Archeological Survey for the Proposed Commercial Development at North Tarrant Parkway and Ray White Road (SWF-2019-00445), Fort Worth, Tarrant County, Texas

Melissa M. Green

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ARCHEOLOGICAL SURVEY FOR THE PROPOSED COMMERCIAL DEVELOPMENT AT NORTH TARRANT PARKWAY AND RAY WHITE ROAD (SWF-2019-00445), FORT WORTH, TARRANT COUNTY, TEXAS

FINAL

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Cox | McLain Environmental Consulting, Inc. Archeological Report 270 (CMEC-AR-270)

COX | McLAIN
Environmental Consulting

5 August 2020
Management Summary

Winkelmann & Associates, Inc. plans to construct a new commercial enterprise comprising three commercial pads to be constructed on the approximately 14-acre (5.67-hectare) parcel in northwest Fort Worth in Tarrant County, Texas. Two of the three pads (eastern and western) are partially in place due to large quantities of fill dirt and bounders already on site; only the middle portion of the parcel will require additional fill prior to construction.

On 27 November 2019, an archeological pedestrian survey augmented by shovel testing was completed to evaluate potential impacts associated with the project; the survey was conducted under pre-2020 Texas Historical Commission approved guidelines. A total of 14 acres (5.67 hectares) were examined and shovel testing was conducted within 4 acres (1.62 hectares) of the larger project area where development is proposed. The proposed development is in the northwest quadrant of the intersection of North Tarrant Parkway and Ray White Road, which has two unnamed tributaries of Whites Branch running through it. A Race Trac gas station/convenience store is situated in the immediate corner of the intersection and was excluded from survey. The area is in an urban setting surrounded by both commercial and residential development. The terrace edges that have been partially artificially modified for development and infrastructure for these developments and have somewhat altered the drainage within the floodplain.

Melissa Green (Principal Investigator) and Corey Pursell of Cox | McLain Environmental Consulting, Inc. (CMEC) carried out the survey in support of a Clean Water Act Section 404 Permit (SWF-2019-00445) for the United States Corps of Engineers, Fort Worth District under Section 106 of the National Historic Preservation Act, as amended. A Texas Antiquities Permit was not required for this project.

Based on background review of available data, the potential for intact archeological deposits was considered very low to none for both prehistoric and historic sites within the archeological area of potential effects. Ground surface visibility varied across the parcel between 0 and 30 percent and ranged from low grasses to shoulder-high grasses and young saplings. Large boulders and soil have been purposely placed and/or dumped along North Tarrant Parkway, partially creating the western pad and the west slope of the eastern pad proposed for construction; however, the remaining area is floodplain. Soils around the footings of the existing commercial pads are disturbed. Three shovel test units were excavated to examine the potential for subsurface archeological deposits in the areas in the floodplain that will be impacted by proposed construction; no additional shovel tests were attempted as these three were inundated at shallow levels. No evidence of historic or prehistoric deposits, materials, or features were identified, and no further work is recommended within the 14-acre area of potential effects.

No artifacts were collected during the investigation however, all notes, photographs, administrative documents, and other project data will be housed at the CMEC Irving office and would be available to future researchers.

If any unanticipated cultural materials or deposits are found at any stage of clearing, preparation, or construction, the work should cease, and Texas Historical Commission (THC) personnel should be notified immediately.

The Texas Historical Commission concurred with the findings and recommendations present in this report on 5 August 2020.
ARCHEOLOGICAL SURVEY FOR THE PROPOSED COMMERCIAL DEVELOPMENT AT NORTH TARRANT PARKWAY AND RAY WHITE ROAD, FORT WORTH, TARRANT COUNTY, TEXAS

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1.0 Introduction

Overview of the Project

Winkelmann & Associates, Inc. plans to construct a new commercial enterprise in the northwest quadrant of the intersection of North (N) Tarrant Parkway and Ray White Road in Fort Worth, Tarrant County, Texas (Figure 1). A tributary to Whites Branch runs through the approximately 14-acre (5.67-hectare) parcel that is fully surrounded by urban development.

Plans for the three commercial pads to be constructed on the approximately 14-acre (5.67-hectare) parcel are being designed (Appendix A). Two of the three pads (eastern and western) are partially in place due to large quantities of fill dirt and bounders already on site; only the middle portion of the parcel will require additional fill prior to construction. Additional fill may be required to level across the three proposed pads. Two bridges are proposed over the tributary connecting the eastern and western pads to the center pad. Four acres (1.62 hectares) of the 14-acre (5.67-hectares) parcel and between the two partially developed pads were subjected to pedestrian archeological survey with shovel testing; the remaining area was pedestrian surveyed and documented through photography.

Regulatory Context

The applicable regulatory framework for this project is Section 106 of the National Historic Preservation Act (NHPA), as amended (36 CFR 800), due to the need for a Section 404 permit (SWF-2019-00445, Commercial Development N Tarrant Pkwy & Ray White Road) under the Clean Water Act. As there is no formal regulatory nexus with any political subdivisions of the State of Texas, the Antiquities Code of Texas (9 TNRC 191) does not apply.

Winkelmann & Associates, Inc. contracted with Cox|McLain Environmental Consulting, Inc. (CMEC) in order to conduct a survey for archeological resources on the 14-acre (5.67 hectare) area of potential effects (APE), particularly with shovel testing in the area between the two partially construction pads where additional development is proposed. Survey was conducted in November 2019 under pre-2020 Texas Historical Commission (THC) approved guidelines for survey. This investigation would evaluate the eligibility of identified resources for inclusion in the National Register of Historic Places or NRHP (36 CFR 60). No new archeological sites were encountered.

Structure of the Report

Following this introduction, Chapter Two presents environmental parameters for the study area; Chapter Three presents a brief cultural context, including a summary of previous archeological research in and near the APE; Chapter Four discusses research goals, relevant methods, and the regulatory considerations underlying them; Chapter Five presents the results of the survey; Chapter Six summarizes the findings and provides recommendations; and Chapter Seven lists references.
Figure 1

N Tarrant & Ray White Commercial Development
2.0 Environmental Context

Topography and Drainage

The 14-acre (5.67-hectare) APE is located at approximate elevations of 639–661 feet (195–201 meters) above mean sea level on undeveloped land along a pair of small, unnamed tributaries of Whites Branch. The APE is located within a mostly flat floodplain that slopes up to terrace edges that have been partially artificially modified for development and infrastructure (e.g., roads, utilities, etc.). The two small, unnamed tributaries join on the parcel, and the main stem then flows south into Whites Branch approximately 0.8 miles (1.3 kilometers) southwest of the southern boundary of the APE parcel.

Geology and Soils

The APE is underlain by Early Cretaceous-age Paw Paw Formation, Weno Limestone, and Denton Clay, undivided. Paw Paw Formation primarily consists of calcareous marl, while Weno Limestone contains thin marl interbeds, and Denton Clay has alternating clay, marl, and limestone (USGS 2019a). According to Natural Resources Conservation Service (NRCS) data, there are two major soil series mapped within the APE: Slidell clay on 1 to 3 percent slopes and Sanger clay on 1 to 3 percent slopes and 3 to 5 percent slopes (Soil Survey Staff 2019). Slidell soils are very deep, moderately well drained, and very slowly permeable. They formed in calcareous clayey sediments and are found on base slopes of ridges on hills. Ap and A horizons of these soils extend to 48 centimeters (19 inches) below the surface and are underlain by a Bss horizon. Sanger soils are very deep, well drained, and very slowly permeable soils that formed in clayey marine sediments on broad uplands. It also has an Ap and A horizon over a Bkss horizon at 95.5 centimeters (38 inches) below ground surface (Soil Survey Staff 2019).

Vegetation and Land Use

The project area is located within the Limestone Cut Plain subregion of the Cross Timbers ecological region of Texas (Griffith et. al. 2010). Mesas alternate with broad intervening valleys creating a stairstep topography in this subregion that is underlain by Lower Cretaceous limestones. Vegetation includes post oak, white shin oak, cedar elm, Texas ash, plateau live oak, and bur oak with a mix of grasses of variable heights (Omernik and Griffith 2013). According to the Texas Parks and Wildlife Department’s Texas Ecosystems Analytical Mapper map and database, there are two vegetation types across the parcel: Central Texas Riparian Hardwood Forest and Native Invasive Deciduous Woodland along the creek (Texas Parks and Wildlife 2019). The APE is surrounded by both commercial and residential urban development.
3.0 Cultural Context

Archeological Chronology

The APE lies within the western part of the North Central Texas archeological region (Perttula 2004a). The standard cultural chronology for the region has changed little in the last two decades; thus, the periods and date ranges established by Peter and McGregor (1988), Prikryl (1990), and Yates and Ferring (1986) still apply (Table 1). The general prehistoric framework for North Central Texas is similar to that used in other areas of Texas, and indeed throughout much of North America, with the first unequivocal human occupations occurring approximately 11,500 radiocarbon years before present (BP), or approximately 13,000 calendar years ago, and most of the prehistoric record is contained within a long Archaic period lasting nearly 8,000 years.

Table 1: Archeological Chronology for North Central Texas*

<table>
<thead>
<tr>
<th>Period</th>
<th>Years Before Present (BP)**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paleoindian</td>
<td>11,500 – 9,000</td>
</tr>
<tr>
<td>Archaic</td>
<td></td>
</tr>
<tr>
<td>Early Archaic</td>
<td>9,000 – 1,300</td>
</tr>
<tr>
<td>Middle Archaic</td>
<td>6,000 – 4,000</td>
</tr>
<tr>
<td>Late Archaic</td>
<td>4,000 – 1,300</td>
</tr>
<tr>
<td>Late Prehistoric</td>
<td></td>
</tr>
<tr>
<td>Late Prehistoric I</td>
<td>1,300 – 700</td>
</tr>
<tr>
<td>Late Prehistoric II</td>
<td>700 – 400</td>
</tr>
<tr>
<td>Protohistoric</td>
<td>400 – 200</td>
</tr>
<tr>
<td>Historic</td>
<td>200 – 50</td>
</tr>
</tbody>
</table>

* After Peter and McGregor (1988), Prikryl (1990), and Yates and Ferring (1986).
** Based on uncalibrated radiocarbon dates, which are typical in Texas archeology (see Perttula 2004a:14, Note 1).

PALEOINDIAN PERIOD

The Paleoindian occupation is the least known period in the prehistory of North Central Texas, due primarily to three factors: the light population density of Paleoindian peoples, the great age of the occupation (up to 13,000 calendar years), and taphonomic factors such as severe erosion and deep sedimentation, depending on location (Ferring 1989, 2001; Holliday 2004). Although initially seen as narrowly specialized big-game hunters, Paleoindian groups such as Clovis are being reevaluated in light of recent discoveries such as the Aubrey site north of Dallas-Fort Worth. At Aubrey, investigators found evidence of a more balanced, flexible subsistence strategy, with remains of big game such as bison and mammoth but also fish, birds, and other small game (Ferring 2001). Generally, Paleoindian people are thought to have been more mobile than subsequent populations, utilizing lithic and other resources from broad geographic areas.
ARCHAIC PERIOD

Usually divided into three more or less equal parts, the Archaic Period encompasses the bulk of North Central Texas prehistory. The Archaic record is clouded by mixed deposits (Hofman et al. 1989; Prikryl 1990) and possible large-scale erosion in the middle of the period (as has been documented further to the west by Blum and colleagues [1992]). Still, the available data show that Archaic peoples were more likely than their predecessors to make projectile points and other stone tools out of local raw materials, potentially indicating more spatially restricted territories and/or subsistence areas, perhaps reflecting seasonal rounds through a specific series of resource-gathering zones (Ferring and Yates 1997; Peter and McGregor 1988). Generally, population is thought to have increased throughout the Archaic Period, perhaps in response to stabilizing climatic conditions.

LATE PREHISTORIC PERIOD

The Late Prehistoric Period is defined technologically, as the beginning of the period is typically marked by the appearance of arrow points and ceramics. Aside from the addition of these extremely important technologies, the overall trajectory of subsistence lifeways in the Late Prehistoric is usually thought to represent a continuation of trends seen in the later part of the Archaic, with even more dramatic focus on very local resources and broad-spectrum foraging (Ferring and Yates 1997). In the latter part of the period (Late Prehistoric II), the picture shifts, with ceramic and lithic evidence indicating links to Plains populations to the north and west (Prikryl 1990).

PROTOHISTORIC AND HISTORIC PERIODS

The beginning of the Protohistoric Period is marked by the first appearance of Europeans in Texas: the Spanish explorers, priests, and speculators who began moving into the state from colonies to the south and west in the sixteenth and seventeenth centuries A.D. Although technically historic (i.e., characterized by the use of writing), this earlier phase is often separated from the more formally designated Historic Period due to the relative infrequency of direct Spanish incursions into North Central Texas, in contrast to the high-profile, early Spanish occupations in South and South Central Texas (Campbell 2003). Even without the missions, military outposts, and other facilities characteristic of the Spanish presence to the south, the effects of trade, disease, and other factors on native populations were still dramatic, and indigenous groups of the Protohistoric Period are little known apart from sporadic finds of European trade goods at native sites (Stephenson 1970). The last two centuries are considered the Historic Period. In brief, the landscape and material culture of North Central Texas during this time are characterized by the overwhelming dominance of European-derived populations and the expansion of railroads, the discovery and exploitation of petroleum resources, the supplanting of small tenant farming by mechanized agriculture and urban sprawl, and various waves of commercial and industrial development, the most recent example being the rise of the service and information economy (Campbell 2003).

For further general background information, particularly regarding prehistoric periods, the reader is referred to the major reports mentioned above, as well as to Perttula’s recent statewide synthesis, The Prehistory of Texas (Perttula 2004b). Although the latter does not include a chapter devoted specifically to North Central Texas archeology, the introductory chapter includes an invaluable side-by-side comparison of cultural chronologies from all of the archeological regions in Texas (Perttula 2004a:
Table 1.1). For later periods, the reader is referred to Randolph B. Campbell’s Gone to Texas: A History of the Lone Star State (2003).

TARRANT COUNTY

The earliest inhabitants in the area were believed to be the Tonkawa and the Hasinai Caddo; however, little information is available. The late 1700s saw the introduction of the Comanche, Kiowa, and Wichita into the area, all of whom later clashed with Anglo settlers in the mid-1850s. Anglo settlement began in 1843 with the arrival of immigrants from Tennessee, Virginia, and Kentucky. In 1845, the first settlement in the area was Birdville, which was founded by a group of farmers and cattle ranchers from Missouri (Hart 2010). Tarrant County was named after General Edward H. Tarrant, who led the troops against the native population at the Battle of Village Creek in 1841. The county was founded on December 20, 1849, when Birdville named as the first county seat. In 1856, the county seat was moved to Fort Worth as a result of a special election (Hightower 2010).

Tarrant County’s population fluctuated from 1850 into the 1900s. During the 1850s, the population rose quickly; 599 whites and 36 slaves were documented during the census. By 1860, the population had grown to 5,170 whites and 850 slaves. During the Civil War and Reconstruction, the population declined, and the area experienced an economic downfall. Construction on the permanent courthouse in Fort Worth, which had been promised in 1860, was halted around 1866 due to post-Civil War Reconstruction. From 1890 to 1920, the population rose from 41,142 to 152,800. World War I brought even more people to Tarrant County when Camp Bowie was established in 1917; approximately 100,000 men trained at the camp during the war. The Army Air Corps operated three airfields (Hicks, Benbrook, and Barron) in the area, and the privately-owned Meacham Field opened in 1927. World War II continued to cause an increase in the population, from 197,553 in 1930 to 361,253 in 1950, largely due to the aviation industry. During the 1960s, 1970s, and 1980s, the population rose sharply due to employment demands from companies such as Bell Helicopter and the completion of the Dallas-Fort Worth International Airport. By 2014, the census total for Tarrant County included 1,945,360 residents (Hightower 2010).

The economy of Tarrant County expanded with the arrival of railroads in the 1870s. The Texas and Pacific Railroad arrived in 1876, later followed by the Missouri-Kansas-Texas, the Santa Fe, the Fort Worth and New Orleans, the St Louis Southwestern, and the Fort Worth and Rio Grande railroads. Prior to the railroads, cattle drives provided the greatest economic boom. However, by 1890, the cattle drives ended, and the introduction of windmills expanded farms. Between 1890 and 1900, nearly 1,000 new farms were established; this number rose to 3,500 by 1950. Principal crops included cotton, corn, and wheat (Hightower 2010).

New ideas at the turn of the nineteenth century for the area helped to expand economic growth. This included impounding Lake Worth for better fire-fighting capabilities which brought in the Swift Packing Company and several medical facilities and hospitals. In addition, several oil refineries were built to handle the oil booms in other parts of the state and oil companies decided to headquarter in Fort Worth. As with many parts of the country, the 1929 Stock Market Crash and the Great Depression hurt the local economy. World War II ended the depression, and aviation became a dominant force driving the economy. As mentioned above, the aviation industry arrived with World War I and is still influential economically. Bell Helicopter moved into Tarrant County in the early 1950s and continues to employ
thousands of people. The completion of the Dallas-Fort Worth International Airport in the 1970s linked the Dallas-Fort Worth area to the rest of the world. By the 1990s, the economy was very diverse and ranged from factories producing aerospace products to foods and plastics to agricultural, cattle ranching, hogs, and chickens (Hightower 2010).

**Previous Investigations and Previously Identified Cultural Resources**

A data search of the Texas Archeological Sites Atlas (Atlas) maintained by the Texas Historical Commission (THC) and the Texas Archeological Research Laboratory (TARL) was conducted to identify any previously recorded cemeteries, historical markers, NRHP properties or districts, SALs, archeological sites, and previous surveys in the APE and within a 1-mile (1.6-kilometer) buffer (the standard buffer zone for such searches) surrounding the APE.

According to the Atlas, the APE has not been previously surveyed. However, there are three archeological surveys and two previously recorded archeological sites in the 1-mile buffer area (THC 2019); these are shown in Figure 2. The nearest survey was conducted for the City of Fort Worth along a short segment of Ray White Road between Shiver Road and N Tarrant Parkway in 2012 by Geo-Marine, Inc. (now Versar, Inc.); no resources were identified. A large areal survey conducted in 1993 south of N Tarrant Parkway along the tributary and Whites Branch at their convergence and southward by AR Consultants, Inc. for the City of Fort Worth and Hillwood Development Corporation’s proposed Arcadia Trail Park and resulted in the recording of the aforementioned archeological sites (details below). An areal archeological survey located northwest of the APE was conducted in 2001 for the Texas Parks and Wildlife Department; no additional information was available on the Atlas (THC 2019).

Archeological sites 41TR131 and 41TR132 were recorded during the 1993 AR Consultants survey of the proposed Arcadia Trail Park. Site 41TR131 is a historic-age accumulation of refuse that dates to the 1930s and into the 1960s. It corresponds to the location of a residence on the 1924 soils map (Skinner and Whorton 1993: Figure 6). The site was recommended not eligible for inclusion on the NRHP or for designation as a SAL, and no additional investigations were recommended at the site. Site 41TR132 is a shell lens buried a meter below the present ground surface in the bank of a tributary to Whites Branch and is located at the juncture of the creek with the main channel. The lens was no more than 10 centimeters thick and roughly 3 to 4 meters long and consisted of a layer of burned (fire-reddened) limestone slabs associated with freshwater mussel shells. The site was recommended eligible for inclusion on the NRHP and designation as a SAL, and avoidance of the site during construction activities was recommended (Skinner and Whorton 1993).

**Historical Map and Aerial Photography Review**

Prior to conducting the survey, a review of available historic topographic maps and aerals on Google Earth™, the Nationwide Environmental Title Research (NETR) website, and the USGS Historical Topographic Map Explorer data set was undertaken to determine how the area had been utilized over time and whether structures or buildings had been present at any time. The Earliest topographical map (1894) shows the area as undeveloped with a few roads in the area and the Texas Railway to the east. All subsequent maps (1954, 1955, 1958, 1968, 1972, 1973, 1981, 1982, 1985, 1992, 2012, ands 2016) show Ray White road in place but turning to the east at the now intersection of Ray White Road
and N Tarrant Parkway. The stock pond first appears on the 1981 map and N Tarrant Parkway does not appear until the 2012 map.

Available photographs reviewed date from 1956, 1963, 1968, 1970, 1979, 1981, 1990, 1995, 2001, 2003, 2005, 2007–2009, and 2011–2018. The earliest aerial imagery available (1956) shows the larger area in a rural undeveloped setting well outside of both Keller and Fort Worth city limits. Ray White Road is extant and does a 90 degree turn to the east at this location (future N Tarrant Parkway). By the 1963 imagery, a large stock pond has been constructed in the northeast corner of the APE. No changes to the area in general or to the APE are shown until the 2001 imagery, when N Tarrant Parkway and the large residential development to the west of the APE have been constructed. Grading along the creek and along the north side of North Tarrant Parkway has also occurred by 2001. The 2004 aerial imagery shows that the northwest corner of the intersection and an area at the west end of the parcel and near the creek have been cleared of vegetation and piles of fill dirt are placed on them. An exit road off the west side of Ray White has been built connecting to the west-bound lanes of N Tarrant Parkway, and the large development to the north is extant on the 2008 imagery. The Race Trac gas station and convenience store is extant on the 2012 imagery; no additional changes have been made since that time (Google Earth™ 2019; NETR 2019).
Figure 2
Location of Archeological APE

N Tarrant & Ray White Commercial Development

Data Sources: THC (2019), NHD (2019)
Topographic Sources: USGS Keller (1981) and Halton City (1985) 7.5 Quadrangles

Project APE
1-mile Buffer of APE
Previous Archeological Project (Area)
4.0 Research Goals and Methods

Purpose of the Research

The present study was carried out to accomplish three major goals:

1. To identify all historic and prehistoric archeological resources located within the APE defined in Chapter One;

2. To perform a preliminary evaluation of the identified resources’ potential for inclusion in the NRHP and/or for listing as a SAL (typically performed concurrently); and

3. To make recommendations about the need for further research concerning the identified resources based on the preliminary NRHP/SAL evaluation and with guidance on methodology and ethics from the THC and the Council of Texas Archeologists (CTA).

NRHP Eligibility

The National Historic Preservation Act of 1966, as amended, provides a statement of federal authority, an administrative framework for agency coordination, and general principles for the assessment of cultural resources, including archeological sites (called “historic properties” in this regulatory context, regardless of actual historic or prehistoric dates), for their eligibility for inclusion in the National Register of Historic Places (36 CFR 800; 36 CFR 60.4).

More specific rules relating to the NRHP nomination process, list management, relevant definitions, and other matters are described in 36 CFR 60. Most important to the present investigation are the criteria for significance (and therefore potential NRHP eligibility):

...The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association and

(a) that are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) that are associated with the lives of persons significant in our past; or

I that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

(d) that have yielded or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

Note that significance and NRHP eligibility are determined by two primary components: integrity and one of the four types of association and data potential listed under 36 CFR 60.4(a-d). The criterion most often applied to archeological sites is the last—and arguably the broadest—of the four (36 CFR 60.4[d]).
Survey Approach and Methods

Field methods complied with the requirements of the guidelines as set forth by the CTA and approved by the THC prior to April 2020. The survey included a pedestrian survey of the entire APE parcel with the intensive excavation of 3 shovel test (ST) units in the floodplain where construction impacts are proposed. Shovel test units were excavated in natural levels to major color/texture changes or restrictive features were placed where ground surface visibility is below 30 percent, soils appear to be of sufficient depth to contain subsurface cultural materials, and/or previous disturbance appears minimal. Excavated matrix was screened through 0.25-inch (0.635-centimeter) hardware cloth, as allowed by moisture and clay content. Deposits were described using conventional texture classifications and Munsell color designations, and all observations were recorded on standardized CMEC shovel test forms.

Indirect/Visual Impacts to Above-Ground Resources

In addition to archeological survey for surficial or buried archeological resources, the APE for indirect or visual effects was evaluated using aerial photographs, historic maps, and photographs taken within the project area.
5.0 Results

On 27 November 2019, CMEC archeological staff conducted pedestrian survey with shovel testing of the 4-acre (1.62-hectare) portion of the 14-acre (5.67-hectare) tract proposed for commercial development, which will front along N Tarrant Parkway. Prior to fieldwork, the potential for intact archeological deposits associated with either prehistoric or historic sites was considered low along the project area. Field conditions were clear and cool with no major logistical obstacles encountered during the course of the survey.

The APE is bounded by Ray White Road and a Race Trac gas station/convenience store to the east, N Tarrant Parkway to the south, and residential developments to the west and north. It is also located within the floodplain of two small, unnamed tributaries that join on the parcel near N Tarrant Parkway then singularly flows out of the parcel, under N Tarrant Parkway, and eventually into Whites Branch to the south (Figures 3, 4, and 5). During this survey, both tributaries were flowing from recent rains and the ground surface was damp and soft underfoot. The only portions of the APE that are not in floodplain were the partially built pad on the western end, a linear section of terrace edge along the northeastern corner, and the sloping western portion of the Race Trac pad in the southeastern corner (see Figure 3).

Ground visibility was extremely low within the APE, ranging from 0 to 30 percent. Vegetation ranged from low to tall grasses and a scattering of young mesquite and willow saplings (see Figure 4). Overall, the ground surface is mostly flat and level within the tributaries' floodplain, although evidence of dirt dumping (Figure 6) was apparent in a number of places near the western end, causing an uneven surface; these small isolated piles are remnants of the purposeful dumping of dirt and rock to build up this portion of the parcel facing N Tarrant Parkway as early as 2004, based on available historical aerial image. The ring of large boulders that was placed in this area about the same time is intact and very visible (Figure 7) and outlined the partially built pad. An abundance of trash was observed in the APE along N Tarrant Parkway, some of which was road trash, also consisted of clothing that may have been left by homeless persons camping out at the base of the built-up roadway and near the creek. Two water meters were also observed within this trash scatter (Figure 8) so buried utilities have already impacted some portions of the floodplain. The stock pond observed on the 1963 aerial is still in place behind the Race Trac, and water still flows from it into the tributary on the east side of the APE (Figure 9). Just north of the pond, signs were observed indicating an existing sewer line crossing the APE from the Race Trac pad to the residential subdivision to the north (Figure 10). To help manage drainage erosion off of the Race Trac pad and direct water into the floodplain, large rocks were placed in the shallow drainage ditch and into the floodplain to evenly dispersed water into the floodplain and not erode the edge of the pad. However, the alterations to the floodplain on the whole (i.e., construction of the present commercial pads have affected the overall drainage within the floodplain.

Shovel testing was minimal and judgmental (see Figure 3). Three shovel test units (STs) were placed in areas where most of the impacts would occur (Table 2). Sediments in ST2 and ST3 were consistent floodplain sediments consisting of wet, sticky loamy clay or clay; water seeped in and inundated these tests at a shallow depth. Conversely, soils observed within ST1 were disturbed and included differing colored clay nodules and caliche throughout, along with a jumble of limestone gravels and cobbles. Natural limestone gravel and cobbles in the soil were also observed in the west bank of the combined singular creek (Figure 11) as it flows to the west and outside of the APE limits. The presence of stone in
Figure 4. View across APE from the Race Trac pad on the eastern end; view west.

Figure 5. View across APE from N Tarrant Parkway; view north.
Figure 6. Evidence of old dirt pile dumping; view west.

Figure 7. Large boulders set on the surface at edge of partially built pad on western end; view north.
Figure 8. Water meter pipes in the APE below N Tarrant Parkway; view east.

Figure 9. Stock pond at eastern end of APE; view north northeast.
the creek bank is evidence of the Weno Limestone portion of the Early Cretaceous Paw Paw Formation, Weno Limestone, and Denton Clay, undivided, geologic formation in this area; limestone was also the only natural stone observed in the entire APE.

Table 2. Shovel Test Results

<table>
<thead>
<tr>
<th>ST #</th>
<th>Depth (cmbs*)</th>
<th>Description</th>
<th>Artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST1</td>
<td>0–22</td>
<td>Dark brown (7.5YR 3/2) silty clay/clay mottled with very small pink (2.5YR 8/4) and dark grayish brown (10YR 4/2) caliche and clay nodules; limestone gravels and cobbles occurred throughout; terminated due to large cobbles</td>
<td>None</td>
</tr>
<tr>
<td>ST2</td>
<td>0–30</td>
<td>Dark grayish brown (10YR 4/2) clay; very soft and wet; terminated due to water seepage</td>
<td>None</td>
</tr>
<tr>
<td>ST3</td>
<td>0–30</td>
<td>Very dark grayish brown (10YR 3/2) loamy clay/clay; wet and sticky; terminated due to water seepage</td>
<td>None</td>
</tr>
</tbody>
</table>

* centimeters below surface
Figure 11. West cut bank of creek showing natural limestone gravels and cobbles; view west.
6.0 Summary and Recommendations

In late November 2019, an archeological pedestrian survey augmented with the excavation of shovel test units was completed to evaluate potential archeological impacts associated with the construction of commercial pads development along N Tarrant Parkway at Ray White Road in northern Fort Worth. The APE falls entirely within the floodplain of tributaries of Whites Branch in an urban setting. The APE was traversed and three shovel tests excavated; no additional shovel test units were attempted due to water seepage. Survey revealed disturbed soils near the footings of the previously built pads and the surrounding area of this proposed construction has been completed developed with residential and commercial enterprises which has affected drainage in the small floodplain.

No archeological deposits, features, or materials that would be evaluated based on Criteria A through D were encountered anywhere in the APE. Therefore, no historic properties will be impacted by the proposed commercial development and development should be allowed to proceed.

There are no extant historic-age buildings or structures and no NRHP- or SAL-eligible archeological resources recorded within the 1-mile (1.6-kilometer) buffer around the APE, and no NRHP or SAL-eligible archeological resources were found during the current survey. Therefore, the proposed project would not cause visual or indirect effects on any above-ground NRHP- or SAL-eligible cultural resources.

In the unlikely event that any site, landscape, or other resource nearby were later determined to be eligible for the NRHP or as a SAL, the proposed project would not introduce new visual effects, as the adjacent existing transmission line corridor has already introduced major visual incursions to the local landscape.

No materials were collected during the investigation; therefore, this project generated no archeological materials to be curated. Notes, photographs, administrative documents, and other project data will be housed at the CMEC Irving office and would be made available to future researchers.

If any unanticipated cultural materials or deposits are found at any stage of clearing, preparation, or construction, the work should cease and THC personnel should be notified immediately.
7.0 References

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APPENDIX A

Project Plans
Plans 1
Plans 2
Plans 3
APPENDIX B

Regulatory Correspondence