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Archaeological Investigations of the Bandera Road 44-Acre Development Project, Bexar County, Texas

Prepared for

Bury + Partners – SA, Inc.

Prepared by

Michael R. Chavez

SWCA Cultural Resources Report No. 2007-424

February 2008

ARCHAEOLOGICAL INVESTIGATIONS OF THE BANDERA ROAD 44-ACRE DEVELOPMENT PROJECT, BEXAR COUNTY, TEXAS

Prepared for

BURY + PARTNERS - SA, INC.
922 Isom Road, Suite 100
San Antonio, Texas 78216

Prepared by

Michael R. Chavez

SWCA ENVIRONMENTAL CONSULTANTS
4407 Monterey Oaks Blvd.
Building 1, Suite 110
Austin, Texas 78749
www.swca.com

Principal Investigator

Kevin A. Miller

SWCA Project Number 13340-053-AUS
SWCA Cultural Resources Report No. 2007-424

February 19, 2008

ABSTRACT

SWCA Environmental Consultants (SWCA) conducted an intensive archaeological survey of the proposed Bandera Road 44-acre Development project area in northern San Antonio, Bexar County, Texas. The project area lies just east of the intersection of Bandera Road (State Highway [SH] 16) and Loop 1604 in northwestern San Antonio, bordered by Loop 1604 to the northwest, an apartment complex to the east, and commercial business fronts to the south/southwest. It is depicted on the Helotes, Texas 7.5-minute USGS topographic map. Investigations were performed pursuant to regulatory obligations related to the possible acquisition of a U.S. Army Corps of Engineers (USACE) Section 404 Permit 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 Documented June 24, 2002) and the National Historic Preservation Act (NHPA).

The background literature review revealed that no portion of the project area has been previously surveyed and no previously recorded sites are within the project area location. However, the Texas Historical Commission (THC) records indicate one previously conducted survey and two previously recorded sites (41BX69 and 41BX1591) are within 1 mile of the project area. While site 41BX1591, a historic trash dump, is located approximately 0.85 mile east of the project area, site 41BX69 is mapped as being adjacent to the northernmost point of the project area. The site is described as a disturbed prehistoric open campsite consisting of unifaces, flakes, burned rock, and one bifacial tool. No evidence of the site was observed within the project area and any remnants of the previously recorded site are likely under the current Loop 1604 roadway.

For the archaeological field investigations, the survey focused on three unnamed tributaries of French Creek within the project area. The areas consisted of a 100-m long portion of a forked drainage on the southern end of the project area, a 315-m long portion of a drainage near the center of the project area, and a 120-m long portion of a drainage on the northern end of the project area. A total of 17 shovel tests was excavated throughout the high probability areas within the project area. No cultural material was observed in any of the shovel tests and no archaeological sites were recorded in the project area. Based on these investigations, no further archaeological work is recommended for the Bandera Road 44-acre Development project area. The project will not affect any archaeological properties.

TABLE OF CONTENTS

Abstract i
Figures iii
Tables iii
Management Summary iv

Introduction 1
Definition of Study Area 1
  Soils and Geology 1
  Flora and Fauna 4
Methods 5
  Background Review 5
  Field Methods 5
Results 5
  Background Review 5
  Field Survey 6
    Southern Drainage 6
    Central Drainage 6
    Northern Drainage 8
Summary and Recommendations 10
References 12

Figures

1. Project location map 2
2. Project area map 3
3. Large cleared area in southwestern portion of project area 4
4. Large containment culvert near the project boundary adjacent to Loop 1604 4
5. Aerial map with shovel test locations 7
6. Overview of modified portion of southern drainage 8
7. Saturated area with standing pools of water near southern drainage 8
8. An exposed cutbank of the central drainage near the eastern project boundary displaying a typical soil profile in the area 10
9. Overview of a seasonal wetland area containing the western extent of the northern drainage near Loop 1604 10
10. Portion of project area nearest to previously recorded site 41BX69 11

Tables

1. Shovel Test Data 9

MANAGEMENT SUMMARY

Project Title: Archaeological Investigations of the Bandera Road 44-acre Development Project, Bexar County, Texas.

SWCA Project Number: 13340-053-AUS.

Project Description: Bury + Partners - SA, Inc. has slated for development an approximately 44-acre plot in northwestern San Antonio, Bexar County, Texas. SWCA conducted an archaeological background review of the entire project area and surveyed portions of the Bandera Road 44-acre Development project area near three unnamed tributaries of French Creek.

Location: The project area lies just east of the intersection of Bandera Road (SH 16) and Loop 1604 in northwestern San Antonio, bordered by Loop 1604 to the northwest, an apartment complex to the east, and commercial business fronts to the south/southwest. It is depicted on the Helotes, Texas 7.5-minute USGS topographic map.

Number of Acres Surveyed: Approximately 44 acres.

Principal Investigator: Kevin A. Miller.

Dates of Work: September 5–6, 2007.

Purpose of Work: Investigations were performed pursuant to regulatory obligations related to the possible acquisition of a USACE Section 404 Permit 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 Documented June 24, 2002) and the NHPA.

Number of Sites: No sites were recorded.

Curation: No artifacts were collected, and nothing was curated.

Comments: The archaeological survey focused on three high probability areas contained within the 44-acre project area. These areas consisted of an approximately 100-m long portion of a forked drainage on the southern end of the project area, a 315-m long portion of a drainage in the center of the project area, and an approximately 120-m long portion of a drainage on the northern end of the project area. All investigations were in accordance with the standards and guidelines of the NHPA and the THC's minimum archaeological survey standards for such projects. As no archaeological sites were located during the survey, the proposed development will have no effect on archaeological properties, and no further work is recommended.

Introduction

SWCA Environmental Consultants (SWCA) conducted an intensive archaeological survey of the proposed Bandera Road 44-acre Development project area in northern San Antonio, Bexar County, Texas (Figure 1). Investigations were performed pursuant to regulatory obligations related to the possible acquisition of a U.S. Army Corps of Engineers (USACE) Section 404 Permit 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 Documented June 24, 2002) and the National Historic Preservation Act (NHPA).

Based on a review of the project area soils, geology, recorded archaeological sites in the area, and the results of previously conducted surveys in the area, the archaeological survey focused on the high probability portions of the project area adjacent to defined jurisdictional waterways of the United States. This typically involves drainages and adjacent terraces and floodplains. As such, SWCA conducted an intensive survey of three tributaries of French Creek within the 44-acre project area. These areas consisted of an approximately 100-m long portion of a forked drainage on the southern end of the project area, a 315-m long portion of a drainage in the center of the project area, and an approximately 120-m long portion of a drainage on the northern end of the project area. The archaeological field investigations were conducted in compliance with the survey standards as suggested by the Texas Historical Commission (THC) and the Antiquities Code of Texas. The fieldwork was conduced by Michael R. Chavez and Joshua Gibbs on September 5–6, 2007, with Kevin A. Miller serving as the Principal Investigator. The archaeological survey was designed to identify and assess any cultural resources in the project area.

Definition of Study Area

The project area lies just east of the intersection of Bandera Road (State Highway [SH] 16) and Loop 1604 in northwestern San Antonio (Figure 2). At this location, Bandera Road runs northwest-southeast and Loop 1604 runs northeast-southwest. The project area is a roughly triangular 44–acre parcel bordered by Loop 1604 to the northwest, an apartment complex to the east, and commercial business fronts to the south/southwest. The majority of the project area (approximately 75 percent) is covered in heavy vegetation with a cleared portion consisting of tall grasses isolated to a large area near the southwest corner (Figure 3).

Overall, the project area is relatively flat with slight drops in elevation towards the three unnamed tributaries of French Creek. The three drainages run towards the east before converging with southeast flowing French Creek, east of the project area. The northernmost drainage within the project area has a large containment culvert near the project boundary adjacent to Loop 1604 (Figure 4). In addition, the southernmost drainage is modified with modern berms, a containment pond, and a cement lined spillway extending from the southern project boundary near the commercial business fronts.

Soils and Geology

The surface geology of the project area is mapped as 80 percent Edwards limestone and 20 percent Del Rio clay. The Edwards limestone is a fine to course grained limestone with abundant chert while the Del Rio clay is a calcareous and gypsiferous clay deposit with beds of highly calcareous siltstones and marine megafossils (Barnes 1974). These deposits are typical of the transition areas of Central Texas leading from the limestone deposits of the Edwards Plateau, south into the plains of the Blackland Prairie and the Rio Grande plain (Barnes 1974).

Soils in the project area are 46 percent Crawford and Bexar stony soils, 25 percent Anhalt clays, 0–1 percent slopes, 25 percent Patrick soils, 1–3 percent slopes, three percent Eckrant cobbly clay, 1–5 percent slopes, and 1 percent Lewisville silty clay, 1–3 percent slopes (Taylor et al. 1962). The rocky soils dominate the southern portion of the project area with the Crawford and Bexar stony soils and the Eckrant cobbly clay located along the southern boundary. The nearly level Crawford and Bexar stony soils consist of deep to moderately deep stony to cherty clay to clay loam over hard limestone (Taylor et al. 1962). The small outcrop of Eckrant cobbly clay is located in the extreme

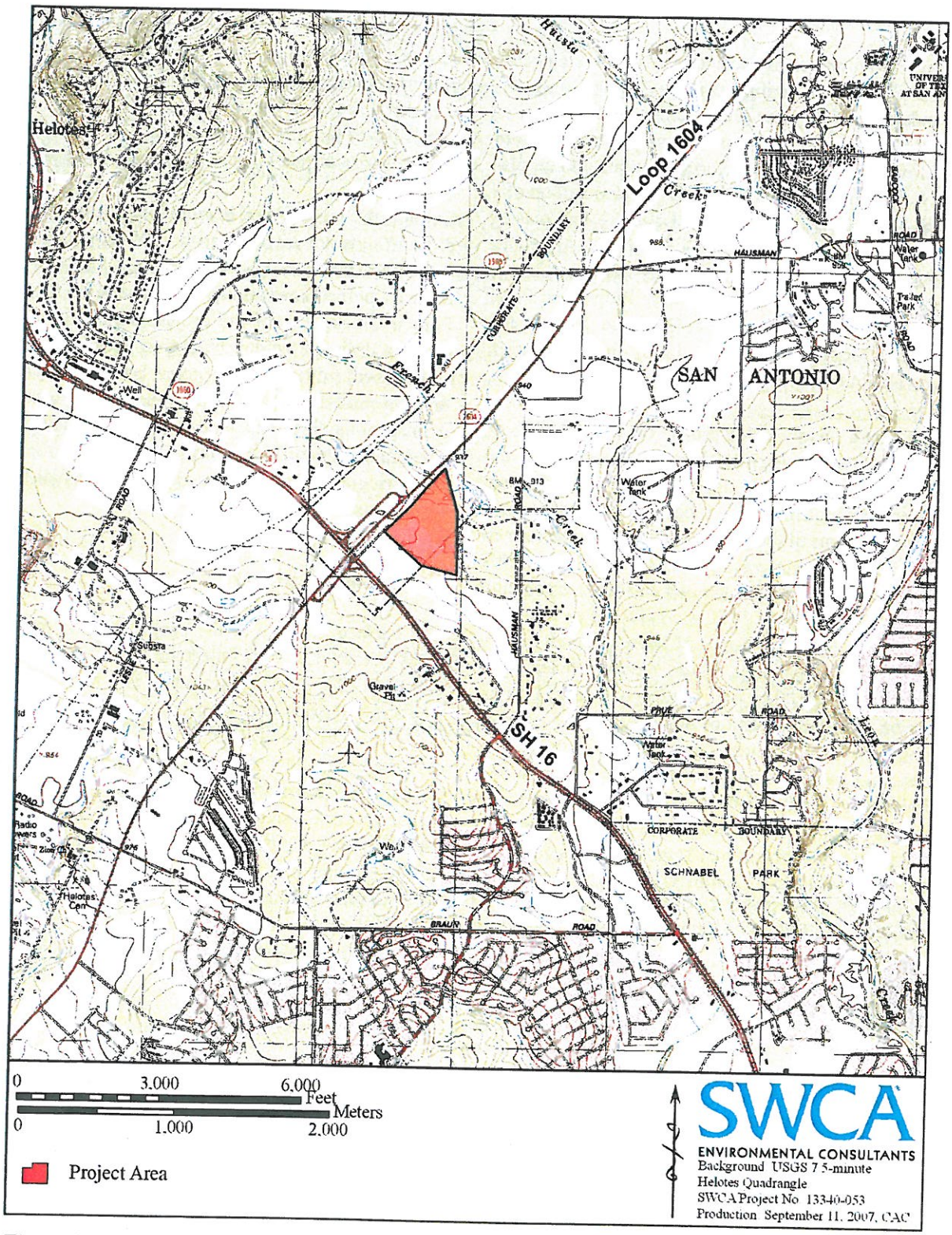

Figure 1. Project location map.

Figure 2. Project area map.

Figure 3. Large cleared area in southwestern portion of project area, facing north/northeast.

southern portion of the project area and consists of very shallow dark colored calcareous clays over hard limestone with scattered stones, gravels, and limestone channery fragments on or near the surface (Taylor et al. 1962). The small outcrop of Lewisville silty clay is located at the location of the cement lined spillway along the southern boundary.

The amount of clay in the soils increase towards the northern portion of the project area as Anhalt clays and Patrick soils are mapped in the area of the investigated drainages. The Anhalt clays bisect the project area from approximately west to east and extend to the location of the southern drainage. These soils are noncalcareous dark brown to dark reddish-brown clays becoming redder with depth over limestone bedrock (Taylor et al. 1962). The northern portion of the project area containing the north and central drainage areas is mapped as Patrick soils. These soils are relatively shallow, nearly level to gently sloping clay loams to clays that occur on terraces that drain limestone prairies (Taylor et al. 1962). The soils tend to be granular to gravelly over a deep bed of limestone gravels (Taylor et al. 1962).

Flora and Fauna

Vegetation trends across the project area vary according to the degree of modern disturbance, soil type, and proximity to water. Trees found in abundance include ashe juniper and assorted oak. Ashe juniper dominates the southern portion of the project area creating "cedar thickets," limiting ground level vegetation. However, the areas adjacent to the drainages are dominated by ground level vegetation creating dense areas with limited visibility and abundant disturbed-earth plants such as greenbrier and poison ivy. Grasses include Bermuda grass, paspalum, bristlegrass, and western ragweed. An aerial photo of the southern portion of the project area shows an area cleared of vegetation from the present location of the western to eastern boundaries. This area correlates with the current location of the dense "cedar thicket".

Figure 4. Large containment culvert near the project boundary adjacent to Loop 1604, facing southeast.

Although the project area is surrounded by modern commercial and residential development, including a major thoroughfare (Loop 1604), the project area displayed evidence of fauna characteristic of the Texan Biotic Province (Blair 1950). This province tends to contain white-tailed deer, eastern cottontail, armadillo, a wide variety of avian taxa, and numerous reptiles including cottonmouth and rat snakes, turtles, and lizards. In addition, evidence of wild feral hogs was observed during the field survey.

Methods

Background Review

Prior to the survey, SWCA archaeologists conducted a background literature review of previously recorded archaeological sites and previously conducted archaeological surveys within 1 mile of the project area. The review utilized information provided by the Texas Archeological Research Laboratory (TARL) and the THC's Texas Historic Sites Atlas (Atlas), an on-line database. The information at TARL pertains to previously recorded sites in the county, while the Atlas shows the locations of previously recorded archaeological sites and previously conducted archaeological projects.

Field Methods

Fieldwork for the Bandera Road 44-acre Development Project consisted of a pedestrian survey and subsurface investigations of the high probability portions of the roughly 44-acre area slated for development, including the areas around the three unnamed tributaries of French Creek and a seasonal wetland area. Based on USACE project recommendations, the cultural resources survey was aligned with the tributaries and included 100 feet on either side of the streams and wetland area. The subsurface explorations were shovel tests placed in areas that had the potential for buried cultural deposits. Specifically, the shovel tests were judgmentally placed in areas of low ground surface visibility and/or in areas with depositional soils.

For the survey, current THC archaeological standards call for the excavation of one shovel test for every 2 acres of a project area between 11 and 50 acres in size. Based on the high probability portions of the project area accounting for approximately 22 acres of the 44-acre project area, a total of 11–12 shovel tests are recommended by the THC for a project area of this size to adequately assess the potential for buried cultural resources to be present.

All shovel tests were excavated to bedrock or a substratum believed to predate human occupation was encountered. Excavated soil was screened through ¼-inch mesh to retrieve any cultural materials that might be present. Each test performed through the course of the survey was documented with standardized shovel test forms and recorded with a handheld GPS, which were subsequently plotted on a map of the project area. In addition, all available exposures within the entire project area were examined for the presence of cultural materials. During the survey of the project area, the archaeological crew photographed the environment and any disturbances.

Results

Background Review

Although Bexar County and the city of San Antonio has been subject to numerous investigations, including the identification of approximately 1,700 historic and prehistoric archaeological sites, the background literature review revealed that no portion of the project area has been previously surveyed and no previously recorded sites are within the project area location. However, the THC records did indicate one previously conducted survey and two previously recorded sites (41BX69 and 41BX1591) are within 1 mile of the project area.

The previously recorded survey was conducted for the San Antonio 201 Wastewater Treatment Project by the Center for Archeological Research (CAR) at the University of Texas at San Antonio for the Environmental Protection Agency (EPA). The survey was located adjacent to the western side of Bandera Road from approximately 1 mile north/northwest of Loop 1604 to approximately 3.5 miles south of Loop 1604.

Only one site (41BX325), a sparse lithic scatter, was recorded during the survey, which is located beyond a mile south of the current project area.

According to the site form, site 41BX69 is located adjacent to the northernmost point of the project area. The site was recorded by the Texas State Highway Department in 1971 and is described as a disturbed prehistoric open campsite consisting of unifaces, flakes, burned rock, and one bifacial tool (TARL Site Form 41BX69). The site is described as being disturbed by road construction related to improvements to Loop 1604. According to the 41BX69 site map, the site is located at the Loop 1604 access road just south of French Creek. Therefore, the site is likely under the current Loop 1604 roadway. Testing was recommended before additional work; however no further information was available in the site records.

Site 41BX1591 is located approximately 0.85 mile east of the project area. The site was recorded in 2004 by SWCA prior to the construction of a housing development. The site is a historic debris pile with diagnostic artifacts dating to the mid twentieth century along with modern debris. Artifacts consisted mainly of glass bottles, with tins cans, historic ceramics, and other metal fragments present. The site also contains abundant modern debris of the same material. Because the site is a debris pile of long term use and consists of 80 percent modern debris and 20 percent historic debris, the site was considered to have a low research value and no further work was recommended.

Field Survey

As previously stated, the field survey consisted of an intensive pedestrian survey with subsurface investigations of the high probability areas located adjacent to the three unnamed drainages within the project area that flow into French Creek. For the sake of this survey report, the drainages are named South Drainage, Central Drainage, and North Drainage (Figure 5). In addition to the pedestrian survey, the archaeologists conducted a reconnaissance survey of the remaining portions of the project area concentrating on areas of probable depositional soils, areas displaying modern disturbances, and the northernmost project area close to previously recorded site 41BX69.

Southern Drainage

The southern drainage consists of a heavily vegetated area near the southeastern boundary of the project area. A wide area near the intersection of the drainage and the eastern boundary consists of heavily saturated soils and pockets of standing water near the flowing drainage. At approximately 25 m into the project area, the southern drainage branches with one tributary coming in from the southwest and another tributary from the northwest. The southwestern tributary appears heavily modified with built up berms leading from a large containment pond (Figure 6). Further up the tributary is a cement lined spillway extending from the southern project boundary near the commercial business fronts. The northwest tributary of the southern drainage extends into an area inundated with runoff and limited vegetation understory (Figure 7). Due to the heavily saturated soils in the area, only one shovel test was excavated adjacent to the northwestern fork of the southern drainage.

Overall, no cultural material was observed on the surface near the southern drainage including the southwest and northwest tributaries of the drainage. A total of five shovel tests was excavated in the area near the southern drainage with no cultural material encountered (STs 1–5). These shovel tests encountered moist dark brown (10YR 3/3) clay to clay loams before encountering limestone cobbles at an average depth of 10 cm below the surface (cmbs) (Table 1).

Central Drainage

The central drainage runs parallel with Loop 1604 before bisecting the project area running west to east (Figure 5). The drainage is the longest of the three drainages running approximately 315 m within the project area. The area is overgrown with vegetation and the surface is saturated likely due to recent rains and modifications to natural water flow from the construction of Loop 1604 and containment areas caused by the apartment complex to the east. Sev-

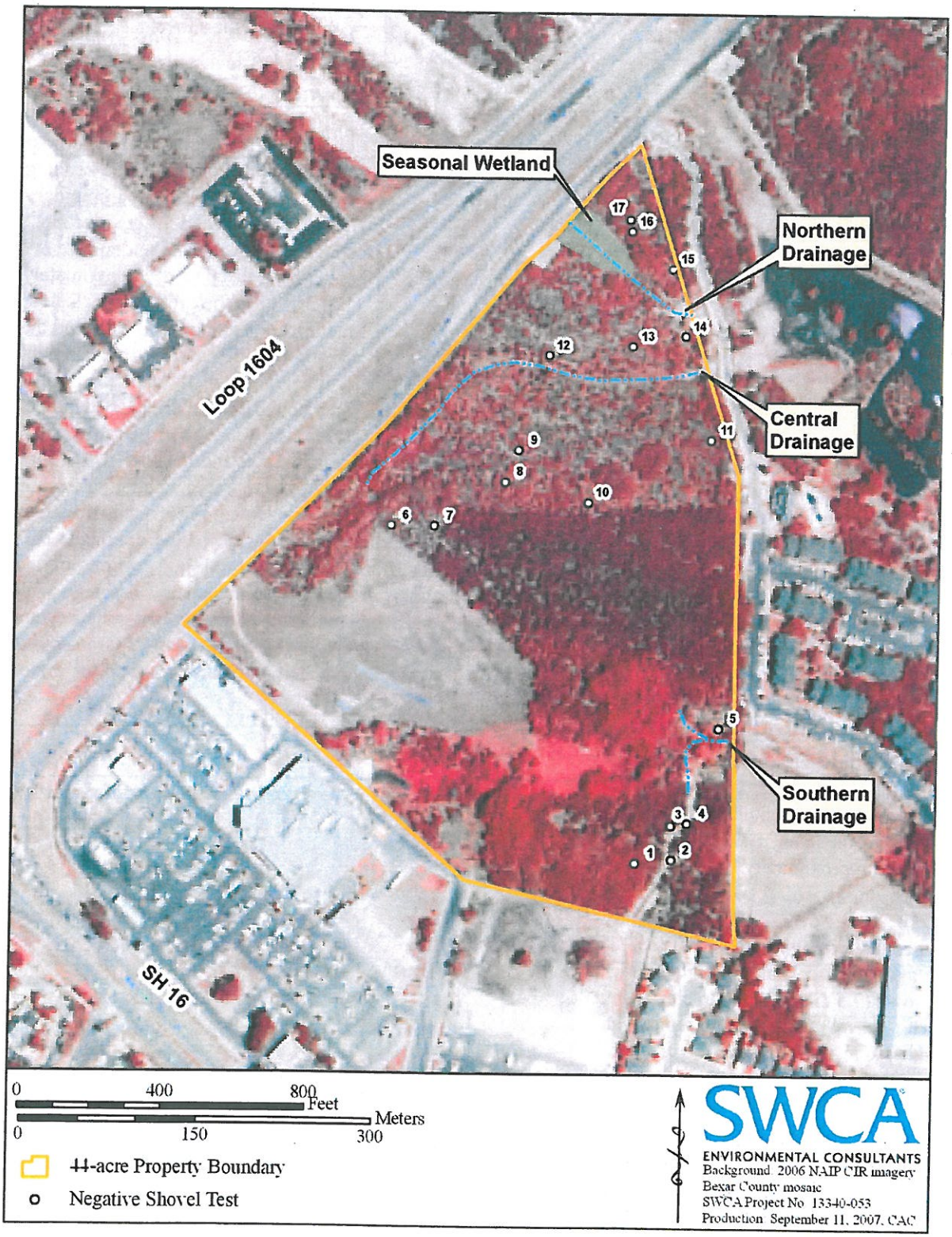

Figure 5. Aerial map with shovel test locations.

Figure 6. Overview of modified portion of southern drainage, facing north/northeast.

eral of the shovel tests were terminated due to water seeping into the shovel tests. It is unlikely that the water table was reached in this area and the water infiltration is likely due to surficial water.

A total of six shovel tests were placed south of the central drainage (STs 6–11) with an additional three shovel tests (STs 12–14) placed in the area between the central and northern drainage. Because of saturated soils and heavy vegetation immediately south of the central drainage, the southern shovel tests were placed approximately 70 m from the actual drainage in areas displaying drier soils. The shovel tests predominantly encountered a dark brown (10YR 3/3) clay loam over a slightly redder dark brown (7.5YR 3/3) clay to clay loam. This subsoil was thick and moist with limestone cobbles and gravel inclusions at a depth of approximately 30 cmbs. An exposed cutbank of the central drainage near the eastern project boundary displayed a typical soil profile of the area (Figure 8). Overall, no cultural material was observed on the surface near the central drainage and no cultural material was encountered within any of the shovel tests.

Northern Drainage

The northern drainage runs almost perpendicular from Loop 1604 ending at the eastern project area boundary near the access road for the apartment complex (Figure 5). The drainage extends for a distance of approximately 120 m within the project area. Due to modification along Loop 1604 and the creation of a cement lined containment pond adjacent to the western project area boundary, the drainage area near Loop 1604 has been identified as a seasonal wetland (Figure 9). This has created a large area with saturated soils that prevented subsurface investigations immediately adjacent to the drainage. This wetland area and the remaining portions of the drainage are similar to the central drainage with overgrown vegetation and saturated soils beyond the main drainage channel. A total of three shovel tests were excavated in the area north of the drainage (STs 15–17).

Figure 7. Saturated area with standing pools of water near southern drainage, facing west.

Table 1. Shovel Test Data

Shovel Test #	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Comments
1	0-15	10YR 3/1	Very dark gray	Clay loam	Gravels	
	15-25	10YR 3/1	Very dark gray	Clay loam	Gravels	Heavy limestone gravels encountered at 25 cmbs.
2	0-7	10YR 3/3	Dark brown	Clay loam	Gravels	Shallow large limestone cobbles at depth.
3	0-10	10YR 3/3	Dark brown	Clay loam	Gravels	Shallow large limestone cobbles at depth.
4	0-7	10YR 3/1	Very dark gray	Clay loam	Gravels	
	7-15	10YR 3/1	Very dark gray	Clay loam	Gravels	Heavy limestone gravels encountered at depth.
5	0-12	10YR 3/1	Very dark gray	Clay	Gravels	Very moist with limestone cobbles at depth.
6	0-20	10YR 3/3	Dark brown	Clay loam	Gravels	Very moist.
	20-40	7.5YR 3/3	Dark brown	Clay loam	Gravels	Heavy limestone gravels encountered at depth.
7	0-30.	10YR 3/1	Very dark gray	Clay loam	Gravels	Very moist, dense vegetation area.
	30-40	7.5YR 3/3	Dark brown	Clay loam	Gravels	Increased moisture - water seeping into test.
8	0-15	10YR 3/2	Very dark grayish brown	Clay loam	Gravels	Very moist, dense vegetation area.
	15-50	10YR 4/3	Brown	Clay loam	Gravels	Increased moisture - with limestone gravels at base.
9	0-20	10YR 3/1	Very dark gray	Clay loam	Gravels	Very moist, dense vegetation area.
	20-40	7.5YR 3/3	Dark brown	Clay loam	Gravels	Increased moisture - water seeping into test.
10	0-17	10YR 3/1	Very dark gray	Clay loam	Gravels	Heavy limestone gravels encountered at depth.
11	0-12	10YR 3/1	Very dark gray	Clay	Gravels	Very moist with limestone cobbles at depth.
12	0-5	10YR 3/2	Very dark grayish brown	Clay loam	Gravels	Limestone gravels on surface.
13	0-30	10YR 3/1	Very dark gray	Clay loam	Gravels	Very moist, dense vegetation area.
	30-40	7.5YR 3/3	Dark brown	Clay loam	Gravels	Increased moisture - water seeping into test.
14	0-25	10YR 3/2	Very dark grayish brown	Clay loam	Gravels	Heavy limestone gravels encountered at depth.
15	0-30	10YR 3/1	Very dark gray	Clay loam	Gravels	Very moist, dense vegetation area.
	30-40	10YR 3/1	Very dark gray	Clay loam	Gravels	Increased moisture - water seeping into test.
16	0-20	10YR 3/2	Very dark grayish brown	Clay loam	Gravels	Very moist, dense vegetation area.
	20-35	10YR 3/3	Dark brown	Clay	Gravels	Increased moisture - water seeping into test.
17	0-30	10YR 3/1	Very dark gray	Clay loam	Gravels	Very moist, dense vegetation area.
	30-40	7.5YR 3/3	Dark brown	Clay loam	Gravels	Increased moisture - water seeping into test.

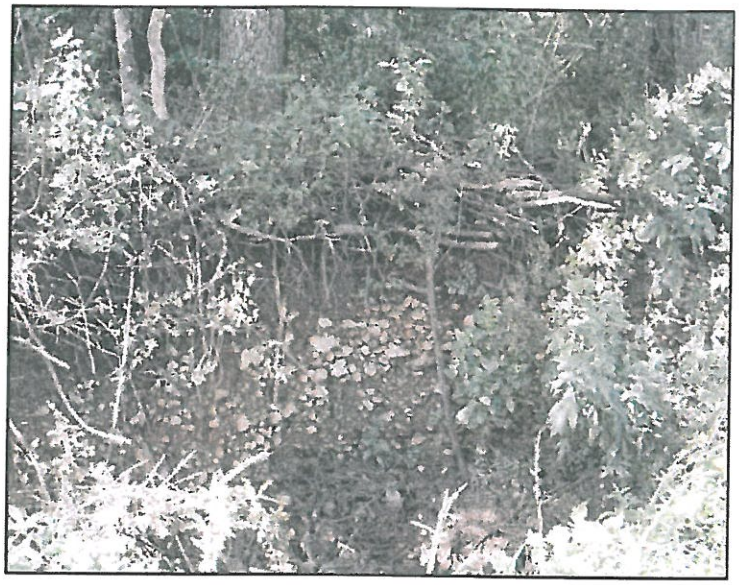

Figure 8. An exposed cutbank of the central drainage near the eastern project boundary displaying a typical soil profile in the area, facing southwest.

The shovel tests predominantly encountered the similar soils encountered in STs 12–14, a dark brown (10YR 3/3) clay loam over a slightly redder dark brown (7.5YR 3/3) clay to clay loam. Again, similar to the central and southern drainage, no cultural material was observed on the surface near the northern drainage and no cultural material was encountered within any of the shovel tests. The area just north of the drainage was surficially investigated for remnants of previously recorded site 41BX69; no cultural material was observed. However, the area within the project area immediately adjacent to the previous site location has been disturbed by the placement of an access road to the apartment complex and associated structures (Figure 10).

Summary and Recommendations

In summary, SWCA performed a background review and an intensive archaeological survey of portions of the Bandera Road 44-acre Development project area in northern San Antonio, Bexar County, Texas. Investigations were performed pursuant to regulatory obligations related to the possible acquisition of a USACE Section 404 Permit 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 Documented June 24, 2002) and the NHPA.

The background literature review revealed that no portion of the project area has been previously surveyed and no previously recorded sites are within the project area location. However, the THC records indicate one previously conducted survey and two previously recorded sites (41BX69 and 41BX1591) are within 1 mile of the project area. While site 41BX1591, a historic trash dump, is located approximately 0.85 mile east of the project area, site 41BX69 was mapped as being adjacent to the northern most point of the project area. The site is described as a disturbed prehistoric open campsite

Figure 9. Overview of a seasonal wetland area containing the western extent of the northern drainage near Loop 1604, facing east.

Figure 10. Portion of project area nearest to previously recorded site 41BX69, facing south. The Loop 1604 northbound access road is in the foreground.

consisting of unifaces, flakes, burned rock, and one bifacial tool (TARL Site Form 41BX69). No evidence of the site was observed within the project area and any remnants of the previously recorded site are likely under the current Loop 1604 roadway.

The intensive archaeological survey focused on three unnamed tributaries of French Creek within the project area. The areas consisted of a 100 m long portion of a forked drainage on the southern end of the project area, a 315 m long portion of a drainage in the center of the project area, and a 120 m long portion of a drainage on the northern end of the project area.

A total of 17 shovel tests were excavated in the high probability areas near the drainages. Current THC archaeological standards call for the excavation of one shovel test for every two acres of a project area between 11 and 50 acres in size. Based on the high probability portions of the project area accounting for approximately 25 acres of the 44-acre project area, a total of 12–13 shovel tests are recommended by the THC for a project area of this size to adequately assess the potential for buried cultural resources to be present. The shovel tests revealed relatively shallow, heavily saturated to moist soils with limestone gravels and cobbles. Overall, the shovel tests revealed no subsurface cultural resources and no cultural materials were observed on the surface.

Because the project will not affect any archaeological properties, no further archaeological work is recommended for the Bandera Road 44-acre Development project area. If buried cultural resources should be identified during the project, then ground-disturbing activities in that area should immediately cease until the nature of the resources can be professionally evaluated.

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