A Cultural Resources Survey of the HEB Project Area at State Highway 211 and Culebra Road, Bexar County, Texas

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Abstract

In late July, 2007, South Texas Archeological Research Services, LLC, performed an archeological survey of the HEB project area at State Highway 211 and Culebra Road in far northwest Bexar County, Texas, for Terracon Consultants, Inc. The area surveyed consisted of approximately 30 acres of flat to gently sloping land that was mostly unimproved and covered in native vegetation. A segment of San Geronimo Creek, a tributary of the Medina River was a few hundred meters north and west of the project area. Fieldwork for the survey was conducted according to *Archeological Survey Standards for Texas, Minimum Survey Standards,* of the Texas Historical Commission, the primary standard adopted by the City of San Antonio Historic Preservation Officer for such surveys.

The survey was preceded by an internet search within the *Texas Archeological Sites Atlas* of the Texas Historical Commission to determine whether or not the project area contained any previously discovered archeological resources that were recorded in the atlas and whether or not any portions of the survey area had been previously surveyed. The results of that search were negative.

A pedestrian examination of the area was performed and 15 archeological shovel tests were excavated within the area. The investigation revealed that the area apparently contained no cultural resources of significance according to antiquities statutes and regulations that could apply to the area. Nothing was collected or curated in conjunction with the survey.

Based on the results of the survey, pending review and comment by the City of San Antonio Historic Preservation Officer and/or the Texas State Historic Preservation Officer, the Principal Investigator believed that future development or other alterations of the project area should not affect any important cultural resources and further cultural resource compliance work should not be necessary unless new finds were made during construction.

Acknowledgements

Several persons rendered valuable assistance to South Texas Archeological Research Services, LLC, in conjunction with its survey and their help is gratefully acknowledged: Valerie Learman and Kristy Knaupp-Beyer of the Austin, Texas, office of Terracon Consultants, Inc.; Sam Escobar of the San Antonio, Texas, office of Terracon Consultants, Inc.; and the archeological field team of Jay McCracken and Albert Uecker.

Introduction

On July 31, 2007, South Texas Archeological Research Services, LLC (STARS), conducted the fieldwork phase of an archeological survey of Tract A of the HEB property at the intersection of State Highway 211 and Culebra Road in northwestern Bexar County, Texas (Figure 1), for Terracon Consultants, Inc (TCI). The survey focused on discovery, identification, and preliminary assessment of the significance of archeological resources within the area surveyed. It was done according to *Archeological Survey Standards for Texas, Minimum Survey Standards* of the Texas Historical Commission (THC), the standards adopted by the City of San Antonio Historic Preservation Office (HPO). The area surveyed consisted of approximately 30 acres of flat to gently sloping ranch land near the southern border of the Balcones Escarpment and Fault Zone.

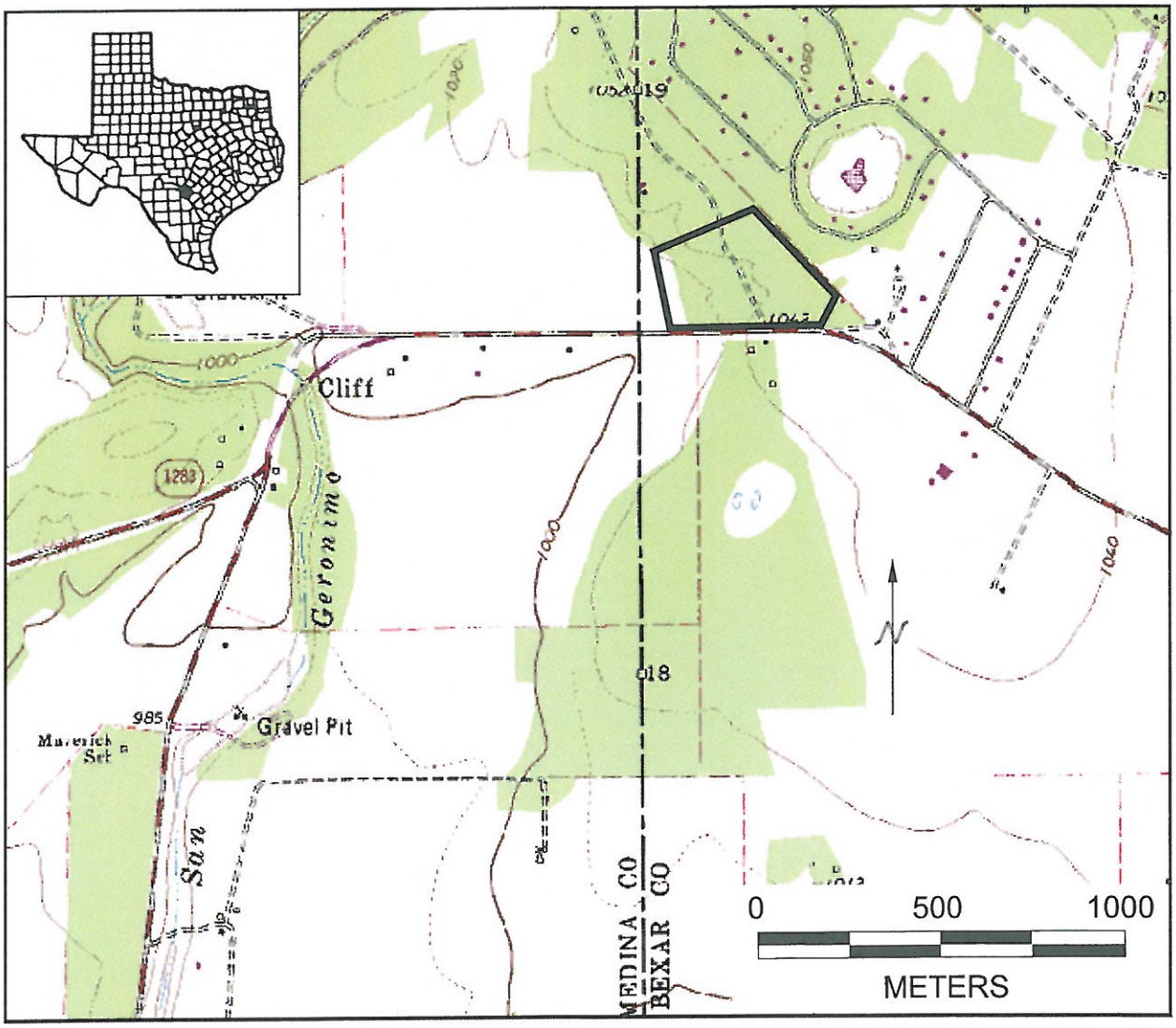

Figure 1. Survey area (within bold outline) as plotted on section of *San Geronimo, Texas*, United States Geological Survey 7.5-minute topographic quadrangle map. Inset shows location of Bexar County in Texas.

The survey area was roughly pentagonal shaped. It was bordered on the south by a segment of Culebra Road (Farm-to-Market 471), on the west by State Highway 211, on the east by a gasoline service station-convenience store business and a suburban residential subdivision, and on the north by unimproved ranchland. The property contained no houses or other buildings. Except along the north side, the property boundaries were fenced. A main ranch road extended from Culebra Road (Farm-to-Market Road 471) northwestward across the property and a sizeable drainage canal about 500 feet long extended between the road and the northeast boundary of the property (Figure 2).

Figure 2. View eastward along drainage canal from main ranch road.

At the time of the survey, much of the property was unimproved and heavily overgrown with a canopy consisting mostly native live oak, juniper, huisache, mesquite, hackberry, mountain laurel, and persimmon trees, mixed with agarita, thorny scrub brush, yucca, and cacti. The exception was a relatively open area of about 6-8 acres that extended along the western border of the property and adjoined State Highway 211. Apparently that portion of the area was once cleared and used for agricultural fields that were later abandoned or possibly mined for topsoil. Part of it, toward the north end, was paved and in use as an equipment storage yard.

A search of the THC's *Texas Archeological Sites Atlas* (THC 2007) conducted just prior to the survey indicated that the survey area contained no previously recorded archeological sites and had not been previously investigated. However, the Atlas search also revealed that several prehistoric archeological sites were previously discovered and investigated along the San Geronimo Creek corridor in the general vicinity. The creek is a first-order tributary of the Medina River. Its proximity and the fact that sites were found in the vicinity increased the odds that the survey area also contained prehistoric sites. Fieldwork included a pedestrian examination of the surface, to the extent feasible considering the dense cover of scrub brush, weeds, and grasses, and excavation of 15 archeological shovel tests throughout the area.

The survey was led by Principal Investigator Herbert G. Uecker, who was assisted by archeological technician Jay McCracken and mapping specialist Albert Uecker, RPLS. This report conforms to the Council of Texas Archeologists reporting guidelines for cases of negative findings.

General Background

Regional Natural Setting and Natural History

At the time of the survey, the regional physiographic and geologic setting of the survey area had already been described in considerable detail (cf. Abbott and Woodruff 1986; Black 1989a:5-16; Black and McGraw 1985:40-54). Briefly, the survey area is located near the southern edge of the Balcones Escarpment and Fault Zone at an average elevation of about 290 meters above sea level. The fault and escarpment region is also known as the Balcones Canyonlands. Intermittent faulting began in the area during the Miocene geologic epoch about 15-21 million years ago and continued until about a million years ago.

The regional geomorphology consists of a series of northeast to southwest trending fault scarps and associated erosional features. The regional drainage pattern is dendritic and major drainages in the region include the Medina, Guadalupe, and San Antonio Rivers. Many prominent streams, such as Culebra, Salado, Mud, Elm, and Helotes Creeks, also dissect the general area.

Base or parent rocks in the canyonlands zone include several members of the Lower Cretaceous series including the Del Rio shale formation and the Buda, Edwards, and Glenrose limestones. These formations collectively range up to as much as 10,000 meters thick over much of central and south Texas. They were formed during the Cretaceous geologic period between about 120 and 65 million years ago. During the last several million years, numerous karst features have formed within the limestone formations, which also house the Edwards aquifer (cf. Veni 1988:11-26; 1998). The aquifer is a regional-scale phenomenon composed of porous beds of limestone and shale sandwiched between less permeable calcareous strata and it is virtually the sole source of potable water for much of central Texas. Soils in the canyonlands region are derivatives of the local bedrock and are typically very thin, stony, and underdeveloped in the uplands.

Ecologically, the area has been a resource-refugium zone since the middle of the Holocene geologic epoch about 7,000 years before present (B.P. [present being arbitrarily defined by culture historians as A.D. 1950]). It was at that juncture in time that the onset of the Altithermal climatic episode (Nance 1972) began to substantially alter the climate of the North American southwest, including Texas. The Altithermal was a period of relatively intense heating and drying that lasted, with many short breaks, until the present time. As the lush tall-grass steppes and mixed-grass prairies of south and west Texas were reduced to thorn scrublands and semiarid deserts over several millennia, both animal and human populations congregated in such areas as the Rio Grande basin and the mountain forests of west Texas and northern Mexico, and also in the central Texas Hill Country. South and west of the Hill Country, riparian zones slowly evolved into isolated ribbons of resources, and many unique places along the area's rivers and streams became centers of human population.

The survey area is situated within a broad ecotonal zone that exhibits characteristics of three major natural regions (cf. Blair 1950; Riskind and Diamond 1988): (1) the Balconian Biotic Province, a subtropical, subhumid mixed woodland or parkland that is geographically congruent with much of the Texas Hill Country and is dominated by juniper-oak scrub forests; (2) the Tamaulipan Biotic Province, a subtropical to megathermal desert steppe or thorn scrubland that ranges southward from central Texas into the coastal and Rio Grande plains and well into northern Mexico that is dominated by huisache and mesquite; and (3) the Blackland Prairie, a subtropical, subhumid area characterized by mixed savannah grassland or prairie and by postoak-blackjack oak woodlands that ranges northward and eastward to the Red River area near the Texas-Oklahoma border. The climate of these regions during the last several millennia has been typified by short mild winters and long hot summers. Modern annual

precipitation in the area averages about 700-800 mm and follows a bimodal pattern with maxima in May and September. The Balcones tablelands have sometimes been the locus of world record precipitation events triggered by tropical waves of warm moist air from the Gulf of Mexico colliding with colder dryer air of arctic and subarctic origins surging southward from the high plains (Caran and Baker 1986).

In the mid 2000s, there were hundreds or even thousands of species of plants, animals, and insects thriving in central Texas. It is beyond the scope of this report to include a comprehensive listing or description of these species but the interested reader is referred to publications by Davis (1960), Enquist (1987), Everitt and Drawe (1993), Kutac and Caran (1994), Neck (1986), Riskind and Diamond (1986), Simpson (1988), and Vines (1984). Major terrestrial faunal species and avifaunal species of the area include the white-tailed deer, javalina, coyote, red fox, opossum, raccoon, ringtailed cat, squirrel, striped skunk, armadillo, wild turkey, bobwhite quail, Inca dove, white-winged dove, box tortoise, and western diamondback rattlesnake. Prominent raptors of the region include turkey and black vultures and various species of owls; and red-tailed hawks, eagles, and peregrine falcons. Also, modest numbers of cougar and bobcat are present in the less populated areas.

Prominent plant species and communities of the survey area and immediate vicinity are typical of those found throughout much of central Texas. Live oak, mountain laurel, persimmon, and juniper are major tree varieties of the hill country scrub forests. Tree species such as mesquite, huisache, and blackbrush acacia; and many cacti and yuccas including prickly pear, Spanish dagger, and sotol are prevalent in lowland thorn shrub thickets. Stream courses and river bottoms of the region contain a broad spectrum of native deciduous trees including Spanish oak, cedar elm, hackberry, pecan, walnut, cherry, and ash. Whitebrush, giant ragweed, cockle burrs, snow-on-the-prairie, frost plant, and numerous other herbs and forbs cover the forest floors. Dozens of types of short and mid grasses carpet the region's prairies and savannas.

Regional Culture History and Cultural Ecology

Probably attracted by the abundance of pristine water, the steep ecological gradients, and the rich biotic microenvironments present, humans first occupied the central Texas area at least 11,000 years B.P. The local culture history contains four broad divisions (cf. Black 1989b:25-33, 1989c:48-57; Black and McGraw 1985:35-40; Hester 1980:27-37; Turner and Hester 1999:50-63): the Paleoindian period (ca. 11,000-8000 B.P.), the Archaic period (ca. 8000-1500 B.P.), the Late Prehistoric period (ca. 1500 B. P. to A.D. 1528), and the Historic period (ca. A.D. 1528 to present). During all but the Historic period, humans in the area were engaged in a nomadic to semi-sedentary hunting and foraging lifeway. Archeological evidence indicates that they were organized as small groups or bands that traveled much of the time in regular patterns, known as subsistence forays, in order to exploit a variety of seasonably available natural resources. This lifeway was practiced in most of North America for many thousands of years before the fifteenth century infusion of Europeans to the New World.

Such peoples were largely of Asiatic origin, but are variously referred to as aboriginals, native Americans, American Indians, ancient Americans, or early Americans. Apparently many of these pioneers entered North America from eastern Siberia via the Bering Strait sometime prior to about 15,000 B.P., probably during a major episode of global cooling and glaciation when an ice sheet or bridge connected Siberia to Alaska. They eventually spread throughout the Americas, and their cultures flourished and greatly diversified, especially during the last few thousand years. By the early eighteenth century when the Spanish established missions in Texas, several hundred Indian groups, each having a fairly distinct linguistic or socio-political identity, lived in the southwestern United States, Texas, and northern Mexico (cf. Campbell 1979:1, 1988:39; Schuetz 1976:1). The story of these peoples' prehistoric past encompasses the first three major periods in the culture history of the central Texas area.

The Paleoindian period includes the terminus of the Pleistocene geologic epoch and the beginning of the Holocene. The climate of the period was generally somewhat cooler and more humid than that of later periods. The natural landscape in much of central Texas during this period consisted mostly of forest parkland, i.e., savannah

grasslands with numerous clusters of trees. The lush vegetation of the period provided a trophic base which supported many large ice-age herbivores and carnivores. Sea level along the Texas coast is estimated to have been about 120 m lower than at present; thus, a broad seaward expanse of land, which is now inundated, existed during those times. Paleoindians were typically organized as small, nomadic, stone-age, hunting and foraging bands that often pursued such large game as bison, mammoth, and mastodon. The fact that they supplemented their diets with wild plant foods has been documented only occasionally in much of Texas because of the poor preservation of pollen and plant fibers in most local soils. The relatively few Paleoindian sites documented in Texas consist primarily of isolated finds of chipped stone spear points that exhibit highly distinctive styles and workmanship, and rare kill and butchering sites of Pleistocene game animals.

The Archaic period is characterized by a shift to generally dryer and warmer conditions, sometimes referred to as the Altithermal climatic period (Nance 1972). The Altithermal of Texas apparently was punctuated by alternating mesic and xeric episodes that were sometimes of significant duration and magnitude. In spite of these erratic patterns, the landscape gradually evolved into a mosaic of alternately sparse and lush savannah grasslands with isolated stands of trees on the uplands and heavier arboreal growth in the riparian zones. This drying out of the land after the Pleistocene corresponds to broad changes in the lifeways and cultures of native peoples. The archeological record indicates that a substantial degree of diversification in human subsistence patterns occurred. Emphasis shifted from the hunting of large Pleistocene mammals, by then extinct, to a new focus on the hunting of smaller game and on plant food gathering, processing, and consumption. During most of the period the dominant lifeway continued to be nomadic hunting and foraging by small egalitarian bands who exploited scattered seasonal resources. As evinced principally by the appearance in the archeological record of large communal or clan cemeteries toward the end of the period, land and other resource scarcities occurred, larger groups were formed, and territorialism, sociopolitical complexity, and semi-permanent or permanent settlements formed.

The predominant type of central and south Texas archeological site of the period is the occupational refuse pile, or midden. Such midden sites are frequently large, open, seasonally occupied base camps located along rivers and streams. They were central places used for the accumulation, processing, cooking, and consumption of foods, and presumably for habitation as well. They were also occasionally used for burying the dead (Hester 1985). Burned rock middens are the most common type present at interior sites. At such sites, foods were often cooked in earthen pits lined with rock slabs or boiled in hide pouches filled with water, food, and hot stones. The rocks had to be routinely replaced as they disintegrated from continual exposure to the intense heat. This resulted in the gradual accumulation of large heaps of thermally fractured and discolored rocks mixed with food scraps, discarded tools, and tool manufacturing debris. Diagnostic projectile points, radiocarbon dates, and other archeological data from burned-rock-midden sites indicate that many of them were occupied intermittently for several hundreds or even thousands of years by peoples who normally wandered about in small bands, but who gathered into much larger bands for special seasonal activities and ceremonies. Additional information about burned-rock-midden sites is provided in the section on interpretation of research findings of this report. Other types of sites that are associated with the Archaic period include smaller, shorter-term occupancy or use sites such as upland hunting-butchering camps, quarry-workshop sites for the procurement of raw stone for the manufacturing of chipped stone tools, cavern or rockshelter habitation sites, isolated hearths and stone chipping scatters, burial and cemetery sites, and isolated finds or caches of projectile points or other tools.

During the Late Prehistoric period, plant domestication and other agricultural practices were gradually adopted. Due to the poor preservation of plant remains in prehistoric archeological deposits of central and south Texas, the extent to which these new subsistence activities were used is not known. The bow and arrow and ceramic technology were introduced from neighboring regions. Permanent settlements arose and trade networks for the routine exchange of goods with neighboring regions were greatly expanded. Sociopolitical relationships were elaborated and the concepts of local group identity and coherence were undoubtedly strengthened.

The impact of these changes on the lifeways of the native peoples living in central and south Texas during the period is just beginning to be known. Apparently with few exceptions, the Archaic lifeways practiced in south and south-central Texas continued largely unmodified into the Late Prehistoric period. The modifications in the technological and cultural inventory that occurred there during the Late Prehistoric period and that manifest archeologically include the production and widespread distribution of smaller, lighter stone tips for arrows and the routine production and use of ceramics. The subsurface remains of prehistoric houses or village sites, and the attendant traces of nearby activity areas, fortification features, agricultural plots, and irrigation systems from the period are present in Texas, but are confined mostly to the northern, eastern, and western margins of the state. Ethnographic accounts from European explorers who ventured into the south Texas or Texas coastal areas during the sixteenth and seventeenth centuries also mention the existence of villages of crude structures, but at this writing there was little known archeological evidence for the existence of such structures (cf. Johnson 1997).

Many of the indigenous Texas Indian groups, including such long term residents of the central Texas region as the Coahuiltecans and Tonkawas, continued to engage primarily in nomadic hunting and foraging well into historic times. This was the case in spite of the fact that some of their Late Prehistoric predecessors had begun the routine practice of horticulture or agriculture, and had apparently settled in permanent or nearly permanent villages by about A.D. 500. Archeological evidence has recently emerged that indicates that small permanent or semi-permanent villages were probably present in what is now central Texas as early as the Middle Archaic period (Johnson 1997). Shortly after the accidental introduction of horses into American Indian culture in the sixteenth century by the Spanish, bison-hunting became the way of life for many tribes on the Great Plains, where nomadism also continued. The Apaches and Comanches are the main southern plains tribes that invaded the central Texas area from the west and north during the 1600s and 1700s, displacing, absorbing, or exterminating many of the original inhabitants of the area (cf. Hester 1980; Newcomb 1961; Sjoberg 1953). They also frequently raided European-American settlements in or near the Texas Hill Country. During the eighteenth century, most of the surviving indigenous groups apparently fled to outlying regions or sought protection from invaders in the Spanish missions.

The Historic period in Texas began in the early sixteenth century (ca. 1528-1536). The first Spaniard, if not the first European, to set foot on Texas soil was probably Alvár Núñez Cabeza de Vaca. He was sailing the Caribbean with an exploratory Spanish expedition and was shipwrecked off the Florida coast in 1528. For about the next eight years, he allegedly wandered along the gulf coast, well into Texas, and finally arrived in Mexico in 1536. By that time, the Spanish had conquered and dominated many of the aboriginal cultures that occupied Mexico, Central America, and a sizeable portion of South America, and thus established a foothold of European-style civilization in those areas. During the period from roughly the second decade of the sixteenth century to the terminal seventeenth century, the Spanish colonized all of what is now Mexico to the Rio Grande. In 1691, an expedition of Spaniards from Mexico penetrated Texas to San Pedro Springs, now located in the northern portion of San Antonio's central business district. In an often-quoted report to the viceroy, explorer Domingo Terán de los Ríos related:

> We marched five leagues over a fine country with broad plains---the most beautiful in New Spain. We camped on the banks of an arroyo, adorned by a great number of trees, cedars, willows, cypresses, osiers, oaks and many other kinds. This I called San Antonio de Padua, because we reached it on his day [Terán de los Ríos 1691 as quoted in Crook 1967:1-2].

Fray Damian Massanet, also with the 1691 Spanish expedition, is cited by Crook as attesting that they encountered a very large tribe of Payaya Indians at that same location.

Several more preliminary expeditions into Texas were conducted by the Spanish during the next few decades. The landing of the Frenchman René Robert Cavelier, Sieur de La Salle, on Matagorda Island in 1684 and the subsequent activities of the French in Texas appear to have consolidated the resolve of the Spanish to colonize the region north of the Rio Grande. Some Spanish families had permanently settled in the vicinity of San Antonio by 1715 (Chabot 1936:8), and by 1718 the Spanish officially established the first settlement north of the Rio Grande

near San Pedro Park. Called San Antonio de Padua, it consisted of a mission and a presidio based on agriculture employing Indian labor and irrigation. This subsistence base was used by the Spanish for virtually the entire time that they controlled the area.

The Spanish soon expanded their colony southward along San Pedro Creek and the San Antonio River, and by 1726, citizens of the crown numbered about 200 in the San Antonio area. In 1731, a party of about 52 additional settlers arrived from the Canary Islands and joined the fledgling colony. The Bexar County missions south of the present Alamo were imported during the mid eighteenth century from what were originally satellite locations in east Texas, and the relocation constituted a final impetus for Spanish settlement in the vicinity. The missions continued active throughout much of the remainder of the eighteenth century. With the beginning of secularization of the missions in the early 1790s came the granting of what had previously been the mission-controlled lands in Texas to Spanish citizens. By the end of the mission era, the indigenous Indians who were, presumably, descendants of the first human inhabitants of south and central Texas, had been virtually eradicated. Many of those who took refuge in the missions died of European-introduced diseases, and the hunting-gathering lifeways of the remnant populations radically disrupted by mission life and the trials of acculturation.

For many decades after the missions waned, the culture history of much of Texas continued to be dominated by their influences. Throughout the periods of Mexican and Texan independence, the U. S.-Mexican War, and until just prior to the Civil War, the subsistence base of the region was largely agricultural and local population growth was fairly benign. There were very few changes in land usage in the area throughout the reigns of several major imperial powers over almost a century and a half until the railroad and the Industrial Revolution came to the region (Fehrenbach 1978:114-117).

Due principally to the infusion of German culture into Texas, substantial changes in local land usage began to occur during the second quarter of the nineteenth century, and their affects lasted through virtually the remainder of the century. It is clear from the history of immigration in Texas that there were simultaneous appearances of significant numbers of several other ethnic groups, mostly of northern European origins, but German immigrants were remarkably talented and unusually tenacious settlers, organizers, builders, and commercializers in the Central Texas area. The Germans came early, quickly planted deep roots, and spurred much later development. As early as the 1830s, a few Germans had already migrated to Texas (Lich 1986:6). Substantial German colonization in Texas began in about 1845 with Prince Carl of Solms-Braunfel's founding of New Braunfels (Biesele 1930:119). During the next decade, the German settlements of Fredericksburg and Boerne developed in the Hill Country north of San Antonio. Contemporaneously, the Germanic population of San Antonio was on the increase and by 1876, according to the town assessor, totaled 5,630 Germans and Alsatians (Fehrenbach 1978:117).

The Germans settled principally along the Balcones Escarpment in central Texas. The Escarpment is the most prominent landform in the Central Texas region and has served as a transitional zone between broadly different lifeways throughout most of the Historic period: "Since earliest European settlement, the Balcones Escarpment stood as a cultural frontier, a dividing line between the farming economy of the coastal plain and the ranching economy of the Texas Hill Country. The Escarpment has greatly influenced the cultural development in the land which it transects [Palmer 1986:153]." Since about the beginning of the nineteenth century, and especially prior to the Civil War, the Escarpment has been the physical and cultural boundary between the Old South and the Old West. Before the coming of the Industrial Revolution to the area during the late-nineteenth century, the economy of the Old South was based primarily on the growing of cotton, while that of the Old West was based mainly on livestock production (Abbott and Woodruff 1986:Preface). Many German-American settlers were attracted to the escarpment region because of its general physiological similarities to certain portions of Germany, such as Bavaria.

Local Culture Historical Context

Helotes

Helotes is a small community just a few kilometers north of the survey area. Its history is relatively well known. The scope of work for the survey did not include archival and historical background research, but a brief examination of pertinent reference materials in the STARS library, in the *Handbook of Texas Online* (Texas State Historical Association 2007a-2007e), and in several other internet sites, yielded some preliminary information about the history of the Helotes area. Green (2002:106-107) indicates that the name Helotes derives from the Spanish term for roasting green ears of corn. According to him, the Helotes area was first occupied by Americans of modern European descent in about 1856, when Mexicans came to the area and intermarried with local Apache Indians. He also asserts that sacred corn fields of the Apaches were once located near the John T. Floores Country Store in present-day Helotes and that the people of Helotes supported the cause for Texas independence by supplying corn and horses to the revolutionary forces.

A similar account is offered in the *Handbook of Texas Online*:

> Helotes… …was first settled around 1856 by Mexicans who intermarried with the Apache Indians camped in the vicinity. A man named Chaca was supposed to have been the first person to build a house and cultivate a cornfield at the site and may have been responsible for the name, which in Spanish means "green roasting ear of corn." Another tradition claims that the name derived from the problems Anglo settlers had with Indians stealing their ripening corn. Yet another story has it that San Antonio vegetable-sellers could always rely on the town for corn, even in periods of drought. A post office opened at Helotes in 1873, and by 1885 the community had a hotel, a school, a general store, a blacksmith, and a population of fifty. By 1914 its population had climbed to 700. Between 1930 and 1945 the number of residents fell to 100, but after the 1960s the town grew steadily [Texas State Historical Association 2007a].

Causey (1998) alludes to another explanation for the origin of the namesake of the town and offers additional information about the history of Helotes:

> "…an old cowboy ", who saw the historical marker outside of the Gugger home (now Helotes Bicycle)… …stopped in to say that the name Helotes had nothing to do with corn, because it came from an Indian word " wahelotes " (spelling uncertain), which meant " wild turkey " [*Guajalote* is wild turkey in Spanish. The word was originally from the Aztec language known as Nahuatl.]. He added that Government Canyon was previously known as Wahelotes Canyon. This explanation is given some plausibility beyond that normally granted to anonymous old cowboys by the fact that Government Canyon is even now widely known for its large wild turkey flocks.
>
> The view that a man named Chaca is a figure in Helotes history, or that Mexicans had not settled the area before 1856 is regarded with amusement by local amateur historians, who are quick to explain that the Menchaca family lives off Scenic Loop Rd. in Grey Forest (once part of Helotes), that the family includes Apache Indians, and can easily trace its arrival in Helotes back to pre-date the first land sales.
>
> Their ancestor, General Juan Menchaca was given a Spanish land grant that included a very large area reaching from Grey Forest to near Austin. When Mexico defeated Spain to gain her independence, General Menchaca was on the losing side, since he led royalist troops. After the war he did not want to return to Spain, so he and a number of his solders settled in the Grey Forest

area. Although the Madlin [Madla] ranch is owned by a Menchaca and remains in the family today, little is left of the Menchaca lands because of Juan Menchacas reluctance to "prove out" the land by fencing it [Causey 1998].

The historical marker referenced in Causey's account was erected by the THC and bears the following text:

> Early Texas pioneer John M. Ross acquired title to the land here in 1836, purchasing rights to a Republic of Texas land grant from Almazon Huston, Quartermaster General of the Republic of Texas Army. In 1852 Ross sold the property to Thomas Devine and Francis Giraud, who formed a partnership to survey the land and sell it in smaller plots. In 1858 Dr. George Frederick Marnoch purchased the land which later became the townsite of Helotes.
>
> The town of Helotes developed around the home and mercantile store of Arnold Gugger, who purchased property from Marnoch's heirs in 1880. Gugger became postmaster in 1888, and in 1908 sold his land to Bert Hileman, who opened the town's first dance hall.
>
> Many farms and cattle and sheep ranches were established in the area. Helotes became a popular stop for cowboys driving cattle to auction in San Antonio.

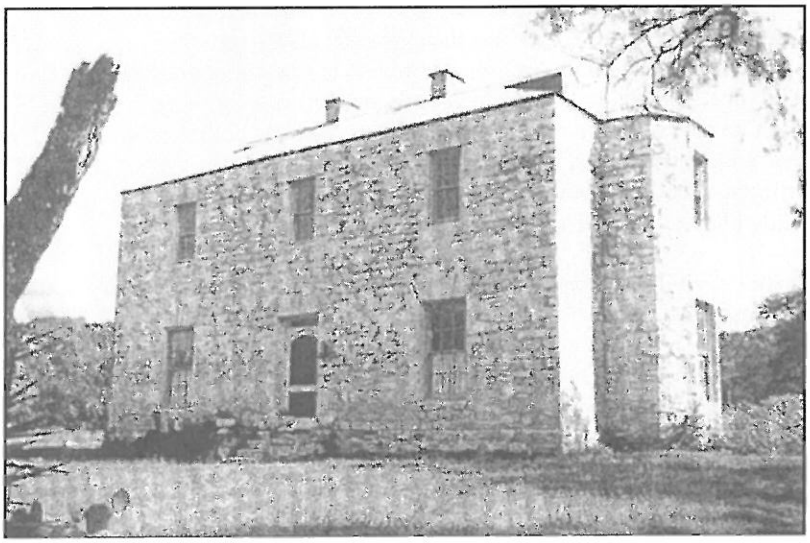

Figure 3. Mid nineteenth century-vintage home of Dr. George Frederick Marnoch, a prominent early resident of the Helotes area. The home is near Scenic Loop Road several kilometers north of the survey area. Reproduced from Causey (1998).

According to Causey (1998), Marnoch was a Scottish immigrant who had served the Royal Scottish Navy as a surgeon and Gugger was a Swiss immigrant. Causey also relates that Hileman spearheaded the effort to get the old Bandera Road paved, opened the first filling station, then sold downtown Helotes in 1919, when the area experienced a serious population decline. He further asserts that Lieutenant Dwight D. Eisenhower visited Helotes a number of times, as did Lieutenant Robert E. Lee.

Culebra Road

Green (2002:28) attributes the name for Culebra Road to the Spanish word for snake, but offers no information about the history of the Culebra Road corridor.

Government Canyon State Natural Area

Government Canyon is just a few kilometers north of the survey area, along Culebra Ceek. Freeman (2000) published a fairly comprehensive history of the Government Canyon State Natural Area (GCSNA) for the Texas Parks and Wildlife Department. GCSNA is just west of Helotes and at the time of Freeman's research, encompassed 5,839 acres. It is beyond the scope of this report to include much of that history. However, it is notable that it includes considerable information about early Anglo-European settlement along Helotes Creek in the general

vicinity of the survey area by the Hoffman family, whose patriarch was Jacob Hoffman. Hoffman's family emigrated to Texas in 1845 under the aegis of Prince Karl of Solms Braunfels, who founded New Braunfels. They subsequently moved to Castroville but later acquired land along Helotes Creek, which they developed and occupied between about 1863 and the early 1870s (Freeman 2000:42-45).

Medina River Corridor

The Medina River drainage corridor, which includes the survey area, has a rich and colorful history. This subsection is adapted primarily from, and closely follows, Miller (1988:76-83) and Texas State Historical Association (2007b-2007e). The interested reader is encouraged to consult these references for additional information.

The Medina River is about 116 miles long and flows generally southeast from its two-pronged source in northwest Bandera County to its confluence with the San Antonio River in south Bexar County. Geologists have determined that the Medina River has occupied essentially its current course for about the past 20,000 years, and archeologists have discovered many ancient Indian campsites and burials that originated during about the last 10,000 to 12,000 years along its corridor.

Some of oldest of the archaeological sites of the area were found in the early 1990s within the proposed Applewhite Reservoir property in southern Bexar County. There, beneath nearly 100 feet of river deposits, archaeologists unearthed the traces of camp fires used about 9,000 years ago (cf. Thoms 1991; Thoms and Mandel 1992). The 10,682 animal bone fragments recovered by Texas A & M University archaeologists from the Richard Beene Site at Applewhite represent hundreds of species of animals, including several, such as beavers and pronghorn antelopes, which no longer inhabit the region in the wild. When they are eventually analyzed, mineralized bone and pollen fragments found near the ancient hearths will probably provide a fairly detailed account of the climate, plants, and animals of southern Bexar County since the end of the last ice age. Several other sites recently excavated along the Medina River corridor near Castroville and Quihi have yielded prehistoric Indian artifacts and features that are probably about 5,000 to 7,000 years old.

Apparently the first European to see the Medina River was Alonso de León, governor of Coahuila, who led a military force across Texas in 1689 in pursuit of the French. In his diary, De León recorded that he named the stream for Pedro Medina, a Spanish engineer whose navigation tables de León was using. On various old maps the river is shown as Río Mariano, Río San José, or Río de Bagres or "Catfish River". Some early maps showed it extending to the Gulf of Mexico as the official boundary between Texas and Coahuila, with the San Antonio River as a tributary.

On August 18, 1813, the Republican Army of the North, under their green flag, fought to retain Mexican independence from Spain. They were defeated in the Battle of Medina southeast of San Antonio, where hundreds were killed by Spanish forces led by General Joaquín de Arredondo. During the march to the Alamo, the Mexican Army under General Antonio López de Santa Anna paused at the Medina River in early March, 1836. Colonel José Enrique de la Peña recorded in his journal that they rested at the river's edge to make plans and assign horses to dragoons, and noted that the banks of the river were lined with native pecan trees.

During the mid 1840s, European empresario Henri Castro negotiated contracts to bring colonists to the new Republic of Texas. After working in a Paris banking house and helping the new republic obtain a much needed loan, Castro was appointed as Texas General Consul in Paris by President Sam Houston. Castro acquired over six leagues of land west of the Medina River and brought several hundred immigrants, most of whom were Catholic farmers, from Alsace and nearby German states. In spite of many hardships, including raids by Comanches and Mexicans, droughts in 1848 and 1849, an invasion of locusts, and a cholera epidemic in 1849, they founded the towns of Castroville, Quihi, and Vandenberg.

Castro planned the town named for him after European villages with narrow streets and scattered small urban lots surrounded by family farm plots. The architecture of Castroville's earliest homes and buildings was also principally of European derivation, with steep thatched roofs, plaster over rough cut stone or timber and stone combinations, and lacking the broad front porches common to the South. Ground floors of stone and second floors with vertically arranged timbers were characteristic of the exteriors of the town's two-story structures. Streets were named for Castro's relatives and European capital cities. These features were not to be found elsewhere on the Texas frontier, prompting later observers to dub the community The Little Alsace of Texas.

The first band of colonists arrived at Castroville in 1844, and Castro and his partner, A. F. Louis Huth, continued to bring additional settlers to the Medina valley for the next several years. After observing the alternating droughts and floods of central Texas, Castro apparently was one of the first to conceive the idea of constructing a dam on the box canyon of the river to impound floodwater for irrigation of the fertile fields below. In 1850, an earthen dam was built, and within a few years it was replaced by a stone dam that impounded enough water to power a mill.

Castroville was selected as the county seat when Medina County was created from part of Bexar County in 1848. By 1856, Castroville was flourishing and had one Catholic church, one Lutheran church, three large stores, a brewery, and a water-powered gristmill. The town's farmers raised corn, cattle, horses, hogs, and poultry, and sold produce to the military posts in the area. Hondo became the county seat in 1892 after the residents of Castroville rejected a request for a $100,000 bonus to be given to the Galveston, Harrisburg, and San Antonio Railroad in 1880, in exchange for routing the railroad through, rather than around the city. The railroad went south around Castroville to Hondo, which became the economic center of the county until the railroads waned. During the Civil War wagon trains loaded with freight stopped overnight at Castroville on their way to Mexico, and the town boomed. Castroville was the twelfth largest city in Texas by the mid-1860s.

After the Civil War, Castroville continued to flourish. By 1884, its population was about 1,000 and the local economy was based on production of cotton, hides, and grains. The first bank opened in the town in 1896. As was typical of many Texas towns, the population of Castroville dropped to 500 during Prohibition, but rose steadily thereafter. In recent decades, Castroville has continued to be an agricultural center and key crops have included corn, maize, oats, wheat, vegetables, and hay. One agricultural firm processed whole-grain corn for local tortilla and corn-chip manufacturers. Other local agricultural based enterprises include feed mills, and irrigation, tractor, and farm-implement dealers. Castroville is also a center for applied research in genetics and artificial breeding of livestock. By 1989, Castroville had a population of 2,037 and 33 businesses. During the late twentieth and early twenty-first centuries, the town's population has averaged about 3,500, supported by about 35-40 businesses.

According to Miller (1988:78), 97 of the distinctive buildings constructed by early Alsatian settlers are still standing in the vicinity of Castroville. Many of these are in the renowned Castroville National Register District and include the Landmark Inn State Historic Site, the St. Louis Catholic Church, the Zion Lutheran churches, the Moye Formation Center, the Tarde Hotel, and Henri Castro's original homestead.

The abundant timber along the Medina River and the protection from hostile Indians afforded by the presence of the Texas Rangers encouraged small bands of shingle makers and charcoal burners to move upstream. By the late 1840s, several families were camping at the horseshoe bend where Bandera was soon established. In 1852, John James, Charles Demontel, and John Herndon formed a business venture to build a cypress-lumber mill and create the town. At the behest of the investors, sixteen Polish families, who were originally from Upper Silesia, migrated from the Polish colony in Karnes County to build and staff the mill. Government contracts for lumber and shingles used in the construction of cavalry posts across the Southwest kept the enterprise going until floods during the 1870s destroyed the mill.

A band of dissident Mormons led by Elder Lyman Wright also arrived in the 1850s. The group left Brigham Young's settlement after a disagreement about plans to move the Mormon headquarters to the Rocky Mountains. They initially settled at Fredericksburg in about 1855, but moved first to the Bandera area and then downriver to Mountain Valley, now covered by Medina Lake. For the next three years, the group engaged in the manufacture of lumber and furniture. After Wright's death in 1858, most of them resettled in Shelby County, Iowa.

Bandera was officially chartered when Bandera County was created from part of Bexar County in 1856. After the Civil War, Bandera boomed as a staging area for cattle drives up the Western Trail and as a cotton production center. An ornate courthouse begun in 1890 announced prosperity from the town square. The local economy declined after 1900 as a series of floods again destroyed sawmills, gins, and businesses, and the cattle drives ceased. Until the San Antonio highway was constructed in 1936, Bandera remained relatively inaccessible.

After a recurrence of severe floods along the upper Medina River, Medina Dam was built in 1912 by the Bexar-Medina-Atascosa County Water District. At that time, Medina Lake was the largest artificial lake in Texas. Engineers Alex Walton, Frederick Stark Pearson, and Clint Kearny, who had visited the canyon in 1894, are credited with conceiving a practical plan to build the dam and associated canals to transport water to the rich farmlands in the lower Medina valley around Natalia. A company of British investors provided funding, and in spite of drought and financial difficulties, the project was successfully completed. Nonetheless, Medina Lake remained dry for about a year after the completion of the dam, until rains finally brought water down the river!

An influx of settlers followed and both agricultural enterprises and recreational facilities, such as summer homes and fishing resorts, proliferated. Youth camps and dude ranches were soon founded around the lake and along the river upstream. By 1920, Cora and Ed Buck began taking summer boarders at their ranch on Julian Creek. Other families soon advertised for guests, and by the 1930s Bandera had become well known as a resort offering riverside camps, restaurants, dance halls, and rodeos to complement surrounding dude ranches. During the mid twentieth century, Bandera became established in the tourist trade as the "The Cowboy Capital of the World".

The small settlement of Von Ormy along the Medina corridor in southern Bexar County, downstream from the Castroville park trails survey area, was named for a Russian Count, Adolph Von Ormy, who purchased a large stone home near the future site of the settlement from San Antonio Merchant Enoch Jones in 1855. Jones had built the home, which overlooks the river, during the early 1850s. The count and his countess apparently planned to bring their large staff of servants from Russia and live there in regal style, but the countess soon went back to Russia. Within a year after her departure, the count sold the property and apparently also returned to his native homeland.

Soils and Geoarcheological Context

According to the *Soil Survey of Bexar County, Texas* (Taylor et al. 1966: Sheet 33), the principal surface soils in the vicinity of the survey area were those of the Brackett-Tarrant association (TaB), the Patrick (PaB) series, and Houston Black Clay (HtA).

Brackett-Tarrant association soils are described as 4-12 inches of calcareous clay loam, loam, or silty clay loam over chalk, marl, and soft limestone, with angular pebbles and fragments on the surface and in the solum, and as 5-12 inches of calcareous clay to clay loam containing many limestone fragments over about 7-12 inches of fractured limestone containing fine earth in interstices, over fractured limestone (Taylor et al. 1966:64, 72).

PaB is described as the most extensive acreage of Patrick soils mapped in the Bexar County and as occurring primarily in the northern part of the county as nearly level to gently sloping terraces along streams that drain the limestone prairies:

The surface layer is clay loam, gravelly clay loam, silty clay, or light clay and is about 12 inches thick. The subsurface layer, about 5 inches thick, is brown clay loam, loam, or light clay [Taylor et al. 1966:27].

Houston Black clay is a thick black gumbo with a generally greasy consistency that is well known for its high shrink-swell and particle migration properties. It is typically very turbaceous, and slowly convects or "boils" over long periods of time. In recent decades, Collins (1997) noted similar soils during geoarcheological work at the Alamodome development site and at several other locations in the San Antonio/Bexar County areas. At those locales, the soils are generally about 2-3 meters deep and rest above very ancient deposits of caliche-laden gravels. In several Houston Black clay profiles observed by the Principal Investigator at similar locations, columns were comparatively uniform in composition. The upper dark clay deposits had virtually no visible inclusions and were readily distinguishable from the light-colored caliche gravels below them, and no cultural evidence was present.

According to Collins (1997), the upper, dark-colored clays are very turbaceous and extend several meters to the bottom of the Holocene deposits. Thus, prehistoric archeological resources, which are found only rarely within such soils, are almost always poorly preserved due to the high shrink-swell and particle migration characteristics of the deposits. Collins has further asserted that, because these soils are so turbaceous, accurate dating of archeological resources found within them is usually not possible unless time-diagnostic artifacts are found in good associations with those resources. Based on the established ages of similar soils in the region, Collins speculated that the dark clays above the caliche gravels are of Holocene age and the caliche gravels are of Pleistocene vintage.

Topsoils and subsoils encountered by the STARS survey team at the surface and in subsurface tests within the survey area closely matched those descriptions.

The thin shield of chert and limestone gravels and cobbles that is scattered across the surfaces of many landscapes in portions of the Gulf Coastal Plain, the Rio Grande Plain, and the Blackland Prairie regions is derived primarily from the Edwards and Glenrose limestone formations of the Balcones Escarpment. In the Central Texas Plateau Prarie and Rio Grande Plains regions, it is particularly noticeable as relatively dense deposits capping secondary terraces or hilly uplands (cf. Hester and Hill 1972:37). It is known as the Uvalde Gravels or as the Uvalde Formation (Loomis et al. 1992).

The Uvalde Gravels is the principal gravel outcrop that was present as thin scatters at the surface throughout much of the survey area. The gravels were of great importance to the local prehistoric human groups as sources of raw chert for chipped stone tool manufacturing, limestone for heating elements in earth ovens, and for a multitude of other uses (cf. Hester 1989:119-120 and Hester et al. 1991 regarding the cultural importation of exotic lithic materials to several regions of Texas from remote sources during prehistory).

Investigation Methods and Results

Due to recent rains, about 90 percent of the surface was covered with dense native grasses, weeds, vines, and scrub brush. Where exposed, the surface was examined visually. Pedestrian transects averaged about 20 meters apart. Fifteen archeological shovel tests were excavated throughout the remainder of the survey area (Figures 4 and 5). Topsoils encountered in the subsurface tests were relatively shallow and superimposed dense limestone cobbles, slabs or bedrock, or caliche subsoils.

Except in the abandoned fields, most topsoils encountered at the surface and in the shovel tests were dark gray-brown to medium brown (about 10YR3/2 and 10YR4/4 Munsell colors) clays or clay loams, and subsoils were buff to yellowish colored caliche. In the fields, the upper soils were light yellow (about 10YR8/4) clays. Apparently the original, darker clay topsoils were removed from those areas. Depths of shovel tests ranged between about 20 and 80 centimeters and averaged about 40 centimeters. Each test was excavated until limestone bedrock, dense

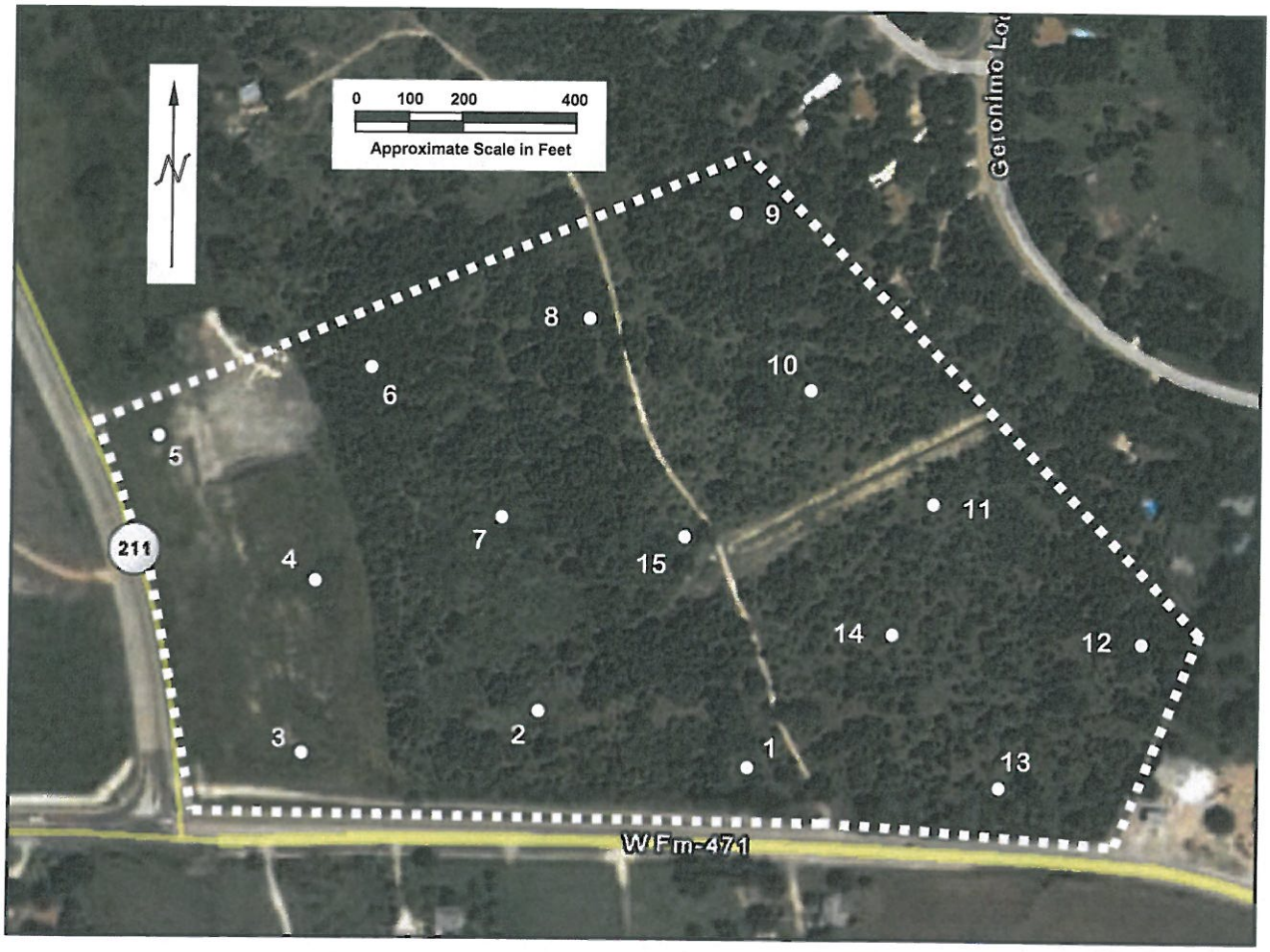

Figure 4. Plot of survey area (HEB Tract A, within dashed border) on recent aerial photograph showing approximate locations of STARS shovel tests as white dots with numbers.

limestone cobbles, or caliche was encountered. To the extent feasible given the density and moisture content of the clay soils encountered, matrix excavated from shovel tests was screened through quarter-inch-mesh hardware cloth. Unscreened matrix was trowel sorted and carefully examined for the presence or absence of cultural evidence.

With the exception of modern perimeter fencing, ranch roads, the earthen canal, the abandoned agricultural fields, and the equipment storage yard previously described, all of which apparently originated after about 1960, nothing of cultural origins was seen during the survey, and nothing was collected or curated in conjunction with the survey.

Conclusions and Recommendations

The survey team encountered no archeological or other cultural resources that, in the opinion of Principal Investigator, were eligible or potentially eligible for designation as landmarks under federal, state, or municipal cultural resource preservation statutes that might apply to the survey area. The Principal Investigator therefore concluded that development of the property should not affect any historically or archeologically significant

resources unless such resources were discovered during construction. Applicable antiquities statutes require that in the event of such discoveries, construction work should immediately be suspended in the vicinity of the finds, pending examination and evaluation of the finds by a qualified archeological consultant and or the HPO or THC.

Figure 5. Clockwise from upper left: Shovel Tests 1, 9, 3, and 5, in progress.

The opinions or conclusions of the HPO or the THC about the presence, absence, or significance of archeological resources might differ from those of the Principal Investigator. Depending on how the survey area is developed, how development is funded and regulated, and whether or not there are any lands owned or controlled by the State of Texas or any of its political subdivisions within the survey area, the City of San Antonio historic codes, the Antiquities Code of Texas, and/or the National Historic Preservation Act could apply to all or portions of the survey area or its development. The Principal Investigator therefore recommended to TCI and prospective developers that a copy of this report should be submitted to the HPO and/or the THC for review and comment prior to occurrences of any ground disturbances, alteration of archeological resources, or removal of associated artifacts in conjunction with development or conversion of the survey area.

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