	43	116
	Lithic Tool	0	0	1	1	0	2	4
	Mussel Shell	0	0	0	0	0	0.6 g	0.6 g
63	Burned Rock	72.8 g	10.6 g	2.6 g	3.4 g	23.4 g	0	112.8 g
	Debitage	0	9	5	5	16	8	43
	Lithic Tool	1	0	1	0	0	1	3
	Mussel Shell	0	0.1 g	0	0	0	0	0.1 g
64	Burned Rock	0	0	0	0	0	0.6 g	0.6 g
	Lithic Tool	0	0	1	0	0	1	2
65	Burned Rock	0	0	0	0	0.9 g	2.4 g	3.3 g
	Debitage	0	0	0	9	2	14	25
66	Burned Rock	0	0	95.9 g	122.2 g	0	1.8 g	219.9 g
	Charcoal	0	0	0.1 g	0	0	0	0.1 g
	Debitage	0	0	0	0	0	4	4
68	Burned Rock	0.6 g	0.7 g	4.2 g	4.5 g	67.9 g	1.8 g	79.7 g
	Debitage	4	4	5	10	0	7	30
	Mussel Shell	0	0	0	0	0.1 g	0	0.1 g
69	Burned Rock	0	3.1 g	5.7 g	2.3 g	0	46.8 g	57.9 g
	Debitage	0	5	0	1	0	0	6
70	Burned Rock	0	0.3 g	0	0	0.8 g	1.9 g	3.0 g
	Debitage	0	0	2	1	1	3	7
71	Charcoal	0	0.5 g	0.6 g	0	0	0	1.1 g
	Debitage	0	0	0	7	3	0	10
72	Burned Rock	0	0	0	0	0	0.6 g	0.6 g
	Debitage	0	0	1	0	3	4	8
	Lithic Tool	0	0	0	0	1	0	1
73	Burned Rock	0.3 g	4.0 g	0	0.1 g	0	0.4 g	4.8 g
	Charcoal	0.2 g	0.5 g	0	0	0	0	0.7 g
	Debitage	0	0	0	6	0	1	7
	Lithic Tool	0	1	0	0	0	0	1
Total	Burned Rock	76.8 g	19.5 g	129.5 g	153.3 g	93 g	70.3 g	542.4 g
	Charcoal	0.2 g	1 g	0.7 g	0	0	0	1.9 g
	Debitage	8	29	46	64	25	84	256
	Lithic Tool	1	1	3	1	1	4	11
	Mussel Shell	0	0.1 g	0	0	0.1 g	0.6 g	0.8 g

Table 4-4. Vertical Distribution of Material Recovered from 41BX305

Level (cmbs)	Burned Rock	Charcoal	Debitage	Lithic Tool	Mussel Shell
1 (0-10)	4 (76.8 g)	1 (0.2 g)	8	1	0
2 (10-20)	7 (19.5 g)	2 (1.0 g)	29	1	1 (0.1 g)
3 (20-30)	5 (129.5 g)	2 (0.7 g)	46	3	0
4 (30-40)	6 (153.3 g)	0	64	1	0
5 (40-50)	4 (93 g)	0	25	1	1 (0.1 g)
6 (50-60)	9 (70.3 g)	0	84	4	1 (0.6 g)
Total	35 (542.4 g)	5 (1.9 g)	256	11	3 (0.8 g)

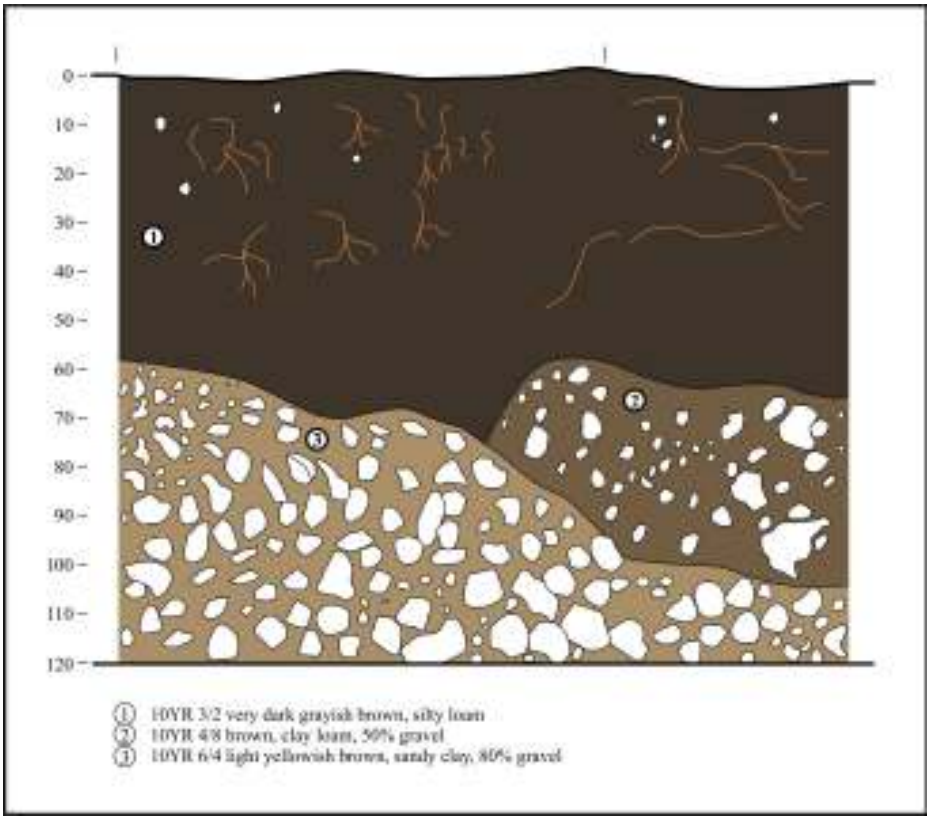

Figure 4-6. East wall profile of BHT 1.

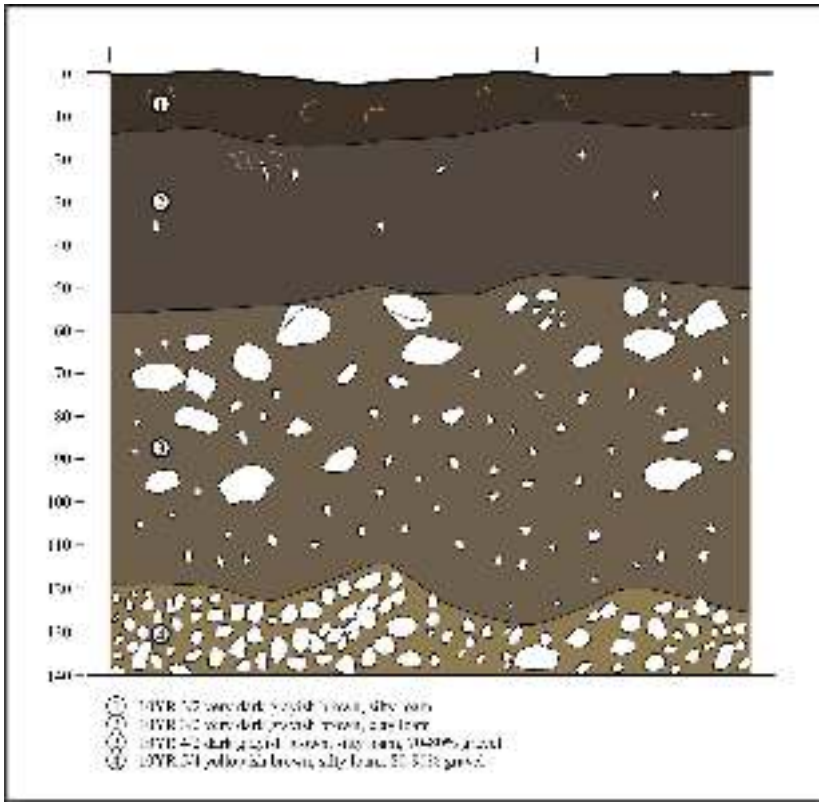

Figure 4-7. East wall profile of BHT 2.

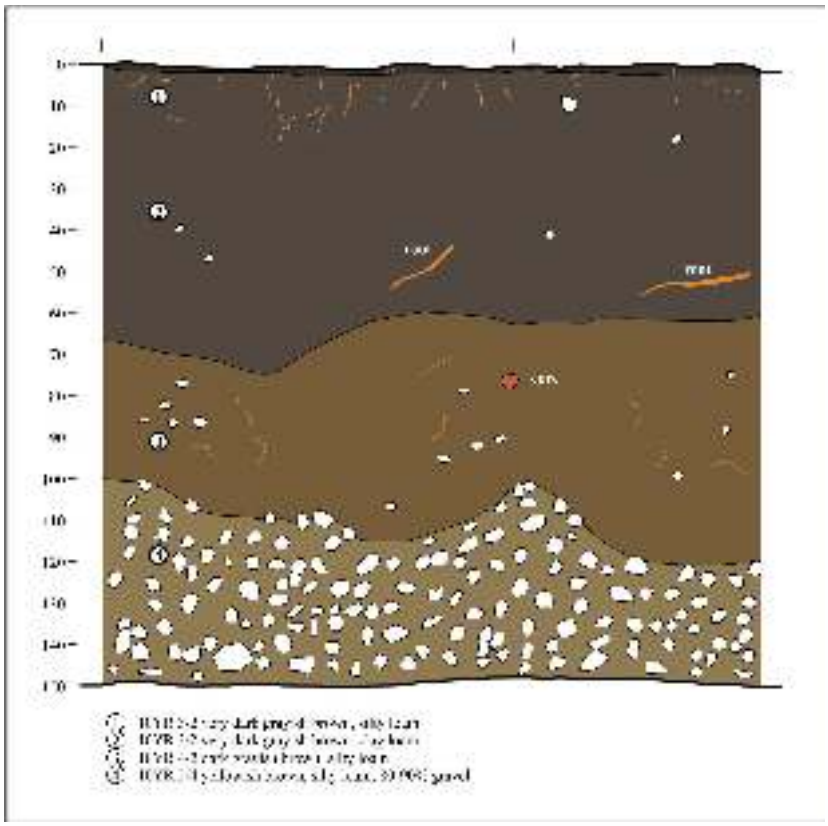

Figure 4-8. South wall profile of BHT 3.

Section 2: Winan Road to Salado Creek Crossing

This stretch of the project area is located on Fort Sam Houston property (Figure 4-9). Twenty-three shovel tests (STs 13-25, 74-80, and 85-87) were excavated in this area. Shovel Test 19 was excavated to only 20 cm due to a nearby beehive. Shovel Tests 20-22 were mapped by hand as dense vegetation made GPS reception inaccurate, and the trail was poorly marked. Site 41BX2058 and one isolated find were identified in Section 2 of the survey area. Table 4-5 presents the results of the shovel tests excavated in this area. ST 15 contained one piece of debitage. An additional three shovel tests (85, 86, and 87) were excavated within 10 m of ST 15, but all were negative for cultural material. Soils in this section of the project area consisted of very dark gray (10YR 3/1) clay loam to dark gray (10YR 4/1) loam.

Figure 4-9. Map of Section 2 of the project area.

41BX2058

Site 41BX2058 was identified during the current CAR survey (see Figure 4-9). The area was disturbed and appeared to be a mixture of late nineteenth- to early twentieth-century historic and prehistoric material. Eight shovel tests (STs 18 and 74-80) were excavated to delineate the site (Table 4-5). Some of the shovel tests were excavated outside the APE to address any secondary effects that might occur in this area. Soils at the site ranged from a very dark grayish brown (10YR 3/2) clay loam to a dark grayish brown (10YR 4/2) silty loam. Evidence of burrowing activities indicated the area has been disturbed (Figure 4-10). An informal trail and the proposed trail run just west of the site (Figure 4-11). Table 4-6 presents the results of the shovel testing. Material from the site included ceramics (n=3), glass (n=5), burned rock (1506.4 g), debitage (n=3), and unidentified metal (147.7 g). Burned rock was the most prevalent artifact type with a majority recovered from ST 74 (792.8 g). Material on the surface of the site was strictly historical with the presence of ceramics (n=3), metal (130 g), and glass (n=1). The ceramics were identified as a Bisque porcelain and Blue Phoenix porcelain, and the glass was cobalt blue (1840s-1930s; Lindsey 2010). The materials appear to be secondary in context, perhaps due to extensive animal burrowing, as there is a mixture of metal, glass, burned rock, and debitage (see ST 74 in Table 4-6). Due to the mixed nature of deposits and its location off the proposed trail, the site was not recommended for further work.

Table 4-5. Shovel Tests in Section 2: Winan Road to Salado Creek Crossing

ST	Site	Terminal Depth (cmbs)	Cultural Material
13	NA	55 (gravel)	No
14	NA	60	No
15	NA	60	Yes
16	NA	60	No
17	NA	60	No
18	41BX2058	60	Yes
19	NA	20 (beehive)	No
20	NA	60	No
21	NA	60	No
22	NA	60	No
23	NA	60	No
24	NA	60	No
25	NA	60	No
74	41BX2058	60	Yes
75	41BX2058	60	Yes
76	41BX2058	60	No
77	41BX2058	60	Yes
78	41BX2058	60	No
79	NA	60	No
80	41BX2058	60	No
85	NA	60	No
86	NA	60	No
87	NA	60	No

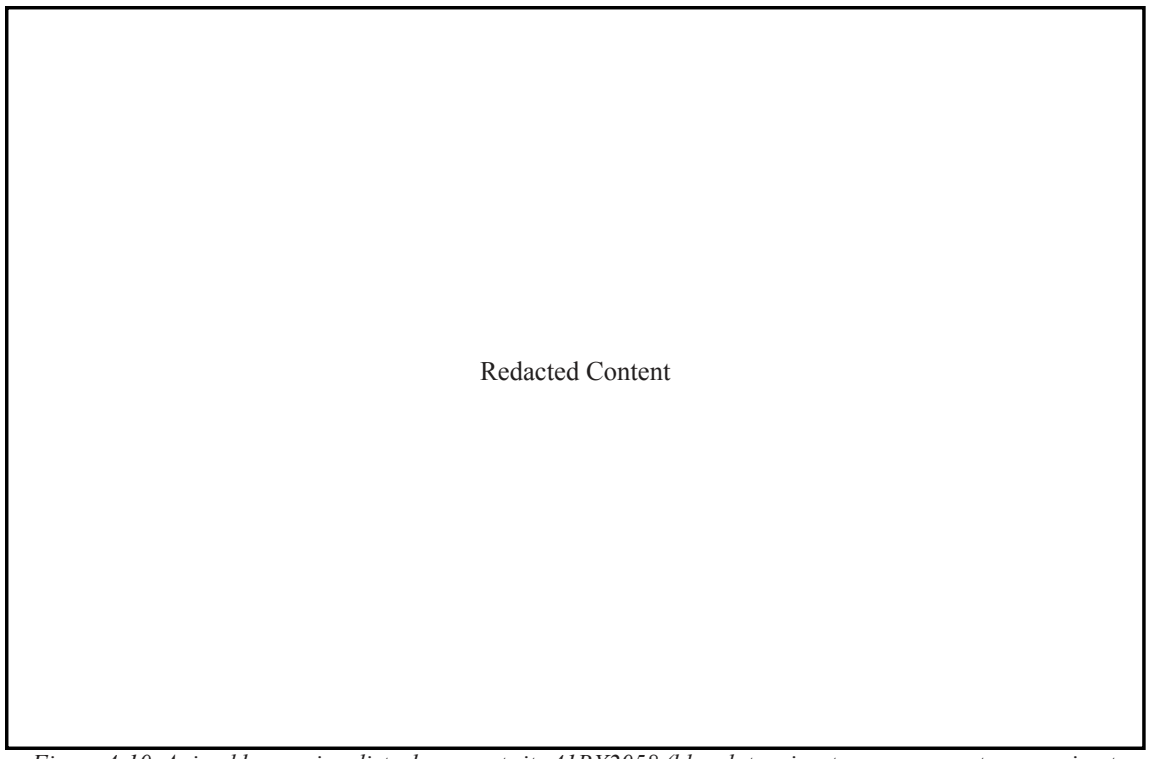

Figure 4-10. Animal burrowing disturbances at site 41BX2058 (blue dot on inset map represents approximate location of photographed area).

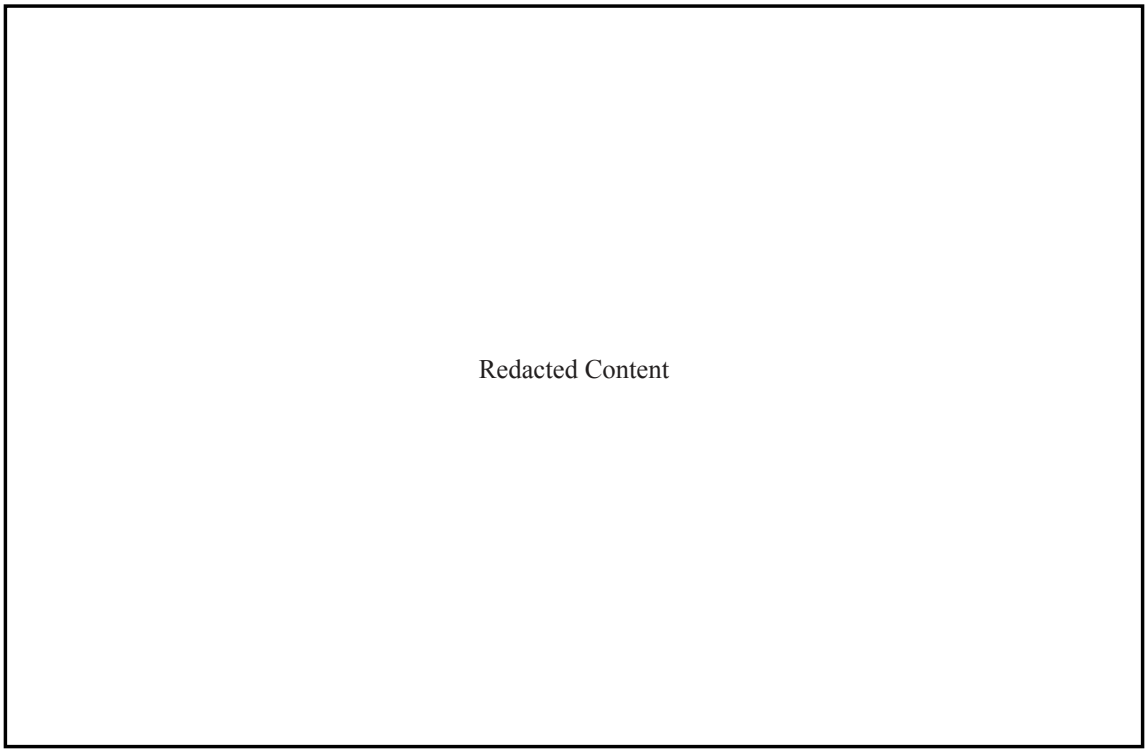

Figure 4-11. Informal trail to the west of site 41BX2058 (blue dot on inset map represents approximate location of photographed area).

Table 4-6. Cultural Material Recovered from 41BX2058

	Ceramic	Glass	Burned Rock (g)	Debitage	Round Nail	Unidentified Metal (g)
Surface	3	1	0	0	0	130
ST 18						
2 (10-20)	0	0	213	0	0	0
3 (20-30)	0	0	221.9	0	0	0
4 (30-40)	0	0	47.4	0	0	0
5 (40-50)	0	0	122.2	0	0	0
6 (50-60)	0	0	82.5	0	0	0
ST 74						
1 (0-10)	0	2	35	1	0	0
2 (10-20)	0	0	80.4	0	0	0
3 (20-30)	0	0	280.9	0	0	14.8
4 (30-40)	0	1	190.2	0	0	2.9
5 (40-50)	0	0	164.9	0	1	0
6 (50-60)	0	1	41.4	0	0	0
ST 75						
4 (30-40)	0	0	26.3	0	0	0
5 (40-50)	0	0	0.3	1	0	0
ST 77						
5 (40-50)	0	0	0	1	0	0
Total	**3**	**5**	**1506.4 g**	**3**	**1**	**147.7 (g)**

Section 3

This section of the project area begins at the creek crossing (Figure 4-12), parallels Holbrook Road, and extends to just south of Petroleum Drive. A large berm is in the southern portion of Section 3. Seven shovel tests (STs 26-31 and 88) were excavated in Section 3, and the results are shown in Table 4-7. Shovel Test 88 was excavated just south of the creek, and only two pieces of modern glass were identified. The area has been disturbed by an informal two-tract road. It appears that an old road might have stretched along the northern portion of the project area where STs 26, 27, and 28 were excavated (Figure 4-13), as heavy gravel road base was encountered in all three shovel tests. Figure 4-14 shows the layer of road base to 25 cmbs in ST 26 followed by a dark gray (10YR 4/1) clay loam matrix. Cultural material encountered in ST 26 consisted of modern glass (n=2) in Level 3 (20-30 cmbs). South of Petroleum Drive, three shovel tests were dug (STs 29, 30, and 31). Shovel Test 30 was excavated on the edge of a parking lot, and fill was encountered at 40 cmbs. The photo in Figure 4-15 was taken near ST 31 looking north toward the location of ST 30. Further work in this section was not warranted.

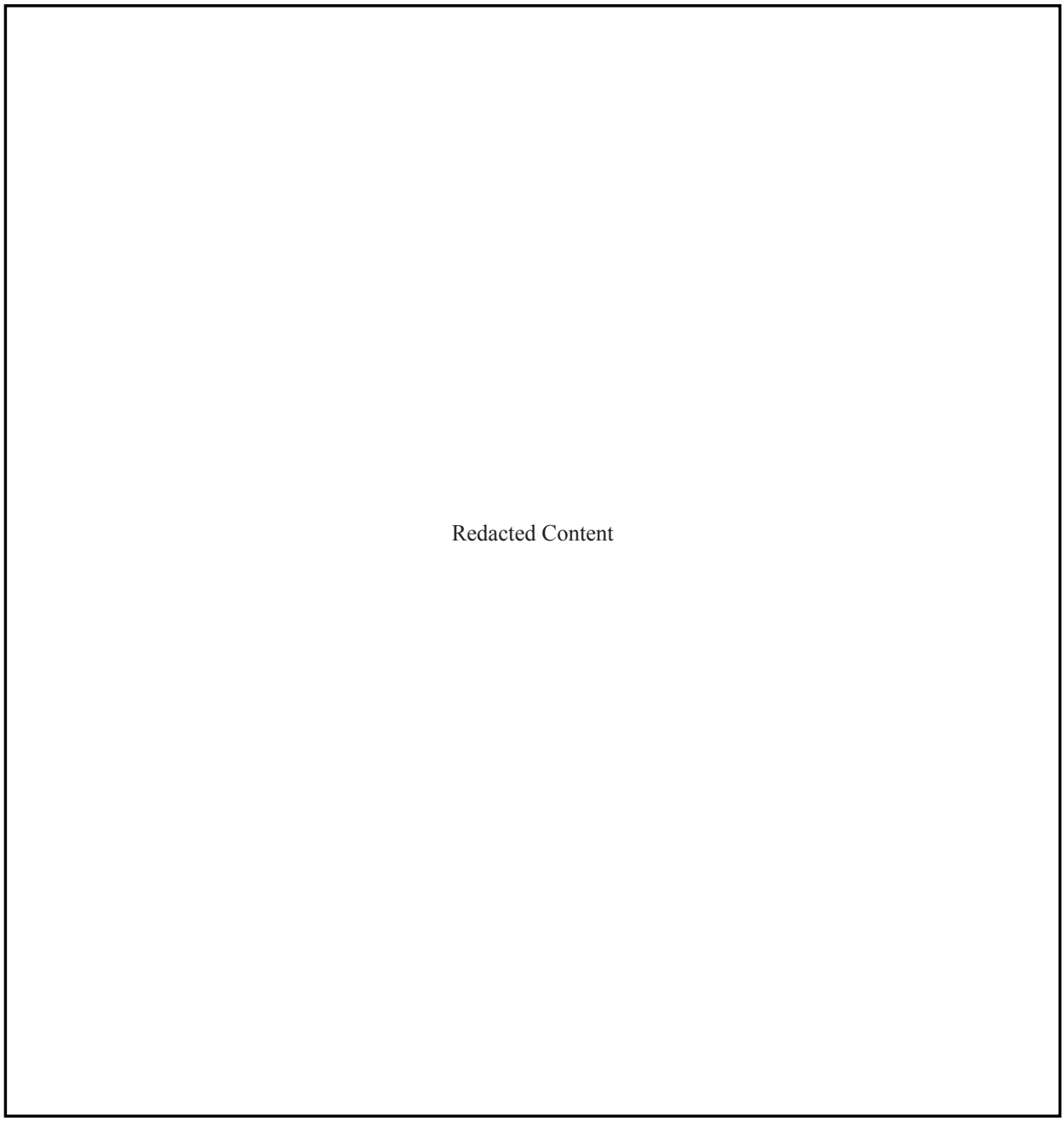

Figure 4-12. Map of Section 3 of the project area.

Table 4-7. Shovel Tests in Section 3

ST	Terminal Depth (cmbs)	Cultural Material
26	60	Yes
27	12 (road fill)	No
28	30 (road fill)	No
29	60	No
30	40 (fill)	No
31	60	No
88	60	Yes

Figure 4-13. Northern portion of Section 3 (blue dot on inset map represents approximate location of photographed area).

Figure 4-14. Photograph of ST 26 showing heavy gravel road base (blue dot on inset map represents approximate location of photographed area).

Figure 4-15. Looking north toward parking lot and berm near ST 30 (blue dot on inset map represents approximate location of photographed area).

Section 4

This section contained STs 32-36 (Figure 4-16). No cultural material was recovered from Section 4. Table 4-8 shows the terminal depths of the five shovel tests excavated in this area. Section 4 was heavily vegetated in the areas of STs 32 and 33. However, the remaining area was sparsely vegetated, and an informal trail was present (Figure 4-17). Soils in the area consisted of very dark grayish brown (10YR 3/2) and very dark gray (10YR 3/1) clay loam. Further work in this area was not recommended.

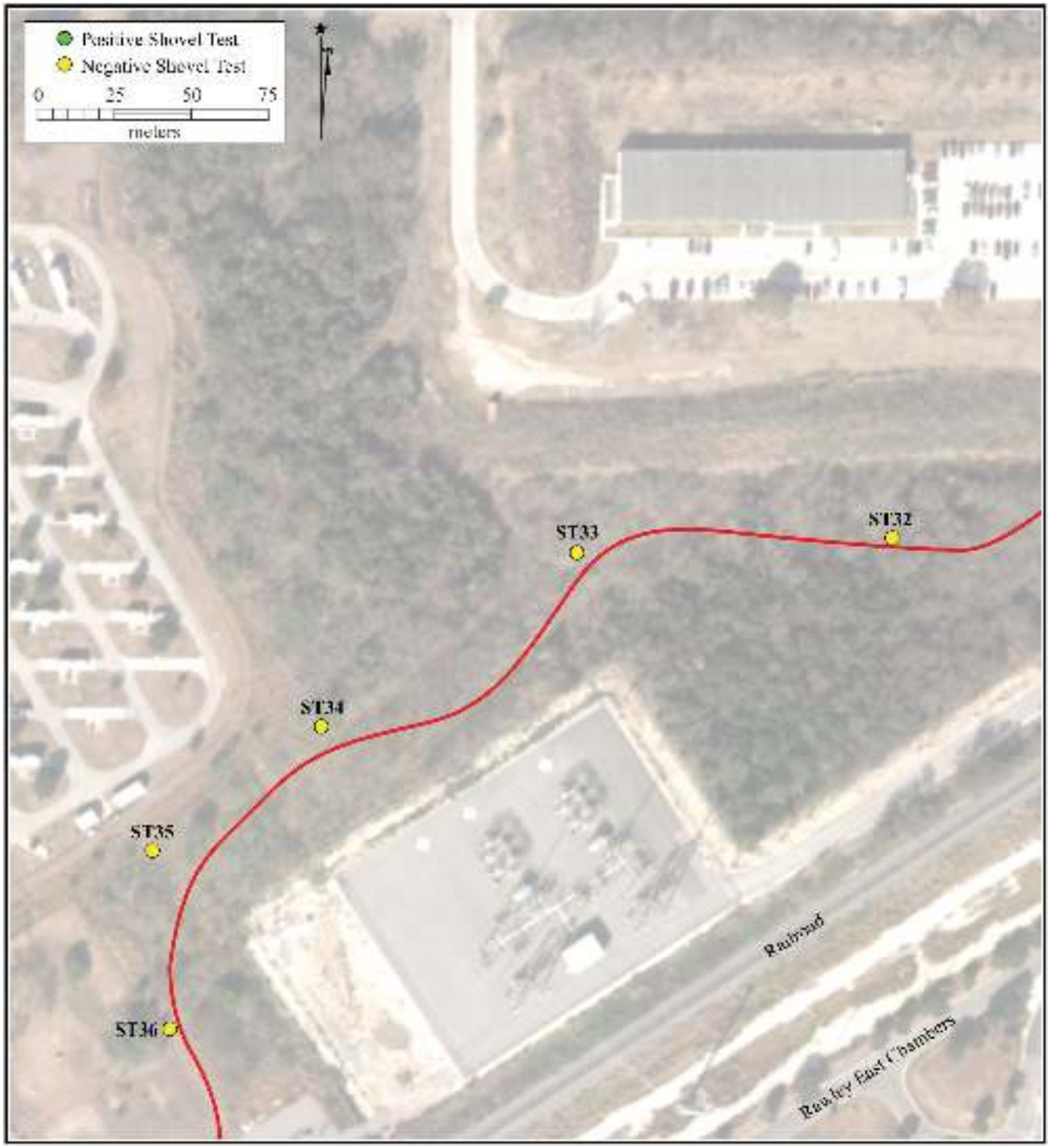

Figure 4-16. Map of Section 4 of the project area.

Table 4-8. Shovel Tests in Section 4

ST	Terminal Depth (cmbs)	Cultural Material
32	60	No
33	60	No
34	60	No
35	60	No
36	60	No

Figure 4-17. Vegetation and informal trail in Section 4 of the project area (blue dot on inset map represents approximate location of photographed area).

Section 5

Eight shovel tests (STs 37-44) were excavated in this section (Figure 4-18). Most of Section 5 is within the boundaries of an equestrian center that is owned by the Department of Defense. The majority of the proposed trail in this section runs along a gravel two-tract road (Figure 4-19). The southern portion of the area borders a parking lot and a plant nursery (Figures 4-20 and 4-21) and ends on 26th Street. The proposed trail was located within the nursery boundaries, but the property was not accessible. Burned rock (10.6 g) was encountered in ST 37. All shovel tests reached a depth of 60 cmbs, with the exceptions of STs 41 and 42 that terminated early due to a water line and gravel, respectively (Table 4-9). Soils in the area generally consisted of matrices that ranged in color from a very dark gray (10YR 3/1) clay to a very dark grayish brown (10YR 3/2) clay loam. As noted, ST 42 contained a disturbance, and the soil was a yellow loam (10YR 8/6) mottled with a dark grayish brown (10YR 4/2) silty clay. Further work in Section 5 was not recommended.

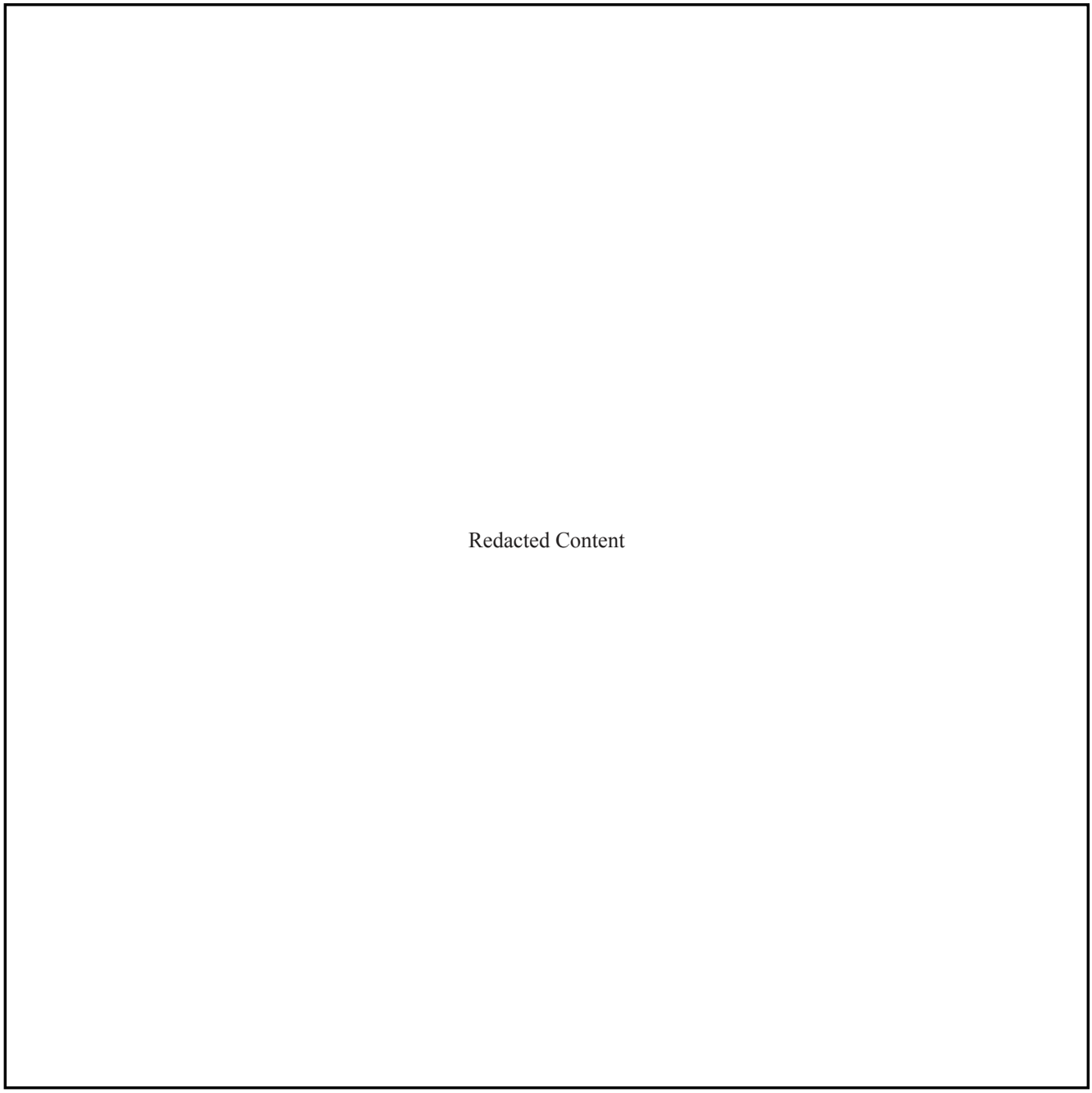

Figure 4-18. Map of Section 5 of the project area.

Figure 4-19. Equestrian center and gravel trail where proposed trail is to be placed, facing south (blue dot on inset map represents approximate location of photographed area).

Figure 4-20. Parking lot south of the equestrian center, facing west (blue dot on inset map represents approximate location of photographed area).

Figure 4-21. Plant nursery at end of Section 5, facing south, (blue dot on inset map represents approximate location of photographed area).

Table 4-9. Shovel Tests in Section 5

ST	Terminal Depth (cmbs)	Cultural Material
37	60	Yes
38	60	No
39	60	No
40	60	No
41	20 (water line)	No
42	47 (gravel)	No
43	60	No
44	60	No

Section 6

The southernmost section of the proposed trail alignment was located south of Binz-Engelman Road. Figure 4-22 provides a map of Section 6 with 17 excavated shovel tests (STs 45-57 and 81-84). The western portion of the trail runs parallel to the railroad tracks, while the southern portion runs along Salado Creek. Figures 4-23 and 4-24 depict the vegetation in the area and evidence of debris from occasional flooding. The southern end of the proposed trail intersects with an existing trail in Jack White Park where Salado Creek is quite visible (Figure 4-25). Shovel Tests 45 through 50 contained heavy gravel likely associated with railroad track construction; therefore, many of these shovel tests were terminated prior to reaching 60 cmbs. Shovel Test 53 was positive for charcoal (2.4 g), and four additional shovel tests (STs 81-84) were excavated 10 m from it in the cardinal directions. Shovel Test 82 contained charcoal (0.1 g) and mussel shell (0.6 g), ST 83 contained charcoal (6.4 g), but STs 81 and 84 were negative (Table 4-10). Shovel Test 54 contained modern glass (n=1). The finds were primarily in shallow deposits and did not meet the criteria for recordation as a site. The distribution of the recovered material is shown in Table 4-11. The remaining shovel tests along Salado Creek consisted of silty loam and clay loam ranging in color from black (10YR 2/1) to very dark grayish brown (10YR 3/2) soils. Further work in the section was not recommended.

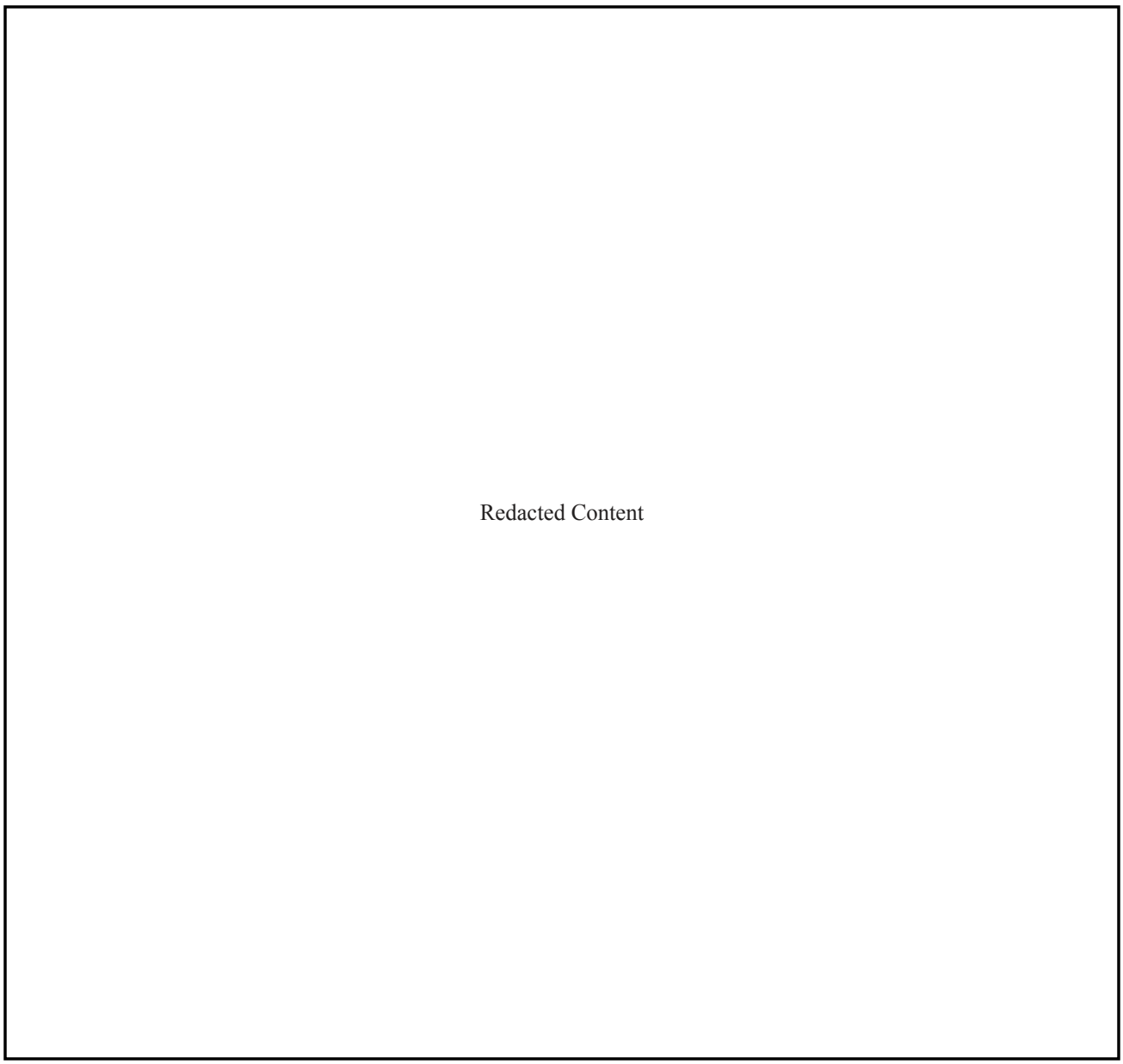

Figure 4-22. Map of Section 6 of the project area.

Figure 4-23. Vegetation in Section 6 of the project area (blue dot on inset map represents approximate location of photographed area).

Figure 4-24. Debris from creek flooding episodes (blue dot on inset map represents approximate location of photographed area).

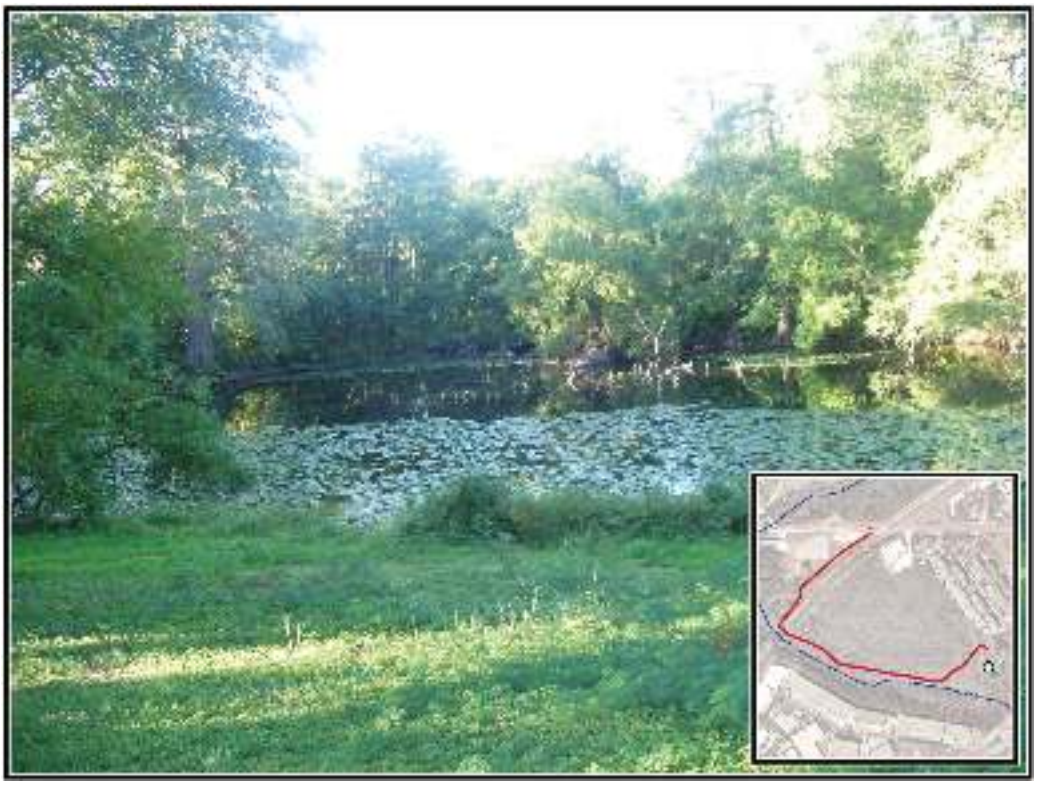

Figure 4-25. Salado Creek at Jack White Park (blue dot on inset map represents approximate location of photographed area).

Table 4-10. Shovel Tests in Section 6

ST	Terminal Depth (cmbs)	Cultural Material
45	30 (gravel)	No
46	30 (gravel)	No
47	38 (gravel)	No
48	50 (gravel)	No
49	10 (gravel)	No
50	49 (gravel)	No
51	60	No
52	60	No
53	60	No
54	60	Yes
55	60	No
56	60	No
57	60	No
81	60	No
82	60	Yes
83	60	Yes
84	60	No

Table 4-11. Distribution of Material Recovered from Section 6

ST/Level	Charcoal	Modern Glass	Mussel Shell
ST 53			
3 (20-30)	1.11 g		
4 (30-40)	0.97 g		
5 (40-50)	0.32 g		
ST 54			
2 (10-20)		1	
ST 82			
3 (20-30)			0.3 g
4 (30-40)	0.1 g		0.3 g
ST 83			
2 (10-20)	0.7 g		
3 (20-30)	5.7 g		
Total	8.9 g		0.6 g

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Chapter 5: Summary and Recommendations

The CAR conducted an archaeological pedestrian survey along with shovel testing and backhoe trenching in October 2014 and May 2016 for the proposed Fort Sam Houston Linear Park Trail. The proposed trail runs along the banks of Salado Creek where 87 shovel tests and three backhoe trenches were excavated. For this report, the results of the work conducted by CAR along the proposed trail corridor were presented in six sections. Cultural material recovered from site 41BX305 included remnants of prehistoric activity along this portion of the Salado Creek.

Twenty-seven shovel tests were excavated in Section 1 of the project area. As part of the work conducted by CAR, one site, 41BX305, was revisited in this area. The site boundaries of 41BX305 were redefined. Cultural material encountered at the site included debitage, burned rock, lithic tools, mussel shell, and charcoal. No diagnostics were found at the site, and further work was not recommended. Three backhoe trenches were also excavated in Section 1, and BHT 3 was positive for cultural material. One isolated find (ST 3) was encountered in this section.

In Section 2, 23 shovel tests were excavated, and a new site, 41BX2058, and one isolated find (ST 15) were documented. Site 41BX2058 was a disturbed mixture of historic and prehistoric material. One isolated find (ST 15) was recovered in this section. Further work at the site was not recommended. In Section 3, only seven shovel tests were excavated, and the area has been disturbed possibly by roadways and the installation of a parking lot. ST 26 contained modern material. Section 4 was explored with five shovel tests, and no cultural material was found. Eight shovel tests were excavated in Section 5 within the boundaries of the equestrian center. Some disturbance associated with a water line was detected in this section. Cultural material was recovered from ST 37 in Section 5. In Section 6, the southernmost portion of the proposed trail alignment, 17 shovel tests were excavated. Organic material (STs 53, 82, and 83) was found in this area, and cultural material was present in ST 54. Further work was not recommended; therefore, the proposed trail can proceed as planned. However, the CAR recommended monitoring for any future utility installation near the parking lot of John James Park.

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References Cited:

Bauer, K.J.
2010 Mexican War. Handbook of Texas Online. Texas State Historical Association. Electronic document, http://www.tshaonline.org/handbook/online/articles/qdm02, accessed March 12, 2015.

Black, S.L.
1986 *The Clemente and Herminia Hinojosa Site, 41JW8: A Toyah Horizon Campsite in Southern Texas*. Special Report, No. 18. Center for Archaeological Research, The University of Texas at San Antonio.

1989 Central Texas Plateau Prairie. In *From the Gulf Coast to the Rio Grande: Human Adaptation in Central, South, and Lower Pecos Texas*, edited by T.R. Hester, S.L. Black, D.G. Steele, B.W. Olive, A.A. Fox, K.J. Reinhard, and L.C. Bement, pp. 17-38. Research Series No. 33. Arkansas Archeological Survey, Fayetteville.

Black, S.L., and D.G. Creel
1997 The Central Texas Burned Rock Midden Reconsidered. In *Hot Rock Cooking on the Greater Edwards Plateau: Four Burned Rock Midden Sites in West Central Texas*, edited by S.L. Black, L.W. Ellis, D.G. Creel, and G.T. Goode, pp. 446-515. Studies in Archeology 22. Texas Archeological Research Laboratory, The University of Texas at Austin.

Black, S.L., and A.J. McGraw
1985 *The Panther Springs Creek Site: Cultural Change and Continuity in the Upper Salado Creek Drainage, South-Central Texas*. Archaeological Survey Report, No. 100. Center for Archaeological Research, The University of Texas at San Antonio.

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

2004 Archeology in Central Texas. In *The Prehistory of Texas*, edited by T.K. Perttula, pp. 205-265. Texas A&M University Press, College Station.

Cox, I.W.
1997 The Growth of San Antonio. In *Archaeology at the Alamodome Investigations of a San Antonio Neighborhood in Transition, Volume I: Historical, Architectural, and Oral History Research*, edited by A.A. Fox, M. Renner, and R.J. Hard, pp. 8-44. Archaeological Survey Report, No. 236. Center for Archaeological Research, The University of Texas at San Antonio.

2005 *The Spanish Acequias of San Antonio*. Maverick Publishing Company, San Antonio.

Favata, M.A., and J.B. Fernandez
1993 *The Account: Nunez Cabeza de Vaca's Relacion*. Arte Publico Press, Houston.

Foster, W.C.
1998 *The La Salle Expedition to Texas: The Journal of Henri Joutel 1664-1687*. Texas State Historical Association, Austin.

Fox, A.A., M. Renner, and R.J. Hard
1997 *Archaeology at the Alamodome: Investigations of a San Antonio Neighborhood in Transition, Volume III: Artifacts and Special Studies*. Archaeological Survey Report, No. 238. Center for Archaeological Research, The University of Texas at San Antonio.

Frkuska, E.C., A.J. Frkuska, F. Valdez, Jr., and T. Hester
1977 *An Initial Archaeological Assessment of John James Park, City of San Antonio, Texas*. Archaeological Survey Report, No. 25. Center for Archaeological Research, The University of Texas at San Antonio.

Gerstle, A., T.C. Kelly, and C. Assad
1978 *The Fort Sam Houston Project: An Archaeological and Historical Assessment*. Archaeological Survey Report, No. 40. Center for Archaeological Research, The University of Texas at San Antonio.

Hester, T.R.
2004 The Prehistory of South Texas. In *The Prehistory of Texas*, edited by T.K. Perttula, pp. 127-151. Texas A&M University Press, College Station.

Johnson, L., Jr.
1995 *Past Cultures and Climates at Jonas Terrace, 41ME29, Medina County, Texas*. Office of the State Archeologist Report 40. Texas Department of Transportation and Texas Historical Commission, Austin.

Johnson, L., and G. Goode
1994 A New Try at Dating and Characterizing Holocene Climates, as well as Archaeological Periods, on the Eastern Edwards Plateau. *Bulletin of the Texas Archeological Society* 65:1-15.

Joint Base San Antonio (JBSA)
2014 JBSA Fort Sam Houston. Electronic document, http://www.jbsa.af.mil/shared/media/document/AFD-120515-030.pdf, accessed June 23, 2014.

Katz, S.R.
1977 *An Archaeological Test Excavation at John James Park, City of San Antonio, Texas*. Archaeological Survey Report, No. 38. Center for Archaeological Research, The University of Texas at San Antonio.

Lindsey, B.
2010 Historic Glass Bottle Identification and Information Website. Society for Historical Archaeology and Bureau of Land Management. Electronic document, http://www.sha.org/bottle/index.htm, accessed December 2014.

Moneyhon, C.H.
2010 Reconstruction. Handbook of Texas Online. Texas State Historical Association. Electronic document, http://www.tshaonline.org/handbook/online/articles/mzr01, accessed March 12, 2015.

Nance, J.M.
2010 Republic of Texas. Handbook of Texas. Texas State Historical Association. Electronic document, https://www.tshaonline.org/handbook/online/articles/mzr02, accessed, January 15, 2015.

National Resources Conservation Service (NRCS)
2015 Web Soil Survey. United States Department of Agriculture. Electronic document, http://websoilsurvey.nrcs.usda.gov/app/ accessed January 2015.

National Weather Service (NWS)
2013 Average Monthly/Annual Temperature, San Antonio, TX (1885-2013). National Oceanic and Atmospheric Administration. U.S. Department of Commerce. Electronic document, http://www.crh.noaa.gov/Image/ewx/sat/satmontemp.pdf, accessed July 24, 2014.

Pletcher, D.M.
2010 Treaty of Guadalupe Hidalgo. Handbook of Texas Online. Texas State Historical Association. Electronic document, http://www.tshaonline.org/handbook/online/articles/nbt01, accessed March 12, 2015.

Potter, D., and S. Black
1995 *Archeology along the Wurzbach Parkway: Module 2 Initial Testing and Evaluation of Five Prehistoric Sites in the Upper Salado Watershed, Bexar County, Texas*. Studies in Archeology 18. Texas Archeology Research Laboratory, The University of Texas at Austin.

Presley, A.L.
2003 Antiquity and Paleoenvironment of the Tamaulipan Biotic Province of Southern Texas: The Zooarchaeological Perspective. Master's thesis, Texas A&M University, College Station.

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

Quigg, M.J., and J.T. Abbott
1997 *Results of Initial Archaeological and Geomorphological Investigations at Pershing Field Fort Sam Houston, Bexar County, Texas*. Mariah and Associates, Inc., Austin.

Scott, A.
2000 *Cultural Resources Survey of 280 Acres along Salado Creek, Fort Sam Houston Military Reservation, Bexar County, Texas*. Prewitt & Associates, Inc. Austin.

Taylor, R.
1996 *The New Handbook of Texas in Six Volumes*. Texas State Historical Association, Austin.

Texas Historical Commission (THC)
2014 Texas Archaeological Sites Atlas. Electronic document, nueces.thc.state.tx.us/view-archsite-form/, accessed May 6, 2014.

Texas State Historical Association (TSHA)
2015a Revolution and Republic. Texas Almanac: The Source for All Things Texan. Electronic document, http://texasalmanac.com/topics/history/timeline/revolution-and-republic-2, accessed June 17, 2015.

2015b Secession and Civil War. Texas Almanac: The Source for All Things Texan. Electronic document, http://www.texasalmanac.com/topics/history/timeline/secession-and-civil-war, accessed January 15, 2015.

2015c 20th Century. Texas Almanac: The Source for All Things Texan. Electronic document http://texasalmanac.com/topics/history/20th-century, accessed June 17, 2015.

Turner, S.E., and T.R. Hester
1999 *A Field Guide to Stone Artifacts of Texas Indians*. Third ed. Gulf Publishing, Houston.

Weir, F.
1976 The Central Texas Archaic. Unpublished Ph.D. dissertation, Washington State University, Pullman.

Werner, G.C.
2010 Texas and Pacific Railway. Handbook of Texas Online. Texas State Historical Association. Electronic document, http://www.tshaonline.org/handbook/online/articles/eqt08, accessed March 12, 2015.

Young, B.
2008 *Archaeological Survey for the Salado Creek Hike and Bike Trail between Houston Street and Benz-Engleman Road in the City of San Antonio, Bexar County, Texas*. Blanton and Associates, Austin.