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Cultural Resources Survey of the 76-Acre Craemer Tract Along Helotes Creek at Loop 1604 and Culebra Road in Bexar County, Texas

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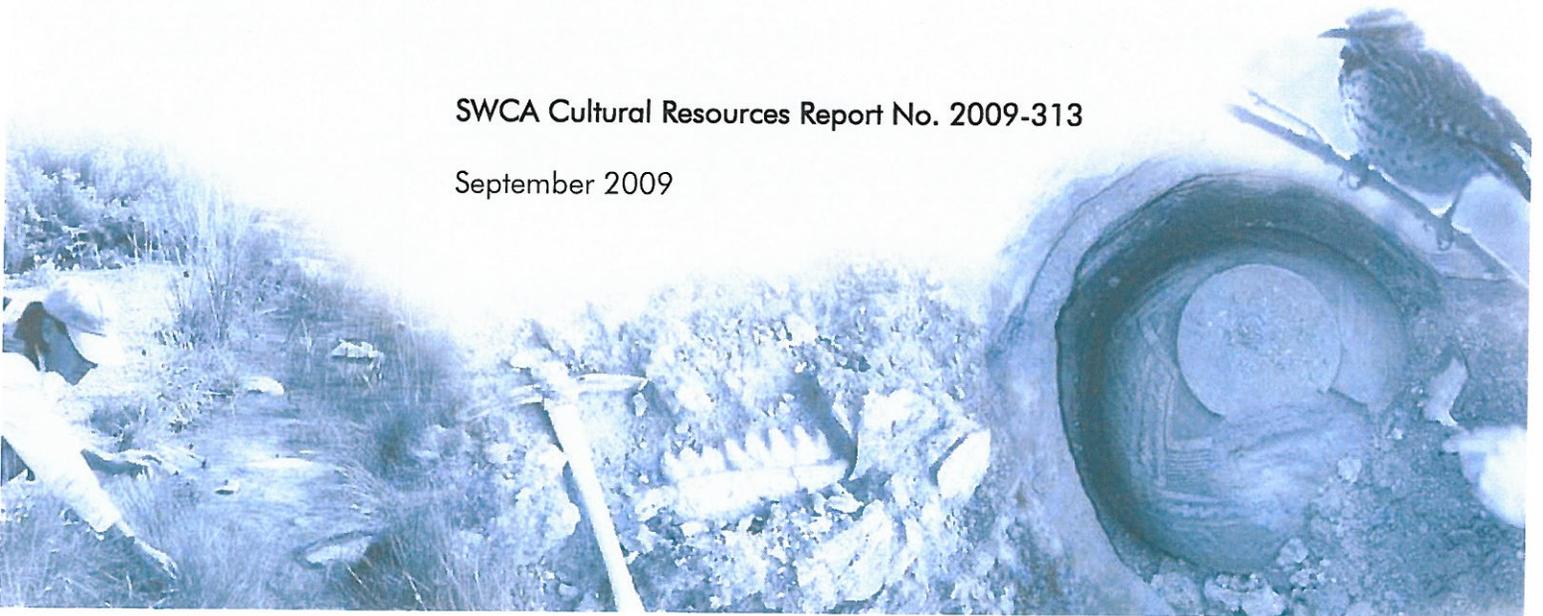
Pape Dawson Engineers

Prepared by

Ken Lawrence

SWCA Cultural Resources Report No. 2009-313

September 2009



**CULTURAL RESOURCES SURVEY OF THE 76-ACRE CRAEMER TRACT ALONG
HELOTES CREEK AT LOOP 1604 AND CULEBRA ROAD IN BEXAR COUNTY,
TEXAS**

Prepared for

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ABSTRACT

On behalf of Pape Dawson Engineers (Pape Dawson), SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the Craemer Tract situated along Helotes Creek near Loop 1604 N and Culebra Road in northwestern San Antonio, Bexar County, Texas. The Craemer Tract is composed of a rectangular 65-acre and a square 11-acre tract that culminates in 76-acres, both bisected by Helotes Creek. Archaeological investigations were performed as part of the sponsor's compliance with application requirements for a U.S. Army Corps of Engineers - Fort Worth District (USACE) Section 404 permit (with Preconstruction Notification) in accordance with 33 CFR Part 325, Appendix C (Processing Department of Army Permits: Procedures for the Protection of Historic Properties; Final Rule 1990; with current Interim Guidance Document dated April 2005). This includes the identification of any prehistoric or historic cultural resources, which may be affected by the project that may be eligible for inclusion in the National Register of Historic Places (NRHP). The investigations included a background and archival review and an intensive pedestrian survey with subsurface investigations.

The area of potential effects (APE) totals approximately 76 acres. Depth of impacts for the site development is unknown, but is expected to be roughly 2–3 feet to accommodate construction of buildings and associated infrastructure within the project area. The background review revealed that the project area has never been surveyed and that there are no previously recorded archaeological sites within or immediately adjacent to the APE.

SWCA archaeologists Daniel Culotta and Ken Lawrence conducted the fieldwork on September 3, 2009 and Christina Nielsen and Mary Jo Galindo conducted additional fieldwork on September 9, 2009. Overall, the rectangular project area is bordered by commercial and residential development and associated improvements (e.g., roads and utilities). Within the project area, impacts include a large gravel pile, erosion, push piles, two-track roads, fence lines, modern dumping, and vegetation clearing. A total of eight backhoe trenches and five shovel tests were excavated within the APE, focusing on the terraces adjacent to Helotes Creek. Backhoe trench excavations ranged from 98–150 centimeters below surface (cmbs), a majority of which, located on the T-1 and T-2 terraces, encountered a horizon of streambed rolled cobbles that indicate highly energetic fluvial activity beneath a recently deposited humate horizon. The remaining two trenches on the T-3 terrace revealed possibly older deposits that appear to exhibit some pedogenic development especially in the third (basal) stratum. The shovel test excavations ranged from 40–45 cmbs and revealed a very compact silt clay loam.

No cultural resources were encountered in the subsurface investigations or on the surface of the APE. Accordingly, no significant cultural resources will be affected by any construction activities within the project area. SWCA recommends no further archeological investigations within the project area.

INTRODUCTION

On behalf of Pape Dawson Engineers (Pape Dawson), SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the 76-acre Craemer Tract along Helotes Creek near Loop 1604 N and Culebra Road in northwestern San Antonio, Bexar County, Texas (Figure 1). Archaeological investigations were performed as part of the sponsor's compliance with application requirements for a U.S. Army Corps of Engineers - Fort Worth District (USACE) Section 404 permit (with Preconstruction Notification) in accordance with 33 CFR Part 325, Appendix C (Processing Department of Army Permits: Procedures for the Protection of Historic Properties; Final Rule 1990; with current Interim Guidance Document dated April 2005). This includes the identification of any prehistoric or historic cultural resources which may be affected by the project that may be eligible for inclusion in the National Register of Historic Places (NRHP). These investigations include a background and archival review and an intensive pedestrian survey with subsurface investigations. SWCA archaeologists Daniel Culotta and Ken Lawrence conducted fieldwork on September 3, 2009 and Christina Nielsen and Mary Jo Galindo conducted fieldwork on September 9, 2009.

DEFINITION OF STUDY AREA

The project area in northwest Bexar County positioned in the northwest corner of San Antonio. The Craemer Tract is 1.1 miles north-northeast of the intersection of Loop 1604 N and Culebra Road and 1.5 miles south of Loop 1604 N and Braun Road intersection. The roughly 76-acre project tract is centered upon the Helotes Creek drainage east of Loop 1604 N (Figure 2). The project area is composed of two separate sections, including an 11-acre

square-shaped southern component with 700-foot dimensions and a larger 65-acre rectangular-shaped northern component roughly measuring 1,100 feet east-west by 2,600 feet north-south (see Figure 2). The north to south trending Helotes Creek drainage bisects both parcels. Collectively, both components compose the 76-acre Craemer Tract that is bounded on the west by Loop 1604 N, by residential and commercial development on the eastern and southern margins, and undeveloped cattle pasture on the northern margin. The depth of the proposed impacts for the site development is unknown, but is expected to be 2–3 feet to accommodate construction of buildings and associated development and infrastructure within the project area. As such, the interpreted area of potential effects (APE) encompasses 76 acres with a typical depth of 3 feet below surface.

GEOLOGY

The Craemer Tract project area is mapped as Early Pleistocene fine calcareous silt grading into coarse gravel of the Leona Formation (Barnes 1983). These deposits are described as being present beneath the Uvalde gravels on the terraces of the Nueces and Leona rivers.

SOILS

The higher terraces aligning Helotes Creek are mapped as Lewisville silty clay 0–3 percent slopes while the lower terrace and channel contains Patrick soils and Houston clay soils (Taylor et al. 1991). The Lewisville silty clay (about 50-cm thick) is characterized as occupying long, narrow, sloping areas that separate upland terraces and occasionally along major drainageways (Taylor et al. 1991). The Patrick soils (0–3 percent slopes) are characterized as about 30-cm thick clay loam that occurs on nearly level to gently sloping terraces along streams that drain limestone prairies

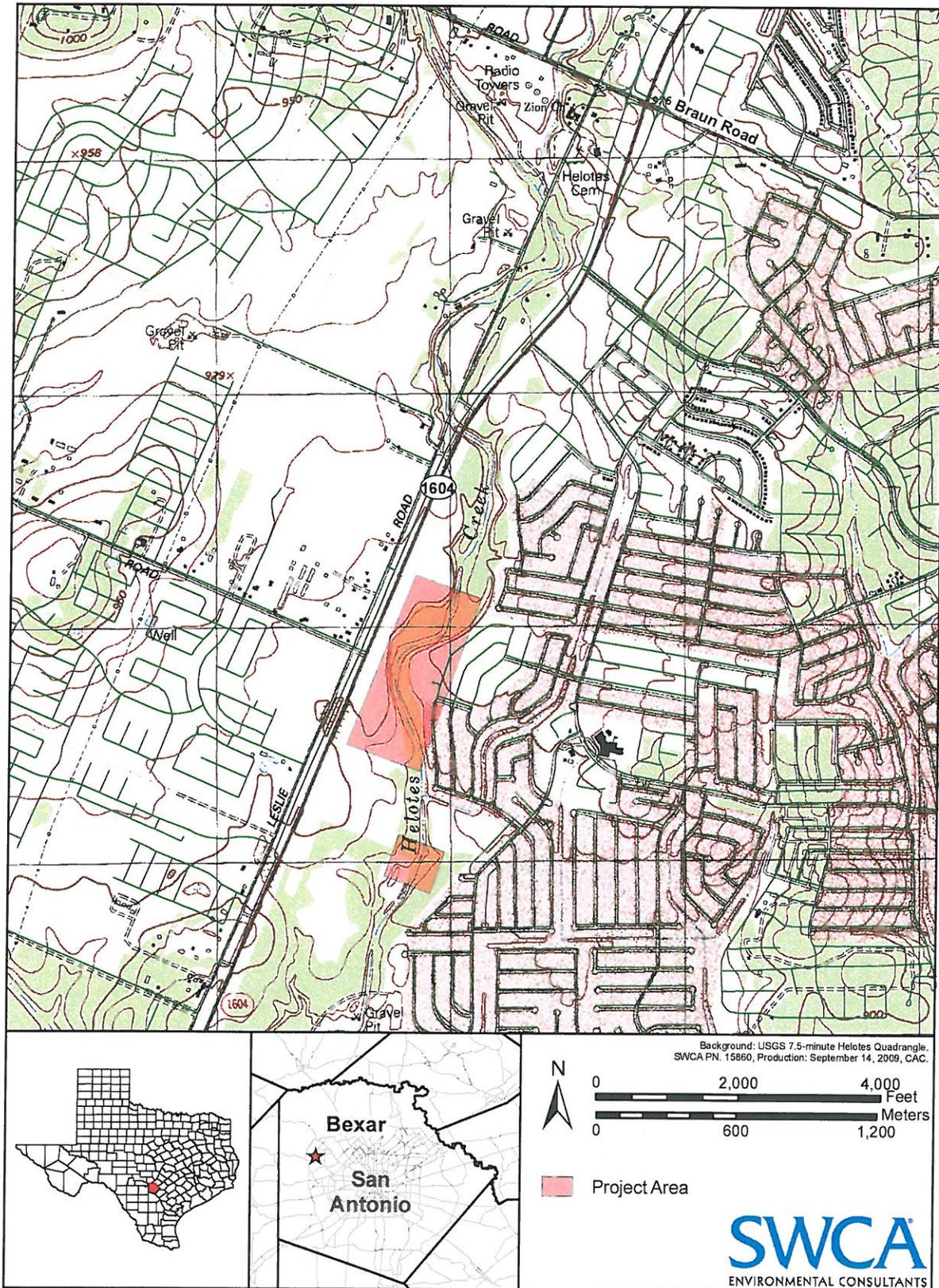


Figure 1. Project Location Map.

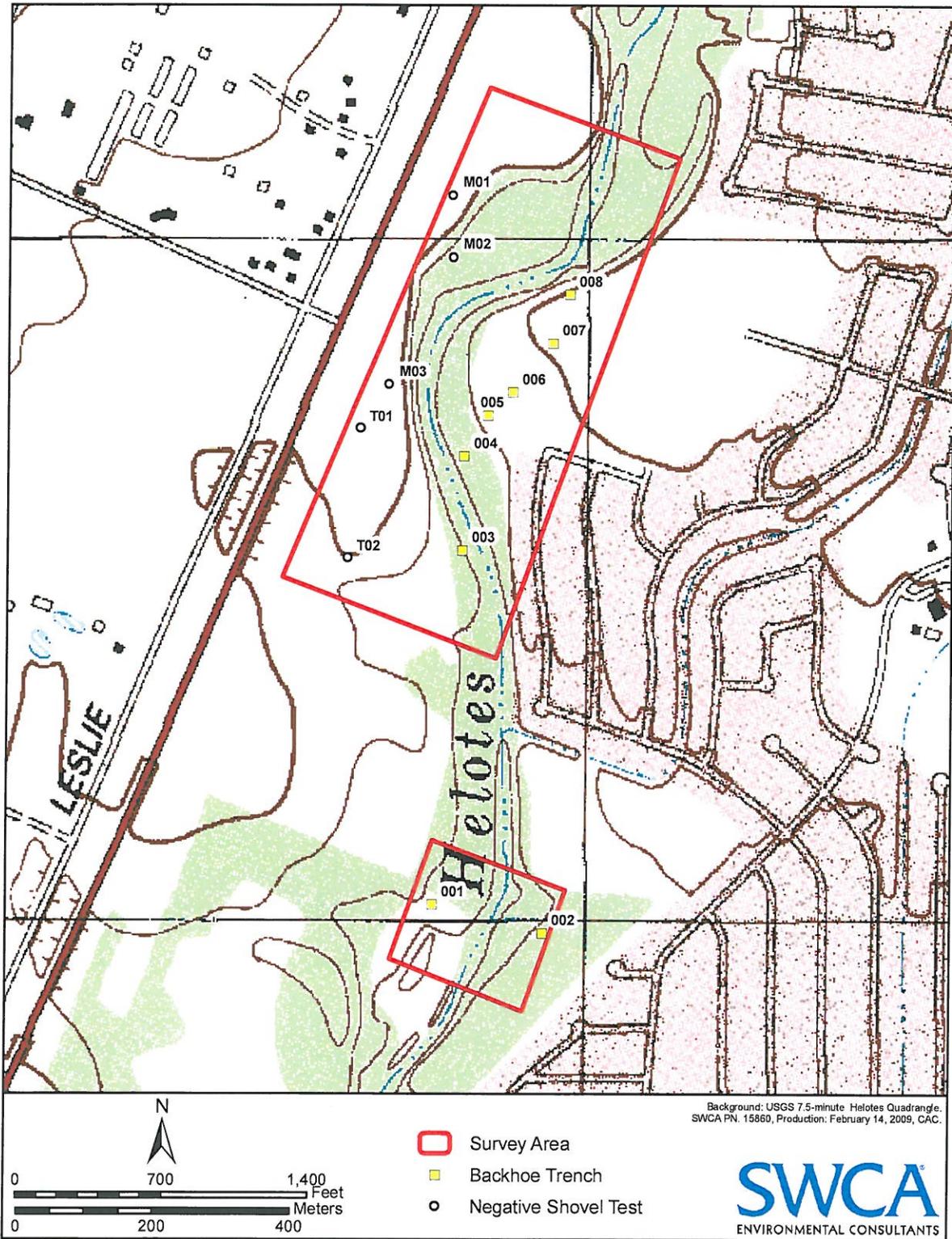


Figure 2. Survey results map.

these are mapped along Helotes Creek (Taylor et al. 1991). While the Houston clay (3–5 percent slopes) are described as an eroded soil about 60-cm thick clay typically situated in uplands and occasionally on long narrow slopes of drainages (Taylor et al. 1991).

METHODS

BACKGROUND REVIEW

SWCA conducted a background cultural resources and environmental literature search of the project area. An SWCA archaeologist reviewed the Helotes, USGS 7.5-minute topographic quadrangle maps at the Texas Archeological Research Laboratory (TARL) and searched the Texas Historical Commission's (THC) Texas Archeological Sites Atlas (Atlas) online database for any previously recorded surveys and historic or prehistoric archaeological sites located in or near the project area. In addition to identifying recorded archaeological sites, the review included information on the following types of cultural resources: NRHP properties, SALs, Official Texas Historical Markers (OTHM), Registered Texas Historic Landmarks (RTHLs), cemeteries, and local neighborhood surveys. The archaeologist also examined the *Soil Survey of Bexar County, Texas* (Taylor et al. 1991) and the *Geologic Atlas of Texas, San Antonio Sheet* (Barnes 1992). Aerial photographs were reviewed to assist in identifying any previous disturbances. Finally, the Texas Department of Transportation (TxDOT) Texas Historic Overlay, a collection of historic map images, was also examined.

FIELD METHODS

SWCA's investigations consisted of an intensive pedestrian survey with subsurface investigations within the APE. Archaeologists examined the ground surface and extensive erosional profiles and exposures for cultural re-

sources. The field assessment of the project area was conducted using two methods of investigation (i.e., shovel testing and backhoe trenching). Investigations with shovel test excavation primarily focused on upland areas while the backhoe trench excavation centered on lowland areas with deeper deposition.

For project areas 11–100 acres in size, the THC's survey standards minimally require a backhoe trench for every three acres and one shovel test for every two acres.

Shovel testing was primarily used when the project crosses topography with a potential for shallowly buried sites and surface visibility was low. Where performed, shovel tests were systematically excavated within the project area. The amount of shovel tests decreased depending on the level of previous disturbances, the nature of the soils, and the topographic setting of the project area. Shovel tests were excavated in 20-cm arbitrary levels to 1 m in depth or to culturally sterile deposits whichever came first and the matrix was screened through ¼-inch mesh. The location of each shovel test was plotted using a GPS receiver and was recorded on appropriate project field forms. Shovel tests were excavated to the depth of project impacts, when possible. In the instance that the shovel testing could not adequately explore project impacts in areas (e.g., floodplains) with potential to contain deeply buried archaeological materials, backhoe trenches were utilized.

Portions of the project encompass topographic settings that have the potential for deeply buried archaeological sites. These areas are mainly terraces along Helotes Creek. The primary method for quickly and efficiently exploring these areas was with backhoe trenching. In these areas, trenches were placed approximately 100–300 m apart, with tighter intervals if necessary.

Trench placement was determined on the level of disturbance, geomorphic settings, the location of any impacted areas such as construction, and the preservation potential for archaeological sites as determined by an SWCA archaeologist. Backhoe trenches were excavated to a depth sufficient to determine the presence/absence of buried cultural materials and allow the complete recording of all features and geomorphic information to depths of project impacts. Generally, trenches were 1.2 to 1.5 m (4 to 5 feet) deep, 7 m (23 feet) in length, and 0.75 m (2.5 feet) wide. All trenching was monitored by an experienced archaeologist while excavations were underway. Once the trench was excavated, an SWCA archaeologist scraped down both walls of the trench, examining the profiles for artifacts, features, or other cultural manifestations. Stratigraphic descriptions were recorded for each trench. All features encountered during trenching were mapped and photographed.

All work was performed in accordance with OSHA (29 CFR Part 1926). The entire process was thoroughly documented and photographed. Upon completion of excavation, all trenches were backfilled, leveled, and returned, as much as possible, to its original state.

RESULTS

BACKGROUND REVIEW

A review of the records on the THC's Historic Sites Atlas indicates that no previously recorded archaeological sites are present and that no surveys have been conducted within the project area. However, several surveys have been conducted, four archaeological sites (41BX781, 41BX1003, 41BX1615, and 41BX1616) have been documented, and one Historical Marker has been placed less than 1.5 miles from the project area.

One of the archaeological surveys was conducted by EPA in January 1977 along FM 1560 roughly two miles northwest of project area. No further information is available regarding this survey. Another survey was conducted along Braun Road as it crosses Helotes Creek about 1.5 miles upstream of the Craemer Tract (Lawrence 2002). This project was undertaken by SWCA for the City of San Antonio for a bridge replacement. No archaeological sites were encountered (Lawrence 2002). Closer to the Craemer Tract, a survey was undertaken by UTSA in 2007–2008 along Loop 1604 roadway for the North Loop 1604 Improvements Project. This survey is west of the Craemer Tract and runs adjacent to the project area, crossing the uplands. Among the archaeological sites recorded during this project, one (41BX1616) is located roughly 1.5 miles north of the project area.

One archaeological site (41BX781) is located west of FM 1560, approximately 2 miles northwest of the project area. No further information is available for site 41BX781. The other archaeological site (41BX1003) is located west of Loop 1604 about a mile north of the project area. Site 41BX1003 was recorded in November 1993 as an early-to-middle twentieth century historic farmhouse. Features at the site include a stone farmhouse and a lined cistern (Lawrence 2002). Site 41BX1615 is an historic German farmstead, located about 1.5 miles north of the Craemer Tract. Recorded in 2005, this site is described as a single component (1850s) German settlement with several historic structures. The significance of this archaeological resources is unknown (TARL site form). Regardless, this site will not be affected by the proposed work at the Craemer Tract. Similar to 41BX1615, the previously mentioned site 41BX1616 is an historic German settlement site. Located almost 1.5 miles north of the project area, the site is designated the Reumple Complex with a single component (1850s) German settle-

ment with three historic structures. The significance of this archaeological resources is unknown (TARL site form).

One Historical Marker is located near the intersection of Braun and Leslie Roads less than 1.5 miles north of the project area. The Historical Marker, erected in 1986, commemorates the Zion Lutheran Church and Cemetery. The cemetery was created in 1881 when Anton Gugger was interred there. In 1906, the descendants of Anton Gugger donated this land to the Zion Lutheran Church to serve as a church graveyard. The congregation of the Zion Lutheran Church formed in the early 1900s to serve the German settlers of the area. Both the cemetery and the church reflect the area's German Heritage (Zion Lutheran Church and Cemetery Marker Text).

Finally, the review of the TxDOT Texas Historic Overlay maps from 1922 and 1953 show no signs of structures within the 76-acre project area.

FIELD SURVEY

On September 3 and 9, 2009 SWCA archaeologists conducted an intensive pedestrian survey of the APE utilizing subsurface investigations (see Figure 2). The first field investigations utilized eight backhoe trench excavation to target the lowland portions of the project area. The second field visit used five shovel test excavations to investigate the upland deposits. A majority of the Craemer Tract project area, about 80 percent (60 acres), is situated in a lowland setting while about 20 percent (16 acres) is in an upland setting. As such, the project area lowlands were the focus of the archaeological survey.

The project area exhibits some disturbance and has variable integrity throughout. Some impacts include a large gravel pile, erosion from high intensity hydrological activity, two-

track roads, cattle, fence lines, modern dumping, and push piles from vegetation clearing (Figures 3 and 4). Of these disturbances, erosion and recent dumping have been the most detrimental to the Craemer Tract.

The project area straddles the Helotes Creek drainage, which is a paired terrace stair step system within both tracts. Both sides of Helotes Creek appear to have three terraces (T-1 to T-3) that rise in elevation as the distance from the drainage increases. The T-0 terrace composes the base of the channel, which is dry, containing broad exposures of limestone bedrock and pockets of cobbles, gravels, pebbles, and coarse sands. The channel is slightly meandering, containing a mixed bed load depositing a riffle and pool base (Charlton 2008). The outside bend of some of the prominent meanders have been substantially eroded. One instance is the right bank (west side) of the northern section that has had most of the T-1 and T-2 terraces eroded away. In these sections, an abrupt cutbank about 12–15 feet high remains and appears to compose the T-3 terrace. Also in these locations, the left bank is effectively the interior of the meander and has relatively intact deposition. The placement of the backhoe trenches focused on these interior bends of Helotes Creek as it meanders through the Craemer Tract.

The vegetation of the lowlands is composed of moderately dense woods with a mixed hardwood (e.g., oaks and elms) overstory and an understory containing assorted shrubs and short grasses (Figure 5). In contrast, the upland is more open with scattered mesquite and occasional oak trees with an understory of cacti, shrubs, and short grasses. Both the upland and lowland areas of the project have broad exposures of rocky surface containing assorted cobbles and gravels. These conditions culminate in a surface visibility ranging from 40–90 percent with a typically excellent



Figure 3. Overview of Craemer Tract disturbances and setting; note infilled borrow pit.



Figure 4. Overview setting of Craemer Tract; note rocky surface.



Figure 5. Overview of typical vegetation of Craemer Tract; T-2 terrace background.

visibility of 60 percent, particularly in the upland areas.

The backhoe trench excavations consisted of eight trenches placed on the terraces of Helotes Creek. Specifically, a backhoe trench (BHT-01) was placed on the riser of the T-1 terrace, three trenches (BHT-02 through 04) were positioned on the tread of the T-1 terrace, two trenches (BHT-05 and BHT-06) examined the tread of the T-2 terrace, while BHT-07 and BHT-08 investigated the apparent T-3 terrace tread (see Figure 2). The eight trenches ranged in depth from 98–150 cmbs and backhoe trenches BHT-01 through BHT-06 encountered at varying depths a stratum composed of poorly sorted, imbricated, stream rolled pebbles and gravels (Figure 6; Table 1). These trenches (BHT-01–06) have a thin surface humate horizon of clay loam with some gravel above the drainage cobble horizon. On the lower terrace (T-1), the stratum of imbricated cobbles, gravels, and pebbles is extremely shallow. In contrast, BHT-07 and BHT-08 on the T-3 terrace exhibited profiles containing silty clay loam–sandy clay loam that increased in compaction and clay content with depth. In addition, the quantity and size of the CaCO₃ inclusions increased with depth composing roughly 7–10 percent of the matrix of the basal stratum.

The stream rolled cobble horizon observed in the trenches on the first and second terraces suggest highly energetic fluvial activity that is capped by a thin horizon of clay loam, which may be more recently deposited. The stratigraphy on the T-3 terrace suggests older deposits that have some development especially in the third (basal) stratum. The upper stratum of the T-3 deposits is similar in character to that described as Lewisville silty clay with possibly some additions of colluvial deposition suggested by the angular gravels (Taylor et al. 1991). In contrast, the highly calcareous Stratum III in BHT 08 is similar to that identi-

fied as the Early Pleistocene Leona Formation characterized as fine calcareous silt that grades into coarse gravel (Barnes 1983).

The shovel test excavations of the project examined the upland T-3 terrace on the right bank (west side) of Helotes Creek (see Figure 2). The five excavated shovel tests (M01 through M03, T01, and T02) ranged from 40–45 cmbs and encountered a very compact silty clay loam with CaCO₃ filaments (Table 2). This stratigraphy is consistent to the upper two strata observed in backhoe trenches BHT-07 and 08.

Overall, the backhoe trench and shovel test excavations did not encounter any prehistoric or historic cultural materials (see Tables 1 and 2). These subsurface investigations did occasionally observe some modern debris (e.g., bottle glass and plastic). Similarly, the surface investigations of the area did not reveal any cultural materials other than recent refuse disposal. As such, no archaeological sites are present within the Craemer Tract project area.

When conditions allow, the THC's survey standards for project areas of 11–100 acres require a minimum of roughly one backhoe trench for every three acres and a shovel test for every two acres. The current project area is approximately 76 acres in size of which 60 acres compose a lowland setting requiring 20 backhoe trenches and an upland of 16 acres requiring eight shovel tests. SWCA excavated a total of eight backhoe trenches and five shovel tests within the project area. However, the lowland portion of the project area contained broad rocky areas of cobbles and gravels and disturbance. Similarly, the uplands have an excellent surface visibility that exhibited evidence of prevalent disturbance. These disturbances have severely modified the terrain, effectively minimizing the potential for intact cultural deposits and reducing the available survey acreage. SWCA's subsurface

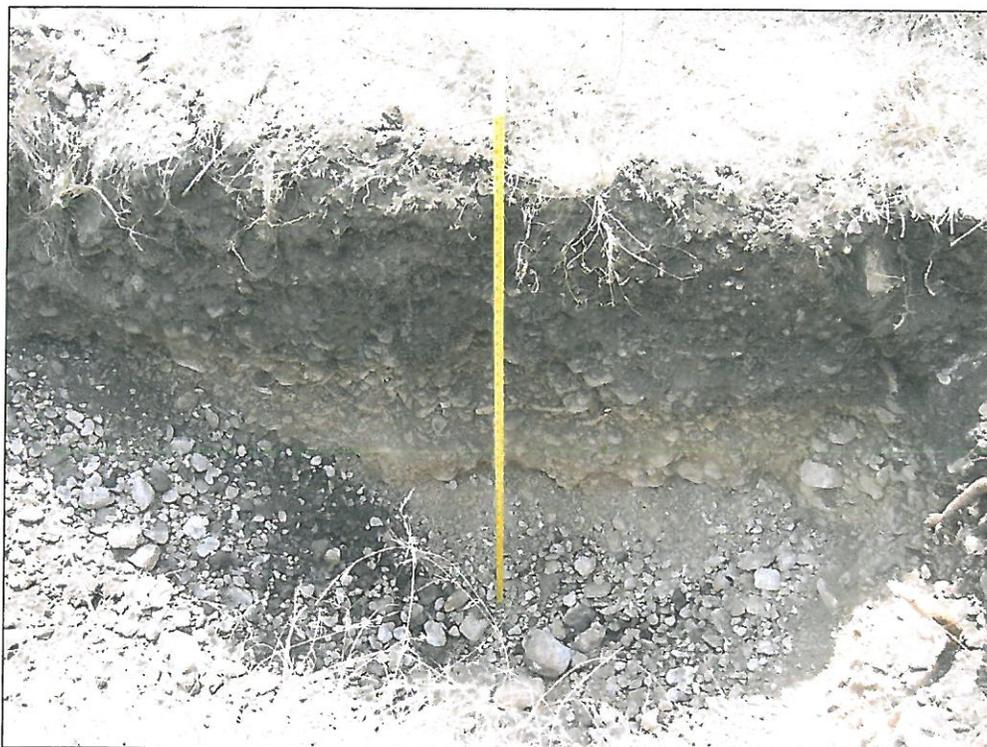


Figure 6. Profile of BHT-6 on T-2 terrace; note imbricated rocky strata.

Table 1. Helotes Creek Backhoe Trench Data

| Trench | Location | Depth (cmbs) | Munsell (moist) | Soil Color | Soil Texture Description | Inclusions | Lower Boundary | Comments |
|--------|-------------------------|--------------|-----------------|--------------------------------------|----------------------------------|---|---------------------|---|
| BHT 1 | West side Helotes Creek | 0-30 | 10YR3/3 | Dark Brown | Friable to firm clay loam | Onion, roots, rootlets, snail shell, small rounded gravels | Abrupt/Smooth | Matrix supported stratum; no cultural materials. Asphalt observed in area. |
| | | 30-130+ | 10YR4/3 | Brown | Loose sand | Gravels, small cobbles and rare boulders | Unobserved | Clast supported horizon; no cultural materials. |
| BHT 2 | East side Helotes Creek | 0-20 | 10YR4/3 | Brown | Friable to firm silty sandy clay | Angular to rounded limestone pebbles and gravels; rootlets, angular limestone cobbles | Abrupt/Level-Smooth | Matrix supported stratum; soil may be truncated by land clearing and scraping. Some clear glass fragments observed in microscopic analysis. |
| | | 20-43 | 10YR4/4-5/4 | Yellowish Brown-Dark Yellowish Brown | Extra firm silty sandy clay | Few subangular limestone gravels and cobbles; rootlets; small distinct, common orangish brown mottles | Clear/Smooth | Matrix supported stratum; no cultural materials. |
| BHT 3 | West side Helotes Creek | 43-98+ | 10YR4/4-5/4 | Yellowish Brown-Dark Yellowish Brown | Loose silty sand | Dense limestone gravels and cobbles | Unobserved | Clast supported stratum consisting of abundant, imbricated rounded pebbles, gravels and cobbles (poorly sorted); no cultural materials. |
| | | 0-80 | 10YR4/3 | Brown | Loose silty sand | Dense limestone microgravels, pebbles, gravels and cobbles, roots, rootlets | Clear/Smooth | Clast supported horizon; gravels and cobbles are moderately sorted, gravels 80%, soil is matrix. No cultural materials. |
| BHT 4 | East side Helotes Creek | 80-110+ | 7.5YR5/8 | Strong Brown | Friable silty clay loam | Microgravels, angular and rounded, limestone gravels and cobbles, roots, rootlets | Unobserved | Clast supported; poorly sorted gravels, denser that Sirat I. No cultural materials. |
| | | 0-33 | 10YR4/4 | Dark Yellowish Brown | Friable silty loam | Roots, rotting vegetation, angular gravels ~2%, insect bores, cases | Abrupt/Smooth | Matrix supported stratum; no cultural materials. |
| BHT 5 | East side Helotes Creek | 33-66 | 10YR6/4 | Light Yellowish Brown | Loose to friable fine silty sand | Roots, rootlets, alternating beds of gravel to cobble with coarse sand | Abrupt/Smooth | Matrix supported stratum; no cultural materials. |
| | | 66-130+ | 10YR4/4-5/4 | Yellowish Brown-Dark Yellowish Brown | Loose fine sand | Few subangular limestone gravels and cobbles; rootlets; small distinct, common orangish brown mottles | Unobserved | Matrix supported stratum; moderately sorted, rounded to spheroid clasts, some layering; no cultural materials. |
| BHT 5 | East side Helotes Creek | 0-45 | 10YR4/4 | Dark Yellowish Brown | Friable silty loam | Roots, rotting vegetation, gravels ~2%, insect bores, cases | Abrupt/Smooth | Matrix supported stratum; no cultural materials. |
| | | 45-90 | 10YR6/4 | Light Yellowish Brown | Loose to friable fine silty sand | Roots, rootlets, alternating beds of gravel to cobble with coarse sand | Abrupt/Smooth | Matrix supported stratum; gravel band: 45-65cm, Clay loam band: 65-68cm, Sand band: 68-78cm, Gravel band: 78-82, Sand band: 82-90cm. No cultural materials. |
| | | 90-125 | 10YR4/4-5/4 | Yellowish Brown-Dark Yellowish Brown | Loose fine sand | Few subangular limestone gravels and cobbles; rootlets; small distinct, common orangish brown mottles | Unobserved | Matrix supported stratum; moderately sorted, rounded to oblong clasts, some layering. No cultural materials. |

Table 1. Helotes Creek Backhoe Trench Data

| Trench | Location | Depth (cmbs) | Munsell (moist) | Soil Color | Soil Texture Description | Inclusions | Lower Boundary | Comments |
|--------|-------------------------|--------------|-----------------|-------------------------|-------------------------------|--|-----------------|---|
| BHT 6 | East side Helotes Creek | 0-50 | 10YR3/1 | Very Dark Gray | Friable silty clay loam | Roots, rootlets, rounded limestone pebbles, gravels and cobbles | Clear/Level | Matrix supported stratum; rock inclusions look to be loosely size sorted, 30%. No cultural materials. |
| | | 50-120+ | 10YR5/4 | Yellowish Brown | Loose silty loam | Abundant limestone pebbles, gravels and rounded cobbles | Unobserved | Clast supported; poorly sorted, rock inclusions ~80-90%. No cultural materials. |
| BHT 7 | East side Helotes Creek | 0-20 | 10YR4/2 | Dark Grayish Brown | Friable silty clay loam | Roots, rootlets, calcium carbonate flecking, microgravels | Clear/Level | Matrix supported stratum; thin layer, may be disturbed from clearing. No cultural materials. |
| | | 20-55 | 10YR3/2 | Very Dark Grayish Brown | Firm silty clay loam | Roots, rootlets, calcium carbonate flecking, microgravels, few rounded limestone gravels | Gradual/Sloping | Matrix supported stratum; sloping NW to SE. No cultural materials. |
| | | 55-115 | 10YR6/3 | Pale Brown | Friable silty sandy clay loam | Roots, rootlets, calcium carbonate flecking, few rounded limestone gravels | Unobserved | Matrix supported stratum; seems to become looser with depth. No cultural materials. |
| | | 115-125 | 10YR6/4 | Light Yellowish Brown | Loose silty sand | Rootlets, moderate rounded limestone gravels and cobbles | Unobserved | Matrix supported stratum; loose, many more rock inclusions. No cultural materials. |
| | | 0-32 | 10YR4/2 | Dark Grayish Brown | Friable sandy loam | Worm casts, small snail shells, insect bores, angular gravels, rare rounded pebbles, roots, rootlets | Gradual/Smooth | Matrix supported stratum; mottles interior, vertical cracking, calcium carbonate filaments (~10%) at base of level. No cultural materials |
| BHT 8 | East side Helotes Creek | 32-65 | 10YR5/4 | Yellowish Brown | Friable silty loam | Small pebbles (2-3%), calcium carbonate (~20%), filaments, rare snail shell, insect burrows | Gradual/Smooth | Matrix supported stratum; moderate vertical cracking. No cultural materials |
| | | 65-150+ | 10YR6/6 | Brownish Yellow | Friable silty clay loam | Insect burrows, calcium carbonate (~30%) filaments, rare snail shell, rare small pebbles | Unobserved | Matrix supported stratum; high silt content, very porous. No cultural materials |

Table 2. Shovel Test Data

| Shovel Test # | Depth (cmbs) | Munsell | Soil Color | Soil Texture Description | Inclusions | Comments |
|---------------|--------------|---------|-------------------------|--------------------------|--------------------|---|
| T1 | 0-30 | 10YR2/2 | Very Dark Brown | Silty Loam | None | No cultural material. |
| | 30-40 | 10YR2/2 | Very Dark Brown | Silty Clay Loam | Calcium carbonates | No cultural material. Terminated at compact soil. |
| T2 | 0-35 | 10YR3/2 | Very Dark Grayish Brown | Silty Loam | None | No cultural material. |
| | 35-45 | 10YR2/2 | Very Dark Brown | Silty Clay Loam | Calcium carbonates | No cultural material. Terminated at compact soil. |
| M1 | 0-40 | 10YR4/6 | Dark Yellowish Brown | Clay Loam | None | No cultural material. Terminated at compact soil. |
| M2 | 0-40 | 10YR4/6 | Dark Yellowish Brown | Clay Loam | None | No cultural material. Terminated at compact soil. |
| M3 | 0-45 | 10YR3/6 | Brown | Clay Loam | None | No cultural material. Terminated at compact soil. |

excavation coverage of the remaining acreage is at or near the THC standards, and a good faith effort has been made to investigate the intact portions of the project area.

SUMMARY AND RECOMMENDATIONS

SWCA conducted an intensive cultural resources survey of a 76-acre Craemer Tract on Helotes Creek near Loop 1604 and Culebra Road in northwestern San Antonio, Bexar County, Texas. Cultural resource investigations were conducted as part of the sponsor's compliance with application requirements for a U.S. Army Corps of Engineers - Fort Worth District (USACE) Section 404 permit (with Preconstruction Notification) in accordance with 33 CFR Part 325, Appendix C (Processing Department of Army Permits: Procedures for the Protection of Historic Properties; Final Rule 1990; with current Interim Guidance Document dated April 2005). This includes an archaeological background review with an intensive pedestrian survey.

The background review revealed that the project area has not been previously surveyed and no previously recorded sites are located within or adjacent to the APE. Several surveys have been conducted within 1.5 miles of the project area that documented four archaeological sites (41BX781, 41BX1003, 41BX1615, and 41BX1616) in addition to one historical marker. However, the closest of these archaeological resources are about 1.5 miles of the project area and none will be affected by the proposed project.

Overall, the project area is bordered by commercial and residential development and associated improvements (e.g., roads and utilities). Within the project area, the impacts include extensive erosion, push piles from vegetation clearing, a large gravel pile, two-track roads, fence lines, prevalent modern dumping, and vegetation clearing. A total of eight backhoe

trenches and five shovel tests were excavated within the APE, targeting the terraces of Helotes Creek. The trenches on the T-1 and T-2 terraces closest to Helotes Creek encountered a horizon of streambed rolled cobbles that indicate highly energetic fluvial activity beneath a recently deposited humate horizon. The remaining two trenches on the T-3 terrace revealed possibly older deposits that appear to exhibit some pedogenic development especially in the third (basal) stratum. The shovel test excavations ranged from 40–45 cmbs and revealed a very compact silt clay loam.

These subsurface investigations are fewer than the THC's survey standards; however, the project area has good to excellent surface visibility as well as the previously discussed disturbances that limited the available survey acreage. SWCA's subsurface investigation coverage of the remaining acreage is at or near the THC standards.

No cultural resources were encountered during the subsurface investigations of the upland or lowland areas of the APE. Similarly, no cultural materials, cultural features, or standing structures were observed on the surface of the project area. Therefore, no significant cultural resources will be affected by any construction activities within the Craemer Tract project area. As a result, SWCA recommends no further archeological investigations within the project area.

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