

# Intensive Pedestrian Archaeological Survey of the Loop 1604 San Antonio River Access Park, Bexar County, Texas



*by*  
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*and* Kristi M. Ulrich

Texas Antiquities Committee Permit No. 5717

*Prepared for:*  
San Antonio River Authority  
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Technical Report, No. 25

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Principal Investigator

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## **Abstract:**

The Center for Archaeological Research at The University of Texas at San Antonio performed an intensive pedestrian survey of the Loop 1604 San Antonio River Access Park, Bexar County, Texas. The work was conducted for the San Antonio River Authority (SARA). During the survey of 3.05 acres conducted by CAR, seven shovel tests and three backhoe trenches were excavated. No sites were identified within the project area and the CAR recommends that the proposed plans for the Loop 1604 San Antonio River Access Park can proceed as planned. The project was performed under Texas Antiquities Permit # 5717 with Dr. Steve Tomka serving as Principal Investigator and Antonia L. Figueroa serving as Project Archaeologist.

No artifacts were recovered and all project related documents are curated at the Center for Archaeological Research.

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## Chapter 2: Project Background

The project area is depicted on the Saspamco (2998-124) 7.5 minute USGS Quadrangle and is located in southeast Bexar County where Loop 1604 crosses the San Antonio River. The Loop 1604 San Antonio River Access Park, the Area of Potential Effect (APE), is a proposed 4.2 acre park that lies immediately east of Loop 1604 and is bounded by the San Antonio River to the southwest (Figure 2-1). The purpose of the planned Nature Park is to contribute to the public’s appreciation of the river by providing access and educational opportunities centered on the San Antonio River corridor. The development of the park may include Hike and Bike Trails, parking lots, and overlook areas.



Figure 2-1. Aerial photograph of the Area of Potential Effect (APE).

Roughly 2.7-acres of the APE is located on high ground (terraces) overlooking the San Antonio River. The remaining acreage of the APE are found in low-lying floodplain settings subject to repeated flooding and any cultural deposits in this low-lying area would be deeply buried. The project area had been impacted by grading of a parking area and foot-path, prior to the CAR crew conducting archaeological work (Figure 2-2 and 2-3). An existing road also crosscuts the eastern portion of the project

area (Figure 2-4). Highway construction maps also indicate that a portion of the APE has been substantially impacted by the original construction and subsequent re-orientation of a curve in Loop 1604. It appears that the original route of Loop 1604 crossed through the proposed park. The 1958 Saspamco (2998-124) 7.5 minute USGS Quadrangle indicates the original route of Loop 1604, also known as FM 1518, prior to upgrading in the mid- to late-1970s (Purcell 2010).



Figure 2-2. Parking area located on the northern portion of the APE.



Figure 2-3. Grading from upland terrace to low lying terrace adjacent to San Antonio River.



Figure 2-4. Road that crosscuts the eastern portion of the APE.

## Environment

The San Antonio River borders the project area from south-west to the west, and Loop 1604 borders it from the west to the north-west. Pastureland was located from the north-east to the south-east of the property boundary.

The Loop 1604 San Antonio River Access Park is located south of the Edward's and below the Balcones Escarpment. Elevations range from 400 to 450 feet amsl. This portion of land along the San Antonio River consists of the Eocene, Claiborne Group (Cook Mt., Sparta, Weches, Queen City, Reklaw Formations) or Ec1 (Bureau of Economic Geology 1992). Physiologically the project area is part of the Interior Coastal Plains (Bureau of Economic Geology 1996) and part of the Tamaulipan biotic province (Blair 1950). The nearest natural water source is the San Antonio River, and the portion along the project area is a part of the lower San Antonio watershed. The San Antonio River covers a length of 240 miles and begins at the "Blue Hole" spring located at the University of the Incarnate Word in San Antonio and ends by converging with the Guadalupe River in Refugio County (SARA 2010). The lower San Antonio watershed is

part of the USGS cataloging unit 12100303 (United States Geological Survey 2009).

The climate in the region is typically subtropical with cool winters and hot summers (Taylor et al. 1991). Annual temperatures range from an average low of 37.9 ° F in January to an average high of 95.0° F in July (Bomar 1999). Annual average rainfall for San Antonio is 30.98 inches (Bomar 1999).

## Flora and Fauna

The project area is located in the Loamy Bottlomland ecological area, and is described as a fire-influenced tallgrass/ hardwood savannah community interspersed with occasional perennial forbs. Rainfall within the project area is highly variable, and droughts occur within the project area three to four times per 100 years, leading to variation in vegetation species composition thru time. Natural vegetation on the uplands is predominately tall cool season and warm season perennial bunchgrasses and sedges (*Carex* spp.) with lesser amounts of midgrasses. Virginia wildrye (*Elymus virginicus*), eastern gamagrass (*Tripsacum dactyloides*), switchcane

(*Arundinaria gigantea*), switchgrass (*Panicum virgatum*), and sedges decrease in abundance and are replaced by dallisgrass (*Paspalum dilatatum*), common Bermudagrass (*Cynodon dactylon*), and carpetgrass (*Axonopus fissifolius*) if improper grazing continues. Shrubs and hardwood saplings invade the site in the absence of brush management. Prolonged lack of brush management or abandonment allows the site to become a hardwood forest dominated by water oak (*Quercus nigra*), willow oak (*Quercus phellos*), over-cup oak (*Quercus lyrata*), and cedar elm (*Ulmus crassifolia*) on non-calcareous site or green ash (*Fraxinus pennsylvanica*), cottonwood (*Populus* spp.), and pecan (*Carya illinoensis*) (USDA-NRCS 2010).

There are over 73 documented fish species identified within the lower San Antonio watershed including many varieties of gar (alligator gar (*Lepisosteus spatula*), longnose gar (*Lepisosteus osseus*), spotted gar (*Lepisosteus oculatus*), *buchanani*; SARA 2006). Fauna in this portion of the Tamaulipan province include White-tailed Deer (*Odocoileus virginianus*), peccary (*Tayassu pecari*) and opossums (*Didelphis virginiana*).

## Soils

The project area consists of the Frio Series soils. The surface layer averages 0 to 25 inches (63.5 cm) in thickness and ranges from loam to clay loam and silty clay loam. The subsurface layer averages 5 to 20 inches (12.7 cm to 50.8 cm) in thickness. The subsurface layer ranges from sandy loam through light loam and stratified loam to clay loam. These soils are poorly to moderately drained and maintain moisture well and fertility of the soil is moderate. Most of the area is used for pecan orchards, cattle pastures, corn, grain sorghum, small grain or hay crops (Taylor et al. 1991). Frio clay loam, 0 to 1 percent slope, is present within the boundaries of the project area, and is fairly fertile soil and good for the growth of pecan orchards and native grasses. (Taylor et al. 1991)

## Culture History

This section reviews the culture chronology for south-central Texas that is divided into four periods: Paleoindian, Archaic, Late Prehistoric and Historic. This portion of the report offers a brief summary of each period, including historical background on the nearest community to the project area, Elmendorf.

### Paleoindian (11500-8800 BP)

The Paleoindian Period corresponds with the earliest documented presence of humans in Bexar County between

11500-8800 BP (Collins 1995). Subsistence patterns during this time focused on large, highly mobile mega fauna but also included the exploitation of small to medium fauna. This period is typically divided into early and late segments. The early portion of the period is associated with Clovis and Folsom adaptations (Meltzer and Bever 1995). Lithic technology includes fluted Clovis and Folsom projectile points. In the later portion of the period there were stylistic changes in projectile point technology seen in Dalton, Scottsbluff, and Golondrina traditions. While widespread in geographic range, these types occurred in high densities in the High Plains and Central Texas (Meltzer and Bever 1995). As the climate warmed, megafauna gradually died off, and subsistence patterns shifted.

### Archaic (8800-1200 BP)

This period is subdivided into the Early, Middle and Late subperiods. The subperiods are distinguished by differences in climate conditions, resource availability, subsistence practices and temporally diagnostic projectile points (Collins 1995; Johnson and Goode 1994). Plant gathering appears to have become an important part of subsistence strategies during this period, and was probably even more important during xeric periods. Environmental conditions may explain the appearance of burned rock earth ovens during the period. They were used to cook a variety of plant foods that were otherwise inedible, such as the roots of sotol, and yucca (Collins 1995: 383).

In the Early Archaic (8800-6000 BP), the subsistence shifted from hunting large game to hunting medium and small species and gathering plant foods (Collins 1995). Projectile point styles include Angostura and Early Split Stemmed. Task-specific tools include Clear Fork gouges and Guadalupe and Nueces bifaces (Turner and Hester 1993:246, 256). Early Archaic sites are located along the eastern and southern portions of the Edwards Plateau in areas with reliable water sources (McKinney 1981). Population densities were relatively low during this subperiod and consisted of small mobile group (Story 1985:39).

The Middle Archaic spans from 6000 to 4000 BP (Collins 1995). Diagnostic projectile points from this period include Bell, Andice, Taylor, Nolan, and Travis. According to Collins (1995), during the Middle Archaic there was a focus on large-game hunting of bison. Climate was gradually drying as the onset of the Alithermal drought began. Demographic and cultural change likely occurred in response to these hotter and drier conditions.

The last subperiod of the Archaic is the Late Archaic that spans from 4000 to 1200 BP (Collins 1995). Dart point

diagnostics of the Late Archaic are triangular points with corner notches that include Ensor and Ellis (Turner and Hester 1993:114,122). Other Late Archaic projectile points are Bulverde, Pedernales, Marshall, and Marcos types (Collins 1995). Evidence from the Thunder Valley sinkhole cemetery suggests that territoriality may have established during the Late Archaic, possibly as a result of population increase (Bement 1989). Some researchers state the accumulation of burned rock middens ceased at this time though current research has challenged this notion (Black and Creel 1997; Mauldin et al. 2003).

### **Late Prehistoric (1200-350 BP)**

The Late Prehistoric Period is divided into the Austin and Toyah phases. During the Austin Phase the bow and arrow was introduced. Nickels and Mauldin (2001) suggested at the beginning of this period environmental conditions were warm and dry. More mesic conditions appear to accelerate after 1000 BP. Subsistence practices remain relatively unchanged, especially during the Austin Phase. The Austin Phase may represent the most intensive use of burned rock middens (Black and Creel 1997), and includes temporally diagnostic point types Scallorn and Edwards (Collins 1995; Turner and Hester 1993).

The presence of bone tempered ceramics (Leon Plain) during the Toyah Phase suggests interaction between Central Texas and ceramic producing traditions in East and North Texas (Peritulla et al. 1995). Ceramics were in common use in East Texas by 2450 BP, but the first Central Texas wares did not appear until ca. 650-700 BP. Other technological traits of this phase include the temporally diagnostic Perdiz point and beveled bifaces. These specialized processing kits are thought to be an adaption to flourishing bison populations by some (Ricklis 1992) and a sign of intensification of exploitation of declining bison populations by others (Mauldin et al. 2010).

### **Protohistoric (ca. 1528-1700 AD)**

The Protohistoric period is a term typically used to describe the transition between the Late Prehistoric and the Colonial Period. This period is not well documented archaeologically in Texas. Some researchers (Wade 2003), argue that the Protohistoric Period may coincide with the end of the Late Prehistoric Toyah interval, spanning the period of AD 1250/1300 to AD 1600/1650 (Hester 1995). For the purposes of this report, we define the period as beginning with the Early Spanish explorations in Texas (ca. 1528) and ending with the establishment of a strong Spanish presence in the region in the early 1700s.

During this period, there was intermittent contact between the native groups and Spanish explorers. It was a time before the Spanish economy significantly impacted the indigenous groups in the area. A number of encounters between indigenous communities and Europeans were recorded during this period, including those of Cabeza de Vaca (1528-1536) and the French settlement established by René Robert Cavelier, Sieur de La Salle (1685-1689). The Spanish sent General Alfonso de Leon into the area in 1689, and in 1691 the area of present-day San Antonio was first visited by Domingo de Teran.

Archaeologically, the time period is poorly documented but has been identified at several sites in south Texas counties (e.g. Hall et al. 1986; Inman et al. 1998; Mauldin 2004). There is not a clear material culture associated with the period. Sites that have been deemed as "Protohistoric" may have Late Prehistoric and/or Historic artifacts associated with them, and in several cases radiocarbon dates confirm their Protohistoric designation (Mauldin 2004).

### **Historic Period**

The Historic Period is characterized by systematic European contact with Native cultures in the Americas. While the Spanish explorers had established their presence in Texas since the 1500s, European settlements, the Spanish in particular, became part of the Texas landscape beginning in the late 1600s. Mission settlements began to be established in Bexar County in 1718 with Mission San Antonio de Valero (Chapa 1997).

On December 29, 1845, the United States Congress approved the Texas State Constitution and Texas was admitted as a state. This act, coupled with the failure to agree on the Rio Grande as a boundary and on the sale of California to the United States, resulted in the war between the United States and Mexico (1846-1848). In early 1846, General Zachary Taylor advanced to the Rio Grande, occupying land that the Mexican government viewed as its own, and 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, established the Rio Grande as a boundary, and gave the United States present-day Arizona, California, New Mexico, Texas and parts of Colorado, Nevada and Utah in exchange for \$15 million. United States troops left Mexico in June of that same year (Bauer 1974; Wallace 1965).

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 probably the major economic activities, cotton-based agriculture was the major cash crop. In 1846, Texas had more than 30,000 black slaves, many associated with cotton production. At the breakout of the Civil War, thousands of Texans fought on both sides, with the effects of the war seen throughout Texas. On June 19, 1865, General Gordon Granger arrived in Galveston with Union forces, signaling the end of the Civil War in Texas (Fox et al. 1997).

### **Previous Archaeology**

The Texas Department of Highways and Public Transportation conducted a pedestrian survey along Loop 1604 in November 1978, prior to the re-routing of the road in the vicinity of the proposed park (THC 2010). No previous archaeological surveys have been conducted within the APE proper and only one archaeological site (41BX1474) is recorded in the general area, approximately 900 meters to the southeast. Site 41BX1474 was recorded by Hick and Company on the bank of the San Antonio River (THC 2010). The archaeological deposits, consisting of fire-cracked rock, a lens of *rabdotus* snails, and scattered flakes were buried at a depth of 1.8 meters below surface in the south descending bank of the river. The recorder noted excellent organic preservation and recommended that the site be tested to determine its National Register of Historic Places and State Archeological Landmark eligibility. It is likely that similar prehistoric sites are located along much of the San Antonio River drainage and can serve as important witnesses to the lengthy history of the river and the inhabitants that used it and its rich resources for thousands of years.

### **Property and Elmendorf History**

The historic ownership of the project area can be traced back to the Josefa de la Garza Grant that was delineated during the Spanish Colonial (Historic) Period. The grant consisted of a large portion of land, but it appears that 213-acres were parceled out as Subdivision No. 2 and was conveyed to José

Cassiano in 1833 (BCDR C1:143). This 213-acre tract was later referred to in deed records as the “Cassiano Tract”. José Cassiano held on to this tract of land for the entirety of his life, and passed it on to his son José Ignacio Cassiano in his Last Will and Testament (BCDR 7:404). José Ignacio Cassiano also kept the tract of land in his possession throughout his lifetime. At the time of José Ignacio Cassiano’s death in February of 1914 (BCDR 1103:166), the property was divided amongst his heirs. José’s wife, Pauline, received the parcel of land that contains the current project area.

Pauline Cassiano conveyed 34.2-acres to John H. Covington and his wife in April of 1931 (BCDR 1243:19). Three years later, the entirety of the parcel of land the Covington’s had purchased was conveyed to Fred H. Nicholson (BCDR 1387:137). Nicholson sold the property to A.W. Barnet in August of 1942 (BCDR 336). The next year, Barnet conveyed the property to B.J. and Applen Jackson (BCDR:402). The Jackson heirs sold the parcel of land to José Navarro Lopez and his wife, Anita (BCDR 5765:357) in May of 1967. José and Anita Lopez conveyed small portions of the property to the State of Texas in December of 1975 (BCDR 7755:923 and BCDR 7755:927). These parcels totaled 0.397 of an acre and were obtained by the State in preparation of the construction of Loop 1604 in this location. The remainder of the property stayed in the Lopez’s hands at this time. Anita Lopez received her husband’s property at the time of his death (BCDR 8019:1478). She conveyed the property that is the current APE to the San Antonio River Authority in August of 2008 (BCDR 13056:338).

The city of Elmendorf, the nearest community to the project area, was established in 1885 by a former mayor of San Antonio, by the name of Henry Elmendorf. Pottery was an important industry for the city and the local clay’s suitability was discovered by W. F. Saenger. The first post office opened in 1886, and the city population rapidly grew after 1900 (Long, 2010). Places and persons of interest in the community of Elmendorf include, Star Clay Pottery, the largest employer for the city for many years. A folk legend in south Texas, serial killer Joe Ball, was born in Elmendorf in 1896 (Osborn 2009).



## Chapter 3: Field and Laboratory Methodology

CAR conducted a pedestrian survey on 3.05-acres for the proposed Loop 1604 San Antonio River Access Park. Shovel testing and backhoe trenching methods were implemented during the archaeological investigations. This chapter describes the field and laboratory methods followed during this project.

### Shovel Testing and Pedestrian Survey

Given the environmental settings, previous impacts and geomorphic contexts, CAR field technicians employed surface inspection and shovel testing in the upland settings. THC minimum guidelines call for the excavation of two shovel tests per acre of land in project areas measuring between 3-10 acres in size. No shovel tests were excavated in areas exceeding 20 percent slopes (e.g., transitions from upland terraces to floodplain terrace) due to the likely secondary depositional context. The entire project area was traversed by the CAR crew at 30 meter intervals, where terrain was accessible.

Shovel tests were 30 cm in diameter and extended to a depth of 60 cm below surface. Shovel tests were excavated in 10-cm increments, and all soil from each level was screened through 1/4-inch hardware cloth. Shovel test forms were completed for every excavated unit. 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, consistence, Munsell color, inclusions). The locations of shovel tests were recorded with Trimble Geo XT GPS units and sketched onto an aerial photograph as a backup to GPS information. Any additional observations considered pertinent were also included as comments on the standard shovel test form.

### Backhoe Trenching

On the floodplain of the San Antonio River, the CAR technicians implemented backhoe trenches to search for deeply buried cultural deposits. Two backhoe trenches were excavated across the floodplain and one on the higher terrace near the parking area. The backhoe trenches measured 3-5 meters (9-16.5-feet) long and approximately 1-meter (3.3-foot) wide. Backhoe trenches did not exceed 1.5 meters (4.9-foot) in depth. Selected portions of the backhoe trench walls were profiled. The placement of the backhoe trenches across the floodplain was decided in field by the Project Archaeologist after consultation with the Principal Investigator.

Field crew created measured profile drawings of the stratigraphy revealed in the trenches including a description of soil types. A standardized form was used for describing specifics of the backhoe trenches including length, width, depth and orientation. Only those trench walls that revealed unique stratigraphy, were profiled to avoid redundancy. All trench walls were photographed and all trench locations were recorded with a GPS unit as well as hand-plotted on an aerial photograph.

### Laboratory Methods

All documents produced during the survey were prepared in accordance with federal regulation 36 CFR part 79 and in accordance with current guidelines of the Center for Archaeological Research. Field notes, forms and hard copies of photographs were placed in labeled archival folders. All field forms were completed in pencil. Documents and forms were printed on acid-free paper and any soiled forms were placed in archival-quality page protectors.



## Chapter 4: Results of the Archaeological Investigations

On August 3, 2010 the Center for Archaeological Research performed an intensive pedestrian survey, accompanied with shovel testing (n=7) and backhoe trenching (n=3) for the proposed Loop 1604 San Antonio River Access Park (Figure 4-1). The San Antonio River Authority contracted CAR-UTSA, to conduct an intensive pedestrian survey of the area to establish an inventory of cultural resources found within the park. No cultural material was encountered during investigations. This section presents the results of the work conducted on the Loop 1604 San Antonio River Access Park.

### Shovel Testing and Pedestrian Survey

Seven shovel tests were excavated as part of the pedestrian survey. Shovel tests were distributed within the upland setting of the APE (see Figure 4-1). As noted earlier, this area had been disturbed by grading of a foot path and a parking area (see Figure 2-1). Soils encountered in the project area during shovel testing ranged from a brown (10YR 5/3) loamy sand to a light yellowish brown (10YR 6/4) loamy sand. It is possible that these sediments represent recent flooding episodes from the San Antonio River. Modern material such as brown bottle glass and tile were recovered from Shovel Test 2 in Level 2 (10-20 cmbs) but was not collected. No shovel tests were excavated on the lower terrace immediately adjacent to the San Antonio River.

During the pedestrian survey, one piece of flow blue transferware was noted on surface (but not collected) near the parking lot area, (Figure 4-2). Also, the base of an aqua bottle was encountered in the lower terrace setting where the current road is located, but not collected (Figure 4-3).



Figure 4-1. Map depicting APE, shovel tests and backhoe trenches.

The bottle was identified as locally made in San Antonio with a star emblem embossed on the bottom and the words SAN ANTONIO, TEXAS embossed on the side. According to the BLM/SHA Historic Bottle website (Lindsey 2010),



Figure 4-2. Transfer ware on the surface of the parking lot area.



Figure 4-3. Historic bottle found in road cut in APE.

aqua glass is a result of the iron impurities typically found in most sands. Moreover, aqua glass is common in bottles manufactured prior to the 1920s.

### Backhoe Trenches

Three backhoe trenches were excavated (see Figure 4-1). One backhoe trench (BHT 1) was excavated on the upper terrace, 3-5 meters from the disturbed parking area. The remaining backhoe trenches (BHT 2 and BHT 3) were excavated on the lower terrace perpendicular to the San Antonio River. All backhoe trenches were negative for cultural material.

BHT 1 was located within the northern portion of the APE and orientated northeast/southwest. Two soil zones were observed in the profile and the eastern wall was profiled (Figure 4-4). Zone 1 consisted of a semi-compact brown (10YR 5/3) silty sand with several root inclusions. Zone 2 was light yellowish brown (10YR 6/4) sandy loam with few roots. Cultural material was not observed in the backhoe trench.

BHT 2 was located on the lower terrace adjacent to the San Antonio River and orientated northeast/southwest. The west wall of the trench was profiled (Figure 4-5). Zone 1 contained few roots that were within a dark gray (10YR 4/2) sandy loam. The

second zone was a light yellowish brown (10YR 6/4) sandy matrix, also with root inclusions. The last zone (3) consisted of a yellowish brown (10YR 6/6) sandy clay loam. No cultural material was observed in BHT 2.

BHT 3 was also excavated on the lower terrace of the project area perpendicular to the San Antonio River. The backhoe trench was orientated northeast/southwest and the southeast wall was profiled (Figure 4-6 and 4-7) and five soil zones were identified. Zone 1 was described as a brown (10YR 5/3) silty sand, while Zone 2 consisted of a grayish brown (10YR 5/2) clayey sand. Zone 3 was only present in the northern portion of the profile and consisted of very dark gray (10YR 3/1) silt intruding into Zone 2. The deepest zone was Zone 4 and it consisted of a brown (10YR 4/3) brown silty clay. Zone 5 was seen intruding into Zone 2 the southern end of the profile just below Zone 1. Zone 5 was a light yellowish brown (10YR 6/4) sandy silt. No cultural material was observed in BHT 3.

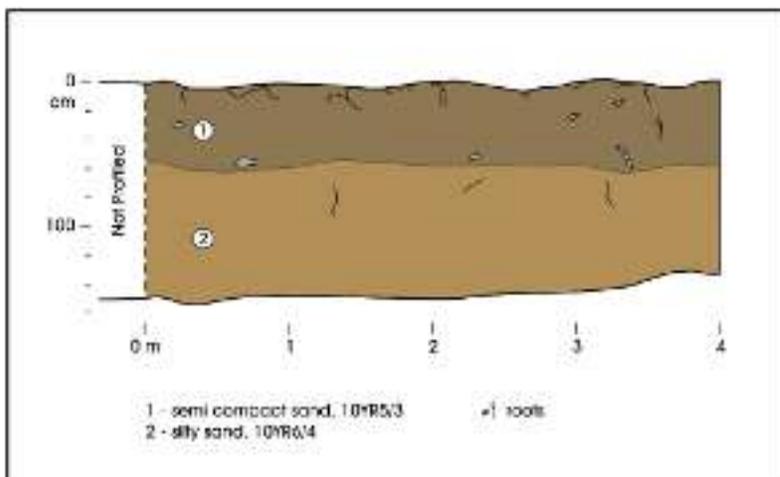


Figure 4-4. Backhoe Trench 1, east wall profile.

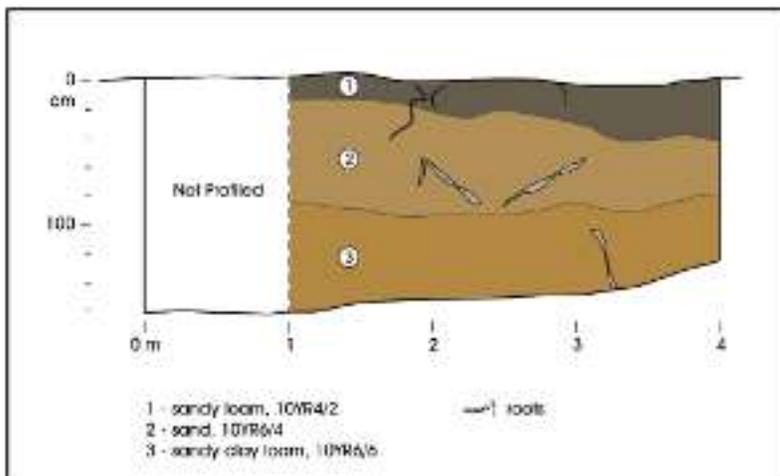


Figure 4-5. Backhoe Trench 2, west wall profile.

### Summary

CAR conducted a pedestrian survey of 3.05-acres for the proposed Loop 1604 San Antonio River Access Park, located along the San Antonio River, in southeast Bexar County, Texas. The purpose of the survey was to complete an inventory evaluation of archaeological sites in the project area. All shovel testing occurred on the northern reaches of the project area. Backhoe trenching occurred in both the upland setting and lowland terrace. Shovel testing and backhoe trenching in the project area revealed sandy soils and no archaeological sites were identified. Two isolated finds that were the result of recent flooding episodes were encountered. No archaeological sites were identified on the 3.05 acres for the proposed Loop 1604 San Antonio River Access Park.

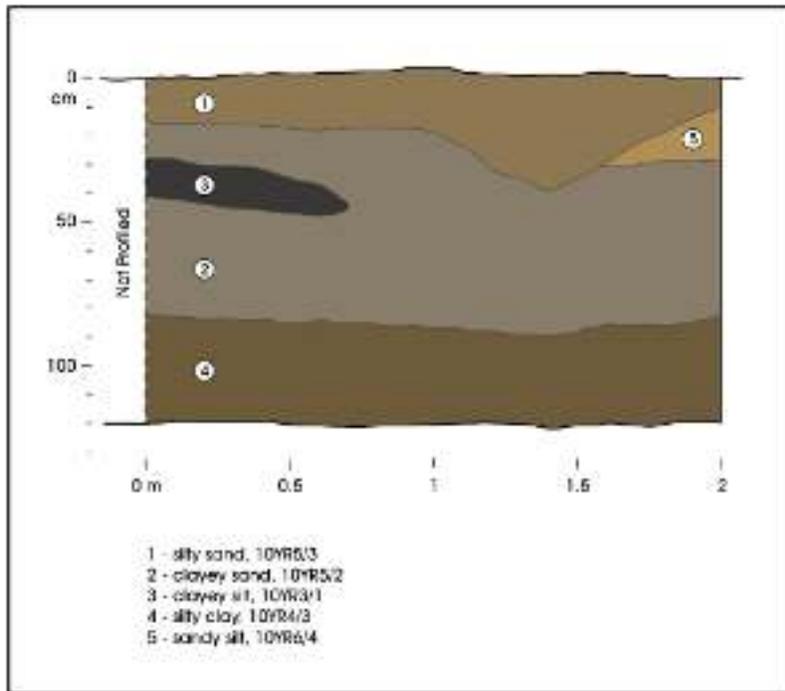


Figure 4-6. Backhoe Trench 3, east wall profile.



Figure 4-7. CAR field crew member (Jason Perez) profiling BHT 3.



## Chapter 5: Conclusions and Recommendations

The CAR conducted a pedestrian survey and inventory of archaeological resources for the proposed Loop 1604 San Antonio River Access Park in August 2010. The work was carried out on behalf of the San Antonio River Authority. The proposed park is located in southeast Bexar County, Texas along the San Antonio River. Archaeological investigations conducted by CAR included shovel testing and backhoe trenching. Shovel tests (n=7) were excavated in the upland of the APE. Backhoe trenches (n=3) were excavated along the banks of the San Antonio River (lower terrace) and upland portions of the project area.

Shovel testing and backhoe trenching revealed no cultural material. Two isolated finds were encountered. A

piece of blue transfer ware was observed on the surface of the disturbed parking lot area and an aqua bottle was encountered in a road cut along the lower terrace. No historic or prehistoric properties were identified during the survey. CAR does not recommend further archaeological work and we suggest that the development of the proposed Loop 1604 San Antonio River Access Park can proceed as planned. lot area and an aqua bottle was encountered in a road cut along the lower terrace. No historic or prehistoric properties were identified during the survey. CAR does not recommend further archaeological work and we suggest that the development of the proposed Loop 1604 San Antonio River Access Park can proceed as planned.



## References Cited

- Bauer, J.  
1974 *The Mexican War, 1846-1848*. Macmillan, New York.
- Bement, L.C.  
1989 *Excavations at 41BP19: The Kennedy Bluffs Site, Bastrop County, Texas*. Texas Archaeological Research Laboratory, The University of Texas at Austin. Contract Reports in Archaeology, Report No. 5, Highway Design Division, Texas State Department of Highways and Public Transportation, Austin.
- Bexar County Deed Records (BCDR)  
2010 Public Deed Records. <<https://gov.propertyinfo.com/TX-Bexar/Default.aspx>>, accessed September 2010
- 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*, by Steve Black, Linda W. Ellis, Darrell G. Creel, and Glenn T. Goode, pp.269-305. Studies in Archeology 2. Texas Archeological Research Laboratory, The University of Texas at Austin.
- Blair, W.F.  
1950 The Biotic Provinces of Texas. *Texas Journal of Science* 2(1):93-117.
- Bomar, G.  
1999 *Texas Weather*. The University of Texas Press, Austin.
- Bureau of Economic Geology  
1992 Geology of Texas, <http://www.texasbeyondhistory.net/coast/nature/images/Geology-of-Texas-BEG.html>. The University of Texas at Austin, Accessed August 26.
- Bureau of Economic Geology  
1996 Physiographic Map of Texas, The University of Texas at Austin, <http://www.lib.utexas.edu/geo/pics/txphysio.jpg>. Accessed August 26, 2010.
- Chapa, J.B.  
1997 Historia del Nuevo Reino de Leon. In *Texas and Northeastern Mexico, 1630-1690*, edited by J. B. Chapa. Translated by N.F. Brierly, University of Texas, Austin.
- Collins, M.B.  
1995 Forty Years of Archeology in Texas. *Bulletin of the Texas Archeological Society* 66:361-400.
- 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.
- Hall, G.D., T.R. Hester and S.L. Black  
1986 *The Prehistoric Sites at Choke Canyon Reservoir, Southern Texas: Results of Phase II Archaeological Investigations*. Choke Canyon Series No. 10. Center for Archaeological Research, The University of Texas at San Antonio.

Hester, T.R.

1995 The Prehistory of South Texas. *Bulletin of the Texas Archeological Society* 66:427-459.

Inman, B.J., T.C. Hill, Jr. and T.R. Hester

1998 Archaeology at the Tortugas Flat Site, 41ZV155, Southern Texas. *Bulletin of the Texas Archeological Society* 69:11-33.

Johnson, L. and G.T. 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 Archaeological Society* 65:1-51.

Lindsey, W.

2007 Bottle/Glass Colors. Historic Glass Bottle Identification & Information Website. <http://www.sha.org/bottle/colors.htm>, Accessed September, 2010.

Long, C.

2010 Handbook of Texas Online, s.v.<http://www.tshaonline.org/handbook/online/articles/EE/hle14.html>. Accessed August 30.

Mauldin, R.P., D.L. Nickels, and C.J. Broehm

2003 *Archaeological Testing to Determine the National Register Eligibility Status of 18 Prehistoric Sites on Camp Bowie, Brown County, Texas*. Archaeological Survey Report, No. 334. Center for Archaeological Research, The University of Texas at San Antonio.

Mauldin, R.P.

2004 *Archeological Survey and Testing of Selected Prehistoric Sites along FM 481, Zavala County, Texas*. Archaeological Survey Report No. 352. Center for Archaeological Research, The University of Texas at San Antonio.

Mauldin, R.P., R.D. Greaves, J.L. Thompson, C.M. Munoz, L. Kemp, B.A. Meissner, B.K. Moses, and S.A. Tomka.

2010 *Archaeological Testing and Data Recovery at 41ZV202, Zavala County, Texas*. Archaeological Survey Report, No. 409, Center for Archaeological Research, The University of Texas at San Antonio.

McKinney, W.W.

1981 Early Holocene Adaptations in Central and Southern Texas: The Problem of the Paleoindian-Archaic Transition. *Bulletin of the Texas Archaeological Society* 52:91-120.

Meltzer, D.J. and M.R. Bever

1995 Paleoindians of Texas: An Update on the Texas Clovis Fluted Point Survey. *Bulletin of the Texas Archeological Society* 66:47-81.

Nickels, D.L. and R.P. Mauldin

2001 *The Project Environment*. In *An Archaeological Survey of Twin Buttes Reservoir, Tom Green County, Texas*, edited by R. Mauldin and D.L. Nickels, pp 25-38. Archaeological Survey Report, No. 300. Center for Archaeological Research, The University of Texas at San Antonio.

Osborn, Jim

2009 Suite 101.com, <http://www.suite101.com/content/joe-ball-a115553>. Accessed August 26, 2010.

- Perttula, T.K., M.R. Miller, R.A. Ricklis, D.J. Prikryl, and C. Lintz  
1995 Prehistoric and Historic Aboriginal Ceramics in Texas. *Bulletin of the Texas Archeological Society* 66:175-235.
- Purcell, B.  
2010 State Loop 1604. The San Antonio Freeway System. <http://www.texashighwayman.com>. Accessed September 1.
- Ricklis, R.A.  
1992 The Spread of the Late Prehistoric Bison Hunting Complex: Evidence from the South-Central Coastal Prairie of Texas. *Plains Anthropologist* 37(140):261-273.
- San Antonio River Authority (SARA)  
2006 *Lower San Antonio River Watershed Instream Flows Study Biological Collection Summary Report*. San Antonio River Authority Environmental Services Department.
- San Antonio River Authority (SARA)  
2010 About SARA, <http://www.sara-tx.org/>, Accessed August 30.
- Story, D.A.  
1985 Adaptive Strategies of Archaic Cultures of the West Gulf Coastal Plain. In *Prehistoric Food Production in North America*, edited by R.I. Ford, pp. 19-56. Anthropological Papers No. 75. Museum of Anthropology, University of Michigan, Ann Arbor.
- Taylor, F.B., R.B. Hailey, and D.L. Richmond  
1991 *Soil Survey of Bexar County, Texas*. United States Department of Agriculture, Soil Conservation Service. Washington, D.C.
- Texas Historical Commission (THC)  
2010 Texas Archaeological Sites Atlas, <http://nueces.thc.state.tx.us/>, Accessed August 30.
- Turner, S.E., and T.R. Hester  
1993 *Stone Artifacts of Texas Indians*. Second Edition. Texas Monthly and Gulf Publishing Company, Houston.
- United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS)  
2008 Ecological Site Description. <http://esis.sc.egov.usda.gov/ESDReport/> Accessed August 26.
- United States Geological Survey (USGS)  
2009 USGS Science for a Changing World, <http://water.usgs.gov/lookup/getwatershed?12100303>. Accessed September 20.
- Wade, M.  
2003 *The Native Americans of the Texas Edwards Plateau, 1582-1799*. 1st ed. Texas Archaeology and Ethnohistory Series. University of Texas Press, Austin.
- Wallace, E.  
1965 *Texas in Turmoil: The Saga of Texas, 1849-1875*. Steck-Vaughn, Austin.

