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Jeffrey D. Owens

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Intensive Cultural Resources Survey of the Proposed 12.5-Acre Colonial Crossing Apartments Tract, Belton, Bell County, Texas

By:

Jeffrey D. Owens

HJN 150014 AR

Prepared for:

Mason Joseph Company, Inc.
San Antonio, Texas

Prepared by:

Horizon Environmental Services, Inc.
Austin, Texas

March 2015

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By:

Jeffrey D. Owens

Prepared for:

Mason Joseph Company, Inc.
211 North Loop 1604 East, Suite 140
San Antonio, Texas 78232

Prepared by:

Horizon Environmental Services, Inc.
1507 South IH 35
Austin, Texas 78741

Jeffrey D. Owens, Principal Investigator
HJN 150014 AR

March 2015

MANAGEMENT SUMMARY

Horizon Environmental Services, Inc. (Horizon) was selected by the Mason Joseph Company, Inc. (MJC) on behalf of a private real estate developer to conduct an intensive cultural resources inventory and assessment for the proposed development of the Colonial Crossing apartment complex on a 5.1-hectare (ha) (12.5-acre [ac]) tract in Belton, Bell County, Texas. The proposed tract is located southeast of the intersection of State Highway (SH) 121 Loop and Farm-to-Market Road (FM) 93 (also known as Nolan Valley Road). The Area of Potential Effect (APE) consists of the entire 5.1-ha (12.5-ac) parcel within which proposed construction would occur.

The proposed undertaking is being sponsored by a private real estate developer on privately owned land utilizing funding provided by the US Department of Housing and Urban Development (HUD); as such, the project falls under the jurisdiction of Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended. As the project represents a publicly sponsored undertaking with the potential to impact potentially significant cultural resources, the project sponsor is required to provide for a cultural resources inventory of the APE.

On February 16, 2015, Horizon archeologist Briana Smith, under the overall direction of Jeffrey D. Owens, Principal Investigator, performed an intensive cultural resources survey of the APE to locate any cultural resources that potentially would be impacted by the proposed undertaking. The cultural resources investigation consisted of an archival review, an intensive pedestrian survey of the APE, and the production of a report suitable for review by the State Historic Preservation Officer (SHPO) in accordance with the Texas Historical Commission's (THC) Rules of Practice and Procedure, Chapter 26, Section 27, and the Council of Texas Archeologists (CTA) Guidelines for Cultural Resources Management Reports.

Horizon's archeologist traversed the APE and thoroughly inspected the modern ground surface for aboriginal and historic-age cultural resources. The Texas State Minimum Archeological Survey Standards (TSMASS) require a minimum of 1 subsurface probe per 2 acres for project areas between 11 and 100 ac in size; as such, a total of 6 subsurface probes would be required within the 5.1-ha (12.5-ac) APE. Horizon exceeded the TSMASS by excavating a total of 13 shovel tests. The pedestrian survey and shovel testing revealed that sediments in the APE consist of shallow, surficial remnants of dark brown gravelly clay residuum ranging from 5.0 to 30.0 centimeters (2.0 to 11.8 inches) in depth, overlying decomposing limestone bedrock gravels.

No cultural resources, historic or prehistoric, were observed within the 5.1-ha (12.5-ac) APE during the survey.

Based on the results of the survey-level investigations of the APE documented in this report, no potentially significant cultural resources would be affected by the proposed undertaking. In accordance with 36 Code of Federal Regulations (CFR) 800.4, Horizon has made a reasonable and good-faith effort to identify historic properties within the APE. No cultural resources were identified that meet the criteria for inclusion in the National Register of Historic Places (NRHP) according to 36 CFR 60.4, and no further archeological work is recommended in connection with the proposed undertaking. However, it should be noted that human burials are protected under the Texas Health and Safety Code. In the event that any human remains or burial objects are inadvertently discovered at any point during construction, use, or ongoing maintenance in the APE, even in previously surveyed areas, all work should cease immediately at the location of the inadvertent discovery until a qualified archeologist can assess the find, and the THC should be notified of the discovery.

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1.0 INTRODUCTION

Horizon Environmental Services, Inc. (Horizon) was selected by the Mason Joseph Company, Inc. (MJC) on behalf of a private real estate developer to conduct an intensive cultural resources inventory and assessment for the proposed development of the Colonial Crossing apartment complex on a 5.1-hectare (ha) (12.5-acre [ac]) tract in Belton, Bell County, Texas. The proposed tract is located southeast of the intersection of State Highway (SH) 121 Loop and Farm-to-Market Road (FM) 93 (also known as Nolan Valley Road). The Area of Potential Effect (APE) consists of the entire 5.1-ha (12.5-ac) parcel within which proposed construction would occur.

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Following this introductory chapter, Chapters 2.0 and 3.0 present the environmental and cultural backgrounds, respectively, of the APE. Chapter 4.0 describes the results of background archival research, and Chapter 5.0 discusses cultural resources survey methods. Chapter 6.0 presents the results of the cultural resources survey, and Chapter 7.0 presents cultural resources management recommendations for the project. Chapter 8.0 lists the references cited in the report, and Appendix A summarizes shovel test data.

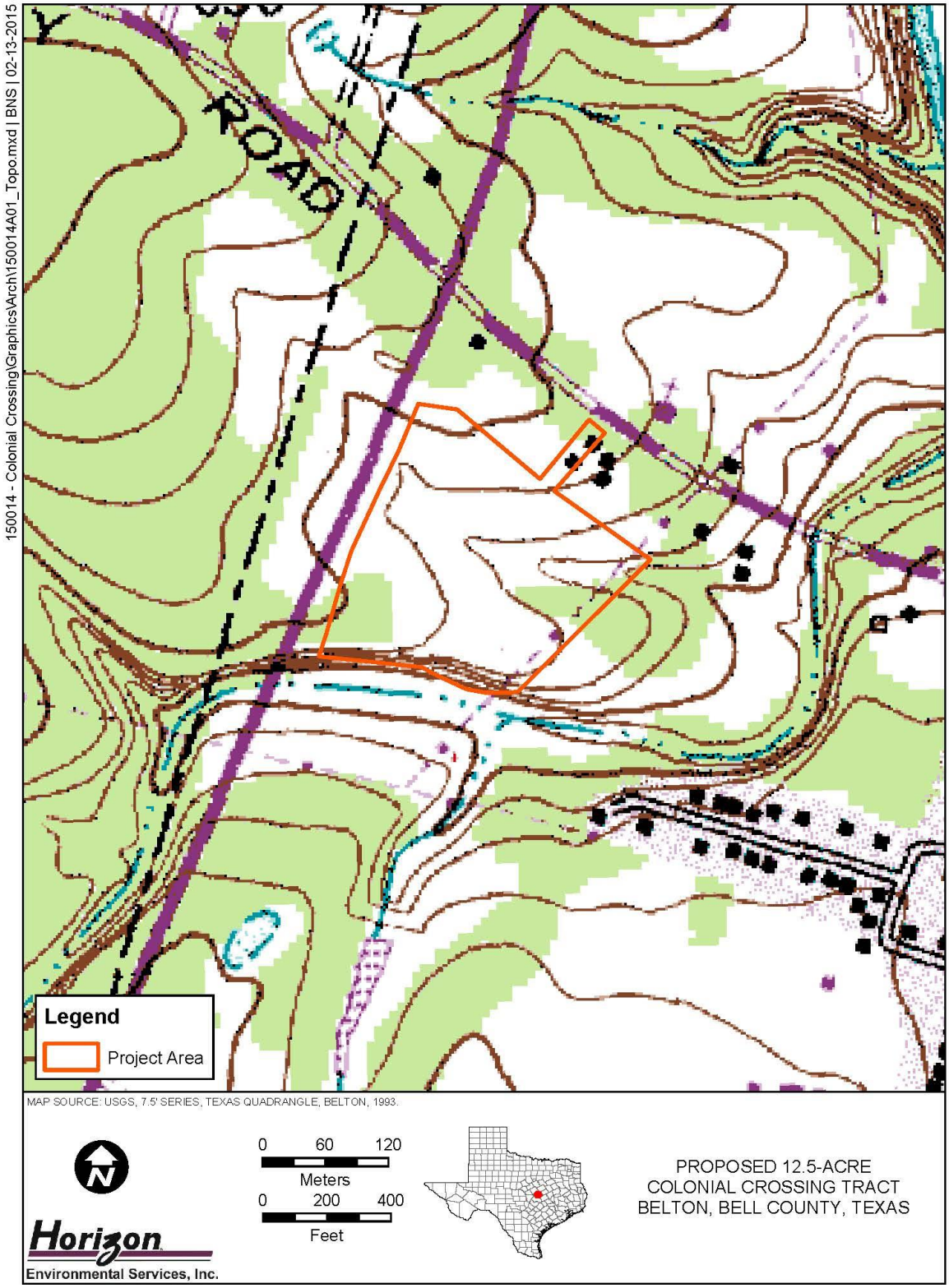

Figure 1. Location of APE on USGS Topographic Quadrangle

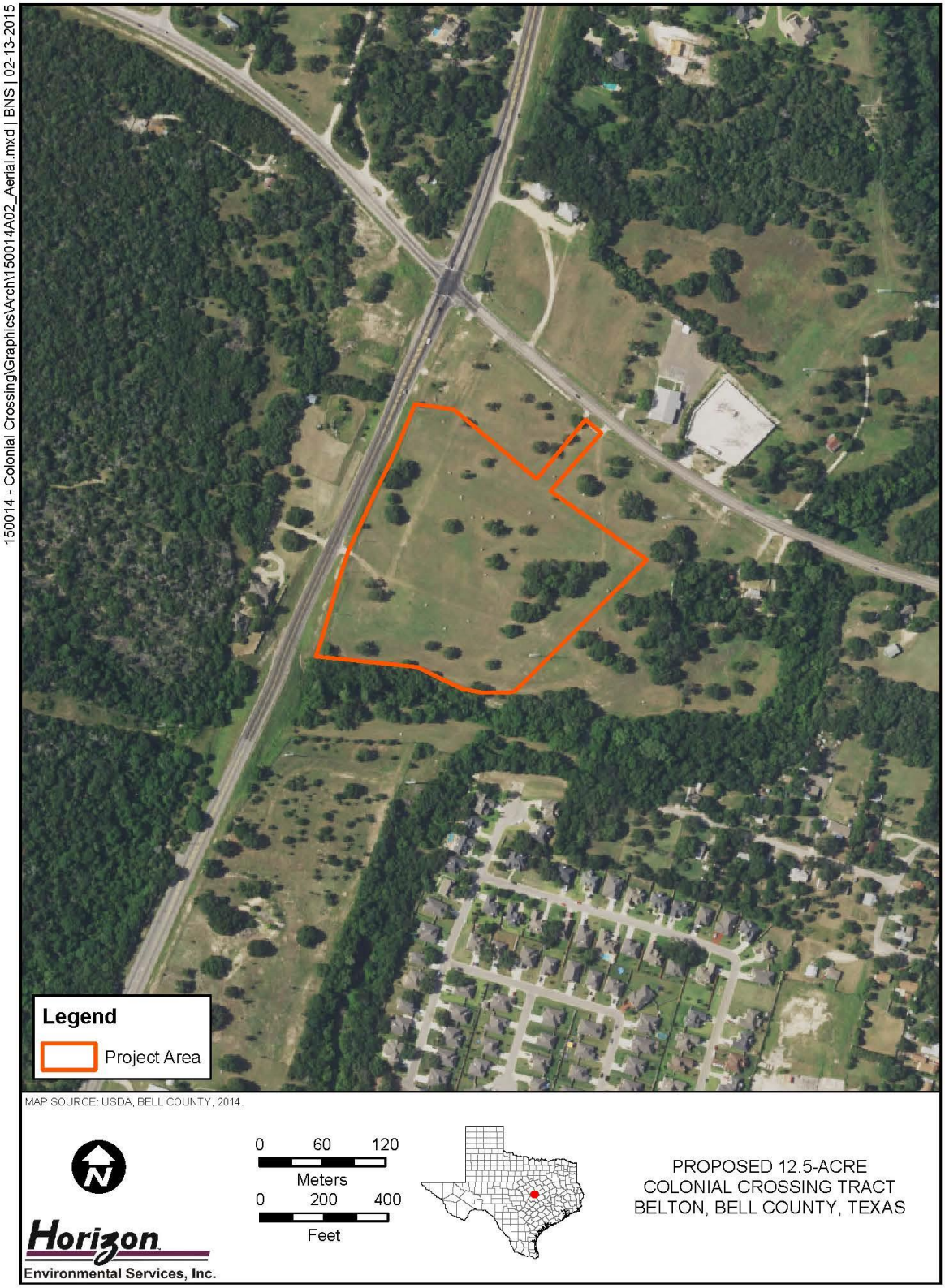

Figure 2. Location of APE on Aerial Photograph

2.0 ENVIRONMENTAL SETTING

The APE is located in central Bell County, Texas. Bell County is situated near the southern end of the Lampasas Cut Plain (Hill 1901; Hill and Vaughn 1900; Johnson 1931:125) in Central Texas and close to the common junction of 3 significant physiographic provinces—the Lampasas Cut Plain, the Edwards Plateau, and the Blackland Prairie. The Blackland Prairie, the narrow physiographic zone situated between the Edwards Plateau to the west and the Gulf Coastal Plain to the east, is a low, rolling land that extends in a narrow band along the eastern edge of the Balcones Fault Zone from the Red River Valley in northeastern Texas to the southern edge of the Edwards Plateau. This is an area of low topographic relief and poor drainage in which water often ponds after rainstorms and streams flow at very gentle gradients. The Edwards Plateau and Balcones Escarpment are associated with a great fault system that arcs across Texas to form a distinct boundary between uplands composed primarily of limestone bedrock and lower plains composed mostly of softer rocks. In places, this boundary is marked by an abrupt scarp (the Balcones Escarpment) and in others by a more gradational ramp, but the entire length of this transition zone is a major ecotone in terms of topography, bedrock, hydrology, soil, vegetation, and animal life.

The Lampasas Cut Plain is a roughly triangular area of rolling hill country in central and north-central Texas situated between the Brazos and Colorado rivers ranging in elevation from 230.0 to 400.0 meters (m) (754.4 to 1,312.0 feet) above mean sea level (amsl). The Lampasas Cut Plain forms a limestone upland that has been dissected by the Brazos River and its tributaries, resulting in landforms characterized by generally rounded uplands cut by moderately broad, shallow valleys. Soil is thin to absent on the bedrock and supports a mixed savanna flora, whereas soil is moderately deep in valley floors, where it supports mixed riparian woodlands and forests. Karst features include sinks, caves, and rockshelters, but such are neither common nor extensive. Edwards chert is locally abundant but not widespread across the Lampasas Cut Plain and is of high quality in some places.

Hydrologically, the APE is situated within the Brazos River basin. The APE is located on an upland landform that slopes downward to the east toward an unnamed tributary of Nolan Creek, which passes generally southeastward approximately 433.0 m (1,420.2 feet) northeast of the APE. An unnamed tributary of Nolan Creek flows west to east just beyond the southern boundary of the APE, and an ephemeral drainage arises within the northwestern portion of the APE and drains to the southeast across the APE. Nolan Creek flows generally southeastward,

discharging into the Leon River on the southeast side of the city of Belton. The Leon River flows southward to conjoin with the Lampasas River and Salado Creek south of Belton to form the Little River, which in turn flows generally southeastward to discharge into the Brazos River near Gause in Milam County. The Brazos River flows southeastward across the Blackland Prairie and Gulf Coastal Plain, ultimately discharging into the Gulf of Mexico a short distance northeast of East Matagorda Bay.

The APE is situated on a dissected upland landform adjacent to an unnamed tributary of Nolan Creek and slopes down moderately strongly to the east. Elevations across the APE range from about 184.5 to 192.0 m (605.0 to 190.9 feet) amsl. Drainage within the APE is eastward, toward the unnamed tributary of Nolan Creek.

2.1 GEOLOGY AND GEOMORPHOLOGY

Geologically, the APE is situated on the Lower Cretaceous Fort Worth Limestone and Duck Creek Formation, undivided (Kdfdce) (Flawn 1970). The Fort Worth Limestone is composed of aphanitic to biosparite limestone containing marine megafossils and calcareous clay ranging in thickness from 7.6 to 10.7 m (25.0 to 35.0 feet). The Duck Creek Formation is composed of bedded, nodular to wavy limestone and marl that also ranges in thickness from 7.6 to 10.7 m (25.0 to 35.0 feet). Geomorphologically, the proposed APE encompasses 1 mapped soil unit—Speck association, 1 to 8% slopes (SPD) (Figure 3; Table 1). This soil unit consists of relatively shallow deposits of gravelly clay loam and clay alluvium overlying bedrock. No Holocene-age alluvial sediments are mapped within the APE.

In Central Texas, aboriginal archeological sites are commonly located adjacent to streams as well as in upland environments. Given the relatively shallow character of the clayey and gravelly upland formation that characterizes the APE, it is likely that any aboriginal cultural resources in the APE would be constrained to the modern ground surface or to shallowly buried contexts that had experienced prior disturbance via erosion and historical agricultural land use. Historic-age resources may be found in virtually any physiographic environment. The proximity of the proposed APE to the city of Belton would tend to suggest that the APE possesses at least moderate potential to contain historic-age archeological resources, though the lack of any standing structures within the proposed project's APE suggests a decreased potential for architectural resources.

2.2 CLIMATE

Evidence for climatic change from the Pleistocene to the present is most often obtained through studies of pollen and faunal sequences (Bryant and Holloway 1985; Collins 1995). Bryant and Holloway (1985) present a sequence of climatic change for nearby east-central Texas from the Wisconsin Full Glacial period (22,500 to 14,000 B.P.) through the Late Glacial period (14,000 to 10,000 B.P.) to the Post-Glacial period (10,000 B.P. to present). Evidence from the Wisconsin Full Glacial period suggests that the climate in east-central Texas was considerably cooler and more humid than at present. Pollen data indicate that the region was more heavily forested in deciduous woodlands than during later periods (Bryant and Holloway 1985). The Late Glacial period was characterized by slow climatic deterioration and a slow warming and/or

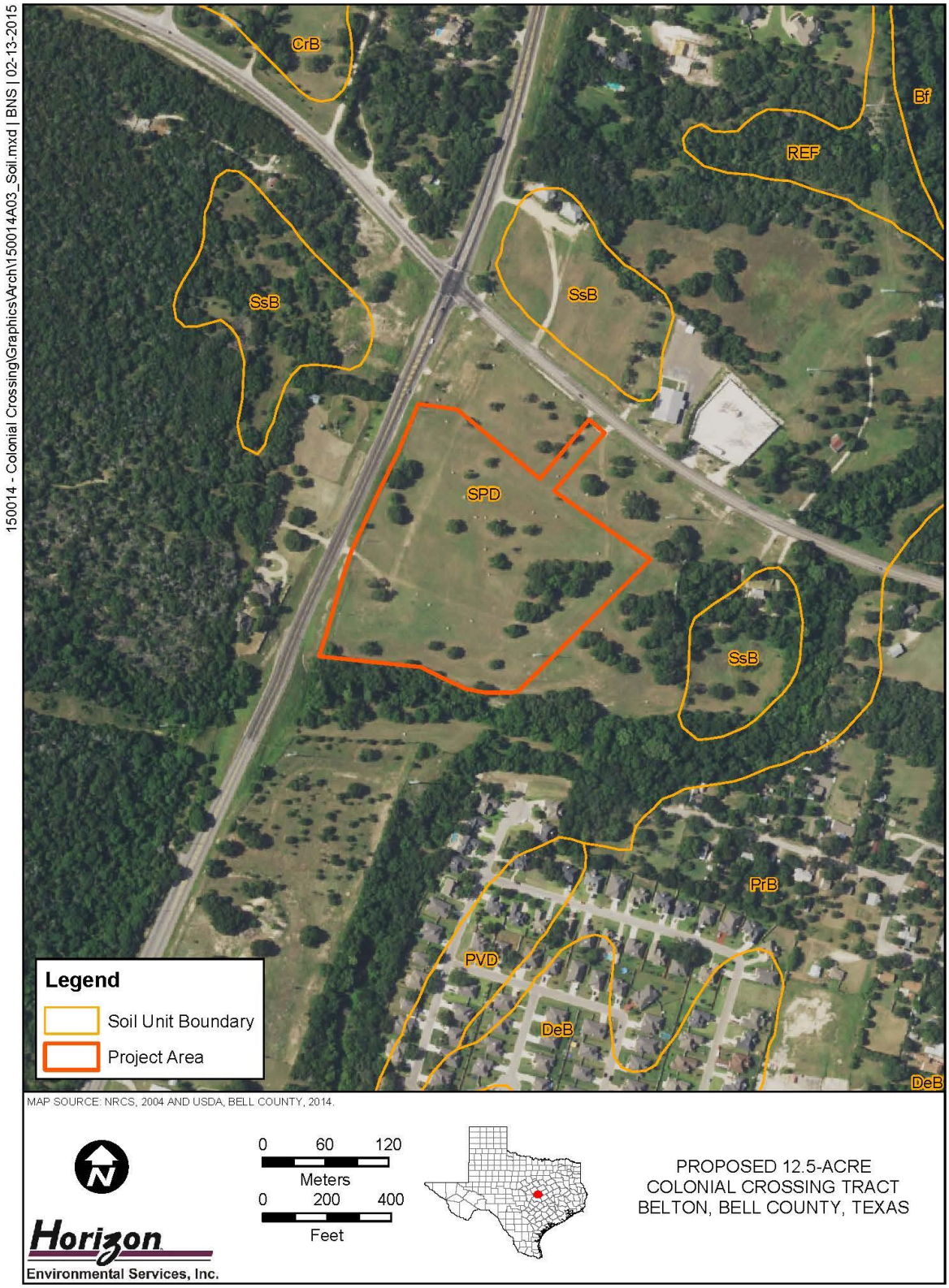

Figure 3. Distribution of Soils Mapped within APE

Table 1. Mapped Soils Located within APE

Soil Name	Soil Description	Typical Profile/Horizon (inches)
Speck association, 1 to 8% slopes (SPD)	Clayey alluvium overlying limestone on ridges	0-8: Gravelly clay loam 8-19: Clay 19-24: Bedrock

Source: NRCS 2015

drying trend (Collins 1995). In east-central Texas, the deciduous woodlands were gradually replaced by grasslands and post oak savannas (Bryant and Holloway 1985). During the Post-Glacial period, the east-central Texas environment appears to have been more stable. The deciduous forests had long since been replaced by prairies and post oak savannas. The drying and/or warming trend that began in the Late Glacial period continued into the mid-Holocene, at which point there appears to have been a brief amelioration to more mesic conditions lasting from roughly 6,000 to 5,000 B.P. Recent studies by Bryant and Holloway (1985) indicate that modern environmental conditions in east-central Texas were probably achieved by 1,500 years ago.

Bell County is located within the south-central climatic division. The modern climate is typically dry to subhumid with long, hot summers and short, mild winters. The climate is influenced primarily by tropical maritime air masses from the Gulf of Mexico, but it is modified by polar air masses. Tropical maritime air masses predominate throughout spring, summer, and fall. Modified polar air masses are dominant in winter and provide a continental climate characterized by considerable variations in temperature.

On average throughout the past century, precipitation and temperature manifest regional clines with mean annual precipitation totals declining fairly regularly from east to west and mean annual temperature declining equally evenly from northwest to southeast (Larkin and Bomar 1983:18, 50). Climate has fluctuated from subtropical humid to subtropical subhumid in central Bell County. Average annual precipitation totals 81 centimeters (cm) (32 inches [in]) and temperature averages 19°C (67°F) annually, ranging from 36°C (96°F) in August (the warmest month) to 15°C (59°F) in January (the coldest month). During this time, however, drier periods lasting from 3 to 7 years, when total annual rainfall ranged from 30 to 64 cm (12 to 25 in), were followed by abnormally wet years with 114 to 127 cm (45 to 50 in) of rainfall.

Two annual precipitation peaks, which typically occur in May and September, are associated with frontal storms that form when southward-moving cool air masses collide with warm, moist air masses moving inland from the Gulf of Mexico (Bomar 1983; Carr 1967). The topographic discontinuity along the Balcones Escarpment lies directly in the path of the Gulf storm trace and increases the lift in convective storms to produce extreme amounts of rainfall (Baker 1975). Two extreme examples are the excess of 91 cm (36 in) of rain that fell within an 18-hour period in the vicinity of Thrall, Texas, in September 1921, and the 56-cm (22-in) deluge that fell in less than 3 hours near O'Harris, Texas, in May 1935 (Baker 1975). Lower rainfall amounts are characteristic of winter and late summer. In winter, frontal storms pass so frequently that there is little time for moisture to increase, and prevailing upper-level winds from west to east often dominate over meridional flow, meaning that much of the available moisture is derived from the

Pacific rather than from the Gulf of Mexico. In summer, cool fronts rarely penetrate into the region and rainfall occurs primarily as localized, thermal convective storms.

2.3 FLORA AND FAUNA

The APE is in the southwestern portion of the Texan biotic province (Blair 1950), an intermediate zone between the forests of the Austroriparian and Carolinian provinces and the grasslands of the Kansan, Balconian, and Tamaulipan provinces. Some species reach the limits of their ecological range within the Texan province.

The fauna associated with this region are represented by a mixture of species from the Austroriparian, Tamaulipan, Chihuahuan, Kansan, Balconian, and Texan biotic provinces. Common mammalian species include white-tailed deer, opossum, eastern cottontail rabbit, raccoon, striped skunk, hispid cotton rat, white-footed mouse, nine-banded armadillo, and fox squirrel. Common bird species include northern bobwhite, eastern meadowlark, mourning dove, killdeer, field sparrow, red-tailed hawk, turkey vulture, belted kingfisher, and mockingbird. Reptile and amphibian species common to this biotic zone include six-lined racerunner, rat snake, eastern hognose snake, Gulf Coast toad, Texas spiny lizard, rough green snake, copperhead, western diamondback rattlesnake, green treefrog, Blanchard's cricket frog, diamondback water snake, Houston toad, and green anole. Although small herds of bison and antelope were common during the late prehistoric and early historic periods, these species are no longer native to this region (Jurney et al. 1989:13-14).

3.0 CULTURAL BACKGROUND

The APE is located within the Central Texas archeological region. The indigenous human inhabitants of Central Texas practiced a generally nomadic hunting and gathering lifestyle throughout all of prehistory, and, in contrast to much of the rest of North America, mobility and settlement patterns do not appear to have changed markedly through time in this region.

3.1 PALEOINDIAN PERIOD (9,200 TO 6,000 B.C.)

The initial human occupations in the New World can now be confidently extended back before 10,000 B.C. (Dincauze 1984; Haynes et al. 1984; Kelly and Todd 1988; Lynch 1990; Meltzer 1989). Evidence from Meadowcroft Rockshelter in Pennsylvania suggests that humans were present in Eastern North America as early as 14,000 to 16,000 years ago (Adovasio et al. 1990), while more recent discoveries at Monte Verde in Chile provide unequivocal evidence for human occupation in South America by at least 12,500 years ago (Dillehay 1989, 1997; Meltzer et al. 1997). Most archeologists presently discount claims of much earlier human occupation during the Pleistocene glacial period.

The earliest generalized evidence for human activities in Central Texas is represented by the PaleoIndian period (9,200 to 6,000 B.C.) (Black 1989). This stage coincided with ameliorating climatic conditions following the close of the Pleistocene epoch that witnessed the extinction of herds of mammoth, horse, camel, and bison. Cultures representing various periods within this stage are characterized by series of distinctive, relatively large, often fluted, lanceolate projectile points. These points are frequently associated with spurred end scrapers, gravers, and bone foreshafts. PaleoIndian groups are often inferred to have been organized into egalitarian bands consisting of a few dozen individuals that practiced a fully nomadic subsistence and settlement pattern. Due to poor preservation of floral materials, subsistence patterns in Central Texas are known primarily through the study of faunal remains. Subsistence focused on the exploitation of plants, small animals, fish, and shellfish, even during the PaleoIndian period. There is little evidence in this region for hunting of extinct megafauna, as has been documented elsewhere in North America. Rather, a broad-based subsistence pattern appears to have been practiced throughout all prehistoric time periods. In Central Texas, the PaleoIndian stage is divided into 2 periods based on recognizable differences in projectile point styles. These include the Early PaleoIndian Period, which is recognized based on large, fluted projectile points (i.e., Clovis, Folsom, Dalton, San Patrice, and Big Sandy), and the Late PaleoIndian period, which is characterized by unfluted lanceolate points (i.e., Plainview, Scottsbluff, Meserve, and Angostura).

3.2 ARCHAIC PERIOD (6,000 B.C. TO A.D. 800)

The onset of the Hypsithermal drying trend marks the beginning of the Archaic stage (6,000 B.C. to A.D. 800). This climatic trend marked the beginning of a significant reorientation of lifestyle throughout most of North America, but this change was far less pronounced in Central Texas. Elsewhere, the changing climatic conditions and corresponding decrease in the big game populations forced people to rely more heavily upon a diversified resource base composed of smaller game and wild plants. In Central Texas, however, this hunting and gathering pattern is characteristic of most of prehistory. The appearance of a more diversified tool kit, the development of an expanded groundstone assemblage, and a general decrease in the size of projectile points are hallmarks of this cultural stage. Material culture shows greater diversity during this broad cultural period, especially in the application of groundstone technology.

Traditionally, the Archaic period is subdivided into Early, Middle, and Late subperiods. In Central Texas, the Early Archaic subperiod extends from 6,000 to 3,000 B.C., the Middle Archaic subperiod extends from 3,000 to 1,000 B.C., and the Late Archaic subperiod covers the 1,000 B.C. to A.D. 800 timeframe. Changes in projectile point morphology are often used as markers differentiating these three subperiods, though other changes in material culture occurred as well. Perhaps most markedly, burned rock middens appear during the Middle Archaic subperiod, continuing into the Late Archaic subperiod, and large cemeteries appear during the Late Archaic subperiod. In addition, the increasing density of prehistoric sites through time is often considered to constitute evidence of population growth, though differential preservation probably at least partially accounts for the lower numbers of older sites.

3.3 LATE PREHISTORIC PERIOD (A.D. 800 TO 1600)

The onset of the Late Prehistoric period (A.D. 800 to 1600) (Black 1989) is defined by the appearance of the bow and arrow. In Central Texas, pottery also appears during the Late Prehistoric period (though ceramics appear earlier in Southeast Texas). Use of the atlatl (i.e., spearthrower) and spear was generally discontinued during the Late Prehistoric period, though they continued to be used in the inland subregion of Southeast Texas along with the bow and arrow through the Late Prehistoric period (Patterson 1980, 1995; Wheat 1953). In Texas, unifacial arrow points appear to be associated with a small prismatic blade technology. The Late Prehistoric period is generally divided into 2 phases, the Austin and Toyah phases. Austin phase sites occur earliest to the north, which has led some researchers (e.g., Prewitt 1985) to suggest that the Austin phase populations of Central Texas were migrants from the north who lacked the ceramic industry of the later Toyah phase.

3.4 HISTORIC PERIOD (A.D. 1600 TO PRESENT)

The first European incursion into what is now known as Texas was in 1519, when Álvarez de Pineda explored the northern shores of the Gulf of Mexico. In 1528, Cabeza de Vaca crossed South Texas after being shipwrecked along the Texas Coast near Galveston Bay. However, European settlement did not seriously disrupt native ways of life until after 1700. The first half of the eighteenth century was the period in which the fur trade and mission system, as well as the first effects of epidemic diseases, began to seriously disrupt the native culture and social systems.

This process is clearly discernable at the Mitchell Ridge site, where burial data suggest population declines and group mergers (Ricklis 1994), as well as increased participation on the part of the Native American population in the fur trade. By the time that heavy settlement of Texas began in the early 1800s by Anglo-Americans, the indigenous Indian population was greatly diminished.

The earliest known historical occupants of Bell County were the Tonkawa Indians.[1] During the 18th century, they made the transition to a horse culture and began to use firearms. Lipan Apaches, Wacos, Anadarkos, Kiowas, and Comanches also frequented the land that become Bell County. The Lipans camped by the rivers and streams, and early white settlers had friendly relations with them. Early settlers also recorded that the Indians fired the prairie each spring to burn off the matted winter grass and facilitate new growth. But by the late 1840s, the Lipans, Tonkawas, and other groups who had customarily camped and hunted in the Bell County area had been decimated by European diseases and driven away by white settlement. Comanche raiding parties continued to strike into the county until 1870.

While the Spanish had explored the Little River to the east in what would become Milam County and had established missions along the San Gabriel to the southeast in the 18th century, there is no evidence that they traversed the future Bell County area. Anglo settlement began in the 1830s, when the area was part of Robertson's colony and, somewhat later, part of old Milam County. The area was first settled in 1834 and 1835 by the families of Goldsby Childers, Robert Davidson, John Fulcher, Moses Griffin, John Needham, Michael Reed, William Taylor, and Orville T. Tyler, who settled as colonists along the Little River. The settlements were deserted during the Runaway Scrape, reoccupied, and then deserted again after the Indian attack on Fort Parker in June 1836. In their retreat from the fort, several of the settlers were overtaken by Indians and killed. The area was reoccupied in the winter of 1836-37. In November 1836, George B. Erath established a fort on the Little River about a mile below the Three Forks, which has been variously known as Smith's Fort, the Block House, Fort Griffin, and Little River Fort. The settlements along the river were considerably troubled by marauding Indians. The more important engagements of 1837 were the Elm Creek Raid on January 7 and the Post Oak Massacre in June. Little River Fort was abandoned, and by 1838 all settlers had left the Bell County area. On May 26, 1839, the Bird's Creek Indian Fight, a bloody but indecisive skirmish between Texas Rangers and Comanches, took place about 1.5 miles northwest of the site of present Temple.

Settlers began to return to the Bell County area after the peace treaties of 1843-44, and Indian raids into the county became less frequent. By the census of 1850, the population of what would shortly become Bell County was approximately 600 whites and 60 black slaves. Bell County was formed on January 22, 1850, and named for Peter H. Bell. The election held to organize the county took place in April at the "Charter Oak" near the center of the county at the military crossing on the Leon River. Nolan Springs was chosen as the county seat and named Nolanville. On December 16, 1851, the name was changed to Belton. In 1854, Coryell County was marked off from Bell County, and in 1856 the legislature attached a 6-mile-wide strip of Falls

[1] The following discussion of Bell County history is adapted from TSHA (2015).

County to Bell County. In 1860, when a resurvey of the line between Bell and Milam counties was made and recognized by the legislature, Bell County assumed its current boundaries.

The last serious Indian raid occurred in March 1859. The Independent Blues, a company of volunteer rangers led by John Henry Brown, was organized in the immediate aftermath of the raid to protect the frontier. This group functioned for about 2 months and was succeeded by several other volunteer units that operated into the summer of 1860. Bell County had a population of 3,794 whites and 1,005 blacks in 1860. Most of the settlers had come to the county either from the older settled counties of lower and eastern Texas, or from the southern US. The county was not really part of the plantation economy like the eastern part of antebellum Texas; two-thirds of the 179 slaveholders in 1860 owned 7 or fewer slaves, and only 4 county residents owned 20 slaves or more. Belton, Aiken, and Salado, the only towns, were on a stage route running north from Austin. Salado College was established in 1859 and flourished in the second half of the 19th century. Early settlement in the county was along the creeks and rivers, but by 1860 most of the county land, some 462,884 acres, was divided into farms. A series of drought years in the mid-1850s hindered the development of farming in the area, and Bell County farmers still operated in a frontier economy on the eve of the Civil War. Due to the uncertain supply of water, much of the land in the county was considered worthless for anything but undeveloped pasture, and county residents raised large herds of cattle and sheep. The 42,037 cattle enumerated by the 1860 census was not equaled again until the 1950s. There were only 21,196 cleared acres in the county in 1860, and the large number of oxen in the county, 2,132, when compared to the relatively small number of mules, 646, indicates that many farmers were still doing the heavy work of breaking the land to the plough. Corn and wheat were the main crops, though cotton was introduced into the county along the Little River in the mid-1850s, and 514 bales of cotton were harvested in 1860.

A significant minority of Bell County residents were Unionists during the secession crisis. A Whig newspaper, the *Independent*, was published in Belton, and, in the election of 1859, Bell County strongly supported Sam Houston. In 1861, however, the county voted 495 to 198 in favor of secession, and many of the former Unionists loyally supported the Confederacy during the Civil War. Out of a white population of some 4,000 at the beginning of the war, one source claims that more than 1,000 Bell County men served in Confederate or state military units. Companies organized in the county served in the First, Fourth, Sixth, and Eighteenth Texas Cavalry regiments, and the Sixth, Sixteenth, and Seventeenth Texas Infantry regiments. Bell County civilians established a variety of rural industries to provide shoes, saddles, and other goods for themselves and the forces. Unionist sentiment never entirely disappeared, however, and from 1862 to 1865 some Union sympathizers and Confederate deserters congregated in northern Bell County at what locals called “Camp Safety.”

Reconstruction in Bell County was a troubled and violent period. Federal troops were quartered in Belton in 1865-66 to support Hiram Christian, newly appointed chief justice of the commissioners’ court, but they were powerless to prevent a series of feuds between political factions that resulted in murders and lynchings. Horse and cattle thieves thrived in the unsettled conditions of the time and contributed to the anarchy that prevailed in the county. During the brief return to self-government under Governor James W. Throckmorton in 1866-67, Bell County sent

X. B. Saunders to the Constitutional Convention of 1866, and a Belton mob helped to discredit Throckmorton's administration by lynching several pro-Union men who were being held prisoner for feud-related murders. Bell County whites chafed under the imposition of congressional Reconstruction in 1868, and a Ku Klux Klan-like organization was established in the county. Due to the small number of black voters in the county, Radical Republicans were dependent on military assistance for local control, and the election of December 1869 returned Bell County to Democratic party rule. The pattern of lawlessness continued into the mid-1870s, and the worst example of vigilante violence occurred on the evening of May 25, 1874, when a mob of men from Bell and other counties broke into the Belton jail and killed 9 men, 8 members of a gang of accused horse thieves, and an accused murderer. One of the most interesting cultural movements of the period in Texas was the Belton Woman's Commonwealth, a celibate commune of "sanctificationists" that flourished in Belton from the 1870s through the 1890s.

Before the Civil War, African Americans had formed some 21% of the county population. The difficulties they faced in finding a niche in Bell County society in the post-war period can be glimpsed in an 1868 description of the county's blacks by a former Confederate officer: "The negroes behave as well as anyone expected, though a large majority of them...are inclined to shift from place to place without having any settled employment." Most of the immigration to the county after the Civil War was white; the black population fell to 11% of the total in 1870 and fluctuated between 8 and 12% until the 1970s, when it increased to about 16%. As in other areas of Texas, blacks were relegated to segregated and inferior housing and educational facilities until the 1960s. Though racial violence was not as common in Bell County as it was in some areas of the state, there were at least 2 lynchings, in 1911 and 1915, and the Klan was revived in the county in the 1920s.

The Civil War and Reconstruction had a dramatic, if temporary, impact on the county economy. In 1870, the value of Bell County farms was only half of what it had been in 1860. Recovery was fairly rapid, aided by the growth of the cattle and sheep industries and, in the 1870s, by a dramatic expansion of cotton farming. From 1866 to the mid-1870s, stock raising was the chief county industry. One of the main feeder routes to the Chisholm Trail entered the county near Prairie Dell, extended through the center of Salado and the eastern edge of Belton, and left the county in the direction of Waco. Many cattle drives passed through or originated in the county from the 1860s to the early 1880s. Cattle raising, after declining somewhat in importance in the early 20th century, was again a major part of the county agricultural economy by 1950, and in 1969 ranchers owned a record 56,101 cattle. Sheep and goat raising followed a similar pattern in the county. The number of sheep grew from 9,718 in 1870 to 21,224 in 1880, and nearly doubled again to 42,063 sheep producing 198,665 pounds of wool in 1890. The sheep industry declined dramatically in the late 19th and early 20th centuries to some 7,859 sheep producing 31,245 pounds of wool in 1920, but revived in the 1930s and reached a new high of 50,141 sheep and 270,311 pounds of wool in 1940. Mohair became a significant agricultural product by 1930, and reached a peak in 1959, when some 32,269 goats were raised in the county.

Cotton, the second boom industry in Bell County, also developed after the Civil War. Cotton culture in the county, which had been relatively insignificant before the war, rose to successive heights of 9,217 bales in 1880, 37,473 bales in 1890, and a peak of 58,050 bales in

1910. The number of improved acres increased more than sevenfold between 1870 and 1880, and nearly doubled again to some 378,355 acres by 1890. While much of the land was used to grow wheat, corn, oats, and other food crops in 1880, cotton was grown on 26% of the cropland in 1890, 45% in 1900, 55% in 1910, and 61% as late as 1930.

Attracted by economic opportunities in ranching and farming, large numbers of immigrants swelled the population of Bell County in the later 19th century. The number of residents doubled between 1860 and 1870, from 4,799 to 9,771, more than doubled again to 20,517 in 1880, and had reached 45,535 by the turn of the century. Many immigrants came either from the older counties of Texas or from other southern states, particularly Arkansas, Alabama, Mississippi, and Tennessee. Population pressure and the shift to cotton production after 1870 adversely affected the economic position of the growing number of county farmers. Increasingly concerned over marketing and credit issues, Bell County citizens pioneered the Grange movement in Texas in the 1870s, and Salado became one of the state centers of Grange activities. Nevertheless, as early as 1880, 41% of the county's farms were worked by tenants. The number increased to 58% by 1900 and remained at about 60% until the 1920s, when it increased still further to a maximum of 68% by 1930. Tenancy rates began to decline during the Great Depression with the shift away from cotton and other staple crops, and by 1959 had dropped to approximately 24% of the county's farmers.

Both the cotton and cattle booms were aided by the improved communications available in the county in the later 19th century. The Gulf, Colorado, and Santa Fe, the first railroad to be built in Bell County, reached Belton in 1881 and established Temple as its headquarters that same year. Temple quickly surpassed Belton to become the largest town in the county by 1890. In 1882, the Missouri, Kansas, and Texas crossed the county, and Belton secured a branch line of this railroad from Echo. The Belton and Temple Interurban, an electric line, was constructed in 1905. Roads were generally poor throughout the county in the early 18th century. There were 11,748 automobiles in the county by 1935, and extensive improvements, including blacktopping, of all major roads took place in the 1930s, as highway development continued throughout the state.

In 1870, only 84 foreign-born inhabitants out of a population of 9,771 lived in Bell County. Significant numbers of Germans, Austrians, and Czechs moved to the county between 1880 and 1920. Though foreign-born residents never exceeded 5% of the county population, these groups and their descendants formed distinctive cultural enclaves, particularly in the southern and eastern parts of the county. For the most part, these groups seem to have coexisted peacefully with the Anglo majority of Bell County citizens, but they were harassed by the County Council of Defense during World War I and by the county Klan in the 1920s. The Hispanic population never exceeded 3% of the county total until the second half of the 20th century, when it rose to some 11% of the whole.

By 1930, Bell County had an ethnically mixed population of 50,030. The county economy was still overwhelmingly agricultural, with only 41 manufacturing establishments employing some 565 workers in operation that year. While cotton production was near its peak in terms of percentage of cropland, the cotton industry was already undergoing a rapid transformation. The combined effects of soil depletion, overproduction, and the boll weevil had already damaged the

industry by the mid-1920s, and the situation of cotton growers was further worsened by the depression. The county population dropped to 44,863 in 1940, as many residents left to find jobs elsewhere. Among the county farmers who remained, the depression encouraged diversification and a shift away from staple crops to livestock. Between 1930 and 1940, the number of acres used for cotton growing fell by more than half, and cotton production shrank from 57,574 bales to 30,435. Acres used for corn production increased over the same period by almost half, and wool and mohair production almost doubled to 137,434 pounds and 75,827 pounds, respectively. Though cotton continued to be an important crop in eastern Bell County, the county's farmers increasingly turned to such other crops as sorghum and wheat and to livestock raising in the later 20th century. Poultry production also grew in significance in the county economy, and in 1970 Bell County ranked first in the state in turkey raising.

The 2 world wars had a major impact on Bell County. The community enthusiastically threw itself into the war effort in 1917, providing twice its draft quota on one occasion and forming a variety of citizens' organizations to assist in rationing, in maintaining morale, and in providing services for the armed forces. A more permanent change in county life brought about by World War II was the establishment of the military base at Fort Hood in the western part of the county; this large installation continues to function as a military training center. In the 1980s, much of western Bell County lay within the boundaries of the military reservation, and the fort's estimated 160,000 military personnel, dependents, military retirees, and civilian employees exerted a tremendous economic and social influence on the civilian communities bordering the base. Neighboring Killeen was the largest city in the county, and the contiguous communities of Killeen, Harker Heights, and Nolanville, with an estimated combined population of 50,949 in 1980, were home to almost a third of the county's inhabitants.

The growth of the Fort Hood-Killeen area was matched by developments in the rest of the county. Bell County's population shot up to 73,824 in 1950, and increased by 27 to 32% every decade thereafter, to reach 157,820 in 1980 and 191,088 in 1990. The county also became increasingly urbanized–by 1980, 81% of the population lived in urban areas, and Bell County was one of the most densely populated counties in the state. Population growth benefited from and contributed to economic diversity in Bell County. In 1982, approximately 6,900 county residents were employed in factories, more than 3 times as many as in 1963; other major areas of employment in the 1980s were construction, agribusiness, retail trade, and services. Among the noteworthy educational and medical institutions in the county were the University of Mary Hardin-Baylor, Central Texas College, Temple Junior College, the University of Central Texas, Scott and White Memorial Hospital, and the Olin E. Teague Veterans Center.

4.0 ARCHIVAL RESEARCH

The archeological survey described in this report was undertaken with 3 primary research goals in mind:

1. To locate and record archeological resources occurring within the designated APE
2. To provide a preliminary assessment of the significance of these resources regarding their potential for inclusion in the National Register of Historic Places (NRHP)
3. To make recommendations for the treatment of these resources based on their NRHP assessments

The first of these goals was accomplished by means of a review of documentation on file at the Texas Historical Commission's (THC) online *Texas Archeological Sites Atlas* (Atlas) (THC 2015), the National Park Service's (NPS) online *National Register Information System* (NRIS) (NPS 2015), the Texas State Historical Association's (TSHA) *Handbook of Texas Online* (TSHA 2015), as well as a program of intensive pedestrian survey. No cultural resources were documented within the APE as a result of the survey, so the second and third goals were not brought into play. The rest of this chapter presents the results of archival research, the methodological background for the current investigations, and the specific survey methods used in the field.

Prior to initiating fieldwork, Horizon personnel reviewed existing information on the THC's online Atlas and the NPS's NRIS database for information on previously recorded archeological sites and previous archeological investigations conducted within a 1.6-kilometer (km) (1.0-mile [mi]) radius of the APE. Based on this archival research, 5 previously recorded archeological sites, 16 historic properties listed on the NRHP, and 2 historic districts listed on the NRHP are present within the 1.0-km (1.0-mi) review area (Figure 4; Table 2). None of these known cultural resources are located within or in immediate proximity to the APE.

In addition, historic US Geological Survey (USGS) topographic maps and aerial photographs were examined to obtain additional information on the potential for historic-age cultural resources within the APE. The 1924 version of the USGS Belton, Texas, 7.5-minute topographic map shows several structures located off both the northeastern and southwestern sides of FM 93 in the vicinity of the APE (Figure 5), though none of these structures was located within the APE. The 1965 USGS topographic map shows several structures along the south-

Table 2. Summary of Previously Recorded Cultural Sites within 1 Mile of APE

Site No./Name	Site Type	NRHP/SAL Eligibility Status	Distance/Direction from APE	Potential to be Impacted by Project?
Archeological Sites				
41BL301	*No information available*	Undetermined	0.9 miles northeast	No
41BL1087	*No information available*	Ineligible	0.9 miles southwest	No
41BL1088	*No information available*	Ineligible	0.6 miles southwest	No
41BL1238	Aboriginal lithic scatter (Middle to Late Archaic)/ Historic-era African American School (Late 19th to early 20th centuries)	Ineligible	0.7 miles east	No
41BL1367	Aboriginal lithic scatter (Undated prehistoric)/ Historic-era artifact scatter (20th century)	Ineligible (investigated portion)	0.6 miles east	No
National Register Historic Properties				
Belton Standpipe	Municipal structure (Built 1914)	Listed NRHP	0.9 miles southeast	No
L.B. Kinchion House	Historic house (Built 1929)	Listed NRHP	0.9 miles southeast	No
John P. Hammersmith House	Historic house (Build 1980)	Listed NRHP	0.9 miles southeast	No
Mount Zion United Methodist Church	Historic church (Built 1893)	Listed NRHP	0.7 miles east	No
Capt. Andrew Jackson Harris House	Historic house (Built 1870)	Listed NRHP	0.7 miles northeast	No
Walter J. Lee House	Historic house (Built 1904)	Listed NRHP	0.8 miles northeast	No
Joel Elliott House	Historic house (Built 1881)	Listed NRHP	0.8 miles northeast	No
Gray Rental Houses	Historic houses (3) (Built 1913)	Listed NRHP	0.9 miles east	No
George and Martha McWhirter House	Historic house (Built 1860s to 1870s)	Listed NRHP	0.8 miles east	No
H.A. and Helena Ware House	Historic house (Built 1895)	Listed NRHP	0.8 miles east	No
402 N. East Street	Historic house (Built 1870s)	Listed NRHP	0.9 miles east-southeast	No
Dr. Taylor Hudson House	Historic house (Built 1890)	Listed NRHP	0.9 miles east	No

Table 2. Summary of Previously Recorded Cultural Sites within 1 Mile of APE (cont.)

Site No./Name	Site Type	NRHP/SAL Eligibility Status	Distance/Direction from APE	Potential to be Impacted by Project?
Morey House	Historic house (Built 1895)	Listed NRHP	0.9 miles east	No
Belton Farmers' Gin Coop	Historic industrial building (Built 1927)	Listed NRHP		No
Carnegie Public Library	Historic public building (Built 1904)	Listed NRHP	0.9 miles east-southeast	No
Bell County Courthouse	Historic public building (Built 1859)	Listed NRHP	0.9 miles southeast	No
National Register Historic Districts				
Baylor Female College Historic District	Historic college and campus (Built 1920)	Listed NRHP	0.7 miles northeast	No
Belton Commercial Historic District	Historic commercial district (19th to 20th centuries)	Listed NRHP	0.9 miles east-southeast	No

APE Area of Potential Effect
NRHP National Register of Historic Places
SAL State Archeological Landmark

western side of FM 93, 2 of which fall within the proposed driveway area of the APE that provides access to the larger parcel, though it appears that most of the structures shown on the 1924 USGS map had been moved or demolished by 1965 (Figure 6). Based on recent aerial imagery, none of the structures located within and in the vicinity of the APE on the 1965 USGS topographic map are currently standing (see Figure 2). These structures appear to have been moved or demolished prior to 1995 based on comparison of aerial photographs from 1964 and 1995 (NETR 2015).

No prior cultural resources surveys have been conducted within the current APE.

Sensitive site data omitted

Figure 4. Locations of Known Cultural Resources within 1 Mile of APE

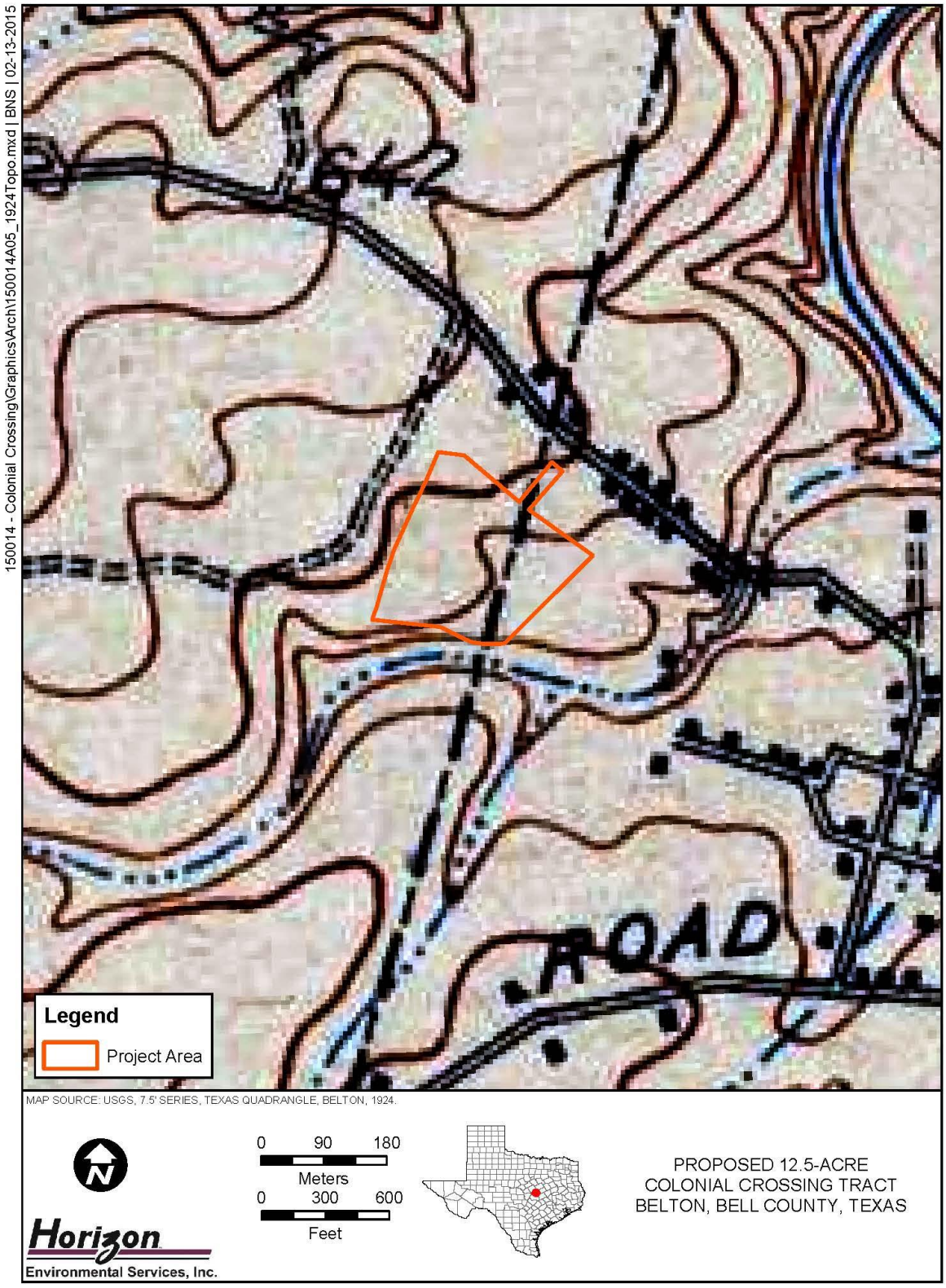

Figure 5. Location of APE on 1924 USGS Topographic Quadrangle

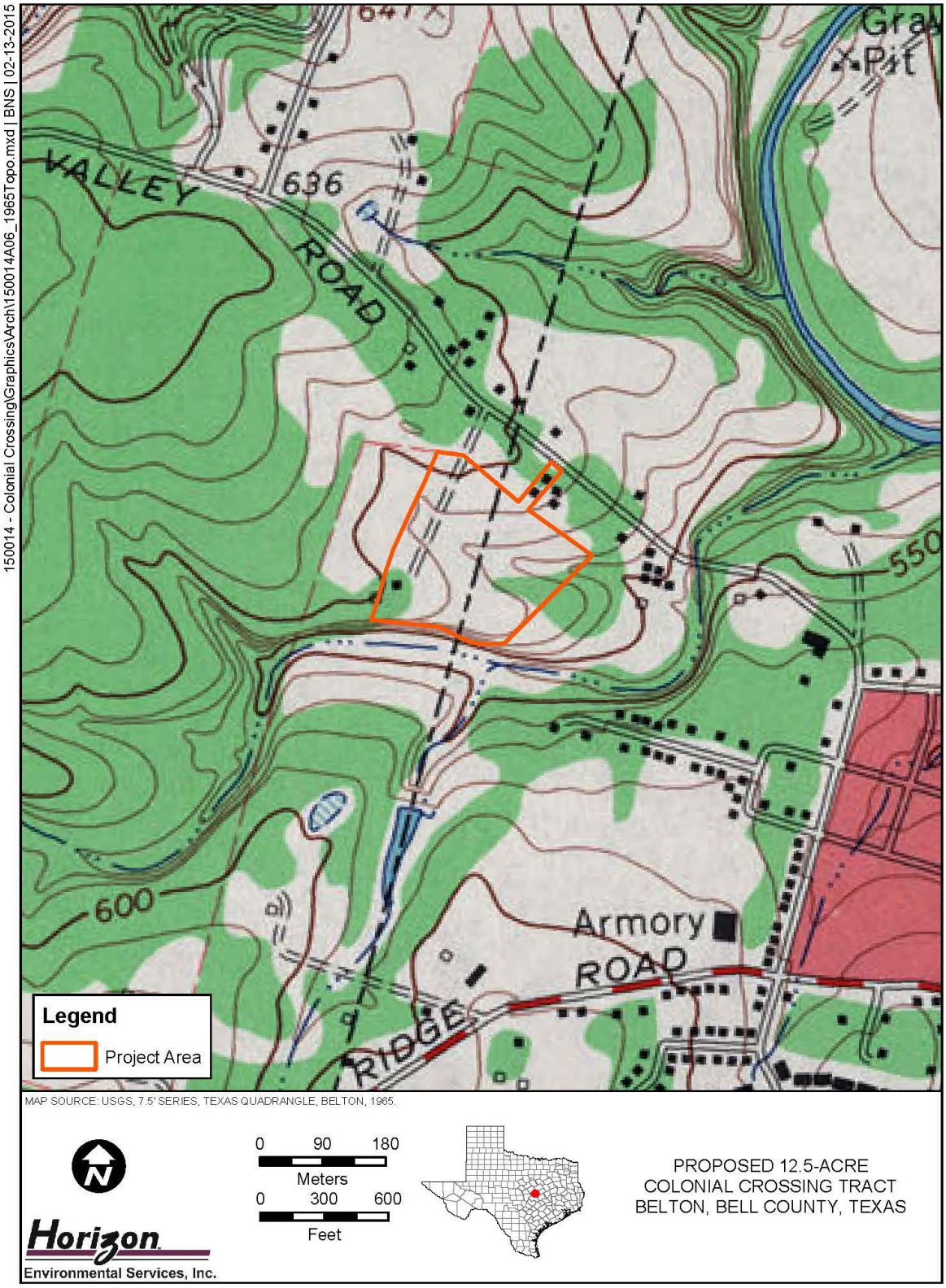

Figure 6. Location of APE on 1965 USGS Topographic Quadrangle

5.0 SURVEY METHODOLOGY

On February 16, 2015, Horizon archeologist Briana Smith, under the overall direction of Jeffrey D. Owens, Principal Investigator, performed an intensive cultural resources survey of the APE to locate any cultural resources that potentially would be impacted by the proposed undertaking. The APE consists of a 5.1-ha (12.5-ac) tract in Belton, Bell County, Texas, located southeast of the intersection of SH 121 Loop and FM 93 (also known as Nolan Valley Road). The APE is situated on a limestone upland adjacent to an unnamed tributary of Nolan Creek that has historically been utilized primarily as pasturage. The APE consists of an open pasture covered in manicured grass with scattered live oak trees (Figures 7 to 10). Due to the vegetative ground cover, visibility of the modern ground surface was generally poor (less than 30%) throughout the APE.

Horizon's archeologist traversed the APE in parallel transects spaced approximately 30.0 meters (98.4 feet) apart and thoroughly inspected the modern ground surface for aboriginal and historic-age cultural resources. In addition, for block-area projects, the Texas State Minimum Archeological Survey Standards (TSMASS) require a minimum of 1 subsurface probe (e.g., shovel tests, mechanical trenches, auger tests) per 2 acres for project areas between 11 and 100 acres in size; as such, a total of 6 subsurface probes would be required within the 5.1-ha (12.5-ac) APE. Horizon exceeded the TSMASS by excavating a total of 13 shovel tests (Figure 11). Shovel tests measured 30.0 cm (11.8 in) in diameter and were excavated to a target depth of 1.0 meter (3.3 feet) below surface, to the top of pre-Holocene deposits, or to the maximum depth practicable. In practice, shovel tests were terminated at depths of 5.0 to 30.0 cm (2.0 to 11.8 in) below surface due to the presence of near-surface deposits of limestone gravels and bedrock. All sediments were screened through 6.35-millimeter (mm) (0.25-inch) hardware cloth. The Universal Transverse Mercator (UTM) coordinates of all shovel tests were determined using a hand-held Garmin ForeTrex Global Positioning System (GPS) device based on the North American Datum of 1983 (NAD 83). Specific shovel test data for all 13 shovel tests excavated within the APE are summarized in Appendix A.

The TSMASS also require backhoe trenching in stream terraces and other areas with the potential to contain buried archeological materials at depths below those that shovel tests are capable of reaching (approximately 40.0 to 60.0 cm [15.7 to 23.6 in] below surface in clay or 80.0 to 100.0+ cm (31.5 to 39.4+ in) below surface in silt, loam, and sandy sediments). The APE is located on a Lower Cretaceous-age limestone upland adjacent to an unnamed tributary of Nolan

Figure 7. View of APE from Eastern Boundary (Facing West)

Figure 8. View of APE from Southwestern Corner (Facing North)

Figure 9. View of Unnamed Drainage South of APE (Facing Southeast)

Figure 10. Typical View of Shallow, Gravelly Soils Overlying Bedrock in Shovel Test

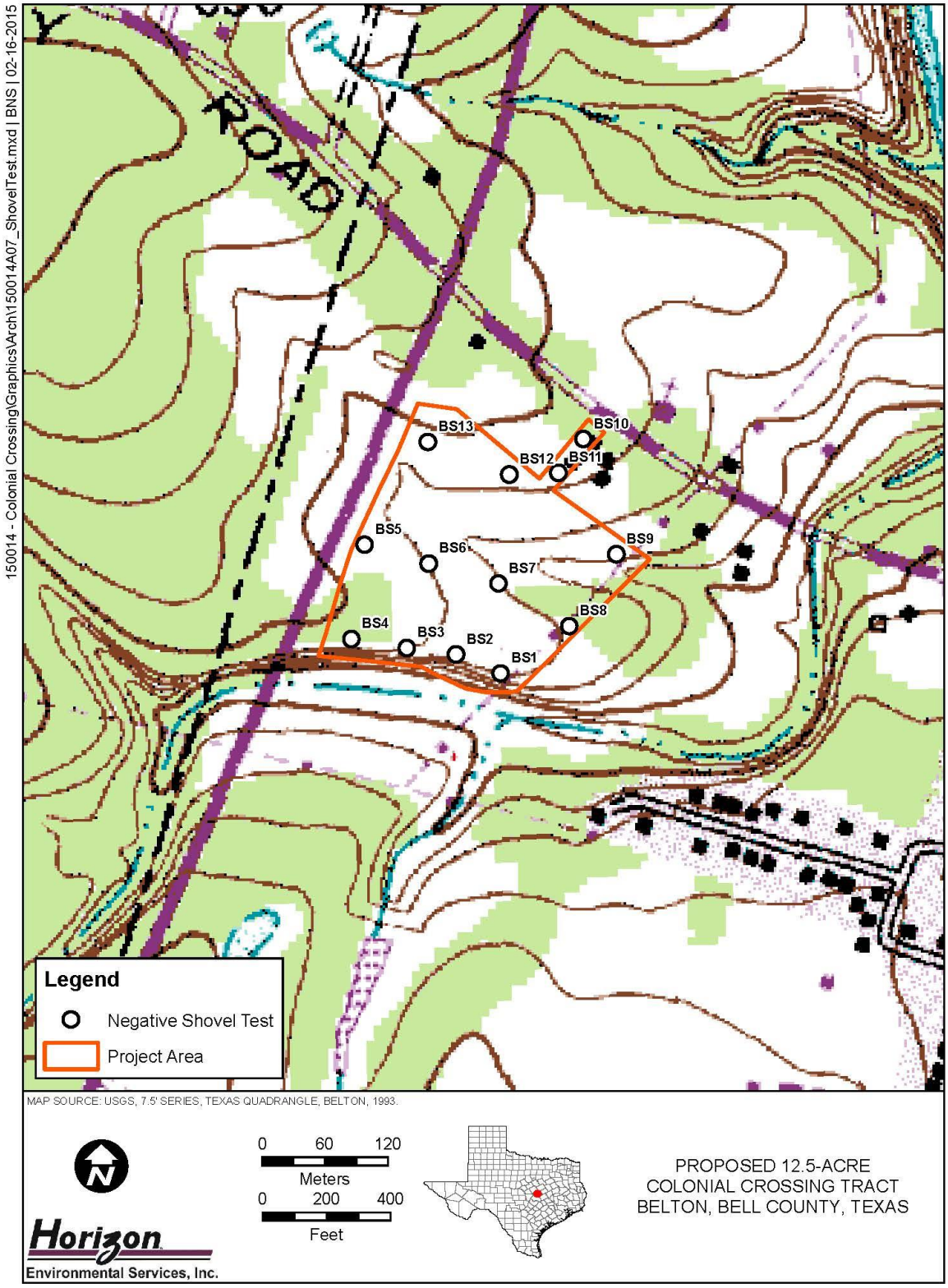

Figure 11. Locations of Shovel Tests Excavated in APE

Creek. The pedestrian survey and shovel testing revealed that sediments in the APE consist of shallow, surficial remnants of dark brown, gravelly clay residuum ranging from 5.0 to 30.0 cm) (2.0 to 11.8 in) in depth, overlying decomposing limestone bedrock gravels. Shovel testing was capable of penetrating to the bottom of sediments with the potential to contain archeological deposits. As such, shovel testing is considered to constitute an adequate and effective survey technique for identifying archeological resources within the APE, and mechanical trenching consequently was not employed as a site-prospecting technique.

This cultural resources survey employed a non-collection policy for archeological materials. Diagnostic artifacts (e.g., projectile points, ceramics, historic materials with maker's marks) and non-diagnostic artifacts (e.g., lithic debitage, burned rock, historic glass, and metal scrap) were described, sketched, and/or photo-documented in the field and replaced in the same location in which they were found. No cultural materials were collected during the current project, and all archeological materials observed on the investigated sites were left in place.

The survey methods employed during the survey represented a "reasonable and good-faith effort" to locate significant archeological sites within the APE, as defined in 36 Code of Federal Regulations (CFR) 800.3.

6.0 RESULTS OF INVESTIGATIONS

Horizon was selected by MJC on behalf of a private real estate developer to conduct an intensive cultural resources inventory and assessment for the proposed development of the Colonial Crossing apartment complex on a 5.1-ha (12.5-ac) tract in Belton, Bell County, Texas. The proposed tract is located southeast of the intersection of SH 121 Loop and FM 93 (also known as Nolan Valley Road). The Area of Potential Effect (APE) consists of the entire 5.1-ha (12.5-ac) parcel within which proposed construction would occur.

The proposed undertaking is being sponsored by a private real estate developer on privately owned land utilizing funding provided by HUD; as such, the project falls under the jurisdiction of Section 106 of the NHPA of 1966, as amended. As the project represents a publicly sponsored undertaking with the potential to impact potentially significant cultural resources, the project sponsor is required to provide for a cultural resources inventory of the APE.

On February 16, 2015, Horizon archeologist Briana Smith, under the overall direction of Jeffrey D. Owens, Principal Investigator, performed an intensive cultural resources survey of the APE to locate any cultural resources that potentially would be impacted by the proposed undertaking. The cultural resources investigation consisted of an archival review, an intensive pedestrian survey of the APE, and the production of a report suitable for review by the SHPO in accordance with the THC's Rules of Practice and Procedure, Chapter 26, Section 27, and the CTA Guidelines for Cultural Resources Management Reports.

Horizon's archeologist traversed the APE and thoroughly inspected the modern ground surface for aboriginal and historic-age cultural resources. The TSMASS require a minimum of 1 subsurface probe per 2 acres for project areas between 11 and 100 acres in size; as such, a total of 6 subsurface probes would be required within the 5.1-ha (12.5-ac) APE. Horizon exceeded the TSMASS by excavating a total of 13 shovel tests. The pedestrian survey and shovel testing revealed that sediments in the APE consist of shallow, surficial remnants of dark brown, gravelly clay residuum ranging from 5.0 to 30.0 cm (2.0 to 11.8 in) in depth, overlying decomposing limestone bedrock gravels.

Modern trash was present adjacent to the FM 93 right-of-way, though no cultural resources, historic or prehistoric, were observed within the 5.1-ha (12.5-ac) APE during the survey.

7.0 SUMMARY AND RECOMMENDATIONS

7.1 CONCEPTUAL FRAMEWORK

The archeological investigations documented in this report were undertaken with 3 primary management goals in mind:

- Locate all historic and prehistoric archeological resources that occur within the designated survey area.
- Evaluate the significance of these resources regarding their potential for inclusion in the NRHP.
- Formulate recommendations for the treatment of these resources based on their NRHP evaluations.

At the survey level of investigation, the principal research objective is to inventory the cultural resources within the APE and to make preliminary determinations of whether or not the resources meet one or more of the pre-defined eligibility criteria set forth in the state and/or federal codes, as appropriate. Usually, management decisions regarding archeological properties are a function of the potential importance of the sites in addressing defined research needs, though historic-age sites may also be evaluated in terms of their association with important historic events and/or personages. Under the NHPA, archeological resources are evaluated according to criteria established to determine the significance of archeological resources for inclusion in the NRHP, respectively.

Analyses of the limited data obtained at the survey level are rarely sufficient to contribute in a meaningful manner to defined research issues. The objective is rather to determine which archeological sites could be most profitably investigated further in pursuance of regional, methodological, or theoretical research questions. Therefore, adequate information on site function, context, and chronological placement from archeological and, if appropriate, historical perspectives is essential for archeological evaluations. Because research questions vary as a function of geography and temporal period, determination of the site context and chronological placement of cultural properties is a particularly important objective during the inventory process.

7.2 ELIGIBILITY CRITERIA FOR INCLUSION IN THE NATIONAL REGISTER OF HISTORIC PLACES

Determinations of eligibility for inclusion in the NRHP are based on the criteria presented in the Code of Federal Regulations (CFR) in 36 CFR §60.4(a-d). The 4 criteria of eligibility are applied following the identification of relevant historical themes and related research questions:

> The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:
>
> a. [T]hat are associated with events that have made a significant contribution to the broad patterns of our history; or,
>
> b. [T]hat are associated with the lives of persons significant in our past; or,
>
> c. [T]hat embody the distinctive characteristics of a type, period, or method of construction, or that represent a significant and distinguishable entity whose components may lack individual distinction; or,
>
> d. [T]hat have yielded, or may be likely to yield, information important in prehistory or history.

The first step in the evaluation process is to define the significance of the property by identifying the particular aspect of history or prehistory to be addressed and the reasons why information on that topic is important. The second step is to define the kinds of evidence or the data requirements that the property must exhibit to provide significant information. These data requirements in turn indicate the kind of integrity that the site must possess to be significant. This concept of integrity relates both to the contextual integrity of such entities as structures, districts, or archeological deposits and to the applicability of the potential database to pertinent research questions. Without such integrity, the significance of a resource is very limited.

For an archeological resource to be eligible for inclusion in the NRHP, it must meet legal standards of eligibility that are determined by 3 requirements: (1) properties must possess significance, (2) the significance must satisfy at least 1 of the 4 criteria for eligibility listed above, and (3) significance should be derived from an understanding of historic context. As discussed here, historic context refers to the organization of information concerning prehistory and history according to various periods of development in various times and at various places. Thus, the significance of a property can best be understood through knowledge of historic development and the relationship of the resource to other, similar properties within a particular period of development. Most prehistoric sites are usually only eligible for inclusion in the NRHP under Criterion D, which considers their potential to contribute data important to an understanding of prehistory. All 4 criteria employed for determining NRHP eligibility potentially can be brought to bear for historic sites.

7.3 SUMMARY OF INVENTORY RESULTS

Horizon's archeologist traversed the project area and thoroughly inspected the modern ground surface for aboriginal and historic-age cultural resources. The TSMASS require a

minimum of 1 subsurface probe per 2 acres for project areas between 11 and 100 ac in size; as such, a total of 6 subsurface probes would be required within the 5.1-ha (12.5-ac) APE. Horizon exceeded the TSMASS by excavating a total of 13 shovel tests. The pedestrian survey and shovel testing revealed that sediments in the APE consist of shallow, surficial remnants of dark brown, gravelly clay residuum ranging from 5.0 to 30.0 cm (2.0 to 11.8 in) in depth overlying decomposing limestone bedrock gravels. No cultural resources, historic or prehistoric, were observed within the 5.1-ha (12.6-ac) project area during the survey.

7.4 MANAGEMENT RECOMMENDATIONS

Based on the results of the survey-level investigations of the project area documented in this report, no potentially significant cultural resources would be affected by the proposed undertaking. In accordance with 36 CFR 800.4, Horizon has made a reasonable and good-faith effort to identify historic properties within the APE. No cultural resources were identified that meet the criteria for inclusion in the NRHP according to 36 CFR 60.4, and no further archeological work is recommended in connection with the proposed undertaking. However, it should be noted that human burials are protected under the Texas Health and Safety Code. In the event that any human remains or burial furniture are inadvertently discovered at any point during construction, use, or ongoing maintenance in the project area, even in previously surveyed areas, all work should cease immediately in the vicinity of the inadvertent discovery, and the THC should be notified of the discovery.

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APPENDIX A:

Shovel Test Data

Table A-1. Shovel Test Summary Data

ST No.	UTM Coordinates[1]		Depth (cmbs)	Soils	Artifacts
	Easting	Northing			
BS1	645153	3437163	0-10	Very dark brown clay	None
			10+	Limestone rocks	None
BS2	645106	3437172	0-25	Very dark brown gravelly clay loam	None
			25+	Limestone rocks	None
BS3	645064	3437189	0-5	Very dark brown gravelly clay loam	None
			5+	Limestone rocks	None
BS4	645011	3437198	0-25	Dark grayish-brown clay	None
			25+	Limestone rocks	None
BS5	645025	3437288	0-10	Dark grayish-brown clay	None
			10+	Limestone rocks	None
BS6	645070	3437276	0-15	Dark grayish-brown gravelly clay loam	None
			15+	Limestone rocks	None
BS7	645123	3437253	0-30	Dark grayish-brown gravelly clay loam	None
			30+	Limestone rocks	None
BS8	645219	3437208	0-5	Very dark brown gravelly clay loam	None
			5+	Limestone rocks	None
BS9	645271	3437263	0-10	Very dark brown gravelly clay loam	None
			10+	Limestone rocks	None
BS10	645235	3437386	0-10	Mottled dark grayish-brown, yellowish-brown, and yellowish-red gravelly clay	None
			10+	Limestone rocks	None
BS11	645210	3437354	0-15	Very dark brown gravelly clay loam	None
			15+	Limestone rocks	None
BS12	645168	3437348	0-10	Very dark brown gravelly clay loam	None
			10+	Limestone rocks	None
BS13	645086	3437385	0-25	Very dark brown gravelly clay loam	None
			25+	Limestone rocks	None

[1] All UTM coordinates are located in Zone 14 and utilize the North American Datum of 1983 (NAD 83)

cmbs = Centimeters below surface

ST = Shovel test

UTM = Universal Transverse Mercator