

**Intensive Cultural Resources Survey of the
Proposed Verano East-West Roadway
Project in Bexar County, Texas**

Prepared for

VTLM Texas, LP

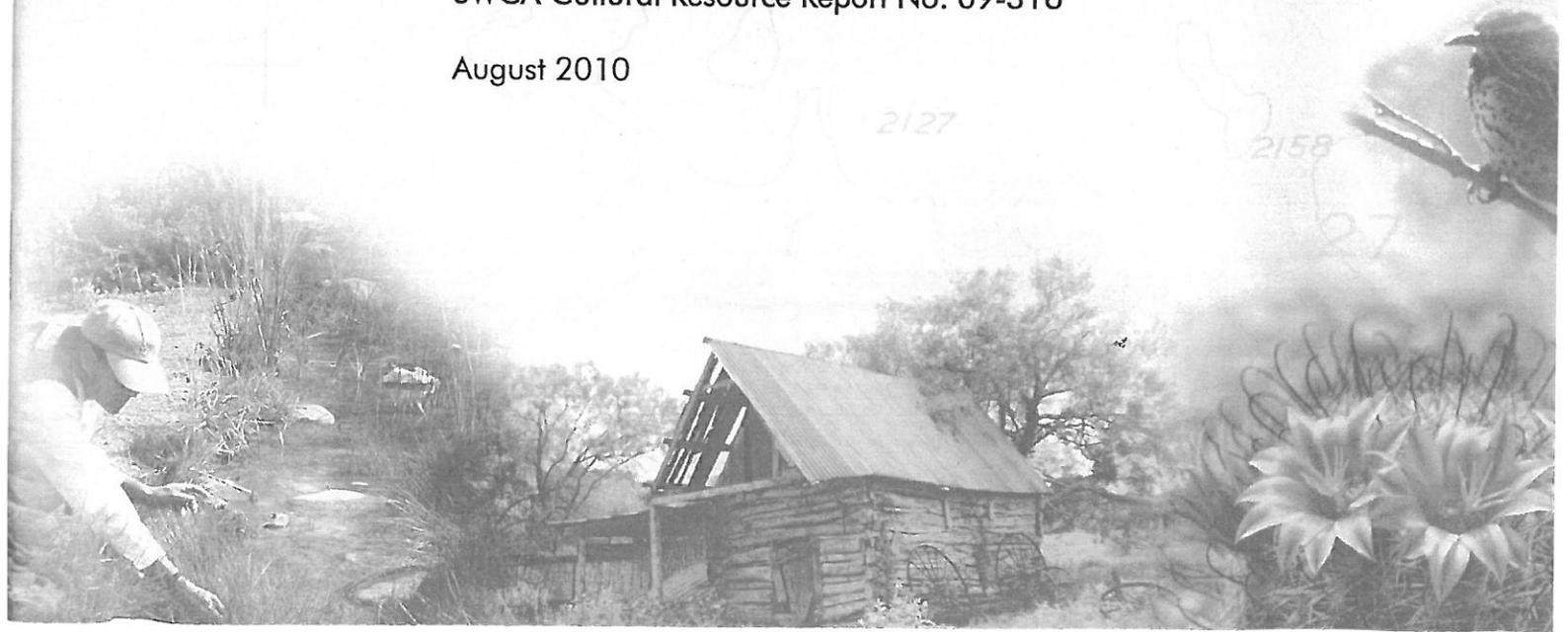
Prepared by

Mary Jo Galindo

Texas Antiquities Permit 5394

SWCA Cultural Resource Report No. 09-316

August 2010



**INTENSIVE CULTURAL RESOURCES SURVEY OF THE PROPOSED VERANO EAST-WEST
ROADWAY PROJECT IN BEXAR COUNTY, TEXAS**

PLAT #090300

Prepared for

VTLM TEXAS, LP

on behalf of

PATE ENGINEERS, INC.
8200 IH-10 West, Suite 440
San Antonio, Texas 78230

Prepared by

Mary Jo Galindo

SWCA ENVIRONMENTAL CONSULTANTS

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

Principal Investigator

Mary Jo Galindo

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ABSTRACT

On behalf of the City of San Antonio, and in coordination with VTLM Texas, LP, SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the Verano East-West Roadway Project area in south-central Bexar County, Texas. The project begins along South Zarzamora Street, about 1.15 miles south of the intersection with Loop 410, and ends 1.4 miles (7,310.38 feet) to the west at a railroad corridor. The proposed project will involve the construction of a new roadway with a right-of-way that varies between 148–178 feet in width. Proposed subsurface impacts are not known at this time, but are not expected to exceed 6 feet throughout the project area, with impacts up to 20 feet for sewer trench locations. Overall, the Area of Potential Effects (APE) is 1.4 miles long, 148–178 feet wide, and generally 6 feet deep, encompassing 33.3 acres. Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5394) and the San Antonio Historic Preservation Office per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634). These investigations included a background and archival review and a pedestrian survey with subsurface investigations.

The purpose of the work was to locate and identify all prehistoric and historic archaeological sites in the project area, establish vertical and horizontal site boundaries as appropriate with regard to the project area, and evaluate the significance and eligibility of any site recorded within the property for designation as a State Archeological Landmark (SAL). SWCA archaeologists Mary Jo Galindo and Christina Nielsen conducted the fieldwork on September 9, 2009.

The background review revealed that the project area has not been surveyed for archaeological resources and no cultural resource sites have been identified within the project area. It also determined that one previously recorded archaeological site, two archaeological surveys, and one cemetery are recorded within a 1-mile radius of the APE.

The westernmost 1,350 feet (412 m) of the APE is a former commercial development site characterized by fill piles, push piles, two track roads, modern trash, automotive parts, and building materials. The remainder of the APE traverses fallow agricultural fields and wooded areas. At the time of the survey, a north-south oriented roadway was being constructed perpendicular to the APE near its midway point. Disturbances associated with the construction precluded subsurface investigations within a 1,350-foot (412-m) segment of the APE. Prior disturbances included earth moving, sewer installations, and vegetation removal. Impacts within the APE also include fence and two-track road construction and the installation of buried and overhead utilities. A total of 13 shovel tests was excavated in the APE in areas believed to contain intact deposits. Besides modern trash, no cultural materials were encountered in these shovel tests, or elsewhere in the APE. Accordingly, no cultural resources will be affected by any construction activities within the project area, and SWCA recommends no further archaeological investigations.

ACKNOWLEDGEMENTS

Mary Jo Galindo served as Principal Investigator, Project Manager, and Lead Surveyor for the duration of the project, ably overseeing overall logistics and organization, and managing reporting and agency consultation. Christina Nielsen served as field technician on this survey, conducting field work on September 9, 2009. Carole Carpenter expertly produced all field and report maps for the project.

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INTRODUCTION

On behalf of the City of San Antonio, and in coordination with VTLM Texas, LP, SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the Verano East-West Roadway Project area in south-central Bexar County, Texas. The western terminus of the project area is approximately 1.36 miles southeast of the intersection of Loop 410 and State Highway 16 (Figure 1). Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5394) and the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634). These investigations included a background review and a pedestrian survey with subsurface investigations.

The purpose of the work was to locate and identify all prehistoric and historic archaeological sites in the project area, establish vertical and horizontal site boundaries as appropriate with regard to the project area, and evaluate the significance and eligibility of any site recorded within the property for eligibility for designation as a State Archeological Landmark (SAL). Overall, the Area of Potential Effects (APE) is 1.4 miles long, 148–178 feet wide, and generally 6 feet deep, encompassing 33.3 acres (Figure 2). SWCA archaeologists Mary Jo Galindo and Christina Nielsen conducted the fieldwork on September 9, 2009.

DEFINITION OF STUDY AREA

The APE begins along South Zarzamora Street, about 1.15 miles south of the intersection with Loop 410, and ends 1.4 miles (7,310.38 feet) to the west at a railroad corridor. The westernmost 1,350 feet (412 m) of the APE is a former commercial development site characterized by fill piles, push piles, two track roads, modern trash, automotive parts, and building materials (Figure 3). The remainder of the APE traverses fallow, overgrown agricultural fields and wooded areas. At the time of the survey, a north-south oriented roadway was being constructed perpendicular to the APE near its midway point. Disturbances associated with the construction precluded subsurface investigations within a 1,350-foot (412-m) segment of the APE. Prior disturbances in this area included earth moving, sewer installations, and vegetation removal (Figure 4). Minor impacts throughout the APE also include intersecting fence lines, two-track roads, and overhead utilities (Figure 5).

The underlying geology of the project area is mapped as Eocene-era Wilcox Group. These deposits are made up of predominately mudstone with varying amounts of sandstone and lignite and are about 440–1,200 feet thick (Fisher 1983).

Four types of soil are mapped in the project area: Willacy loam, Houston Black gravelly clay, Hilly Gravelly Land, and Venus clay loam (Taylor et al. 1991:Map Sheet 70). Approximately 36 percent of the project area is mapped as Willacy loam with 0 to 1 percent slopes. This soil occurs as long broad areas on old alluvial outwash plains or terraces. Willacy soils are mapped in the central 0.6 mile of the APE, which was formally used for agriculture. The surface layer is a very dark grayish-brown, about 15 inches thick, and non-calcareous. The underlying layer is dark brown to yellowish-brown and is about 40 inches thick (Taylor et al. 1991:35).

Another 33 percent of the project area is mapped as Houston Black gravelly clay, with 1 to 3 percent slopes, occurring on the uplands as long, smooth, convex slopes. Within the APE, Houston Black soils are mapped near both the eastern and western ends of the proposed project. The surface layer is black clay, 38 inches thick with gravel comprising 8–18 percent by volume. The underlying layer consists of clay or gravelly clay, 12 inches thick (Taylor et al. 1991:21).

Hilly Gravelly Land with 5 to 25 percent slopes comprises approximately 26 percent of the project area. This soil occurs as knolls and narrow ridges that are probably the erosion-resistant remnants of old waterways. Within the APE, Hilly Gravelly Land soils are mapped near both the eastern and western ends of the proposed project intermixed with Houston Black gravelly clay. These soils consist of beds of caliche or of gravelly, very strongly calcareous, loamy alluvium 10–20 feet thick. The upper 3–12 inches of the caliche layer is generally hard and platy (Taylor et al. 1991:17).

Venus clay loam with 1 to 3 percent slopes, comprises the remainder of the project area. This soil occurs as gentle slopes between terraces and upland soils. Within the APE, Venus soils are mapped between Hilly Gravelly Land and Houston Black soils, near the western end of the proposed project. The surface layer is about 14 inches thick. The underlying layer consists of proportionately less clay and is about 20 inches thick (Taylor et al. 1991:33).

METHODS

BACKGROUND REVIEW

SWCA conducted a thorough background cultural resources and environmental literature search of the project area. An SWCA archaeologist reviewed the Terrell Wells (2998-241), U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map 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

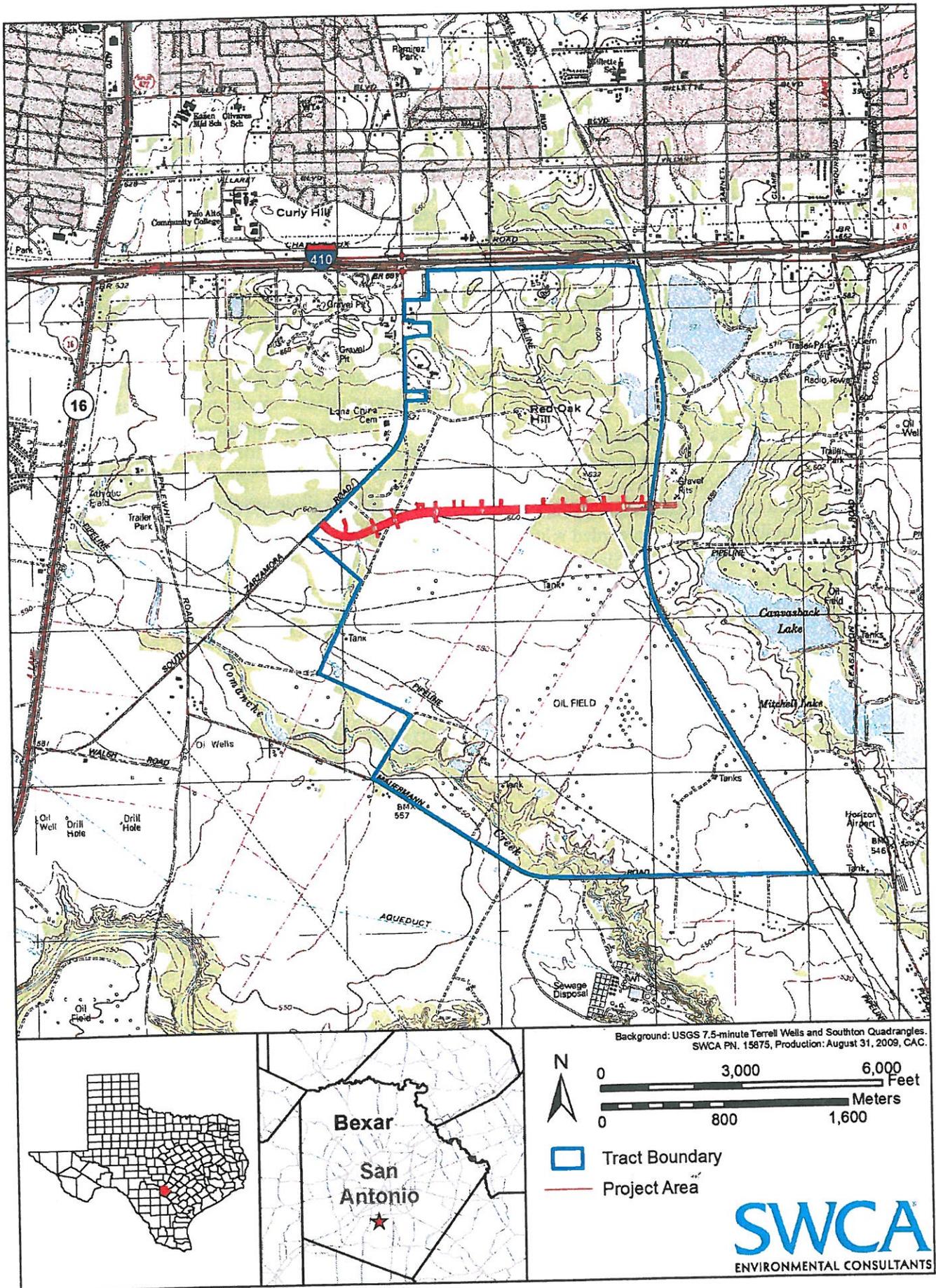


Figure 1. Project location map.

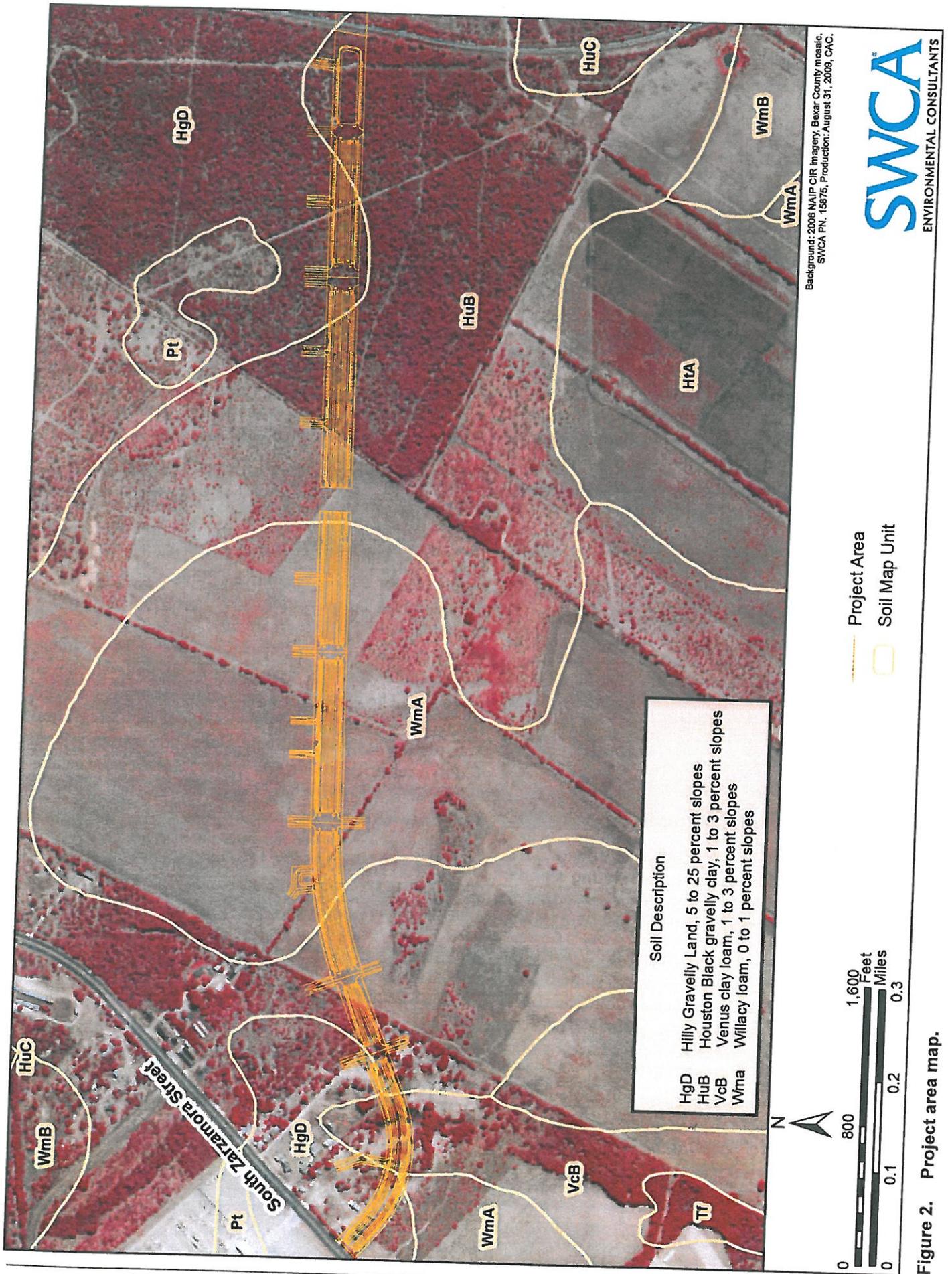


Figure 2. Project area map.



Figure 3. Typical ground visibility within the eastern end of Area of Potential Effects where modern trash, construction debris, two-track roads, and push piles were evident, facing east.

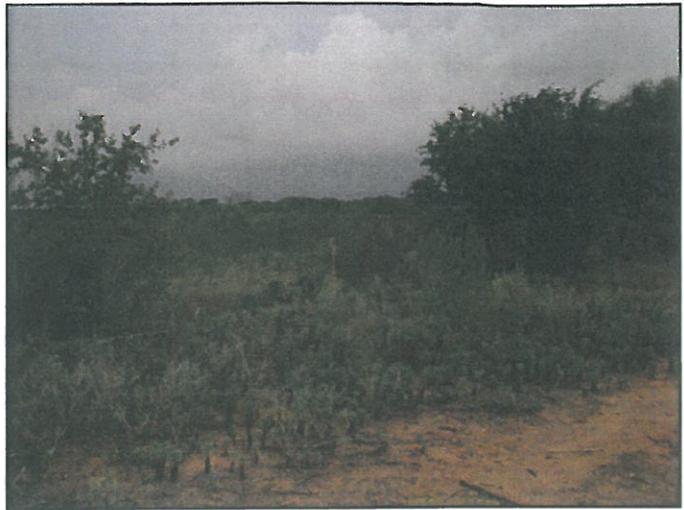


Figure 5. The Area of Potential Effects intersects numerous fence lines, two-track roads, and, near the eastern end, overhead utilities, facing west.



Figure 4. Concurrent construction of a north-south roadway precluded shovel testing along a 412-m stretch of the Area of Potential Effects, facing north.

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: National Register of Historic Places properties, SALs, Official Texas Historical Markers, Registered Texas Historic Landmarks, 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* (Fisher 1983). Aerial photographs were reviewed to assist in identifying any disturbances.

FIELD METHODS

SWCA's investigations consisted of an intensive pedestrian survey with subsurface investigations within the project area. Archaeologists examined the ground surface and exposures for cultural resources. Subsurface investigations involved shovel testing in settings with the potential to contain buried cultural materials. The shovel tests were approximately 30 cm in diameter and excavated to culturally sterile deposits or impassible basal clay, whichever came first. The matrix from each shovel test was screened through ¼-inch mesh, and the location of each excavation was plotted using a hand-held global positioning system (GPS) receiver. Each shovel test was recorded on a standardized form to document the excavations. The THC's survey standards for linear projects mandate 16 shovel tests per mile for a 100-foot-wide right-of-way (ROW). The width of this project varies between 148 feet (for a distance of 1,775 feet) and 178 feet (for a distance of 5,536 feet), translating into 39 shovel tests for the 1.4-mile-long project area.

RESULTS

BACKGROUND REVIEW

The background review revealed that the project area has not been surveyed for archaeological resources and no cultural resource sites have been identified within the project area. The background research also determined that one previously recorded archaeological site, two archaeological surveys, and one cemetery are recorded within a 1-mile radius of the APE.

Site 41BX1747 was recorded in 2007 by THC Steward David Calame and Kay Hinder. The site consists of a

circa 1830 stone structure along Comanche Creek built by Fernando Rodriguez on a Spanish or Mexican land grant. A multi-component site, 41BX1747 also had a light prehistoric lithic scatter (Atlas).

Two surveys have been conducted within 1 mile of the project area, including a linear one by the Federal Highway Administration (FHWA) in 1986 along Loop 410. No sites within 1 mile of the project area were recorded during this survey (Atlas). The second survey was conducted under Antiquities Permit 4640 along South Zarzamora Road in 2007 by archaeologists from SWCA on behalf of the City of San Antonio. No sites within 1 mile of the project area were recorded during this survey (Galindo 2008).

The Lona China (or Guzman) Cemetery (BX-C044) is 0.41 mile north of the project area along South Zarzamora Road. No further information was available for this cemetery.

FIELD SURVEY

On September 9, 2009 two SWCA archaeologists conducted an intensive pedestrian survey of the Verano East-West Roadway Project. The APE was subjected to a 100 percent pedestrian survey with shovel testing in areas with potential for intact buried cultural resources. A total of 13 shovel tests was excavated along the 1.4-mile APE. (Table 1; Figure 6). These subsurface investigations ranged from 15–40 cm below surface (cmbs), averaging 22 cmbs. The matrix encountered included silty clay loam, silty clay, clay loam, and clay with chert and limestone gravel and cobble inclusions. In areas that were previously used for agricul-

ture, the upper portion of the soils had been disturbed by plowing. All of the shovel tests terminated at compact soil and/or impenetrable gravel. Ground visibility ranged from 30–90 percent throughout the APE, generally increasing to the west. No cultural material was encountered in any subsurface investigations during this survey.

The westernmost 1,350 feet (412 m) of the APE is a former commercial development site characterized by fill piles, push piles, intersecting two track roads, modern trash, automotive parts, and building materials scattered on the surface. Standing structures are visible on a recent aerial at this location (see Figure 2), but at the time of the survey, none remained. Footprints associated with the former structures were evident along with brick and concrete block fragments, asphalt shingles, window pane glass fragments, and other miscellaneous construction debris on the surface (Figure 7). Venus soils, the deepest in the APE, are mapped at this location, but no shovel tests were excavated in this area due to ground visibility that consistently exceeded 30 percent and the extent of prior disturbances, the most detrimental of which were extensive fill piles, push piles, and related earth moving activities that have altered the landscape and reduced the potential for intact buried cultural resources (Figure 8).

A small corner of the property adjacent to the former commercial development is within the APE. Although brick and concrete block fragments were on the surface at this location, the ground had not been extensively modified and appeared intact. Ground visibility in this section was 70

Table 1. Shovel Test Data

Shovel Test #	Depth (cmbs)	Munsell	Soil Color	Soil Texture Description	Inclusions	Comments
1	0–15	10 YR 4/4	brown	silty clay	rocks	no cultural material; terminated at compact soil and gravel lens
2	0–15	10 YR 3/3	dark brown	silty clay loam	cobbles	no cultural material; terminated at compact soil
3	0–15	10 YR 4/4	brown	silty clay loam	none	no cultural material
	15–30	10 YR 3/4	brown	clay	none	no cultural material; terminated at compact soil
4	0–15	10 YR 3/3	dark brown	silty clay loam	cobbles throughout top 10cm	no cultural material; terminated at compact soil
5	0–20	10 YR 4/4	brown	silty clay	lots of chert gravels	no cultural material; terminated at compact soil and gravel lens
6	0–15	10 YR 3/3	dark brown	silty clay loam	cobbles throughout top 10cm	no cultural material
	15–20	10 YR 2/1	black	clay loam	none	no cultural material; terminated at compact soil
7	0–20	10 YR 4/4	brown	silty clay	none	no cultural material; terminated at compact soil and gravel lens
8	0–15	10 YR 3/3	dark brown	silty clay loam	cobbles throughout top 10cm	no cultural material
	15–20	10 YR 2/1	black	clay loam	none	no cultural material; terminated at compact soil
9	0–20	10 YR 4/4	brown	silty clay	few rocks	no cultural material; terminated at compact soil
10	0–20	10 YR 3/3	dark brown	silty clay loam	none	no cultural material; terminated at compact soil and gravel lens
11	0–20	10 YR 4/4	brown	silty clay	gravels increase with depth	no cultural material; terminated at compact soil
12	0–30	10 YR 3/2	very dark grayish-brown	silty clay loam	10YR2/2 mottles	no cultural material; terminated at compact soil and gravel lens
13	0–15	10 YR 4/4	brown	clay loam	gravels	no cultural material
	15–40	10 YR 3/4	brown	clay	cobbles	no cultural material; terminated at compact soil

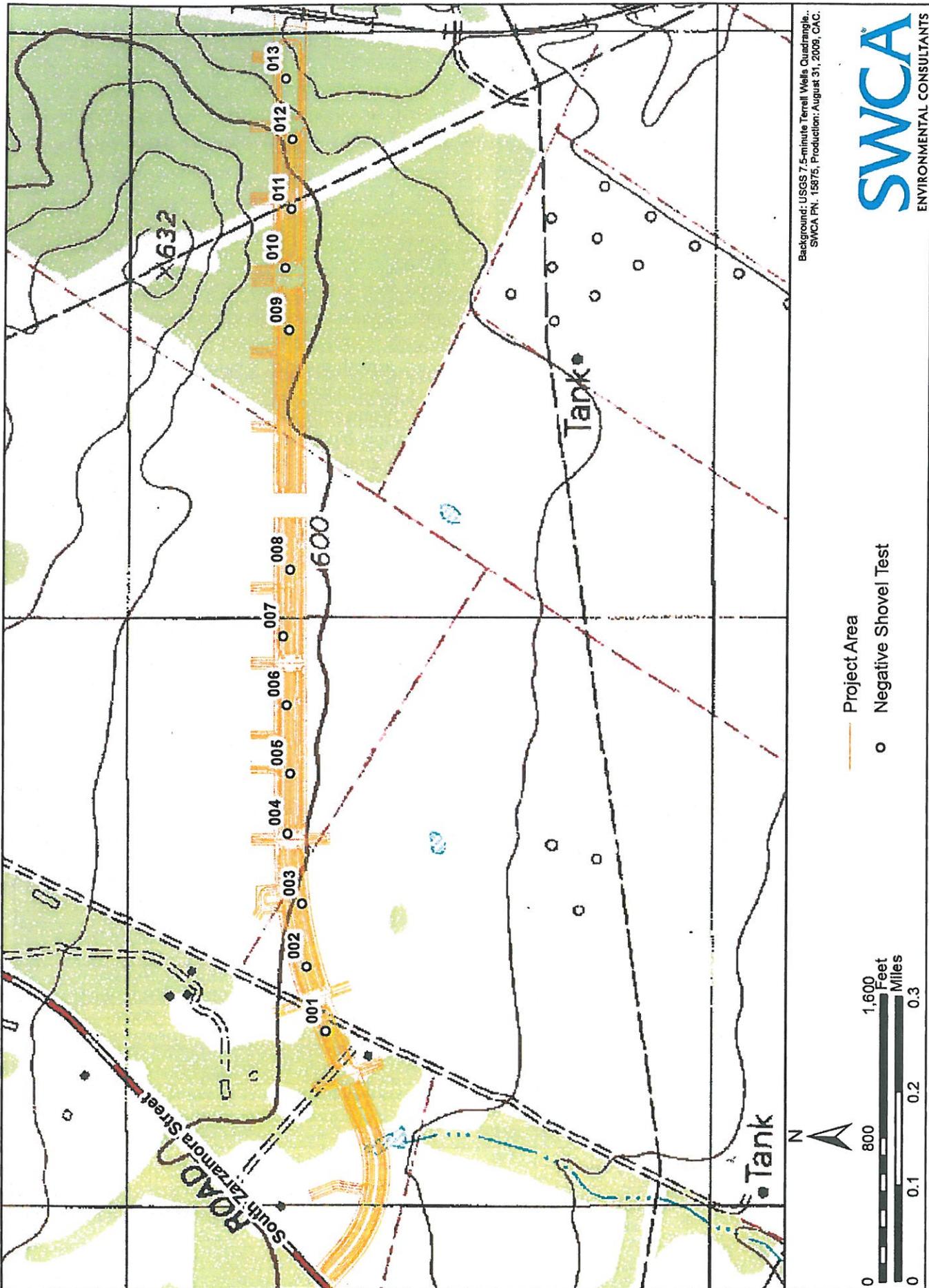


Figure 6. Survey results map.



Figure 7. The easternmost section of the Area of Potential Effects contained remnants of a commercial development including former building footprints along with fragmented building materials on the surface and overhead utilities, facing southeast.



Figure 9. Fallow agricultural fields characterized the majority of the Area of Potential Effects, facing northeast.



Figure 8. Prior disturbances within the easternmost section of the Area of Potential Effects included extensive fill piles, facing east.

percent. Shovel test (ST) 1 was excavated in this segment of the APE through friable silty clay and rocks to a depth of 15 cmbs, when a dense layer of compact soil and gravel was encountered. ST 1 contained no buried cultural material. From ST 1, the APE continues to the northeast, crossing an intersecting two-track road that parallels the fence line and overhead utilities at this location.

The APE continues east-northeast for about 763 feet (233 m) across a fallow agricultural field that was overgrown with brush and wildflowers at the time of survey (Figure 9). The brush reduced ground visibility to 40 percent. ST 2 and ST 3 were excavated in this segment of the APE through



Figure 10. Ground visibility increased in fallow agricultural fields where the brush was not extensive, facing east.

silty clay loam to depths of 15 and 30 cmbs, respectively. ST 2 contained cobbles, but ST 3 did not encounter any rocks. Both shovel tests were terminated at a dense layer of compact soil. Neither shovel test contained buried cultural material. From ST 3, the APE continues eastward, crossing an intersecting two-track road that parallels the fence line (see Figure 5).

The APE continues east for about 925 feet (282 m) across a fallow agricultural field that, although it was overgrown with weeds and sunflowers, the lack of brush increased the ground visibility to 60 percent (Figure 10). ST 4 and ST 5 were excavated in this segment of the APE through silty clay and silty clay loam to depths of 15 and 20 cmbs, respectively. ST 4 contained cobbles throughout the top 10 cm, while ST 5 encountered chert gravel. Both shovel tests were terminated at a dense layer of compact soil, with



Figure 11. The centerline of the Area of Potential Effects had been cleared of vegetation for the last 1,800 feet (549 m), facing east.

additional gravel in ST 5. Neither shovel test contained buried cultural material.

From ST 5, the APE continues east for about 800 feet (244 m) across a fallow agricultural field that was overgrown with brush and grasses that reduced ground visibility to 50 percent. ST 6 through ST 8 were excavated in this segment of the APE. ST 6 and ST 8 were excavated through a 15-cm layer of silty clay loam overlying a 5-cm layer of clay loam, with cobbles throughout the top 10 cm. ST 7 encountered 20 cm of silty clay. All three shovel tests were terminated at a dense layer of compact soil, with additional gravel in ST 7. None of the shovel tests contained buried cultural material.

From ST 8, the APE continues eastward. At the time of the survey, a north-south oriented roadway was being constructed perpendicular to the APE about 30 m east of ST 8. Disturbances associated with the construction precluded subsurface investigations within a 1,350-foot (412-m) segment of the APE.

East of the road construction, a 10-m-wide swath of the APE had been cleared of vegetation along the centerline to the APE's eastern terminus at the railroad corridor, a distance of about 1,800 feet (549 m) (Figure 11). Ground visibility within the cleared swath was 100 percent, while leaf litter reduced this to 40 percent within the wooded areas of the

APE. ST 9 through ST 13 were excavated in this segment of the APE and encountered no buried cultural material.

SUMMARY AND RECOMMENDATIONS

SWCA conducted an intensive cultural resources survey of the Verano East-West Roadway Project in Bexar County, Texas. Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5394) and the San Antonio HPO per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634).

The background literature review determined that the project area has not been surveyed for archaeological resources and no cultural resource sites have been identified within the project area.

Disturbances associated with prior commercial development and the construction of a north-south intersecting road precluded subsurface investigations within two 1,350-foot (412-m) segments of the APE, which account for 39 percent of the APE. Prior disturbances included earth moving, sewer installations, and vegetation removal. Impacts within the APE also include fence and two-track road construction, and the installation of overhead utilities.

This survey did not encounter cultural material on the surface or in any subsurface investigations. The THC's survey standards for linear projects mandate 16 shovel tests per mile for a 100-foot-wide ROW. The width of this project varies between 148 feet (for a distance of 1,775 feet) and 178 feet (for a distance of 5,536 feet), translating into 39 shovel tests for the 1.4-mile-long project area. The 13 shovel tests excavated during the intensive survey do not meet this standard; however the large areas of previous disturbances precluded the need for shovel testing across 37 percent (2,700 feet) of the APE. SWCA has made a reasonable and good faith effort to identify archaeological and historic properties within the APE.

Besides modern trash, no cultural materials were encountered in these shovel tests, or elsewhere in the APE. Accordingly, no cultural resources will be affected by any construction activities within the project area, and SWCA recommends no further archaeological investigations.

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