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An Intensive Cultural Resources Survey of 107 Acres Along Galm Road, San Antonio, Bexar County, Texas

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AN INTENSIVE CULTURAL RESOURCES SURVEY

OF 107 ACRES ALONG GALM ROAD, SAN ANTONIO, BEXAR COUNTY, TEXAS

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Redacted

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RABA-KISTNER ENVIRONMENTAL, INC.

San Antonio, Texas

Texas Antiquities Committee Permit Number: 7866

ASF16-212-01

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Management Summary:

In December 2016, the Northside Independent School District (Client) contracted with **Raba Kistner Environmental, Inc. (RKEI)** to perform a cultural resources pedestrian survey within a 107-acre tract near Galm Road in San Antonio, Bexar County, Texas. The purpose of this survey was to determine whether cultural resources were located within the Area of Potential Effects (APE), and if feasible, assess their significance and eligibility for designation as State Antiquities Landmarks (SALs) and for inclusion in the National Register of Historic Places (NRHP). The project was sponsored by the Client and the owner of the project is currently George Weimer (soon to be owned by the Client). Since the area of potential effects (APE) is owned by a political subdivision of the state, the project falls under the Antiquities Code of Texas, as administered by the Texas Historical Commission (THC). Additionally, the APE is 2.5 kilometers to the southeast of Government Canyon State Natural Area. The field work was carried out between January 10 and 13, 2017 under Texas Antiquities Committee Permit No. 7866, issued to Kristi M. Nichols, who served as Principal Investigator. Mark Luzmoor served as the Project Archaeologist and Chris Murray, Richard Sample, Chris Matthews, and Kendra Brownlow assisted during the field work.

Background research revealed that no previously recorded archaeological sites are located within the boundary of the APE. However, there are five archaeological sites within a 1-kilometer radius of the APE. In total, 19 shovel tests (STs) were excavated within the APE. Surface visibility was around 80% throughout the APE. Approximately 75% of the APE was open-plowed fields, with the other 25% located in fairly thick underbrush. During the pedestrian survey, 25 isolated artifacts were encountered within the plowed fields of the APE. These included secondary and tertiary flakes, bifaces, and utilized flakes; only the tools were collected. A historic bottle dump also was encountered during the pedestrian survey on the eastern end of the APE. The bottles date to the middle of the twentieth century. Two shovel tests (ST 3 & 5) were positive for cultural material in the top 20 centimeters below surface (cmbs) (two pieces of debitage and one burned rock).

41BX2162 was designated as a multi-component archaeological site due to the large amount of surface finds, the two positive STs, and the historic bottle dump, all along the eastern end of the APE. However, no cultural deposits were encountered beneath 20 cmbs, the majority of the cultural material was recorded on the surface, and no diagnostic prehistoric material was encountered. Thus, **RKEI** finds that the site lacks research potential and recommends no further archaeological work within the project boundaries. All field records generated by this project will be curated in accordance with the Texas Archaeology Research Laboratory guidelines.

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Chapter 1: **Introduction and Area of Potential Effects**

Raba Kistner Environmental, Inc. (**RKEI**) was contracted by the Northside Independent School District (NISD) (CLIENT) to perform an intensive cultural resources survey within a 107-acre (ac) tract near Galm Road for the construction of a new high school in northwest San Antonio, Bexar County, Texas (Figure 1-1). This work was done under Texas Antiquities Committee Permit No. 7866. The project is sponsored by the NISD and the land is currently owned by George Weimer, and will soon be acquired by the NISD. Since the Area of Potential Effects (APE) is owned by a political subdivision of the State, the project falls under the Antiquities Code of Texas as administered by the Texas Historical Commission (THC). The purpose of the survey was to locate any surface-exposed or buried cultural deposits and assess their significance and eligibility for inclusion in the National Register of Historic Places (NRHP) and for formal designation as State Antiquities Landmarks (SAL).

This report summarizes the results of the field investigations, and provides recommendations regarding the proposed project. Following this introductory presentation and the description of the APE, Chapters 2 and 3 provide background on the setting of the project area, as well as the culture history and previous archaeological investigations that have taken place in the vicinity of the APE. Chapter 4 outlines the field and laboratory methods employed during the project and the Chapter 5 summarizes the results of the field investigations. Chapter 6 provides a brief summary of the findings and provides recommendations regarding the planned project.

Area of Potential Effects

The APE is located in northwest San Antonio, Bexar County, Texas. The APE is situated approximately 0.3 kilometers (km) to the southeast of Galm Road. **Figure 1-2** depicts the proposed APE on the *Helotes* (2998-312), and *San Geronimo* (2998-321) 7.5-minute United States Geological Society (USGS) topographic quadrangle maps. The project area is approximately 107 ac. An unnamed dry creek bed runs approximately 0.3 km to the east of the APE.

The APE consists primarily of plowed agricultural land that was used to grow hay. The remaining portions of the project area are covered in shrubs and trees. There are two narrow strips of land that are included within the APE that will eventually become access roads to the school (Figure 1-3). The plots of land directly north and east of the APE are being converted into large housing developments. The area to the south of the APE consists of plowed fields (Figure 1-3).

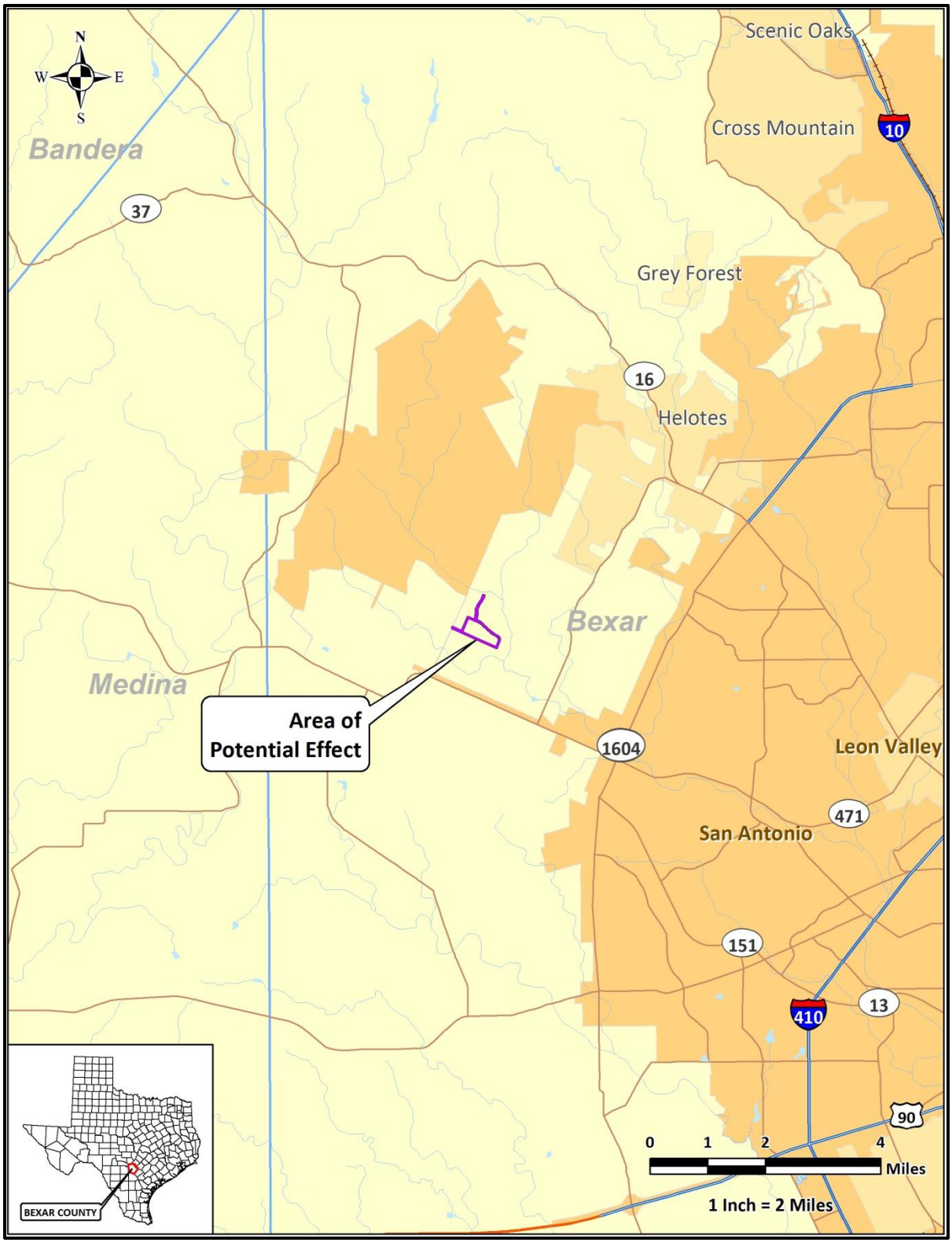


Figure 1-1. The project APE in northwest San Antonio, Bexar County, Texas.

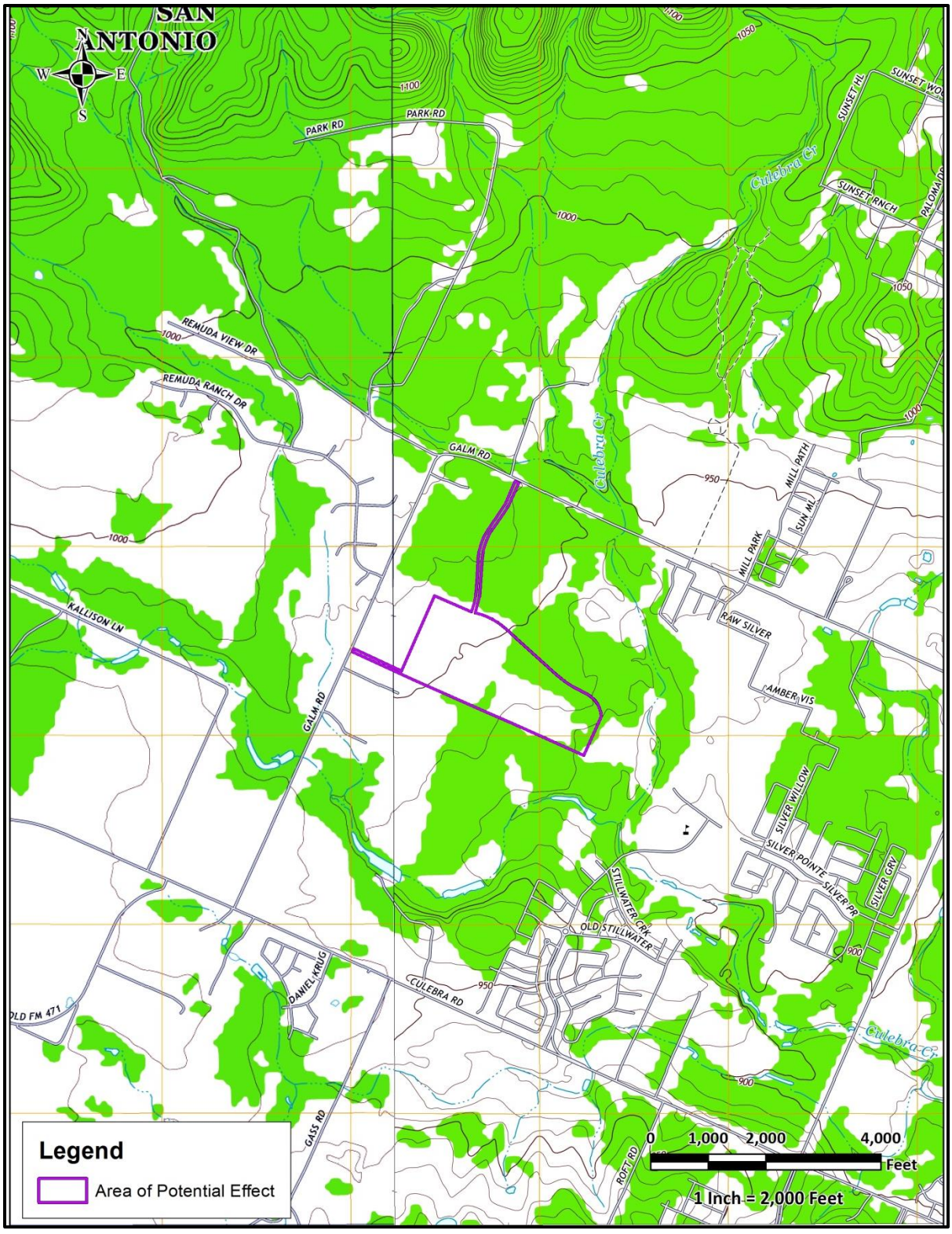


Figure 1-2. Project area on the *Helotes* (2998-312)*, and San Geronimo* (2998-321) 7.5-minute USGS topographic quadrangle maps in northwest San Antonio, Bexar County, Texas.

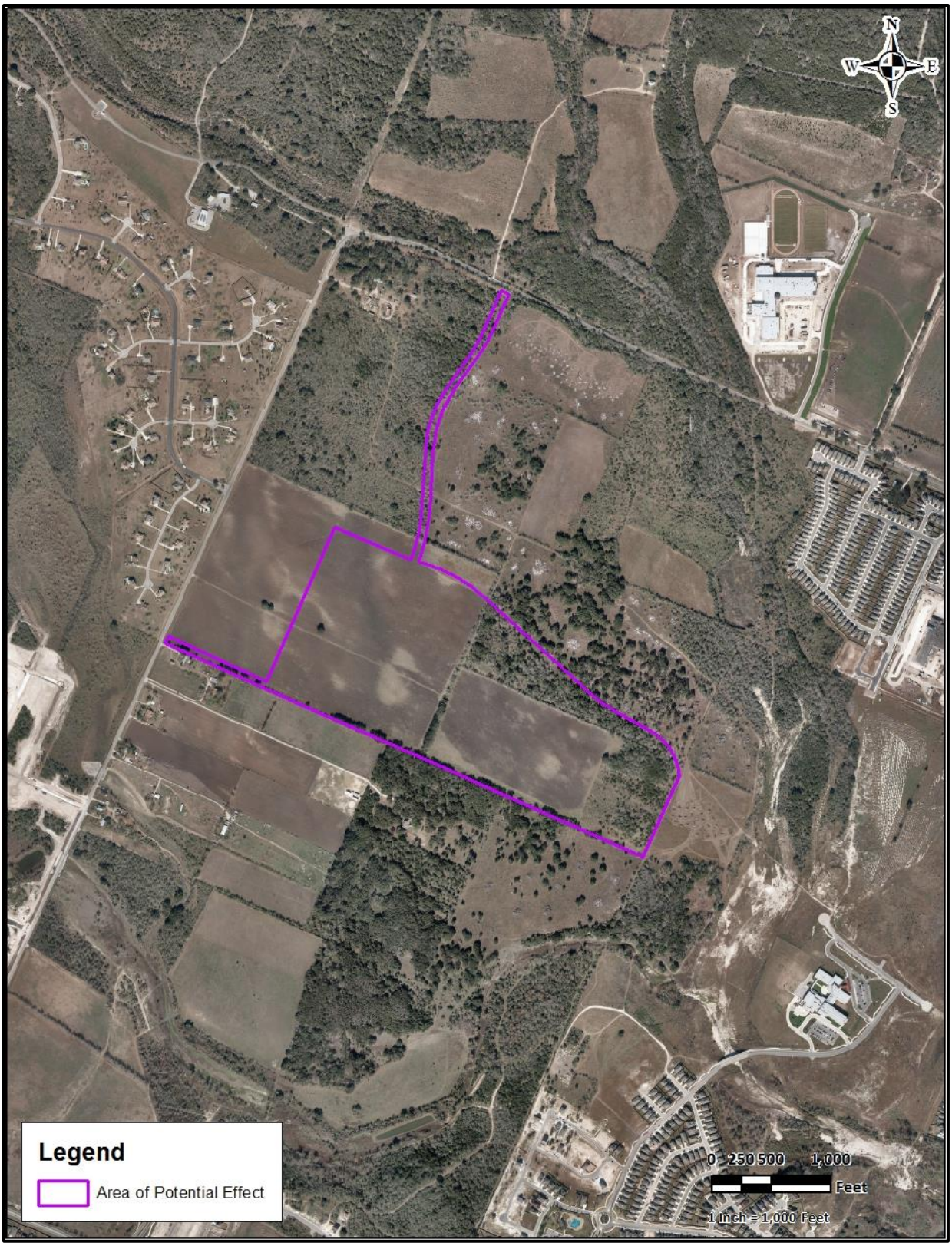


Figure 1-3. Recent aerial of the APE.

The ground surface of the APE was littered in chert cobbles (**Figure 1-4**). Un-cleared areas along the edges of the fields were overgrown with shrubs and trees (**Figure 1-5**). The tracts of land directly north and east of the APE are being converted into large housing developments (**Figure 1-6**).

Figure 1-4. Northern edge of the APE facing northwest. Note chert cobbles littering the ground surface.

Figure 1-5. Eastern edge of the APE facing northeast. Note the heavy shrubbery and limited visibility.

Figure 1-6. Plot of land immediately east of APE being converted into housing development.

Chapter 2: **Environmental Setting**

Project Area Setting

The project area is located in the South-Central Texas geographic region. The region is bordered by the Edwards Plateau to the north, the South Texas Brush County to the south, the Gulf of Mexico coastline to the east, and the Lower Pecos region to the west (Norwine 1995:138). A gently rolling landscape with seasonal drainages dominates the landscape. Elevations across the project area range around approximately 960 feet (ft) above mean sea level (amsl). No active drainage flows through the APE. The closest active waterway is Culebra Creek which runs approximately 1 km to the south of the APE.

Soils

The soils within the APE are typically found on gently sloping uplands or stream terraces (Figure 2-1). The Lewisville series (LvA) forms a deep deposit of well-drained silty clay. Patrick series soil (PaA) is found in the northwestern area of the APE (Web Soil Survey 2017). Patrick series are moderately deep and moderately permeable clays. Both of these soils have formed as flat deposits (0-1% slope) across the project area. Lewisville parent materials are loamy and clayey calcareous sediments with a few soft calcium carbonate nodules present with increasing depth. The soil ranges in color from dark grayish brown (10YR 4/2) at the surface to pale brown (10YR 6/3) at greater depth (USDA-NRCS 2017).

In contrast, Patrick series soils from as clayey deposits over gravelly sediments on ancient upland terraces. Limestone and chert pebbles are located at the surface, and continue throughout the deposit. The soil is calcareous, with some soft calcium carbonate concretions found near the base of the deposit (approximately 120 inches below the surface). Patrick clays are dark grayish brown (10YR 4/2) at the surface. With depth, the deposit becomes lighter in color (brown, 7.5YR 5/4) and the texture includes gravelly loamy sand (USDA-NRCS 2017).

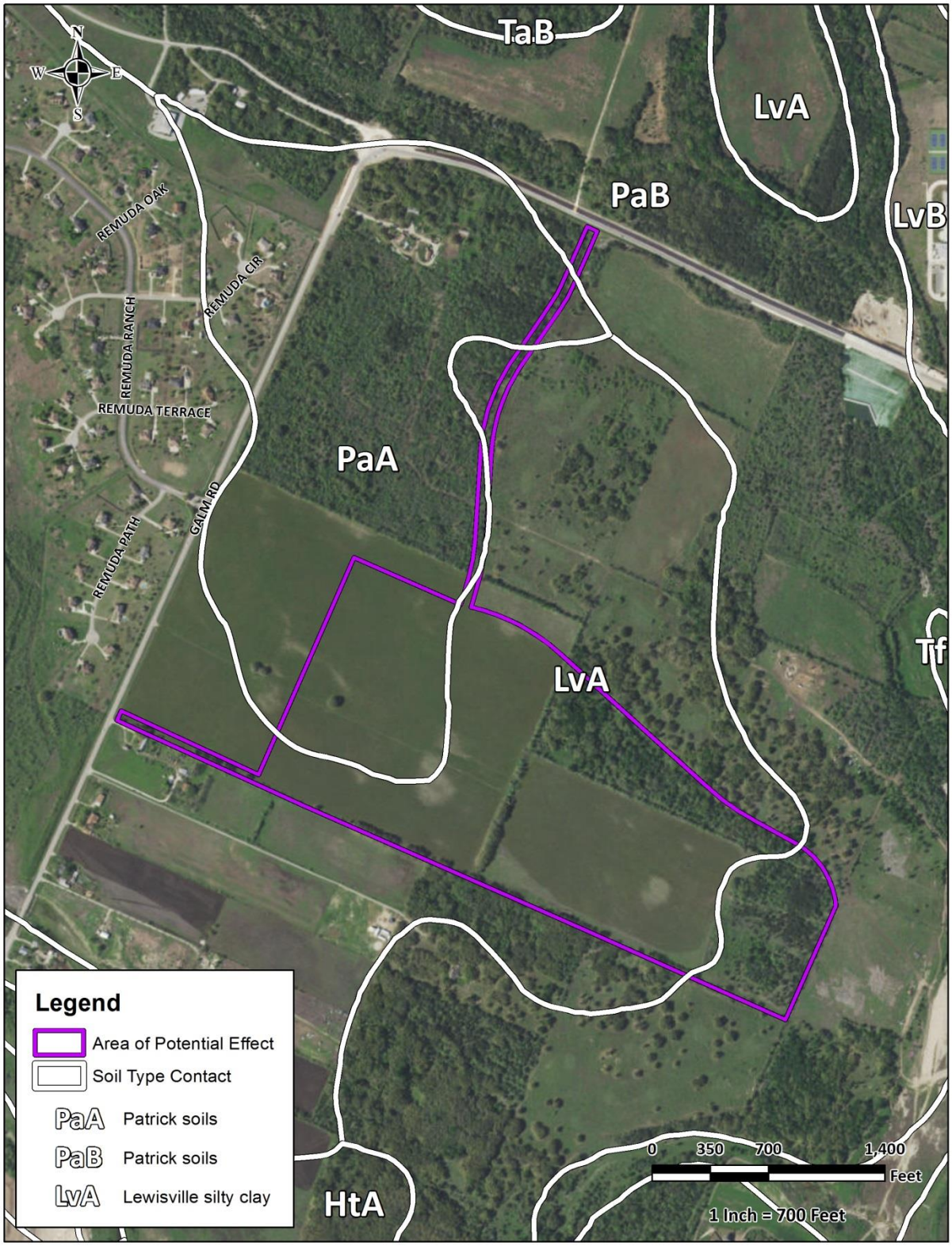


Figure 2-1. Soils encountered within the project area and vicinity.

Flora and Fauna

The project area is located near the intersection of the Balconian and Taumaulipan biotic provinces (Blair 1950). Floral and faunal resources consist of a mix of species from the Austroriparian, Taumaulipan, Chihuahuan, Kansan, Balconian, and Texan biotic provinces.

There are three major geographic regions nearby the project area: the Edwards Plateau, the Blackland Prairie, and the South Texas Plains. Trees, plants and grasses in this region include cedar (*Juniperus ashei*), live oak (*Quercus fusiformis*), Texas mountain laurel (*Sophora secundiflora*), mesquite (*Prosopis glandulosa*), prickly pear (*Optunia* sp.), agarita (*Berberis trifoliolata*), cat claw (*Smilax bona-nox*), mustang grape (*Vitis mustangensis*), sotol (*Dasylirion texanum*), and Spanish dagger (*Yucca* sp.).

The fauna that inhabit the south-central Texas region includes at least 95 bird and 29 mammal species. The area also contains a wide array of reptiles, fish and amphibians. Mammal species that were noted within the APE include white-tailed deer (*Odocoileus virginianus*), nine-banded armadillo (*Dasypus novemcinctus*), Virginia opossum (*Didelphis virgininana*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), coyote (*Canis latrans*), cottontail rabbit (*Sylvilagus audubonii*), feral hog, domestic and feral cat, and squirrel.

South Texas Climate

The climate in south-central Texas is humid subtropical with hot and humid summers. From May through September, hot weather dominates with the cool season beginning around the first of November and extending through March. Winters are typically short and mild with little precipitation. San Antonio averages only 33 inches (in) of rain per year (SRCC 2015; based on monthly averages from 1980 to 2010). Monthly temperature averages range between 52°F in January to 85°F in August.

Chapter 3: **Culture Chronology and Previous Archaeology**

Culture Chronology

The cultural history of South Central Texas spans approximately 11,500 years. Archaeologists have divided the occupation of the region into four principal periods and several sub-periods: Paleoindian, Archaic, Late Prehistoric, and Historic. The periods are characterized by changes in climatic conditions, distinct vegetation types and structures, and concomitant adaptive changes by human populations in hunting and gathering technologies and strategies, general material culture, and at the tail end of the cultural sequence, the arrival of non-indigenous populations. The standard summaries of the culture chronologies of Central Texas accepted by many of the regional archaeologists were produced by Collins (1995) and Prewitt (1981). Below is a brief summary of the cultural sequence that has been reconstructed by archaeologists for the south-central part of the state.

Paleoindian

The oldest cultural materials found in the region date to the Paleoindian Period. The period spans roughly from 11,500-8800 BP (Collins 1995, 2004). The Aubrey site in Denton County has one of the earliest occupations, with radiocarbon assays dating to between 11,542 ± 11 BP and 11,590 ± 93 BP (Bousman et al. 2004:48). Paleoclimatic proxy measures suggest that a cooler climate with increased precipitation was predominant during the Late Pleistocene (Mauldin and Nickels 2001; Toomey et al 1993), the later portion of the period.

Initial reconstructions of Paleoindian adaptations typically viewed these hunter-gatherers as traversing extreme distances in pursuit of now extinct mega-fauna such as mammoth and mastodon. While these Paleoindians populations did exploit the Late Pleistocene mega-fauna when it was accessible, a number of faunal assemblages from an increasingly larger number of sites indicate that the Paleoindian diet was more varied and consisted of a wide range of resources, including small game and plants. The Lewisville (Winkler 1982) and the Aubrey sites (Ferring 2001) produced faunal assemblages that represented a wide range of taxa, including large, medium, and small species. Information on the consumption of plant resources during the Paleoindian period is lacking. Bousman et al. (2004) reported that the late Paleoindian component at the Wilson-Leonard site reflected the exploitation of riparian, forest, and grassland species. Analysis of Paleoindian skeletal remains indicates that the diets of the Paleoindian and later Archaic hunter-gatherers may have been similar (Bousman et al. 2004; Powell and Steele 1994).

The early portion of the Paleoindian Period was characterized by the appearance of Clovis and Folsom fluted projectile points that were used for hunting mega-fauna. Typical projectile points produced at sites with occupations dating to the later portion of the Paleoindian period included the Plainview, Dalton, Angostura, Golandrina, Meserve, and Scottsbluff types. Meltzer and Bever (1995) have identified 406 Clovis sites in Texas. One of the earliest, 41RB1, yielded radiocarbon assays that put the maximum age for the Paleoindian component at 11,415 ± 125 BP (Bousman et al. 2004:47).

Sites in Bexar County that contain Paleoindian components include St. Mary's Hall (Hester 1978, 1990), Pavo Real (Collins et al. 2003), the Richard Beene site (Thoms et al. 1996; Thoms and Mandel 2006) and 41BX1396 (Tomka 2012). St. Mary's Hall, 41BX229, was first encountered in 1972 during the construction of a house just outside the school's property. The Pavo Real site, 41BX52, is located along Leon Creek in northwest Bexar County. The site first was documented in 1970 and has been investigated several times over the past 40 years (Collins et al. 2003). The Richard Beene site, 41BX831, is located along the Medina River in southern Bexar County (Thoms et al. 1996). Site 41BX1396 is located in Brackenridge Park in San Antonio, Texas, and was encountered during installations for lighting in 2010. Dating of organic samples indicated that occupation at the site occurred as early as 10,490-10,230 BP.

Archaic Period

The Archaic Period dates between ca. 8800 to 1200 BP. It is divided into three subperiods: Early, Middle, and Late. During the Archaic, mobility strategies may have shifted to more frequent short-distance movements that allowed the exploitation of seasonal resource patches. The intermittent presence of bison in parts of Texas, combined with changes is climatic conditions and the primary productivity of the plant resources may have contributed to shifts in subsistence strategies and associated technological repertoire. When bison was not present in the region, hunting strategies focused on medium to small game along with continued foraging for plant resources. When bison was available, hunter-gatherers targeted the larger-bodied prey on a regular basis.

Early Archaic

Collins (1995) suggests that the Early Archaic spans from 8800 to 6000 BP. Projectile point styles characteristic of the Early Archaic include Angostura, Early Split Stem, Martindale, and Uvalde (Collins 1995). The Early Archaic climate was drier than the Paleoindian period and witnessed a return to grasslands (Bousman 1998). Mega-fauna of the Paleoindian period could not survive the new climate

and ecosystems, therefore eventually dying out. Early Archaic exploitation of medium to small fauna intensified.

The Wilson-Leonard excavation produced a wealth of cultural materials representative of a lengthy period in regional prehistory. The projectile point assemblages from the site indicate that the lanceolate Paleoindian point forms continue from the Paleoindian into the Early Archaic (Angostura). However, relatively quickly during the Early Archaic, they are replaced by corner- and basally-notched and shouldered forms (Early Triangular, Andice, Bell) that quickly become the dominant points tipping the atlatl-thrown darts. In addition, the uses of small to medium hearths similar to the previous period were noted. The appearance of earth ovens suggests another shift in subsistence strategies. The earth ovens encountered at the Wilson-Leonard site were used to cook wild hyacinth along with aquatic and terrestrial resources (Collins et al. 1998). Analyses of Early Archaic human remains encountered in Kerr County (Bement 1991) reveal diets low in carbohydrates in comparison to the Early Archaic populations found in the Lower Pecos region.

Within Bexar County, the excavations at 41BX1396 revealed an Early Archaic component, radiocarbon dated to Cal BP 8390 to 8180 (Tomka 2012).

Middle Archaic

The Middle Archaic subperiod spans from 6000 to 4000 BP (Collins 1995; Weir 1976). Archaeological data indicates that there appeared to be a population increase during this time. Climate was gradually drying leading to the onset of a long drought period. Changes to the demographics and cultural characteristics were likely in response to the warmer and more arid conditions. Projectile point styles characteristic of this subperiod include Bell, Andice, Calf Creek, Taylor, Nolan, and Travis.

Subsistence during the Middle Archaic saw an increased reliance on nuts and other products of riverine environments (Black 1989). The increase of burned rock middens during the Middle Archaic represented the increased focus on the use of plant resources (Black 1989; Johnson and Goode 1994). Little is known about burial practices during the Middle Archaic. An excavation in an Uvalde County sinkhole (41UV4) contained 25-50 individuals (Johnson and Goode 1994:28).

Late Archaic

The Late Archaic spans from 4000 to 1200 BP (Collins 2004). It is represented by the Bulverde, Pedernales, Kinney, Lange, Marshall, Williams, Marcos, Montell, Castroville, Ensor, Frio, Fairland, and

Darl projectile points. The early part of the Late Archaic exhibited fluctuations in the temperature and rainfall. There appears to have been an increase in population at this time (Nickels et al. 1998).

Some researchers believe that the use of burned rock middens decreased during the Late Archaic. Some research has challenged this notion (Black and Creel 1997; Mauldin et al. 2003). Johnson and Goode (1994) discuss the role of burned rock middens in relation to acorn processing.

Human remains from burials related to the Late Archaic in Central and South Texas suggest the region saw an increase in population. This increase may have prompted the establishment of territorial boundaries, which resulted in boundary disputes (Story 1985). Human remains dating to this sub-period have been encountered near the Edward's Plateau.

Late Prehistoric

The Late Prehistoric Period begins ca. 1200 BP (Collins 1995; Collins 2004), and appears to continue until the beginning of the Protohistoric Period (ca. A.D. 1700). The term Late Prehistoric is used in Central and South Texas to designate the time following the end of the Archaic period. A series of traits characterizes the shift from the Archaic to the Late Prehistoric Period. The main technological changes were the shift to the bow and arrow and the introduction of pottery. The Late Prehistoric Period is divided into two phases: the Austin Phase and the Toyah Phase.

At the beginning of this period, environmental conditions were deemed to be warm and dry. Moister conditions appear after 1000 BP (Mauldin and Nickels 2001). Subsistence practices appeared similar to the Late Archaic. Projectile points associated with the Austin Phase include the Scallorn and Edwards types. The Toyah Phase is characterized by the prominence of the Perdiz point (Collins 1995).

Most researchers concur that the early portion of the Late Prehistoric period saw a decrease in population density (Black 1989:32). Radiocarbon dates from some sites have indicated that the middens were utilized during the Late Prehistoric. Some archaeologists feel the peak of midden use was after A.D. 1 and into the Late Prehistoric (Black and Creel 1997:273). Radiocarbon dates from Camp Bowie middens provide evidence that supports Black and Creel's arguments that burned rock middens were a primarily Late Prehistoric occurrence (Mauldin et al. 2003).

Beginning rather abruptly at about 650 BP, a shift in technology occurred. This shift is characterized by the introduction of blade technology, the first ceramics in Central Texas (bone-tempered plainwares),

the appearance of Perdiz arrow points, and alternately beveled bifaces (Black 1989:32; Huebner 1991:346). Prewitt (1981) suggests this technology originated in north-central Texas. Patterson (1988), however, notes that the Perdiz point was first seen in southeast Texas by about 1350 BP, and was introduced to west Texas some 600 to 700 years later.

Early ceramics in Central Texas (ca. A.D. 1250 to 1300) are associated with the Toyah Phase of the Late Prehistoric and are referred to as Leon Plain ware. The Leon Plain ceramic types are undecorated, bone-tempered bowls, jars, and ollas with oxidized, burnished and floated exterior surfaces (Ricklis 1995). There is notable variation within the type (Black 1986; Johnson 1994; Kalter et al. 2005). This variation can be attributed to differences in manufacturing techniques and cultural affiliation. Analysis of residues on ceramic sherds suggests that vessels were used to process bison bone grease/fat, mesquite bean/bison bone grease, and deer/bison bone grease (Quigg et al. 1993).

The return of bison to South and Central Texas during the Late Prehistoric resulted from a drier climate in the plains located to the north of Texas and increased grasses in the Cross-Timbers and Post Oak Savannah in north-central Texas (Huebner 1991). The increased grasses in the two biotas formed the "bison corridor" along the eastern edge of the Edwards Plateau and into the South Texas Plain (Huebner 1991:354-355). Rock shelter sites, such as Scorpion Cave in Medina County (Highley et al. 1978) and Classen Rock Shelter in northern Bexar County (Fox and Fox 1967), have indicated a shift in settlement strategies (Skinner 1981). Burials dating to this period often reveal evidence on conflict (Black 1989:32).

History of the APE

The northwestern portion of Bexar County was largely uninhabited until the mid-1800s. Maps, including Rullman's 1839 map of Bexar County, indicate that the project area was once a portion of the larger Manuel M. Y. Musquiz parcel. Historical documents do not indicate when Musquiz arrived in San Antonio; however, he started making land claims in the area in 1839 and his "headright," a parcel was located 5 miles (mi) east of San Antonio (BCDR 1:154). The project area is first mentioned when Musquiz hires John James to survey the property. James was included on the 1842 deed for the M.M.Y. Musquiz Survey No. 80 (BCDR 2:525-526). James had an excellent reputation as a surveyor, and landowners soon found that attaching his name to their deeds was all the guarantee the State – or Republic - needed to issue title. In addition, James often accepted land certificates as payment for survey (Strong 2010). Patent No. 354 was given to M.M.Y. Musquiz by Sam Houston on December 1, 1844. The land is

described as being Survey No. 80, Section 5, located 15 mi northwest of the City of San Antonio, and containing *Ojo de Agua de Culebra* – Snake Spring (BCDR 2:111).

Documents do not indicate if Musquiz made any improvements to the property. However, maps from the late 1800s show the property relative to Culebra Creek and the spring (Figure 3-1). Records indicate that he may have left the area and moved west to establish a ranch. The Texas Archaeological Sites Atlas indicates that a Manuel Musquiz settled in the vicinity of Fort Davis in 1854; however, his *rancho* was quickly abandoned due to raids by Native Americans. A marker erected along Rte. 118 near the ruins of the *rancho* house suggest that Musquiz moved back "east" (THC 2017).

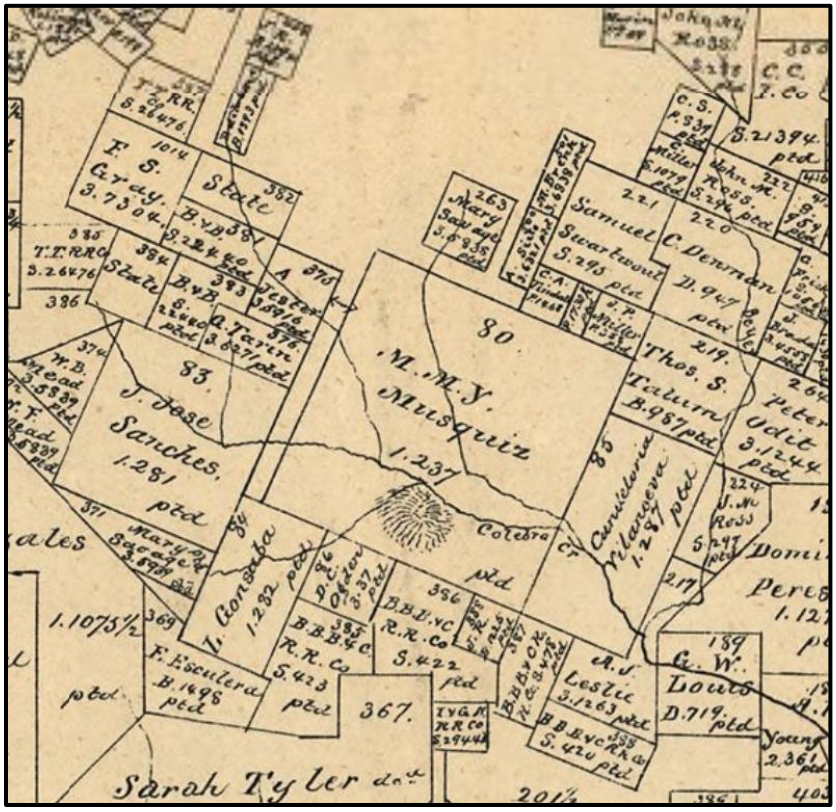
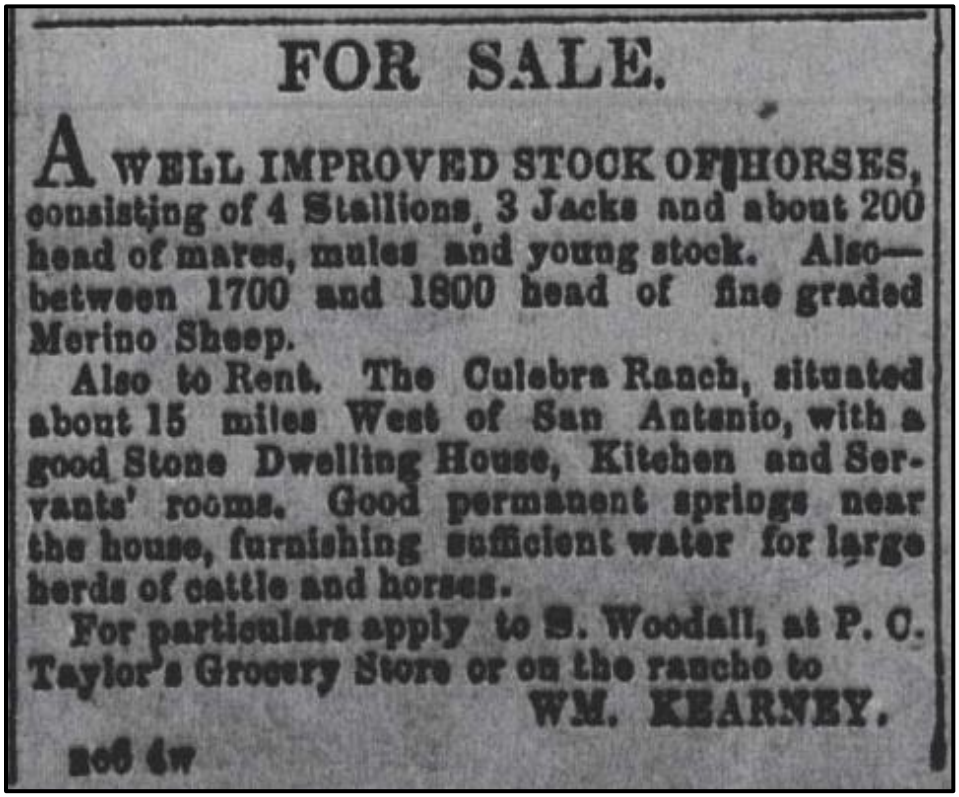


Figure 3-1. The M.M.Y. Musquiz survey on the 1879 W.C. Walsh Map of Bexar County (Library of Congress 2017).

It is unclear from the deed records how the property was used between 1844 and 1867. Records indicate that the ranch was available for lease by the end of the 1800s. A newspaper advertisement from 1867 indicates that "Culebra Ranch," lying 15 mi west of San Antonio, was available for rent (Figure 3-2). The property had a house, kitchen, and permanent springs for livestock (Figure 3-2). In 1889, a lease was signed between John B. Lanyon and Frank M. Edwards. Lanyon writes in the lease that Edwards has access to the entire parcel known as "Culebra Ranch," a 2,039 ac of Survey 80, Section 5 for five years. Lanyon would be able to collect a profit from agricultural crops and was guaranteed the proper care of any of his livestock remaining on the property (BCDR 60:550).



FOR SALE.

A WELL IMPROVED STOCK OF HORSES, consisting of 4 Stallions, 3 Jacks and about 200 head of mares, mules and young stock. Also—between 1700 and 1800 head of fine graded Merino Sheep.

Also to Rent. The Culebra Ranch, situated about 15 miles West of San Antonio, with a good Stone Dwelling House, Kitchen and Servants' rooms. Good permanent springs near the house, furnishing sufficient water for large herds of cattle and horses.

For particulars apply to S. Woodall, at P. C. Taylor's Grocery Store or on the rancho to

WM. KEARNEY.

ap6 4w

Figure 3-2. Advertisement for Culebra Ranch, *The San Antonio Ledger*, April 20, 1867.

Deed records indicate that Lanyon did not reside in Texas. In 1893, Lanyon passed the property to S.B. Lanyon. The deed record states that John B. Lanyon resided in Chicago, while S.H. Lanyon resided in Pittsburgh. A Mechanic's Lien Affidavit filed by the Daughterty Brothers in 1898 indicates that there was a dispute between the Lanyons and the drillers regarding the drilling of a well on the property (BCDR 212:109). The drillers indicated that they placed a well on lot No. 12, along the southern portion of the property. The affidavit orients the property within named roads. Survey No. 80 lies to the northeast of the Culebra Road and Hoffmann Road intersection, following Hoffmann Road north to the intersection of Braun and Hoffmann Roads (BCDR 1:333). The 1897 Rullman Map of Bexar County depicts the Lanyon Property in relation to named roadways and the Hoffmann property (Figure 3-3). However, no structures are depicted on the map.

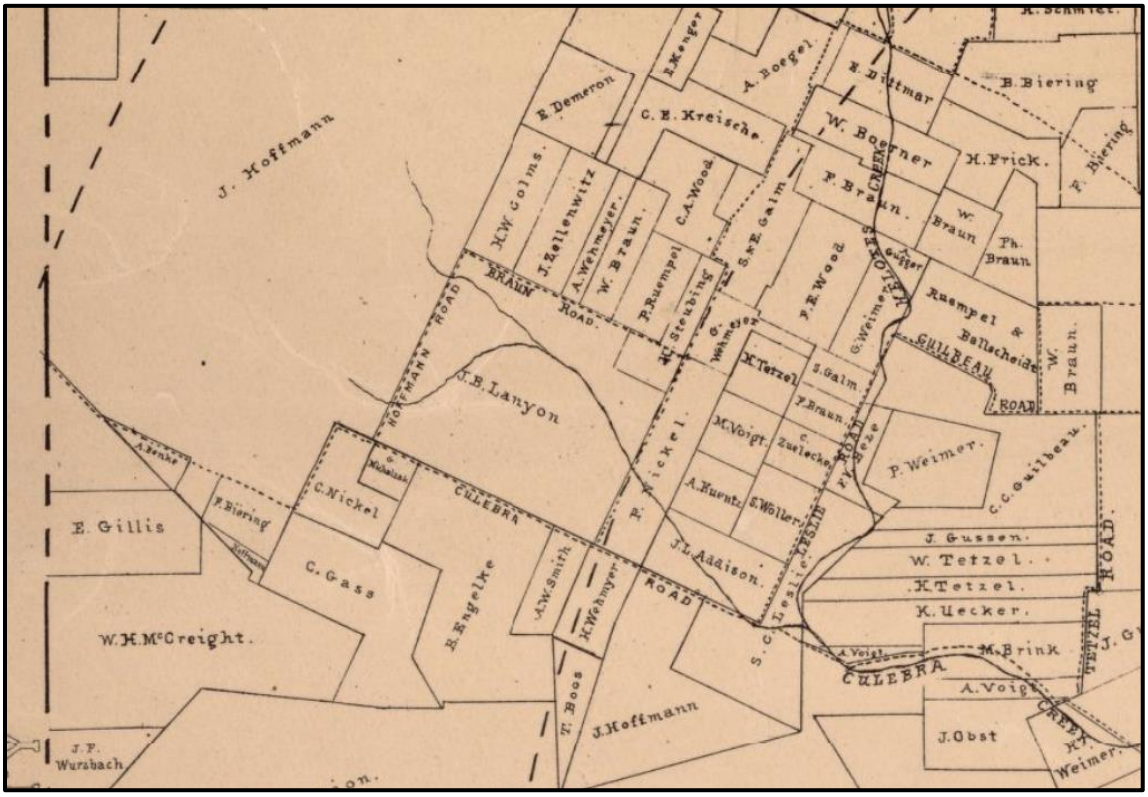


Figure 3-3. The J.B. Lanyon Property on the 1897 Rullmann Map of Bexar County (Library of Congress 2017).

Emily and Alvin Lanyon arrived in San Antonio around 1900 to claim S.H. Lanyon's land. Lanyon died intestate in 1897, spurring his widow and son to travel to Texas. In 1903, Emily and Alvin transferred the land to A.K. Lanyon (BCDR 225:632). By 1906, A.K. Lanyon sells the property to Peter Faust (BCDR 205:520). Faust begins to subdivide the property and sells off parcels between 1906 and 1911 (BCDR 351:320; 271:524; 260:50). The largest parcel, encompassing 800 ac, was sold to Ed Wolff and Emil Klar in 1906 (BCDR 260:50). Klar and Wolff further subdivided the parcel into 329.5 acres located on Culebra Creek, east of Hoffman Road and south of Braun Road (BCDR 271:523).

Between 1910 and 1920, the land changed hands several times. Ed Wolff sold 580 ac bound by Culebra, Hoffman, and Braun Roads to Erich Menger, Sr. in 1910 (BCDR 341:4). Menger subdivided and sold the land to relatives (Bihl family) (BCDR 429:111-113; 420:579; 367:452; 367:446). By 1920, 580 ac of the M.M. Musquiz Survey was purchased by George Keiffer and John F. Onion (BCDR 601:477). The land was identified as being along Culebra Road, east of Hoffmann/Galm Road, and south of Braun Road. The property was further bound by land owned by Weidner, Ebert, Klar, Hoffmann and Moos.

The Keiffer family retained the property until 1944, when Irene Kieffer sold the property to Robert and Ida Kreuse (BCDR 2077:249-250). The Kreuse family continued to own the property until 1974, when they sold the land to an investment company (BCDR 7397:634-639). A highway map from 1957 shows the locations of structures on Survey No. 80. The map shows structures located along Culebra Creek, however, no structures appear north on Galm Road towards Braum/Galm Road (Figure 3-4).

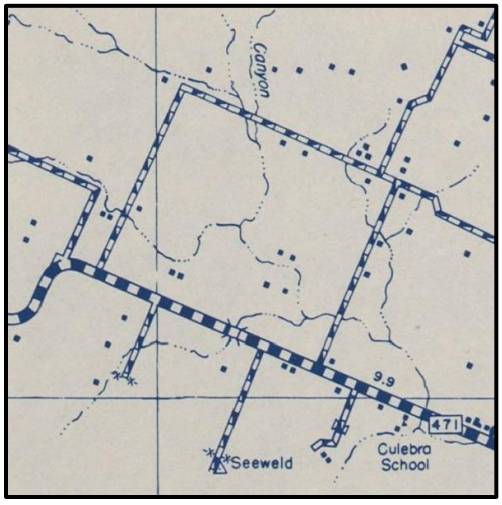


Figure 3-4. The 1958 Texas Highway Department Map of Bexar County (University of North Texas Libraries 2017).

Historic documents, including deed records, maps, and newspapers, suggest that the project area was never occupied by landowners. Over the course of the property's history, owners appear to use the land for livestock grazing. While the newspaper advertisement from 1867 indicates that a house is on the property, no other records indicate that the structure stood within the boundaries of the APE.

Previous Archaeology

No archaeological sites have been recorded within the current APE (Figure 3-5) and no systematic survey ever occurred of the APE. Seven archaeological sites have been recorded within a 1-km radius of the APE (THC 2016). Sites 41BX1676 and 41BX1677 were recorded by Abasolo Archeological Consultants in May 2006. The two Archaic-aged sites are located along Government Canyon Creek and an outcrop of Edwards chert. Site 41BX676 is composed of lithics and fire-cracked rock, including diagnostic chipped stone artifacts. The site extends from the banks of the creek into a nearby agricultural field. Site 41BX1677 was identified eroding from a dirt road, and is mostly composed of debitage and fire-cracked rock. Cultural materials associated with both sites are located on the surface, or shallowly buried, and Site 41BX1677 has been heavily collected in the past. Therefore, Abasolo did not recommend further archaeological investigations at the sites (Shafer and Hester 2006).

Culebra Creek runs to the south of the project area and was subject to archaeological investigations by C.K. Chandler, an avocational archaeologist with the Southern Texas Archaeological Association, in 1986. Site 41BX712 is located on the southern bank of Culebra Creek near a natural spring, and contains Archaic and Late Prehistoric cultural materials, including debitage and fire-cracked rock along the surface and spread across a 1.5-ac area. Chandler did not provide any recommendations in regards to significance.

In 2005, David Calame, with the Southern Texas Archaeological Association, recorded Site 41BX1689, an Early Archaic camp site along the northern side of Culebra Creek. During his investigation, Calame collected diagnostic chipped stone artifacts, including Guadalupe tools and Andice, Uvalde, Pedernales, Edwards, and Early Triangular projectile points. Calame did not make any recommendations for the site at the time; however, it has now been disturbed by residential development (THC 2016).

Abasolo Archeological Consultants investigated Site 41BX1629 during an archaeological survey for a residential development along the north bank of Culebra Creek. The site was exposed on the surface in a road cut, along a scraped surface, and along a drainage ditch cut. Middle and Late Archaic components, including Frio, Castroville, Pedernales, Langtry, and Nolan projectile points, several hearths, and a burned rock midden were noted during excavations. All artifacts and features were

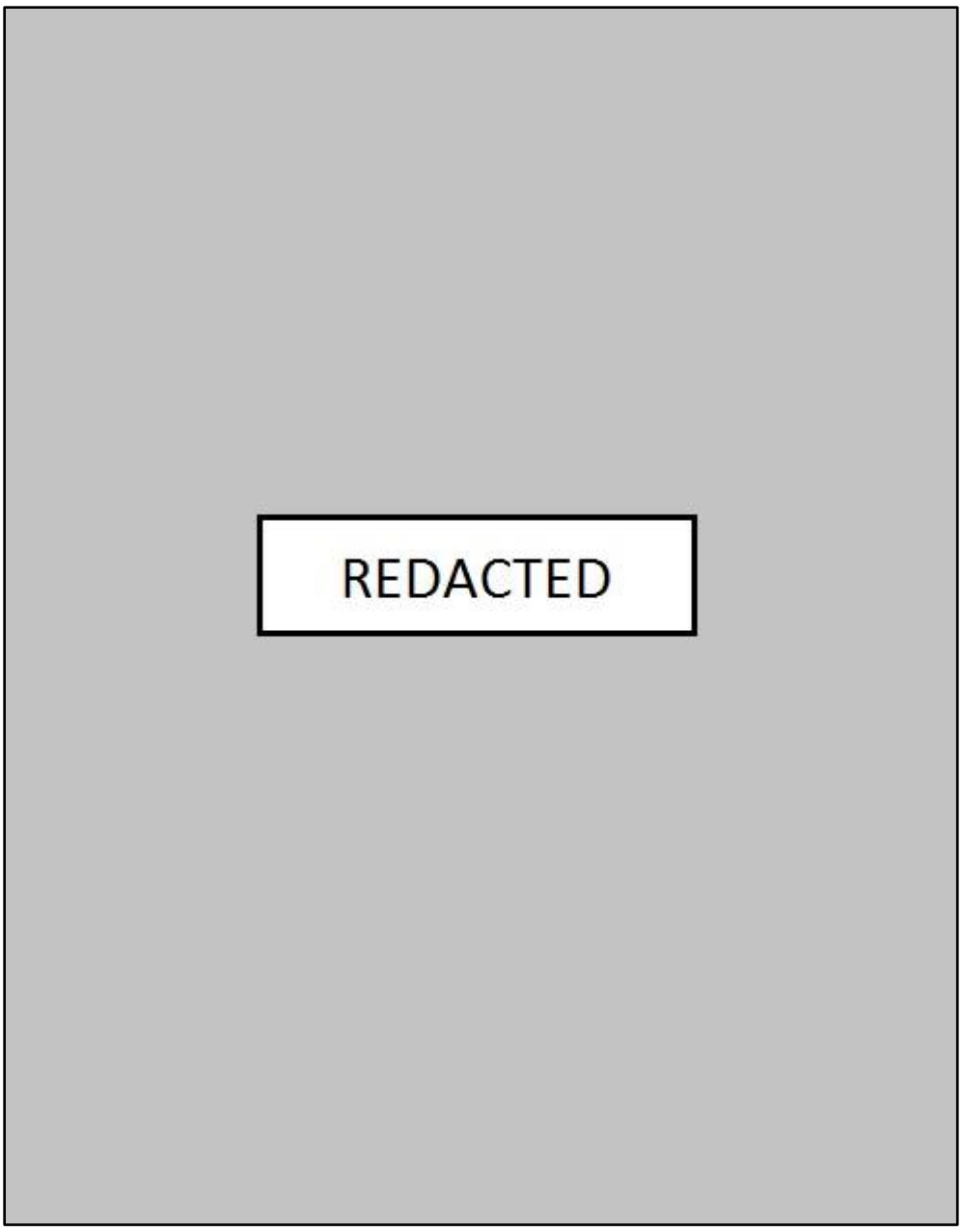


Figure 3-5. Archaeological investigations and sites within a 1-kilometer radius of the APE.

located on the surface or shallowly buried within the plow zone. As the site had been greatly disturbed by agricultural and construction activities, the Abasolo staff recommended that the site was ineligible for listing as a SAL and had poor research potential. The site is now beneath residential development (THC 2017).

Two archaeological sites are located in Government Canyon State Natural Area near the APE: 41BX1205 and 41BX1194. As with other sites within Government Canyon, 41BX1205 is an Archaic lithic scatter near Government Canyon Creek. The site is approximately 4 ac in size, and all artifacts are on the surface. McNatt et al. (2000), the initial surveyors of the site, indicated that the site had low research potential and did not recommend the site as a SAL. However, even though the site had low research potential, it is still considered eligible for inclusion in the NRHP because it is within a state natural area (THC 2017). Site 41BX1194 is a historic early- to mid-twentieth century ranch complex sitting on a flat upland surface along Government Canyon Creek. The site is approximately 7 ac and contains standing and collapsed buildings and scattered historic artifacts on the ground surface. McNatt et al. (2000) indicated that the site had low research potential and did not recommend the site as a SAL. However, even though the site had low research potential, it is still considered eligible for inclusion in the NRHP because it is within a state natural area (THC 2017).

In May of 2001, The Center for Archaeological Research at The University of Texas at San Antonio (CAR-UTSA) conducted a large survey of Government Canyon State Park. As a part of this survey, several trails and previous sites were investigated throughout the park. A total of 86 sites were identified, 52 of which represented newly recorded sites. Projectile points from the sites suggest that the survey area was used since the Paleoindian period of occupation. None of these sites fell within a 1-km radius of the APE (Greaves et al. 2002).

The above review of the projects and newly recorded sites indicates that the most common archaeological components found east of the Edwards Plateau within the vicinity of the APE are most likely to be Late Prehistoric assemblages. These components likely represent the remains of hunter-gatherer groups visiting the Blackland Prairie on hunting expeditions targeting either medium or large ungulates such as deer and antelope or bison. While such visits would also have occurred during preceding times, it appears that the remnants of such Early and Middle Archaic activities have been scoured from the landscape except perhaps in the vicinity of major streams that cross-cut the Blackland Prairie. It is likely that smaller streams, such as Plum Creek would not have had the sediment bed-load to deeply bury archaeological deposits that may have accumulated on their terraces during prehistoric

times.

Chapter 4: **Methods of Investigation**

RKEI utilized a combination of visual surface inspection and shovel test excavations to assess surface and shallowly buried archaeological deposits. Shovel testing was conducted in areas judged to have high probabilities for cultural deposits, and/or when surface visibility was below 30 percent. In addition, shovel tests were excavated to aid in archaeological site boundary delineation. All work complied with THC and Council of Texas Archeologists (CTA) survey standards for Texas for the overall project area.

Field Methods

The archaeological survey consisted of a 100 percent pedestrian survey of the entire project APE. Since the majority of the ground visibility was over 30%, only 19 shovel tests (STs) were excavated throughout the APE. All shovel tests were approximately 30 cm in diameter and, unless prevented by obstacles or buried features, extended to a depth of 60 centimeters below surface (cmbs). Each shovel test was excavated in 10-cm increments. All soil from each level was screened through 1/4-in hardware cloth. Any collected artifacts were to be labeled with appropriate provenience information for laboratory processing and analysis. A shovel test form was completed for each excavated shovel test. Data collected from the shovel test included the final excavation depth, a tally of all materials encountered from each 10-cm level, and a brief soil description (texture, consistency, Munsell color, inclusions). The location was recorded using a Garmin, hand-held, GPS unit. Shovel test locations were sketched onto a current aerial photograph of the APE as a backup to the GPS information. Any additional observation considered pertinent was included as comments on the standard shovel test excavation form.

Laboratory Methods

Digital photographs were printed on acid-free paper, labeled with archivally appropriate materials, and placed in archival-quality plastic sleeves. All field forms were completed with pencil. Ink-jet produced maps and illustrations were placed in archival quality plastic page protectors to prevent against accidental smearing due to moisture. Field notes, field forms, photographs, and field drawings were placed into labeled archival folders and were also converted into electronic files (i.e., pdf). A copy of the report and all digital material were burned onto a CD and permanently curated with field notes and documents. All field records generated by this project will be curated in accordance with the Texas Archaeology Research Laboratory guidelines. Artifacts collected during the course of the survey will be returned to the property owner at the completion of the project.

Chapter 5: **Results of Investigations**

In January of 2017, **RKEI** performed a pedestrian survey of the proposed location a new school located in Northside Independent School District in northwest San Antonio, Bexar County, Texas. The APE encompassed approximately 107 acres. Planned improvements include the construction of a high school. The survey consisted of a visual inspection of the ground surface for cultural materials and the excavation of 19 shovel tests (STs) throughout the APE (Figure 5-1). During the survey, 25 isolated finds were encountered on the surface. Approximately 75% of the APE consisted of plowed fields, with the remaining 25% covered by fairly thick underbrush. Of the 19 STs excavated, 10 were excavated in the plowed fields, while 9 were excavated in the underbrush. The pedestrian survey was conducted utilizing transects placed 30 meters apart. Transects within the small field located in the southeastern portion of the APE were spaced approximately 10 meters apart.

Twenty-five isolated finds were recorded during the pedestrian survey. The majority of these finds were encountered within the plowed fields. The locations of the artifacts were recorded using a hand-held GPS, and plotted on a map. Initial inspection of the APE noted that the plowed fields exhibited many chert cobbles on the surface. All of the isolated finds consisted of lithic debitage and tools. Artifacts that could not be identified in the field were collected and returned to the RKEI Laboratory, whereas easily identifiable items were documented in the field.

Of the 25 isolated finds returned to the lab for analysis, it was determined that 19 were artifacts (Table 5-1). Due to plowing of the fields, many of the chert cobbles exhibited mechanical flaking. Two cores were defined (Figure 5-2). Nine lithic artifacts were identified as early stage bifaces (Figure 5-3 and Figure 5-4). Three secondary lithic flakes were recovered. Two of the secondary flakes exhibited post-depositional mechanical flaking. One was a utilized flake.

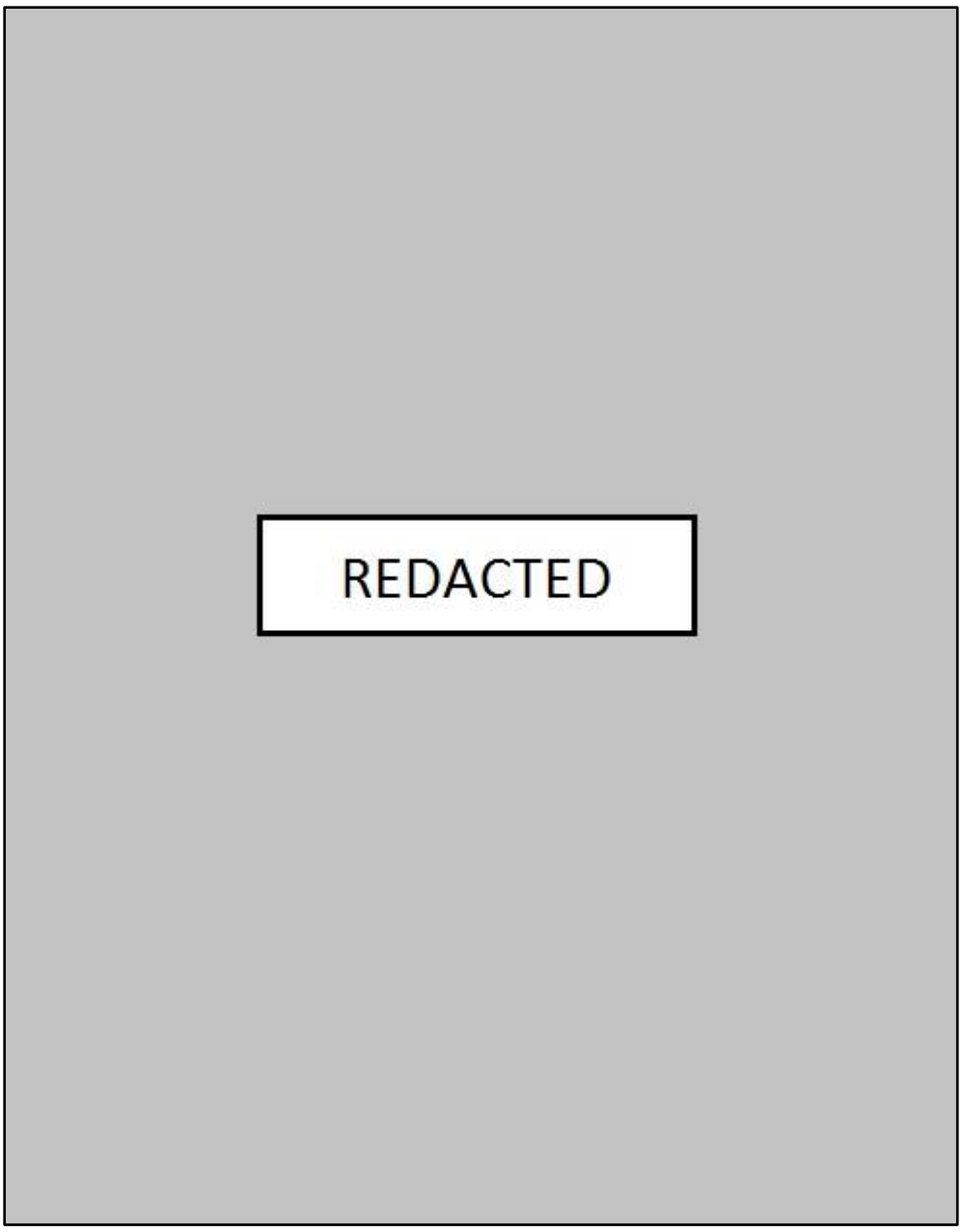


Figure 5-1. Location of shovel tests and isolated finds encountered during the pedestrian survey.

Table 5-1. Identification of collected isolated finds.

	Biface	FCR	Debitage		Lithic Core	Lithic Tool	
	Early Stage Biface		Secondary	Tertiary		Flake-Tool	Retouched Flake
IF-1			1				
IF-2							1
IF-3	1						
IF-4	1						
IF-5					1		
IF-7			1				
IF-9	1						
IF-11	1						
IF-12	1						
IF-15						1	
IF-17					1		
IF-18	1						
IF-19	1						
IF-20		1					
IF-22			1				
IF-23	1						
IF-24				1			
IF-25	1						
Total	9	1	3	1	2	1	1

Figure 5-2. Two chert cores recovered during the archaeological survey.

Figure 5-3. Four early stage bifaces recovered from the surface during the survey.

Figure 5-4. Additional early stage bifaces encountered during the pedestrian survey.

The small plowed field in the southeastern portion of the APE appeared to contain the highest density of lithic debitage and tools on the surface. Of the eight artifacts encountered in the northeastern corner of the small field, three were identified as early stage bifaces. The remainder appeared to be lithic flakes and a core. Due to the concentration, shovel tests were excavated in the vicinity of the highest density of isolated finds to determine if there was any depth to the deposit.

Along the edges of the plowed field, chert and limestone cobbles were found in piles (Figures 5-5 and 5-6). These piles likely derived from field clearing. The piles of cobbles were inspected and while some chert cobbles exhibited mechanical breaks, none appeared to be intentionally modified.

Figure 5-5. Pile of limestone along the eastern edge of the large field.

Figure 5-6. Pile of limestone along the southern edge of the large field.

In addition to the isolated finds described above, RKEI archaeologists encountered a historic trash dump in the eastern portion of the APE. The dump, identified as Feature 1, consisted of glass bottles, metal cans and can fragments, ceramics, car oil filters, and plastic (Figure 5-7). It appears that the area was used as a dump during the 1960s to the 1980s, as many of the glass bottles date to these periods. Many of the glass bottles did not have identifying marks, but appeared to be related to condiment jars, juice bottles, pickle jars, and large soda bottles. Glass colors represented were mostly clear and green, although a few brown bottles were observed. Brands that were identified on some of the lids included Crisco Oil, Chloroseptic Aerosol, and Ponds. Ceramic sherds encountered seem to be related to broken flower pots. The trash deposit measured approximately 14 by 12 meters in dimension.

Diagnostic material included a Sunbeam Glassbake milk glass bowl base (Figure 5-8). Glassbake was popular from the 1940s to the 1970s. It appears that the fragment is from a Mixmaster mixing bowl that began manufacture during the late 1940s (https://www.sunbeam.com.au/Content/About-Us/). A Singer Sewing Machine oil can also was recovered (Figure 5-8). The markings on the can indicate that it likely dates from the 1960s, when the can of oil sold for 75 cents.

Figure 5-7. Trash dump encountered during the pedestrian survey.

Figure 5-8. Sample of items encountered at the trash dump.

Shovel Tests

Nineteen shovel tests were excavated during the course of the project (Figure 5-1). As stated, the majority of the APE consisted of plowed fields, with over 80% visibility. Seven shovel tests were excavated within the plowed fields to determine if there were any buried cultural deposits that had been impacted by the repeated plowing over the last decades. Three shovel tests were excavated within the plowed fields to identify if there were buried cultural deposits within an area that exhibited a high concentration of artifacts on the surface. The remaining nine shovel tests were excavated within the dense underbrush in the eastern portion of the APE. Seventeen (89%) of the nineteen shovel tests were negative for cultural material. Two shovel tests (STs 3 and 5), located in the dense underbrush near the historic trash dump, produced artifacts.

Shovel Test 3 was placed on a slight high point just to the east of the northeast corner of the small field. The shovel test was placed on the edge of an ephemeral natural drainage, located between the plowed field and the historic trash dump. One fragment of debitage was recovered in Level 1 (0-10 cmbs) and one fragment of burned rock was collected from Level 2 (10-20 cmbs). The shovel test was terminated at 45 cm below surface at bedrock (Figure 5-9).

Figure 5-9. Bedrock at the base of Shovel Test 3.

Shovel Test 5 was placed near the northeastern corner of the APE. The shovel test was placed southeast of the historic trash dump, near the property fenceline. One fragment of debitage that exhibited evidence of mechanical crushing was recovered in Level 1 (0-10 cmbs).

Shovel tests 3, 4, 5, 6, 7, 8, 16, 17, and 18 were excavated in the vicinity of the concentration of the artifacts observed on the surface to determine if there was any depth to the cultural material deposits noted on the surface. No artifacts were noted below the ground surface.

41BX2162

41BX2162 was designated as a multi-component site located in the northeastern portion of the APE (Figure 5-10). The site included the historic trash dump and the concentration of lithic artifacts noted on the surface. Two positive shovel tests (ST 3 and ST 5) were located within 30 m of artifacts observed on the surface. The remaining negative shovel tests (4, 6, 7, 8, 16, 17, and 18) aided in determining the boundary of the site. A natural drainage serves as the south boundary of the site.

Both the prehistoric and historic components of the site are found on the surface. No shovel tests contained buried historic material. The historic dump appears to date from the 1950s to the 1980s. The historic dump measured approximately 14 by 12 m.

Prehistoric lithic artifacts were recovered from the western portion of the field site. Much of the prehistoric portion of the site is located within the plowed fields. The two positive shovel tests were located within the underbrush and produced lithic flakes in the upper 10 cm. The shallow depth of the artifacts indicates that the prehistoric deposit does not extend much below the surface, and may be a result of continual plowing and flooding of the area. No diagnostic material was encountered; therefore, the prehistoric temporal affiliation of the site is unknown.

The historic trash dump, the positive shovel tests, and the lithic material observed on the surface encompass 41BX2162. The short distance between each component led to only one site being designated. The site covers approximately 6.18 acres.

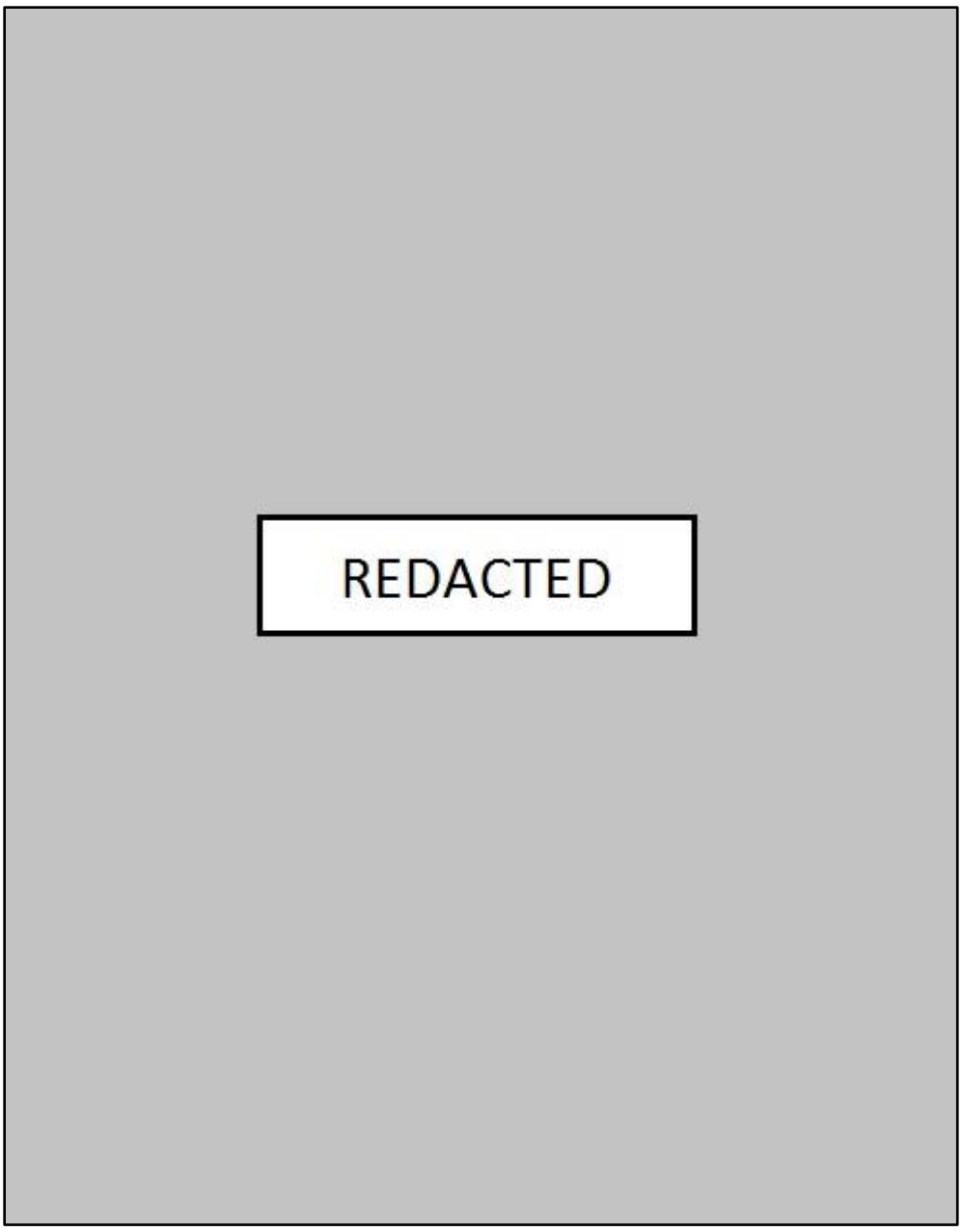


Figure 5-10. Location of 41BX2162.

Chapter 6: **Summary and Recommendations**

The archaeological survey of the 107-acre tract of land for the proposed NISD high school was conducted over four days in January 2017. The property consisted of approximately 75% recently plowed field, and 25% areas of underbrush. Due to the high visibility of much of the project area, only 19 shovel tests were excavated within the APE. The goal of these shovel tests was to determine if there was any depth to the lithic artifact concentrations observed on the surface. Of the nineteen shovel tests excavated, two (STs 3 and 5; 11%) were positive for cultural material.

The two positive shovel tests contained cultural material in the upper 10 cm of matrix. One piece of debitage was recovered in Level 1 (0-10 cmbs) of both ST 3 and ST 5. Shovel Test 3 also contained a fragment of burned rock within Level 2 (10-20 cmbs). Both of these shovel tests were excavated in the eastern portion of the APE, near a historic trash dump and a concentration of prehistoric lithic tools observed on the surface of a plowed field. The historic trash dump encountered in easternmost portion of the APE consisted of glass bottles, metal cans, plastic, car oil filters, broken flower pots, and other historic material. The material noted in the trash dump dated to the mid-twentieth century. The trash deposit measured approximately 14 by 12 m in dimension. Shovel Test 5, which contained one piece of debitage, was located just to the north of the trash dump. The positive Shovel Test 3 was located to the west of the trash dump.

Eight artifacts were encountered on the surface in the northeastern corner of the small plowed field. These included three early stage bifaces, lithic debitage, and a core. Shovel tests excavated in the vicinity of the surface finds did not produce any cultural material.

The collection of prehistoric artifacts on the surface, the positive shovel tests, and the historic trash dump were designated as 41BX2162. The distance between the historic trash dump and the prehistoric artifacts was not great enough to separate the two areas into a separate site. Rather, the site boundaries were delineated to include all artifact encountered within 30 meters of each other. The site encompasses approximately 6.18 ac.

41BX2162 appears to be a surface concentration of chipped lithic artifacts. While two positive shovel tests were excavated, the shallowly buried materials indicate that plowing or cracks within the clay may have allowed or contributed to some artifacts working their way below the ground surface. The large majority of materials, however, are found on surface and consist of early to middle reduction stage

bifaces exhibiting manufacture failures. With the exception of the temporally diagnostic historic materials, no datable artifacts were encountered that would offer insight to the temporal affiliation of the prehistoric component. The RKEI staff suggests that 41BX2162 has low research potential and is not eligible for inclusion in the NRHP or for designation as a SAL.

No diagnostic prehistoric material was encountered within the project boundaries. The lack of intact temporally diagnostic features combined with the absence of diagnostic prehistoric artifacts makes it difficult to associate the materials from the site with a given time period. While the prehistoric artifacts represent the remnants of lithic procurement activities, these activities may represent the a narrow or a very broad time frame and therefore it is not possible to speak or a coherent, behaviorally associated lithic assemblage. Given this conclusion, RKEI does not recommend further archaeological investigations. However, should changes be made to the project APE, further work may be required.

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