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Archaeological Investigations at Moody Reunion and Fairgrounds, Floresville, Wilson County, Texas

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Texas Antiquities Permit No. 8276
Technical Report No. 81

CENTER FOR ARCHAEOLOGICAL STUDIES
Texas State University

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The following information is provided in accordance with the General Rules of Practice and Procedures, Title 13, Chapter 26, Texas Administrative Code:

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ABSTRACT

Archaeologists from the Center for Archaeological Studies (CAS) at Texas State University conducted an intensive pedestrian survey including the excavation of 5 mechanical trenches and 50 shovel tests in Moody Reunion and Fairgrounds, Floresville, Texas, from January 10 through February 23, 2018. The survey was executed in order to assess the project area for potential impacts to cultural resources in advance of the installation of a new baseball complex and associated infrastructure by the City of Floresville. Work was carried out by CAS archaeologists Jacob Hooge and David Macias under Texas Antiquities Permit Number 8276, assigned to Principal Investigator Jacob Hooge.

The area of potential effects (APE) includes Floresville River Park, Kiddie Park, and an area extending approximately 1,400 meters northwest of the Floresville Events Center. Other than modern refuse, only one single prehistoric stone tool was observed in a secondary context within a gully near the San Antonio River. The source of the tool could not be identified leading to its classification as an isolated find, and thus, holds little research value, and are not significant to the city's, state's or nation's history. Although soil profiles observed in trenches and a natural erosion feature exhibit potential for buried archaeology, no other prehistoric or historic cultural materials were observed during survey. Accordingly, CAS recommends full regulatory clearance for the installations of all of the proposed features.

MANAGEMENT SUMMARY

Project Title: Archaeological Investigations at Moody Reunion and Fairgrounds, Floresville, Wilson County, Texas

Project Type: Intensive Pedestrian and Mechanical Trenching Survey

Local Sponsor: City of Floresville

Institution: Center for Archaeological Studies, Texas State University

Principal Investigator: Jacob Hooge

Project Archaeologist: David Macias

Texas Antiquities Permit No.: 8276

Dates of Work: 10 January to 15 February 2018

Total Acreage Evaluated: approximately 95.2 acres

Number of Shovel Tests: 50

Number of Trenches: 5

Purpose of Work: To identify, record, and evaluate the extent and integrity of cultural resources that would be impacted within the project area.

Number of Sites: 0

Curation: Center for Archaeological Studies, Texas State University

Comments: Pedestrian survey, mechanical trenching, and shovel testing revealed no significant prehistoric or historic-aged cultural remains within the Moody Reunion and Fairgrounds Park. Only one isolated find of a prehistoric lithic tool was observed in a secondary context in a natural erosional feature within the APE.

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INTRODUCTION

From January 10 to February 15, 2018, archaeologists from the Center for Archaeological Studies (CAS) at Texas State University (University) conducted subsurface archaeological investigations at Moody Reunion and Fairgrounds on behalf of the City of Floresville (City), Wilson County, Texas. Moody Reunion and Fairgrounds is located along the east bank of the San Antonio River approximately 2.5 km southwest of the Floresville city center, containing a total of approximately 95.2 acres of land. The City plans to install improvements including a new baseball complex which will require significant ground disturbance levelling the existing grade downward toward the river. In addition, underground drainage, electrical lines, and light poles will be placed throughout the complex and involve the excavation of trenches up to 2 m deep.

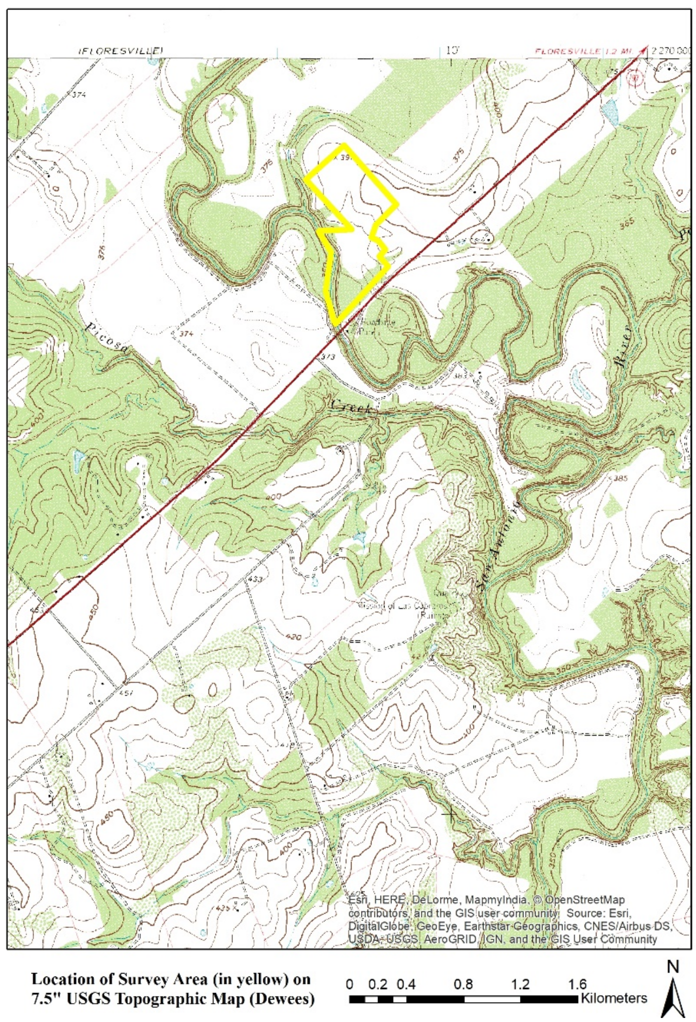

Figure 1. Project area in terms of its location within the Dewees Quad USGS Topographic Map, Wilson County, Texas.

The City's standing as a political entity within the State causes this proposed development to be subject to provisions of the Antiquities Code of Texas (TAC). The TAC requires that such an undertaking consider the potential impact on any cultural resources that might be present and that might contribute information that is meaningful or significant to understanding the history and/or prehistory of the State of Texas. All archaeological work was performed under auspices of Texas Antiquities Permit Number 8276, granted to Principal Investigator Jacob Hooge.

Cultural resources located on land owned or controlled by the State of Texas, or its political subdivisions, are protected by the TAC (Texas Natural Resources Code, Title 9, Chapter 191), which identifies significant sites as State Antiquities Landmarks (SALs) (formerly known as State Archeological Landmarks). TAC Rules of Practice and Procedure, as defined by the Texas Historical Commission (THC), are explicit about perception and protection of cultural resources located on State-owned or controlled land:

> . . . archeological sites and historic structures on lands belonging to state agencies or political subdivisions of the State of Texas are State Archeological Landmarks or may be eligible to be designated as landmarks . . . The State of Texas considers that all publicly owned archeological sites and historic structures have some intrinsic historic value, and the Antiquities Code provides some level of protection for those sites . . . regardless of their size, character, or ability to currently yield data that will contribute important information on the history or prehistory of Texas . . . (26.2).

As all cultural resources located in, on, or under State-owned or controlled land are considered eligible for SAL status, and not all cultural resources are appropriately designated as such or directly threatened by development, the THC has criteria for practically assessing the significance and/or need for further investigations under the permit process (Rules and Practice, Chapter 26.8):

1. The site has the potential to contribute to a better understanding of the prehistory and/or history of Texas by the addition of new and important information;

2. The site's archeological deposits and the artifacts within the site are preserved and intact, thereby supporting the research potential or preservation interests of the site;

3. The site possesses unique or rare attributes concerning Texas prehistory and/or history;

4. The study of the site offers the opportunity to test theories and methods of preservation, thereby contributing to new scientific knowledge;

5. The high likelihood that vandalism and relic collecting has occurred or could occur, and official landmark designation is needed to insure maximum legal protection, or alternatively further investigation are needed to mitigate the effects of vandalism and relic collecting when the site cannot be protected.

Under formatting standards set forth by the Council of Texas Archeologists (CTA) and adopted by the THC, this report provides a brief overview of the regulatory requirements for this project (above), defines the project area setting, outlines regional and local trends in archaeology, describes the methods used in gathering data, and presents the results of the survey. The fieldwork for this project was performed by Principal Investigator Jacob Hooge and CAS Project Archaeologist David Macias.

Project Area Setting

The project area is located on the southwest outskirts of the City of Floresville in central Wilson County, Texas. The San Antonio River runs south along the western boundary of the area of potential effects (APE) within the South Texas Brush Country ecological zone and just 50 km southeast of the Balcones Escarpment. This landform marks a transition between the Blackland Prairie and Edwards Plateau environments to the northwest and the Oak Woodlands and Brush Country to the east and south, respectively. These environmental transitions are known as ecotones, and they are typically high-energy settings capable of supporting richly diverse plants and animals (Crumley 1994). Because of the nearby access to water in addition to a wealth of plants and animals, this particular region was and is an attractive locale for human occupation.

Virtually all of Moody Reunion and Fairgrounds Park has been cleared of trees. Prior to the construction of the baseball fields, the land was used as farmland primarily for peanuts. Because no major construction other than what is now present within the APE has occurred, all soils below the plow zone are likely to be relatively intact.

Geology and Soils

Bedrock geology of the region consists of Eocene sandstones and siltstones, but the project area, however, is small and situated within Quaternary Alluvium (Qal) associated with the San Antonio River drainage consisting primarily of late Pleistocene and Holocene sandy flood deposits, as mapped by the Bureau of Economic Geology (Barnes 1992). In proximity to the project area, Qal abuts middle Eocene sandstone, Queen City Sand (Eqc) and Weches Formation siltstone, clay, and mud (Ew), as well as late Pleistocene fluviatile terrace deposits (Qt).

The Natural Resources Conservation Service (NRCS) Web Soil Survey maps four soil types in the project area: Saspamco fine sandy loam, Atco loam, Wilco loamy fine sand, and Loire and Divot soils. These soils are deep, alluvial sediments that extend to at least 5 ft below the ground surface. Based on this information, it is highly probable that the project area contains previously unknown cultural deposits at local, regional, and national levels.

Climate and Weather

The following weather statistics are based on a 30-year record (1951-1980). Average maximum temperatures of summers come to 85° F and minimums of winter fall to around 51° F in Wilson County (Bomar 1983). Growing seasons average 280 days per year (Handbook of Texas Online 2017c). Moisture from the Gulf of Mexico and the effects of tropical storms make the area prone to intensive rainfall and severe flooding; these effects are compounded with the convergence of polar air masses, often occurring over the nearby Balcones Escarpment and its orographic effect (Caran and Baker 1986; Slade 1986). Heavy periodic rainfall and its associated flooding of the San Antonio River basin will have impacted site formation processes along waterways and thereby, the APE. The mean annual precipitation recorded for Wilson County is 28 inches. Precipitation in the county is bimodal, with most precipitation occurring in the late spring and in the early fall (Dixon 2000).

Drought can also be an expected feature of Central Texas weather; there is not a decade in the twentieth century that did not include drought (Bomar 1983:153). At a greater temporal scale, the region's climate can be described as moist with mild winters, wet all seasons to dry summers (east to west), and with long hot summers (Köppen Climatic Classification: Cfa-Csa, east to west), but evidence indicates that climates are variable as well (Maulden et al. 2010).

Flora and Fauna

Floral and faunal characteristics of both adjoining environmental regions (Edwards Plateau and Blackland Prairie), mingle along the Balcones Escarpment (Blair 1950). Typical modern fauna found in the region includes, armadillo, badger, beaver, black rat, coyote, crayfish, domestic dog, eastern cottontail, eastern gray squirrel, eastern wood rat, horse, muskrat, common opossum, pig, raccoon, red fox, turkey, western diamondback rattlesnake, white-tailed deer, and white-tailed jackrabbit, in addition to bountiful other mammals, birds, reptiles, amphibians, and fish. In prehistory, many of the same animals were present, as well as were bison and antelope. Today, feral house cats and pigs have been added to the menagerie, and their presence is highly visible within the APE.

The region's natural vegetation is generally a grassland-woodland-shrubland mosaic, where grasslands separate patches of woody vegetation (Ellis et al. 1995). Along the escarpment, Mesquite, post oak, and blackjack oaks interrupt patches of bluestems, gramas, and many other types of grass in the Blackland Prairie. These species are also found with the Edwards Plateau's live oak, shinnery oak, junipers, and mesquite (Gould 1962).

The APE is situated on an upper terrace above the east bank of the San Antonio River. Following the clearing of the land and construction of the sports complex, wildlife changed accordingly and is now more suited for scavenging the leavings of baseball players and their fans. Despite changes to the banks, the river remains home to a variety of fish (Kutac and Caran 1994).

Central Texas Cultural Chronology

The project APE is located within the southernmost portions of the Central Texas Archaeological Region according to Prewitt 1981 but within the South Texas-Northeastern Mexico Archaeological Region according to others (Turner and Hester 1993). For the purposes of this survey, the cultural chronology will focus on Central Texas as the site is located on the San Antonio River just a short distance from the ecotone formed by the Balcones Escarpment.

The cultural chronologies for Central and South Texas are not well understood or agreed upon. However, archaeological deposits indicate rich cultural development spanning several millennia. Black (1995), Hester (1995, 2004), and Collins (1995, 2004) have recently synthesized available archaeological evidence from the region. All dates are in the radiocarbon time scale and given as years before present (B.P., i.e. before 1950). Human presence is divided into three periods: Prehistoric, Protohistoric, and Historic.

Prehistoric

The Prehistoric period is divided into three major temporal stages, the Paleoindian, Archaic and Late Prehistoric. The Paleoindian stage begins with the earliest known human occupation of North America and extends to approximately 8800 B.P. The Archaic stage follows, extending from ca. 8800 B.P. to 1250 B.P. The Late Prehistoric stage begins ca. 1250 B.P. and is characterized by the development of bow and arrow and ceramic technologies.

Paleoindian

Collins (1995:381–385, 2004) dated the Paleoindian period in Central Texas to 11,500–8800 B.P.; the Paleoindian period is further divided into Early (ca. 11,500–10,200 B.P.) and Late (ca. 10,200–8800 B.P.) phases. Early Paleoindian artifacts are associated with the Clovis and Folsom cultures and diagnostic items include fluted, lanceolate projectile points. The Clovis culture is also characterized by well-made prismatic blades (Collins 1995; Green 1964). The Early Paleoindian stage is generally characterized by nomadic cultures that relied heavily on hunting large game animals (Black 1989). However, recent research has suggested that early Paleoindian subsistence patterns were considerably more diverse than previously thought and included reliance on local fauna, including turtles (Black 1989; Bousman et al. 2004; Collins and Brown 2000; Hester 1983; Lemke and Timperley 2008). Folsom cultures are considered to be specialized bison hunters, as inferred from the geographic location and artifactual composition of sites (Collins 1995).

The Late Paleoindian substage occurred from ca.10,200–8800 B.P. Reliable evidence for these dates was recovered from the Wilson-Leonard site, north of Austin (Bousman et al. 2004; Collins 1998). At Wilson-Leonard, archaeologists excavated an occupation known as Wilson, named for the unique corner-notched projectile point. The dense occupation also included a human burial (Bousman et al. 2004; Collins 1998). In addition to the Wilson occupation, Golondrina-Barber and St. Mary's Hall components, dating between 9500 and 8800 B.P., were excavated. Collins (1995) suggested the Wilson, Golondrina-Barber, and St. Mary's Hall components represent a transitional period between the Paleoindian and Archaic Periods due to the subtle presence of notched projectile points and burned-rock cooking features.

Archaic

Collins (1995, 2004) has contended that the Archaic stage in Central Texas lasted approximately 7500 years, from 8800–1200/1300 B.P., and has divided the stage into Early, Middle, and Late Archaic based on Weir's (1976) chronology. The Archaic stage marks several transitions: a shift in hunting focus from Pleistocene megafauna to smaller animals, the increased use of plant food resources and use of ground stones in food processing, increased implementation of stone cooking technology, increased use of organic materials for tool manufacturing and an increase in the number and variety of lithic tools for woodworking, the predominance of corner- and side-notched projectile points, greater population stability and less residential mobility, and systematic burial of the dead. What appears as a new emphasis on organic materials in tool technologies and diet is more likely a reflection of preservation bias.

Early Archaic

Although Collins (1995:383, 2004) argued that the Early Archaic spanned the period from 8800 B.P. to 6000 B.P. based on three divisions of projectile point types, the current project considers the Early Archaic to have extended from 8800 B.P. to 5800 B.P., based on Prewitt (1981) and modified by Collins (1995). This cultural period is distinguished from previous periods by significant changes in lithic technology, such as notched projectile points, specialized tools (e.g. Clear Fork and Guadalupe bifaces), and dietary adjustment evidenced by the increased number of ground stone artifacts and burned rock midden cooking features (Collins 1995; Turner and Hester 1993:246–256). Shifts in subsistence were the result of a variable climate and concomitant variation in game resources (i.e. bison, Dillehay 1974). Collins (1995) suggested that Early Archaic peoples occupied the wetter portions of the Edwards Plateau. Early Archaic sites are thinly dispersed and are seen across a wide area of Texas and northern Mexico (Weir 1976). However, Collins (1995:383) noted a concentration of Early Archaic components along the southeastern margins of the Edwards Plateau, close to major spring localities such as in San Marcos.

Middle Archaic

The Middle Archaic, defined by Collins (1995, 2004) as 6000 B.P. to 4000 B.P. (5800 B.P. to 4000 B.P. for the current project), is approximately marked by the onset of the Altithermal. The climate fluctuated from arid to mesic, then back to arid in Central Texas during the Altithermal. Vegetation and wildlife regimes all fluctuated in response to these environmental oscillations, with human groups responding accordingly. Collins (1995) divided the Middle Archaic period by projectile point style intervals: Bell-Andice-Calf Creek, Taylor, and Nolan and Travis. The Bell-Andice-Calf Creek interval occurred during a mesic period when grasslands, attractive to bison herds, expanded southward into Central and South Texas. Bell-Andice-Calf Creek peoples, as evidenced by hunting-based lithic technology, were specialized bison hunters who followed the herds southward (Johnson and Goode 1994). As the period shifted from mesic to arid, both bison and bison hunters retreated northward. During this transitional period, Taylor bifaces were manufactured. Later in the Middle Archaic, Taylor bifaces were replaced by Nolan and Travis points (Collins 1995, 2004). The Nolan-Travis interval was a period when temperature and aridity were at their highest levels. Prehistoric inhabitants acclimated themselves to peak aridity as seen through increased utilization of xerophytes such as sotol (Johnson and Goode 1994). These plants, typically baked in earthen ovens, also reflect the development of burned rock middens. During more arid episodes, the aquifer-fed streams and resource-rich environments of Central Texas were extensively utilized (Story 1985:40; Weir 1976:125, 128).

Late Archaic

The Central Texas Late Archaic spanned the period of ca. 4000–1250 B.P. (Collins 1995:384, 2004). For finer resolution, the current project divides the Late Archaic period by Johnson and Goode's (1994) sub-periods: Late Archaic I, 4000–2200 B.P., and Late Archaic II, 2200–1250 B.P. Sites with ideal stratigraphic separation may reveal three discernable sub-periods for the Late Archaic (e.g., Prewitt 1981). Late Archaic I, according to Johnson and Goode (1994), is marked by two significant cultural traits: 1) the billet thinning of bifacial knives and projectile points leapt forward in artistry and technology, and 2) the human population appeared to have increased. Although these patterns vary considerably through time and from one sub region to another, they strongly shape the archaeological record of the Late Archaic. Overall, evidence suggests an increasingly mesic climate through the Late Archaic (Collins 1995; Johnson and Goode 1994; Mauldin et al. 2012). Mauldin et al. (2012) suggested that climatic variation resulted in a general decrease in grassland bison range. Some archaeologists have noted the presence of cemeteries at sites such as Ernest Witte (Hall 1981) and Olmos Dam (Lukowski 1988) as evidence that populations indeed increased in size and that groups were becoming territorial (Story 1985:44–45). However, other archaeologists have challenged the interpretation of a growing population by citing a decrease in burned rock middens (Prewitt 1981:80–81).

Late Prehistoric

Collins (1995, 2004) dated the Late Prehistoric in Central Texas at 1,300/1,200 B.P.–260 B.P. and followed Kelley (1947) in dividing it into Austin and Toyah phases. The current project delimits the Austin phase to 1250–750 B.P. and the Toyah phase to 750–300 B.P. The most distinctive changes in relation to previous eras include a technological shift away from the dart and atlatl to the bow and arrow, and the more or less concurrent appearance of pottery (Black 1989:32; Story 1985:45–47).

Austin Phase

The Austin phase is characterized primarily by the appearance of arrow points, including Scallorn and Edwards types. Evidence for increased social strife, and perhaps overall population density, has been seen in numerous Central Texas burials dated to this period, which have revealed incidents of arrow-wound deaths, suggesting that population growth may have resulted in disputes over limited resource availability (Black 1989; Meissner 1991; Prewitt 1974). Burned rock middens are occasionally found with these types of points (Houk and Lohse 1993), and ground and pecked stone tools, used for plant food processing, become increasingly common in the Austin phase.

Toyah Phase

The beginning of the Toyah phase (750 B.P.) in Central Texas is characterized by contracting stem points with flaring, barbed shoulders (a style known as Perdiz); by the common occurrence of blade technology that is considered to be part of a specialized Toyah bison hunting and processing toolkit (Black and McGraw 1985; Huebner 1991; Ricklis 1994); and by the appearance of bone-tempered pottery in Central Texas (Johnson 1994:241–281). The wide variety of ceramic styles and influences seen throughout Toyah phase ceramic assemblages provide information about the social composition of these cultural groups (Arnn 2005). Toyah phase ceramic assemblages display Caddo, Texas Gulf Coast, and Jornada Mogollon influences (Arnn 2005). In addition to shifts in material technology, Mauldin et al. (2012) suggested that bison herds foraged across increasingly widespread ranges, at least partly in response to the climatic patterns described above. Mauldin et al. (2012) concluded that this change in bison herd behavior is partly responsible for a change in Toyah hunting strategy, involving increasingly logistically-organized hunting forays in pursuit of spatially dispersed herds. Based on the ratio of zooarchaeological to archaeobotanical data associated with types of sites (e.g. bulk plant processing, bulk meat processing, residential), Dering (2008) provided further evidence of Toyah phase logistically-oriented subsistence strategies and broad diet breadths. Included with logistical subsistence strategies was what appears to be either trade for horticultural products not produced in Central Texas or of limited localized horticultural practices. Both scenarios involve maize, which is exceedingly uncommon in Toyah-period archaeological contexts in Central Texas, but which has been reported from at least three locales, the Kyle Rockshelter (41HI1) in Hill County (Jelks 1961), Bear Branch (41CA13) in Callahan County (Adams 2002), and the Timmeron Rockshleter (41HY95) in Hays County (Harris 1985).

Protohistoric (Spanish Entrada Period)

In Texas, the Protohistoric period, also known as the Spanish Entrada period, was marked by Spanish *entradas*, the formal expeditions from established forts and missions in Northern Mexico into Central, Coastal, and East Texas in the late seventeenth and early eighteenth centuries. These encounters began with the venture into Texas by the Spanish explorer Cabeza de Vaca and the Narvaez expedition in 1528. The period is generally dated between 1500 and 1700 (or 1528, the date of the Cabeza de Vaca/Narvaez expedition, to the establishment of Mission San Antonio de Valero in 1718).

With Alonso de León’s expedition of 1680, El Camino Real (the King’s Road) was established from Villa Santiago de la Monclova in Mexico to East Texas. This roadway followed established Native American trade routes and trails and became a vital link between Mission San Juan Bautista in Northern Mexico and the Spanish settlement of Los Adaes in East Texas (McGraw et al. 1991). Spanish priests accompanying *entradas* provided the most complete information of indigenous cultures of early Texas. Those documented during the early entradas include the Cantona, Muruam, Payaya, Sana, and Yojuane, who were settled around the springs at San Marcos and described as semi-nomadic bands. Other tribes encountered at San Marcos included mobile hunting parties from villages in South and West Texas, including Catequeza, Cayanaaya, Chalome, Cibolo, and Jumano, who were heading toward bison hunting grounds in the Blackland Prairies (Foster 1995:265–289; Johnson and Campbell 1992; Newcomb 1993). Later groups who migrated into the region and displaced the earlier groups or tribes included the Tonkawa from Oklahoma and Lipan and Comanche from the Plains (Campbell and Campbell 1985; Dunn 1911; Newcomb 1961, 1993).

Archaeological sites dated to this period often contain a mix of both European imported goods, such as metal objects and glass beads, and traditional Native American artifacts, such as manufactured stone tools.

Historic

Spanish settlement in Central Texas first occurred in San Antonio with the establishment of Mission San Antonio de Valero (the Alamo) in 1718, and the later founding of San Antonio de

Béxar (Bolton 1970; Habig 1977; de la Teja 1995). Some researchers have demarcated the transition in Texas between the Entrada (Protohistoric) and Historic periods by the construction of the first Spanish missions in Texas. Most knowledge of this period has been gained through the written records of the early Spanish missionaries. During this time, massive depopulation occurred among the Native Americans, mostly due to European diseases to which the indigenous people had little resistance. Those few indigenous people remaining were nearly all displaced to reservations by the mid-1850s (Fisher 1998).

European presence in the region increased as settlers received land grants from the Mexican government until 1835. Settlement was difficult, however, due to continuation of hostilities with and raids by Native American tribes. The Texas Rangers provided protection from these conflicts after Texas secured independence from Mexico in 1836. Settlement in the region increased until 1845, when Texas gained admission to the United States, resulting in the formation of Hays County three years later (Bousman and Nickels 2003).

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS

Previous archaeological investigations in areas adjacent to the San Antonio River have demonstrated a high probability of the existence of stratified and buried historic and prehistoric resources within close proximity to the river. A total of 9 site centroids lie within several kilometers of the APE, and the northern boundary of the Rancho de las Cabras Historic District lies approximately 600 meters south. Figure 2 exhibits the locations of these sites relative to the APE.

Sites 41WN64 and 41WN117 lie to the north of the APE at approximately 1 km and 2 km distance, respectively. 41WN64 is a historic ruin site consisting of a sandstone foundation, brick kiln, well, and cistern, and was associated with Anglo-American settlement. 41WN117 is also a historic site and consists of a stone house foundation and basement; the structure was associated with occupation by a Benito Lopez between 1867 and 1888. Site 41WN69 lies 3 km east of the APE; this site consists of a prehistoric lithic scatter containing no diagnostic materials (THC online Sites Atlas)

Sites 41WN30, 41WN90, 41WN91, 41WN93, and 41WN92 lie approximately 2 km south of the project area within the Rancho de las Cabras National Historic District. These sites consist of both prehistoric and historic occupations and include cultural remains ranging from sparse prehistoric lithic scatters to a colonial era Spanish ranch associated with Mission Espada.

Center for Archaeological Research conducted excavations of part of the Rancho de las Cabras compound in 1983. Details of a structural wall component were recorded, and a trench for a palisade-type fence were located in the eastern portion of the compound. The fence was likely constructed for use in livestock farming during the late 18th and early 19th centuries (Fox and Houk 1998).

More recently Center for Archaeological Research conducted an intensive pedestrian survey of the Helton San Antonio River Nature Park located approximately 11 km northwest of the APE but within similar environs along the San Antonio River. Sites 41WN120 and 41WN121 were recorded within the survey area and consist of both a prehistoric hearth feature including an associated Refugio dart point (Archaic Period, Turner and Hester 1999) located within a bluff over the San Antonio River as well as a pair of late 19th century structures and associated glass and ceramic scatters (Munoz 2010).

Sensitive Material
Restricted Access Only

Figure 2. Archaeological sites adjacent to the APE.

METHODS

The current archaeological investigations were a 100% systematic, intensive pedestrian survey that included subsurface testing within the APE. Per standards set by the Council of Texas Archaeologists and promoted by the THC, 50 shovel tests and 5 trenches were excavated throughout the 95.2-acre area. Additionally, CAS mechanically excavated 5 trenches to investigate the potential for deeply buried deposits. The locations of all trenches and shovel tests were recorded using a Trimble GeoXT 6000 Series GPS unit.

Each trench, approximately 1 m wide by 3 m long, was excavated by arbitrary 30-cm levels to a maximum depth of 240 cm below surface or until a petrocalcic horizon was encountered. For all trenches, five 5-gallon buckets of sediment from every 30-cm level was passed through ¼-inch hardware mesh. Trenches were immediately backfilled following photo documentation and observation.

All shovel tests, approximately 30 cm in diameter, were excavated primarily by stratigraphic zones and secondarily by arbitrary 20 cm levels to a maximum depth of 80 cm. All of the excavated sediment was passed through a ¼-inch hardware screen. Observations and comments pertaining to each probe were recorded by the excavator. Once all excavations were complete, the shovel tests were backfilled.

RESULTS

The APE within Moody Reunion and Fairgrounds, Floresville River Park, and Kiddie Park is mostly cleared land on terraces immediately above the San Antonio River. The APE is relatively flat but slopes gently toward the river along its western edge with a 3 to 4 meter steep drop occurring within 10 to 15 meters of the bank.

Existing previous ground disturbances include a 4-field baseball complex with a central bathroom and concession stand in the center, swimming pool, children's jungle gym, a covered concrete pavilion, and associated roads and parking lots (Figure 3). The athletic fields, jungle gym, roads, and parking lots likely caused minimal ground disturbance other than minor grading, which likely would not have extended beyond the plow zone and covers the vast majority of the APE. The covered pavilion and swimming pool are likely to have had more significant impact to the subsurface.

One additional disturbance noted in the APE during survey was bioturbation associated with feral hogs. Within the northern half of the APE, at least half of the land area had been recently uprooted to depths of up to 25 cm below surface. The southern half of the project area appeared largely unaffected.

Five mechanical trenches were excavated to a maximum depth of 240 cm below surface or to a petrocalcic horizon, and 50 shovel tests were excavated to a maximum depth of 80 cm throughout the APE yielding only modern refuse. Figure 3 shows the locations for all trenches and shovel tests within the APE. Table 1 in Appendix A contains the details for each backhoe trench, and Table 1 in Appendix B contains the details for each shovel test.

The soil profile throughout the APE grades from a deep, immature sand in the west along the San Antonio River to a relatively shallow, mature upland sandy clay on the upper terrace on the east side of the project area. Figures 4 and 5 depict the location and profile of Trench BT1 respectively. Figure 5 shows a naturally exposed profile wall on the west side of the APE near the banks of the river (see Figure 3).

The soil profiles in the eastern portion of the APE indicate the terrace is much more seldom impacted by flood events and the meanderings of the San Antonio River. Although the underlying bedrock is unlithified clays/sands and thus, difficult to discern from highly calcified younger soils, the upper 2 meters of profile visible in BT1 appear to show a near complete A-B-Bkk-C horizonation, and therefore, indicate sediments below 2 meters in this area to be beyond human time scales in Texas.

The western portion of the APE, especially near the San Antonio River contains much younger and much deeper soils consisting of frequent alluvial flood deposits. The natural profile exposure shown in Figures 3 and 6 exhibited near structureless, massive sands down to depths of at least 4 meters. Although no cultural material could be identified in the profiles of the exposure, 1 stone tool was identified in a secondary context on the floor of the exposure (Figure 7). The tool may represent a tested cobble or perhaps a cutting tool and could have been transported to its place of discovery by alluvial processes.

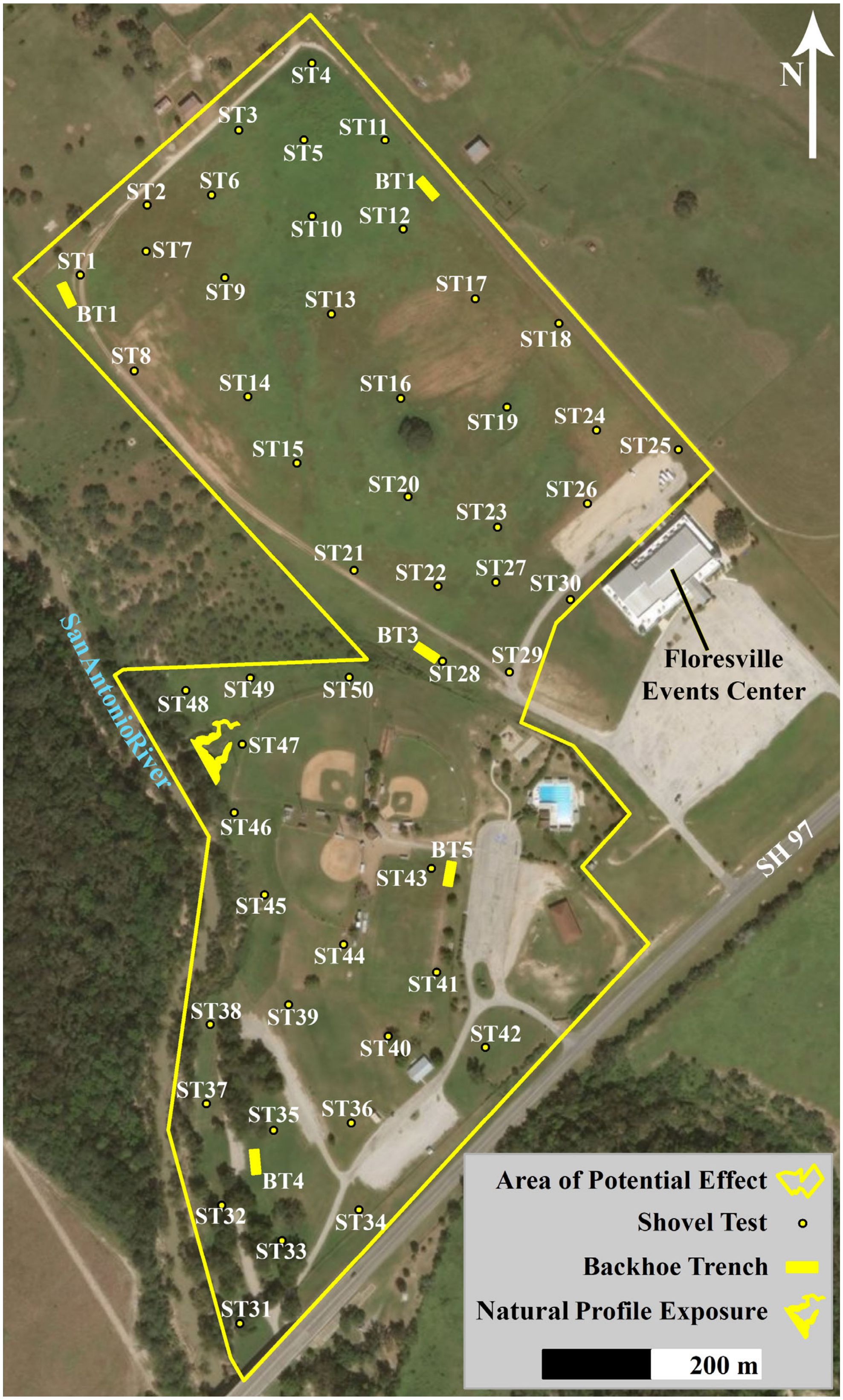

Figure 3. Backhoe trench and shovel test locations within area of potential effects.

Figure 4. Backhoe and operator beginning excavation of trench BT1.

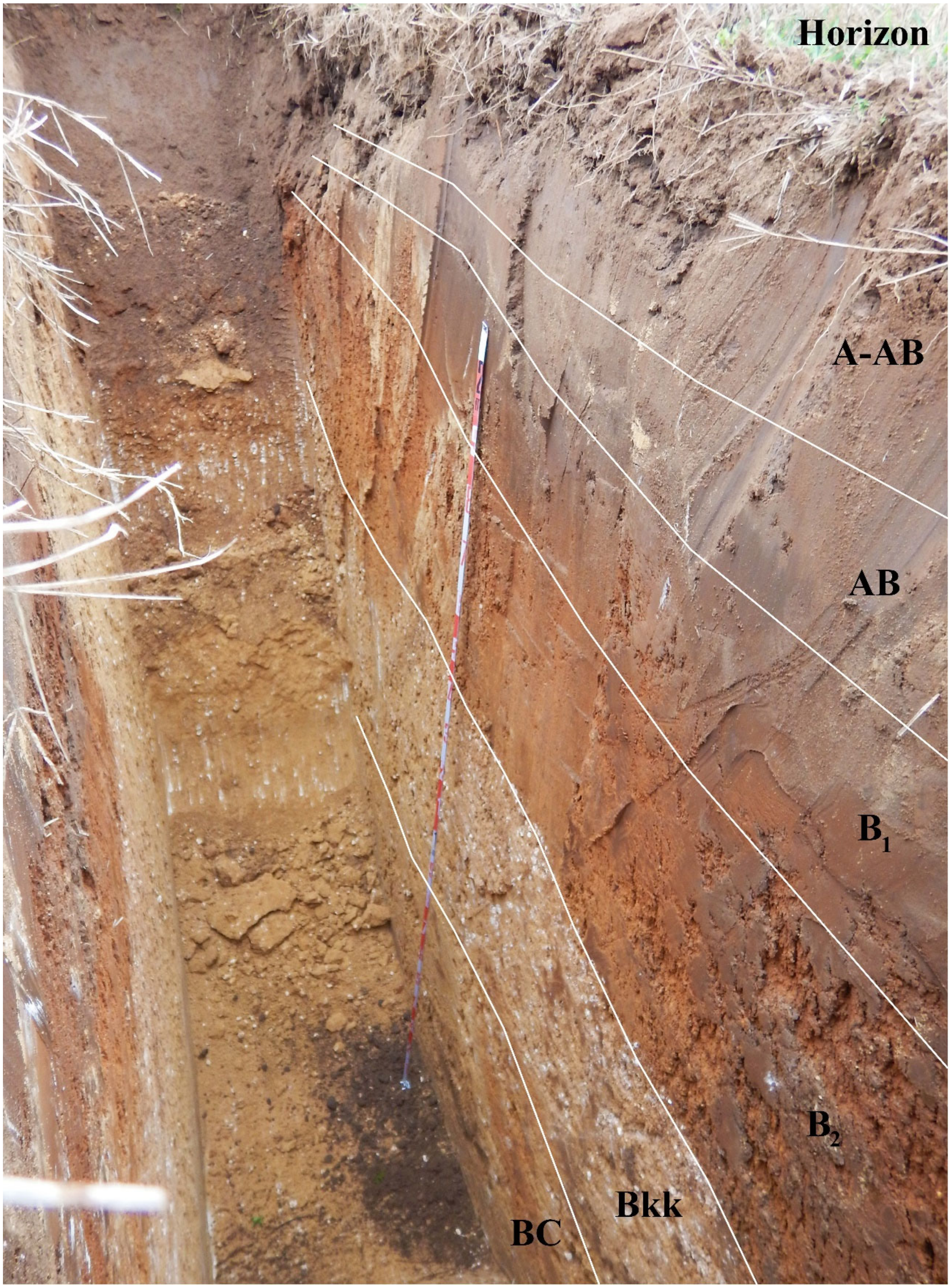

Figure 5. Profile of trench BT1 showing mature soil horizonation on east side of APE. Detailed in Appendix A, Table 1.

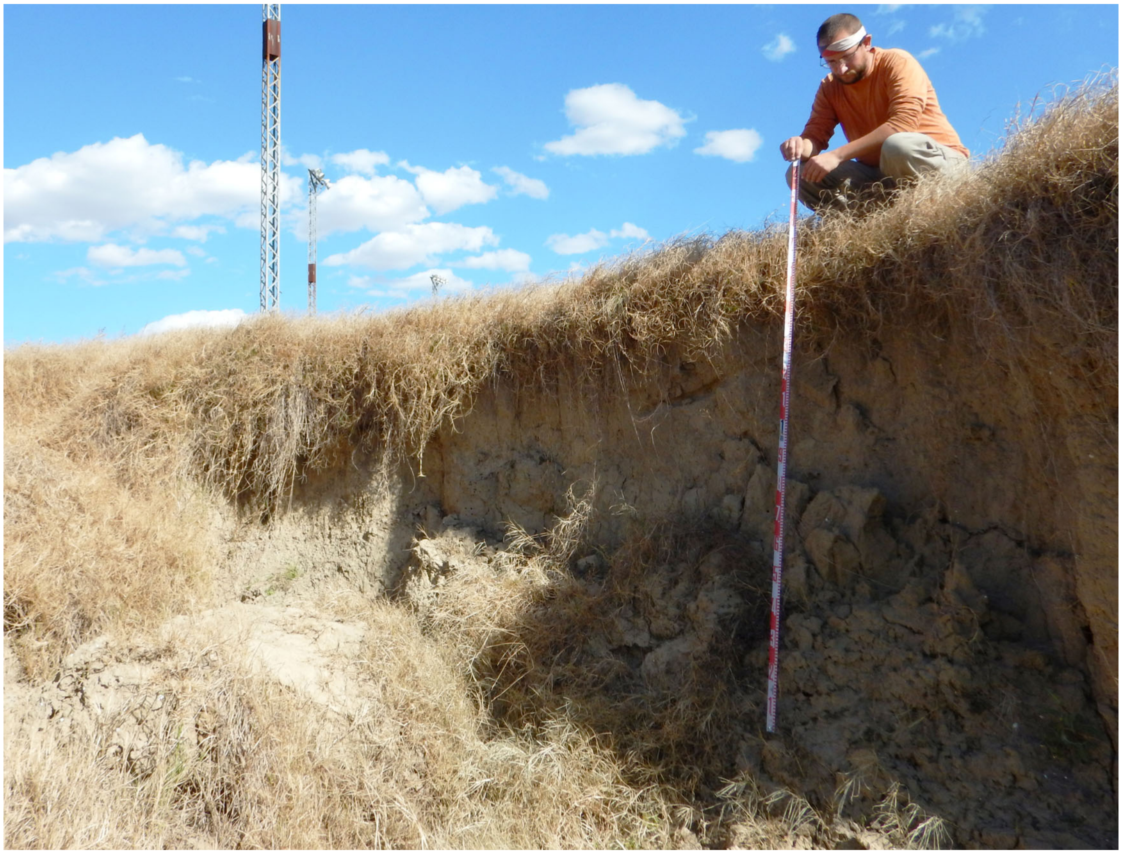

Figure 6. East wall of natural profile exposure in west-central portion of project APE showing deep, massive sand deposits.

Figure 7. Stone tool observed in secondary context on floor of natural profile exposure.

CONCLUSIONS AND RECOMMENDATIONS

The City of Floresville plans to install improvements within Moody Reunion and Fairgrounds including a new baseball complex, which will require significant ground disturbance. As a political subdivision of the State of Texas, work performed by the City, using State funds and/or involving State-owned property, requires compliance with the Texas Antiquities Code. A level of effort deemed appropriate by the City, State, and the Center for Archaeological Studies included an intensive pedestrian survey and the excavation of 5 mechanical trenches and 50 shovel tests distributed throughout the APE. Based on the survey results, CAS did not identify buried historic or prehistoric material significant to the City's, State's, or Nation's history that would be adversely impacted by the park improvements.

Overall, the soils of the APE exhibit a high potential for buried cultural resources, and the nearness to the San Antonio River would have been attractive to both prehistoric and historic peoples. The western portions of the APE nearest the river consist of deep sands and could contain deeply buried cultural deposits not reachable by this survey. The eastern edges of the APE consist of more upland and mature soils, and would contain, cultural materials in the upper 2 to 3 meters of the soil column if such were present.

Although one stone tool was found in a secondary context within an erosional feature near in the west-central portion of the APE, the source of the tool could not be identified and no other cultural material was observed. This isolated find was located very near the east bank of the San Antonio River and may simply represent a transported tested cobble.

The majority of the APE within what is now the Floresville River Park, Kiddie Park, and Moody Reunion and Fairgrounds was relatively unchanged by anything other than agricultural work until the construction of the existing structures and baseball complexes. Although the construction of the new baseball fields will be quite impactful of the subsurface due to the necessity of grading the existing slope, disturbance to significant cultural material within the APE will be minimal as only a single isolated find was recorded during an intensive pedestrian survey which included subsurface testing. CAS recommends the City be given full regulatory clearance to proceed. Should the City uncover cultural remains not identified by this survey during grading or other ground disturbance, CAS recommends that the THC be notified immediately.

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APPENDIX A

Table A-1. All backhoe trenches showing texture, color, and comments by stratigraphic level.

BT	Depth (cmbs)	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
1	0-30	Sandy loam	5YR 3/2	Sterile	Sub-angular blocky, 0% coarse fragments, clear smooth lower boundary
	30-50	Sandy clay	2.5YR 3/2	Sterile	Sub-angular blocky, 0% coarse fragments, gradual smooth lower boundary
	50-80	Sandy clay	2.5YR 4/4	Sterile	Sub-angular blocky, 0% coarse fragments, gradual smooth lower boundary
	80-105	Clay	5YR 5/6	Sterile	Angular blocky, 0% coarse fragments, abrupt smooth lower boundary
	105-180	Sandy clay	7.5YR 6/6	Sterile	Rounded blocky, >50% $CaCO_3$ nodules, abrupt smooth lower boundary
	180-240	Clayey sand	10YR 6/6	Sterile	Massive structureless, 5% $CaCO_3$ nodules
2	0-30	Sandy loam	10YR 3/3	Sterile	Rounded blocky, 0% coarse fragments, gradual smooth lower boundary
	30-55	Sandy loam	10YR 4/3	Sterile	Rounded blocky, 0% coarse fragments, clear smooth lower boundary
	55-105	Sandy clay	7.5YR 5/6	Sterile	Structureless, 0% coarse fragments, Abrupt smooth lower boundary
	105-160	Sandy silt	10YR 5/4	Sterile	Rounded blocky, 50% $CaCO_3$ masses, clear smooth lower boundary
	160-205	Sand	10YR 6/4	Sterile	Sub-angular blocky, 5% $CaCO_3$ nodules
3	0-15	Sandy loam	7.5YR 5/3	Sterile	Sub-angular platy, 0% coarse fragments, abrupt irregular lower boundary
	15-55	Sand	7.5YR 4/2	Sterile	Rounded blocky, 0% coarse fragments, abrupt smooth lower boundary
	55-85	Clayey sand	7.5YR 3/2	Sterile	Sub-angular blocky, 0% coarse fragments, clear smooth lower boundary
	85-145	Clayey sand	7.5YR 5/4	Sterile	Sub-angular blocky, 3% rabdotus shells, clear smooth lower boundary
	145-225	Clayey sand	7.5YR 5/6	Sterile	Sub-angular blocky, 3% rabdotus shells
4	0-50	Sand	10YR 5/3.5	Sterile	Massive structureless, 0% coarse fragments, clear smooth lower boundary
	50-85	Sandy clay	10YR 4/2	Sterile	Angular blocky, 0% coarse fragments, clear smooth lower boundary

Table A-1. All backhoe trenches showing texture, color, and comments by stratigraphic level.

BT	Depth (cmbs)	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
	85-130	Clayey sand	10YR 4/3	Sterile	Rounded blocky, 0% coarse fragments, abrupt smooth lower boundary
	130-165	Sandy loam	10YR 5/3	Sterile	Angular blocky, 0% coarse fragments, Gradual smooth lower boundary
	165-210	Sand	10YR 6/4	Sterile	Rounded blocky, 0% coarse fragments
5	0-25	Clay	7.5YR 3/1	Sterile	Angular blocky, 0% coarse fragments, Gradual smooth lower boundary
	25-45	Clay loam	10YR 4/3	Sterile; Charcoal at 32 cmbs	Sub-angular blocky, 0% coarse fragments, Clear irregular lower boundary
	45-70	Clay	10YR 3/2	Sterile	Angular blocky, 0% coarse fragments, Abrupt irregular lower boundary
	70-120	Sandy clay	10YR 4/3, 10YR 5/4	Sterile	Sub-angular blocky, 5% $CaCO_3$ masses, Gradual smooth lower boundary
	120-195	Sandy clay	7.5YR 5/6	Sterile	Sub-angular blocky, 10% $CaCO_3$ masses, Clear smooth lower boundary
	195-220	Sandy clay	7.5YR 6/6	Sterile	Sub-angular blocky, 25% $CaCO_3$ masses

APPENDIX B

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
1	0-20	Sandy loam	Dark brown	None	
	20-40	Sandy loam	Dark brown	None	
	40-60	Clayey sand	Reddish yellow	None	
2	0-10	Silty sand	5YR 3/3	None	
	10-20	Silty clay	5YR 4/6	None	
	20-40	Silty clay	5YR 4/6	None	
	40-60	Silty clay	5YR 4/6	None	
3	0-20	Sandy loam	Brown	None	Disturbed surface
	20-30	Sandy loam	Brown	None	
	30-35	Sandy clay	Dark brown	None	20% very dark gray mottles
	35-40	Clay	Reddish brown	None	
	40-60	Clay	Reddish brown	None	
4	0-20	Clay	10YR 3/1	None	
	20-40	Clay	10YR 3/1	None	
	40-60	Clay	10YR 3/1	None	
5	0-20	Sandy clay loam	Brown	None	
	20-40	Sandy clay loam	Brown	None	
	40-60	Sandy clay	Reddish brown	None	
6	0-5	Sandy clay	7.5YR 4/3	None	
	5-20	Clay	7.5YR 4/6	None	
	20-40	Clay	7.5YR 4/6	None	
	40-60	Clay	7.5YR 4/6	None	

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
7	0-20	Sandy clay	Reddish brown	None	Surface disturbed by feral pigs
	20-40	Sandy clay	Reddish brown	None	
	40-60	Sandy clay	Reddish brown	None	
8	0-10	Silty clay	5YR 4/2	None	
	10-20	Silty clay	5YR 4/6	None	5 cm iron nodule
	20-40	Clay	5YR 4/6	None	
	40-60	Clay	5YR 4/6	None	
9	0-20	Sandy clay loam	Grayish brown	None	
	20-25	Sandy clay loam	Grayish brown	None	
	25-40	Sandy clay	Reddish brown	None	
10	0-12	Loam	7.5YR 4/3	None	Imported fill
	12-20	Silty clay	5YR 4/4	1 piece brown glass	~10% $CaCO_3$ nodules
	20-40	Silty clay	5YR 4/4	None	~10% $CaCO_3$ nodules
	40-55	Silty clay	5YR 4/4	None	~10% $CaCO_3$ nodules
	55-60	Clay	5YR 5/4	None	~10% $CaCO_3$ nodules, ST located within graded portion of new baseball fields. Upper 12 cm highly disturbed, likely moved into place. At 12 cmbs surface truncated by grading. Glass fragment possibly moved into stratum by grading. By 60 cmbs soil appears to be a Bkk horizon and likely beyond human timescales.
11	0-20	Sandy clay	Dark grayish brown	None	
	20-40	Sandy clay		None	
	40-60	Sandy clay loam	Reddish brown	None	
12	0-10	Loam	10YR 4/3	None	Likely imported fill.
	10-20	Sandy clay	10YR 6/4	None	>25% $CaCO_3$ nodules

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
	20-35	Sandy clay	10YR 6/4	None	ST in area graded for baseball fields. Upper 10 cm likely fill. Surface at 10 cmbs truncated by grading 5-6 ft below original surface based on estimation from nearby hillcut.
13	0-20	Sand	Brown	None	Construction debris on surface
	20-40	Sandy clay	Dark brown	None	
	40-50	Sandy clay	Dark brown	None	
	50-60	Sand	Yellowish red	None	
	60-70	Sandy clay	Dark grayish brown	None	
14	0-20	Sandy clay	10YR 4/2	None	
	20-40	Sandy clay	10YR 4/2	None	
	40-60	Sandy clay	10YR 4/2	None	
15	0-20	Sandy clay loam	Brown	None	
	20-25	Sandy clay loam	Brown		Concentration of caliche at bottom of level
	25-40	Sandy clay	Dark brown		
	40-60	Sandy clay	Dark brown		
16	0-18	Silty clay	7.5YR 4/2	None	
	18-40	Sandy clay	7.5YR 4/6	None	
	40-60	Sandy clay	7.5YR 4/6	None	15% $CaCO_3$ nodules. Likely some grading has occurred. Color change at 18 cmbs is probably a truncated surface
17	0-20	Sandy clay	Reddish brown		Disturbed surface due to subscription
	20-40	Sandy clay	Reddish brown		

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
	40-60	Sandy clay	Reddish brown		
18	0-10	Sandy loam	10YR 4/4	None	Area of shovel test likely undisturbed soil. Appears to be most upland part of APE
	10-20	Sandy loam	10YR 4/1	None	
	20-40	Sandy loam	10YR 4/1	None	
	40-60	Sandy clay	7.5YR 4/3	None	
19	0-20	Sandy clay	Reddish brown	None	
	20-28	Sandy clay	Reddish brown	None	
	28-40	Sandy clay	Dark yellowish red	None	
	40-60	Sandy clay	Dark yellowish red	None	
20	0-20	Sandy clay	10YR 4/2	None	
	20-42	Sandy clay	5YR 4/3	None	
	42-60	Sandy clay	10YR 5/4	None	15% $CaCO_3$ nodules
21	0-20	Sandy loam	Dark grayish brown	None	
	20-40	Sandy loam	Dark grayish brown	None	
	40-50	Sandy loam	Dark grayish brown	None	
	50-65	Sandy clay	Dark grayish brown	None	
22	0-20	Sandy loam	5YR 4/2	None	

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
	20-40	Sandy loam	10YR 4/2	None	
	40-60	Sandy loam	10YR 4/2	None	
23	0-10	Sandy loam	Brown	None	
	10-20	Sandy clay	Dark grayish brown	None	
	20-40	Sandy clay	Dark grayish brown	None	
	40-55	Sandy clay	Dark grayish brown	None	
	55-60	Sandy clay	Dark grayish brown	None	
	60-70	Sandy clay	Strong brown	None	
24	0-15	Sandy clay	10YR 4/2	None	
	15-20	Sandy clay	5YR 4/3	None	
	20-40	Sandy clay	5YR 4/3	None	
	40-50	Sandy clay	5YR 4/3	None	
	50-60	Clay	5YR 4/6	None	
25	0-20	Sandy loam	10YR 4/2	None	
	20-40	Sandy loam	10YR 4/2	None	
	40-50	Sandy loam	10YR 4/2	None	
	50-65	Sandy loam	5YR 4/6	None	
26	0-10	Sandy loam	Brown	None	Disturbed surface
	10-20	Sandy clay	Yellowish red	None	

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
	20-40	Sandy clay	Yellowish red	None	
	40-60	Sandy clay	Yellowish red	None	
27	0-20	Sandy loam	10YR 4/2	None	
	20-40	Sandy loam	10YR 4/2	None	
	40-60	Sandy loam	10YR 4/2	None	
28	0-20	Sandy loam	Brown	None	
	20-40	Sandy clay	Yellowish red	None	
	40-60	Sandy clay	Yellowish red	None	
29	0-20	Sandy clay	10YR 5/4	None	20% $CaCO_3$ nodules
	20-40	Sandy clay	10YR 5/4	None	20% $CaCO_3$ nodules
	40-60	Sandy clay	10YR 5/4	None	20% $CaCO_3$ nodules. Entire profile may be imported caliche fill.
30	0-20	Sandy loam	Brown	None	<5% caliche
	20-35	Sandy clay	Reddish brown	None	10% caliche
	35-40	Sandy clay	Reddish brown	None	90% caliche. Impenetrable beyond 40 cmbs
31	0-10	Sandy loam	Dark grayish brown	None	
	10-20	Sand	Brown	None	
	20-40	Sand	Brown	None	
	40-60	Sand	Brown	None	
	60-70	Sand	Brown	None	
	70-75	Sand	Brown	None	
	75-80	Sandy clay	Dark grayish brown	None	

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
32	0-20	Sandy loam	10YR 5/2	None	
	20-40	Sandy loam	10YR 5/2	None	
	40-60	Sandy loam	10YR 5/2	None	
33	0-20	Sandy loam	Brown	None	
	20-40	Sandy loam	Brown	None	
	40-60	Sandy loam	Brown	None	
	60-70	Sandy clay	Dark grayish brown	None	
34	0-20	Sandy loam	10YR 5/2	4 asphalt fragments	
	20-40	Sandy loam	10YR 5/3	1 asphalt fragment	
	40-60	Sandy loam	10YR 5/3	None	
	60-70	Sand	10YR 5/5	None	
35	0-20	Sandy loam	Brown	None	
	20-40	Sandy loam	Brown	None	
	40-50	Sandy loam	Brown	None	
	50-60	Sandy clay	Dark grayish brown	None	
36	0-20	Sandy loam	10YR 4/2	None	
	20-40	Sandy clay	10YR 5/2	None	
	40-60	Sandy clay	10YR 5/3	None	
37	0-20	Sandy loam	Brown	None	

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
	20-40	Sandy loam	Brown	None	
	40-60	Sandy loam	Brown	None	
	60-70	Sandy loam	Brown	None	
	70-80	Sandy clay	Dark grayish brown	None	
38	0-20	Silty sand	10YR 5/3	None	
	20-40	Silty sand	10YR 5/3	None	
	40-60	Silty sand	10YR 5/3	None	
	60-80	Silty sand	10YR 5/3	None	
39	0-20	Sandy loam	Brown	None	
	20-30	Sandy loam	Brown	None	
	30-40	Sandy clay	Dark grayish brown	None	10% caliche
	40-60	Sandy clay	Dark grayish brown	None	10% caliche
40	0-20	Sandy loam	10YR 5/3	None	
	20-40	Sand	10YR 5/3	None	
	40-65	Clayey sand	10YR 5/4	None	
41	0-20	Sandy clay loam	Dark grayish brown	None	
	20-40	Sandy clay loam	Dark grayish brown	None	
	40-50	Sandy clay	Light yellowish brown	None	30% caliche
	50-60	Sandy clay	Yellowish red	None	<5% caliche
42	0-20	Loam	10YR 4/2	None	5% cherty gravel

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
	20-40	Loam	10YR 4/2	None	
	40-50	Loam	10YR 4/2	None	
	50-62	Silty clay	10YR 5/3	None	
43	0-20	Sandy clay loam	Brown	None	
	20-40	Sandy clay	Dark grayish brown	None	
	40-60	Sandy clay	Dark grayish brown	None	
44	0-20	Sandy loam	10YR 4/3	None	
	20-40	Sandy loam	10YR 4/3	None	
	40-60	Sandy loam	10YR 4/3	None	
45	0-20	Silty loam	Yellowish brown	Baseball on surface	
	20-30	Silty loam	Yellowish brown	None	
	30-40	Silty clay	Yellowish brown	None	
	40-60	Silty clay	Yellowish brown	None	
46	0-20	Silty sand	10YR 5/2	None	
	20-40	Silty sand	10YR 5/3	None	
	40-60	Silty sand	10YR 5/3	None	
47	0-20	Silty clay loam	Brown	None	
	20-40	Silty clay loam	Brown	None	
	40-60	Sandy loam	Yellowish brown	None	Animal burrow at 50 cmbs
48	0-20	Sandy loam	10YR 4/2	None	
	20-40	Sand	10 YR 4/3	None	
	40-60	Sand	10 YR 4/3	None	
	60-70	Sand	10 YR 4/3	None	

Table B-1. All shovel tests showing texture, color, and comments by stratigraphic level.

ST	Depth cmbs	Sediment Texture	Sediment Color	Artifacts Recovered	Comments
49	0-20	Sandy clay loam	Dark grayish brown	None	
	20-30	Sandy clay loam	Dark grayish brown	None	
	30-40	Sand	Yellowish brown	None	
	40-60	Sand	Yellowish brown	None	
50	0-20	Sandy clay loam	Brown	None	
	20-40	Sandy clay loam	Brown	None	
	40-60	Sandy clay	Reddish brown	None	Macias