

An Intensive Pedestrian Survey for Proposed Greenway Extensions at Culebra and Helotes Creeks, San Antonio, Bexar County, Texas



by
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Texas Antiquities Permit No. 6850

Prepared for:
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The University of Texas at San Antonio
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San Antonio, Texas 78249
Technical Report, No. 58

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Abstract:

In April of 2014, the Center for Archaeological Research (CAR) at The University of Texas at San Antonio (UTSA) conducted an archaeological pedestrian survey of a proposed trail for the Greenway Extensions of Culebra and Helotes Creeks in San Antonio, Bexar County, Texas. The proposed trail system is 2.7-km long and runs along Culebra and Helotes Creeks. The goal of the archaeological survey was to identify and document all prehistoric and/or historic archaeological sites that may be impacted by the proposed trail alignment. The archaeological work was performed under Texas Antiquities Permit No. 6850, with Dr. Raymond Mauldin serving as Principal Investigator and Cynthia Moore Munoz serving as Project Manager. Antonia Figueroa was the Project Archaeologist.

The field work resulted in the excavation of 22 shovel tests along the proposed trail corridor. Ground disturbances in the Area of Potential Effect and modifications to the creek banks made shovel testing infeasible in some parts of the project area. Although several archaeological sites surround the project area, no new archaeological sites were documented during the archaeological survey. Since only one artifact, an isolated find, was encountered during the archaeological investigations, the CAR recommends the proposed trail alignment for the Greenway Extensions of Culebra and Helotes Creeks proceed as planned. In a letter dated June 26, 2014, the Texas Historical Commission (THC) agreed with these recommendations. The COSA Office of Historic Preservation also concurred with the CAR's recommendations.

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

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Chapter 1: Introduction

In April 2014, the Center for Archaeological Research (CAR) of The University of Texas at San Antonio (UTSA) was contracted by Adams Environmental, Inc. (AEI) to provide services to the City of San Antonio (COSA). The CAR conducted an archaeological pedestrian survey prior to the construction of a proposed trail for the Greenway Extensions at Culebra and Helotes Creeks in San Antonio, Bexar County, Texas. The Area of Potential Effect (APE) is a proposed 2.7-km trail system along Culebra and Helotes Creeks located in northwest San Antonio, Bexar County, Texas. The APE is shown on a composite of the Culebra Hills and Helotes USGS 7.5-minute quadrangle maps (Figure 1-1). 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.

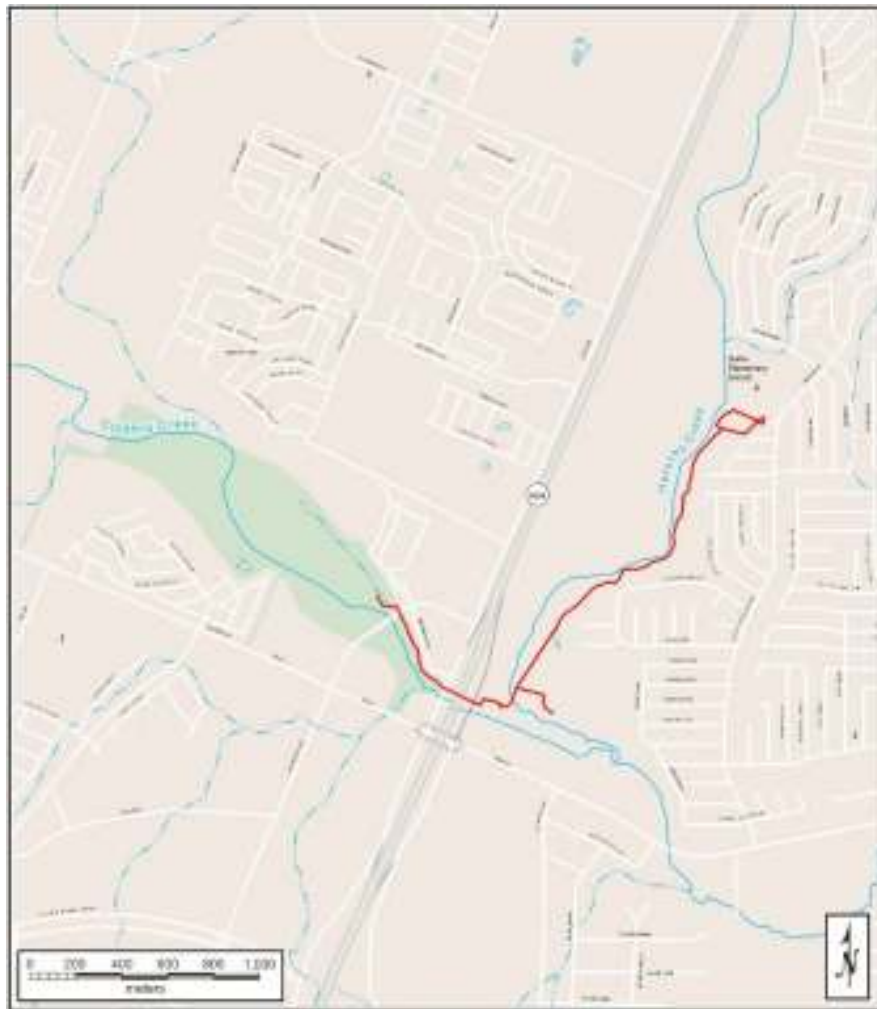


Figure 1-1. *The location of the project area (red) on a composite of the Culebra Hills and Helotes USGS 7.5-minute series quadrangle maps.*

The archaeological work was performed under Texas Antiquities Permit No. 6850, with Dr. Raymond Mauldin serving as Principal Investigator and Cynthia Moore Munoz serving as Project Manager. Antonia Figueroa was the Project Archaeologist. The City of San Antonio (COSA), a political subdivision of the State of Texas, owns the land impacted by the project. As such, the project has to comply with State Historic Preservation laws and the mandates of the Antiquities Code of Texas. The work was also coordinated through the COSA's Office of Historic Preservation (OHP) in compliance with the City of San Antonio Unified Development Code Chapter 35. The archaeological survey resulted in the excavation of 22 shovel tests along the proposed trail corridor. Only one artifact was recovered during the archaeological survey and was considered an isolated find. Portions of the project area were within the channels of Helotes and Culebra Creeks, making the excavation of shovel tests impossible. Furthermore, modifications to the drainages and surrounding areas made the excavation of backhoe trenches infeasible. No archaeological sites were identified during the archaeological survey.

Chapter 2: Project Overview

This chapter presents an overview of the project environs that includes a description of the geographical area, climate, and soils, followed by a brief culture history of the area although no archaeological sites were identified in the APE. Previous archaeological work surrounding the project area concludes the chapter.

Project Environment

The project area (Figure 2-1) is in northwest San Antonio, Bexar County, Texas. The proposed trail runs along the intersection of Culebra and Helotes Creeks just north of Culebra Road and west and east of Loop 1604. The creeks provide low-lying terraces with the potential for buried archaeological resources.



Figure 2-1. Aerial photograph depicting the project area (red).

The project area is within the Nueces-Guadalupe Plain, a northern biogeographical subarea of the South Texas Plains. The Gulf Coastal Plain and Gulf of Mexico lie approximately 224 km to the east (Nickels et al. 1998). A few kilometers to the north, plains give way to the Balcones Escarpment and Edwards Plateau. The Balcones Escarpment serves as a geographical division between the Central Texas archaeological region to the north and the South Texas region to the south (Black 1989).

Climate in this general area is classified as subtropical-subhumid with hot, humid summers and mild, dry winters. Rainfall averages approximately 79 cm a year. Temperatures range from an average January low of 39° F to an average July high of 96° F. The annual growing season in Bexar County averages 265 days (Long 2013).

The project area is dominated by Tinn and Frio series soils, with slopes of zero to one percent (National Resources Conservation Service [NRCS] 2014). Tinn series are very deep, moderately well drained, very slowly permeable, and formed in calcareous clayey alluvium (NRCS 2014). Frio series consist of loamy alluvium of Holocene age that are derived from mixed sources (NRCS 2014). The northern portion of the project area borders Venus loam soils. Venus soils are located along stream terraces with zero to one percent slopes (NRCS 2014). The southwestern portion of the project area is within Patrick soils that are located on paleo-terraces with well drained soils and a one to three percent slopes (NRCS 2014).

Culture History

The project area lies at the intersection of two broad archaeological regions, Central Texas and South Texas. Few known archaeological sites with long sequences of stratified deposits are known 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 (1995, 2004), Johnson and Goode (1994), and Black (1989) for Central Texas, with observations from Hester (2004) for South Texas. Four major time 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 1995, 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. Material assemblages dating earlier than Clovis are referred to as pre-Clovis.

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). The use of food processing technologies, such as features including hearths, ovens, and middens, appears to increase during this time (Black and McGraw 1985). Large cemeteries also appeared during this period signaling the likely establishment of regional “territories” (Black and McGraw 1985:37). Collins (1995, 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 1995, 2004; Hester 2004).

In Central Texas, the Early Archaic dates from 8800-6000 BP (Collins 1995, 2004). Changing climate and the extinction of megafauna appear to have initiated a behavioral change by 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 1995, 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 (Story 1985; 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). There is no consensus among researchers regarding population size in this sub-period. 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; Story 1985). 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 Clifton 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

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). From AD 1550 to the late 1600s, European forays into South and Central Texas were infrequent. 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 impacted 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).

Previous Archaeological Investigations

A background literature review revealed six previously recorded prehistoric archaeological sites in close proximity to the project area. The previously recorded sites were outside the project area and were not revisited during field work.

Site 41BX1465 was first recorded in 2001 by Geo-Marine, Inc. (Texas Historical Commission [THC] 2014). Cultural material was present on and below the surface. Flakes and cores were distributed across the site. Archaeological investigations included the excavation of two shovel tests with deposits that reach a depth of 80 centimeters below the surface (cmbs). Because the research value of the site was minimal, it was not considered eligible for listing on the National Register of Historic Places. The site was revisited by Geo-Marine, Inc. in 2007 (THC 2014). Further work was not recommended due to the destruction of the site by the construction of a church and associated parking lots.

Site 41BX126 was originally documented in 1971 but was not tested (THC 2014). In 1997, the CAR investigated the site in preparation for impacts from the Texas Department of Transportation (TXDOT) construction of Loop 1604 (Nickels et al. 1998). Seventeen burned rock features were recorded. The site was found to be occupied during the Early, Middle, and Late Archaic periods (Nickels et al. 1998). Although CAR recommended further work on the site, neither TXDOT nor the THC concurred with the recommendation. The site was partially impacted by the construction of Loop 1604. The remainder of the site was capped with sand to prevent further disturbance. Site 41BX126 was revisited in 2007 by Geo-Marine, Inc. for the Leon Creek Watershed Overview (THC 2014) and again in 2008 by the CAR for the North Loop 1604 Improvements Project (Thompson et al. 2008). No excavations were conducted by either agency.

Site 41BX1424 was recorded by CAR in 1999 (Figueroa and Langner 2001) for the Harwell Property project. Cultural material, consisting of cores and debitage, was observed on the surface. Four shovel tests were excavated on the site, and no artifacts were recovered. Because the CAR concluded that the site had no research potential, further work was not recommended. The site was revisited in 2007 by Geo-Marine, Inc. for the Leon Creek Watershed Overview (THC 2014). It was noted that the site was destroyed by commercial construction, and further work was not recommended.

Site 41BX1423, recorded in 1999 by the CAR, was described as a burned rock midden (Figueroa and Langner 2001). Seventeen shovel tests and one backhoe trench were excavated to define the site and the domed shaped burned rock midden. The burned rock midden was found to be disturbed by looting, a two-track dirt road, and a utility trench. Materials recovered from shovel tests included burned rock, debitage, and lithic tools. Lithic tools included two Perdiz arrow points and a Fairland dart point. Because the site was heavily disturbed, further work was not recommended. In 2007 the site was revisited by Geo-Marine, Inc. as part of the Leon Creek Watershed Overview (THC 2014). It was reported that the site had been destroyed by commercial construction.

Site 41BX1422 was also recorded in 1999 during the Harwell Property project (Figueroa and Langner 2001). Seventeen shovel tests and one 1-x-1 m test unit were excavated to explore a shallow hearth feature. Cultural material present on the site included burned rock, debitage, and lithic tools. Recovered diagnostics consisted of one Perdiz arrow point and one Pedernales dart point (Figueroa and Langner 2001). At the time of recording, impacts to the site included looting and a two-track dirt road. The site was deemed as having low research potential due to heavy disturbance. Further work was recommended, but the site was buried for preservation.

Site 41BX1863 was recorded in 2010 as part of the Culebra Creek Park Improvements by Ecological Communications Corporation (Butler and McClain 2010; THC 2014). Archaeological investigations included surface inspections, backhoe trenching, and shovel testing. Surface inspection, in the form of dogleash inventories, revealed a sparse surface density of artifacts. Six shovel tests were excavated and were negative for cultural material (Butler and McClain 2010). The site was defined as a surface scatter of non-diagnostic lithic artifacts. At the time of recording, it was determined the site had little research potential, and further work was not recommended. Impacts to the site included a walking trail for the Culebra Creek Park.

Chapter 3: Field and Laboratory Methods

The CAR conducted a 100 percent pedestrian survey with shovel testing along the proposed trail corridor for the Greenway Extensions of Culebra and Helotes Creeks. During archaeological investigations, 22 shovel tests were excavated. According to the THC guidelines, this project was conducted as a linear survey for a corridor < 30 m wide. The survey corridor was subjected to one transect that ran along the proposed trail alignment. Due to artificial modifications along the creek crossings, no backhoe trenches were excavated (see Chapter 4). This chapter outlines the field and laboratory methods followed during the archaeological investigations.

Field Methods

Based on the 2.7-km linear survey area, excavation required to fulfill the THC survey standards would be a minimum of 28 shovel tests at a density of 16 shovel tests per mile. Ground disturbances, the lack of soil and modifications to the creek bed resulted in the excavation of 22 shovel tests to assess the trail. Shovel tests were 30 cm in diameter and, when possible, extended to a depth of 60 cmbs. They were excavated in 10-cm increments, and all soil from each level was screened through quarter-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, 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.

Archaeological 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. Acid-free labels were placed in all artifact bags. Each label contained provenience information and a corresponding lot number written in archival ink, with pencil, or by laser printer. 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.

Field notes, forms, photographs, and drawings were printed on acid-free paper and placed in archival folders. A copy of the survey report and all computer disks pertaining to the investigations were stored in an archival box and curated with the field notes and documents. Following laboratory processing and analysis, and in consultation with THC, all sediment samples were discarded. This discard was in conformance with THC guidelines. Upon completion of the project, all cultural materials and records were permanently curated at the CAR facility.

Chapter 4: Survey Results

In April 2014, the CAR conducted a pedestrian survey and shovel testing of a proposed trail corridor for the Greenway Extensions at Culebra and Helotes Creeks, located in northwest San Antonio, Bexar County, Texas. The field work resulted in the excavation of 22 shovel tests (ST) along the proposed trail. Figure 4-1 depicts the project area and the locations of the excavated shovel tests. No archaeological sites were documented during the fieldwork. No backhoe trenches were excavated due to the creek bank modifications at creek crossings. Seventeen shovel tests were excavated along Helotes Creek (just east of Loop 1604), and five were excavated along Culebra Creek (west of Loop 1604; Figure 4-1). The terminal depth of shovel tests and recovered cultural material is presented in Table 4-1.



Figure 4-1. Aerial photograph of proposed trail (red) with shovel tests.

Table 4-1. Results from Shovel Testing

ST	Terminal Depth (cmbs)	Reason for Termination	Cultural Material	Creek
1	60	end of shovel test	modern glass (0-10 cmbs)	Helotes
2	60	end of shovel test	none	Helotes
3	60	end of shovel test	modern glass (0-10 cmbs)	Helotes
4	60	end of shovel test	none	Helotes
5	60	end of shovel test	none	Helotes
6	60	end of shovel test	none	Helotes
7	60	end of shovel test	none	Helotes
8	60	end of shovel test	none	Helotes
9	60	end of shovel test	none	Helotes
10	40	cobbles	none	Helotes
11	60	end of shovel test	none	Helotes
12	28	large root	none	Helotes
13	60	end of shovel test	none	Helotes
14	50	cobbles	none	Helotes
15	40	cobbles	none	Helotes
16	40	cobbles	none	Helotes
17	30	cobbles	none	Helotes
18	60	end of shovel test	none	Culebra
19	20	large root	none	Culebra
20	60	end of shovel test	none	Culebra
21	38	bedrock	debitage (20-30 cmbs)	Culebra
22	40	bedrock	none	Culebra

Helotes Creek

The eastern portion of the proposed trail is along the east bank of Helotes Creek (see Figure 4-1). Shovel test intervals in this area varied from 30-100 m apart. The ground surface was also inspected for cultural material.

Shovel Tests 1-5 were excavated in the portion of the trail that forms a loop in the northern portion of the project area. As seen in Figure 4-2 vegetation in the area was moderate to dense with 50-60 percent ground visibility. No artifacts were encountered along this portion of the trail corridor with the exception of modern glass in STs 1 and 3. Soils from STs 1-5 consisted of dark brown (10YR 3/3) clay loam to a dark yellowish brown (10YR 4/4) silty loam. Much of this area had disturbances from animal burrowing (Figure 4-3).



Figure 4-2. Northern portion of project area. Inset shows approximate location on trail.



Figure 4-3. Animal burrowing disturbances along proposed trail alignment. Inset shows approximate location on trail.

Shovel Tests 6-15 were excavated just along the east bank of Helotes Creek. No cultural material was encountered in the excavations. Soils varied from a dark yellowish brown (10YR 4/4) silty sandy clay to a dark grayish brown (10 YR 4/2) clay loam. As noted in Table 4-1, 60 percent of the 10 shovel tests in the area terminated at 60 cmbs, but four were shallower in depth due to heavy cobbles and roots (Figure 4-4). This portion of the proposed trail contained an informal footpath and sparse vegetation (Figure 4-5).



Figure 4-4. *Shovel Test 10 with heavy cobbles present. Inset shows approximate location on trail.*



Figure 4-5. *Proposed trail along informal footpath. Inset shows approximate location on trail.*

Shovel Tests 16 and 17 were excavated near small tributaries to Helotes Creek, and push piles of debris were evident (Figure 4-6). Because of the push pile disturbance, additional shovel tests were not excavated along this portion of the proposed trail. No cultural material was recovered in this portion of the trail. Soil in this area consisted of a dark grayish brown (10YR 4/2) clay loam. Both STs 16 and 17 terminated at 30-40 cmbs due to heavy cobbles from the tributary setting (see Table 4-1).



Figure 4-6. *Push piles and debris present in creek tributary. Inset shows approximate location on trail.*

Because the proposed trail, from ST 17 to Culebra Creek, runs along a large man-made berm (Figure 4-7) or through the Helotes Creek, shovel tests were not excavated in this area.

There have been several modifications in this portion of the project area that include terracing of the creek bed (Figure 4-8) and a dam and concrete aprons at the crossings of Culebra and Helotes Creeks (Figure 4-9).



Figure 4-7. *Artificial berm in Helotes Creek. Inset shows approximate location on trail.*



Figure 4-8. *Terracing in creek bed. Inset shows approximate location on trail.*



Figure 4-9. Dam and concrete apron at crossing of Culebra and Helotes Creeks. Inset shows approximate location on trail.

Culebra Creek

The proposed trail continued along the north bank of Culebra Creek. Five shovel tests were excavated in this part of the project area (see Figure 4-1). Shovel Tests 18 through 20 were excavated in the western portion of the proposed trail corridor within Culebra Creek Park (Figure 4-10). Shovel Tests 18 and 19 were placed along the trail corridor that was clearly marked with flagging and stakes. Electronic map files provided to the CAR did not correspond to the flagged trail within Culebra Creek Park (see Figure 4-1).



Figure 4-10. Excavation of ST 18 along proposed trail alignment along Culebra Creek and near Culebra Creek Park. Inset shows approximate location on trail.

No cultural material was found in STs 18-20. As noted in Table 4-1, STs 18 and 20 reached depths of 60 cmbs. Shovel Test 19 was terminated at 20 cmbs due to a large root mass (Figure 4-11). Soils in this area ranged from a very dark brown (10YR 2/2) clay loam to a very dark gray (10YR 3/1) sandy clay.



Figure 4-11. Large root mass in ST 19. Inset shows approximate location on trail.

Shovel Test 21, immediately southeast of Westwood Loop bridge, was excavated within a tributary of Culebra Creek and terminated at 38 cmbs due to bedrock (see Figure 4-1). One piece of debitage was encountered in Level 3 (20-30 cmbs). Because the debitage was river rolled, polished, and found within heavy cobbles, it was determined to be in a secondary context. Delineation of the shovel test was deemed unnecessary.

Shovel Test 22 was excavated west of the Loop 1604 bridge. This shovel test reached a depth of 40 cmbs and was terminated due to bedrock. The trail section between STs 21 and 22 ran through the creek bed (Figure 4-12). Shovel testing below the Loop 1604 bridge was not possible due to disturbances and heavy gravel fill (Figure 4-13).



Figure 4-12. *Proposed trail alignment defined by Culebra Creek tributary. Inset shows approximate location on trail.*



Figure 4-13. *Ground disturbance and heavy fill under Loop 1604 bridge. Inset shows approximate location on trail.*

Chapter 5: Summary and Recommendations

In April 2014, the CAR completed a pedestrian survey with shovel testing of the proposed 2.7-km trail corridor for the Greenway Extensions of Culebra and Helotes Creeks for Adams Environmental, Inc. and the City of San Antonio. 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 field work resulted in the excavation of 22 shovel tests along the proposed trail corridor. Ground disturbances in the APE and modifications to the creek banks made shovel testing infeasible in some parts of the project area. One piece of debitage with evidence of river rolling was recovered during shovel testing. No surface artifacts were noted. Because no cultural material or new archaeological sites were documented during the survey, the CAR recommends the proposed trail alignment for the Greenway Extensions of Culebra and Helotes Creeks proceed as planned. In a letter dated June 26, 2014, the Texas Historical Commission (THC) agreed with these recommendations. The COSA Office of Historic Preservation also concurred with the CAR's recommendations.

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