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Archeological Survey For The Austin Industries Proposed Parking Lot Expansion At East Union Bower Road (SWF-2019-00383), Irving, Dallas County, Texas

Melissa M. Green

Brett Lang

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ARCHEOLOGICAL SURVEY FOR THE AUSTIN INDUSTRIES PROPOSED PARKING LOT EXPANSION AT EAST UNION BOWER ROAD (SWF-2019-00383), IRVING, DALLAS COUNTY, TEXAS

FINAL

Prepared by
Melissa M. Green, MA, RPA (Principal Investigator)
Brett Lang, MS (Project Archeologist)
Cox|McLain Environmental Consulting, Inc.
600 E. John Carpenter Freeway, Suite 186
Irving, Texas 75062

For
Austin Industries, Inc.
3535 Travis Street, Suite 201
Dallas, Texas 75204

And
United States Army Corps of Engineers, Fort Worth District
819 Taylor Street, Room 3A37
Fort Worth, Texas 76102

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Environmental Consulting

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Management Summary

On December 12, 2019, an intensive archeological survey augmented with shovel testing was completed to evaluate potential impacts associated with the proposed construction of a parking lot expansion in east central Irving in Dallas County, Texas. The overall grade of the area would be converted to a consistent slope toward the unnamed tributary to the Elm Fork of the Trinity River near the center of the parcel and more steeply sloped along the eastern portion of the parcel. Approximately 6.5 acres (2.6 hectares) were examined and shovel tested.

The proposed parking lot parcel is undeveloped, heavily vegetated, and surrounded by industrial buildings and parking lots in an urban industrial setting. From East Union Bower Road, the parcel's main access point is located along an alley and utility corridor on the west side of the Austin Industries equipment yard. An existing sewer line runs along the alley/utility corridor from East Union Bower Road and north of the unnamed drainage that runs southeast across the north part of the parcel. This drainage eventually drains into the Elm Fork of the Trinity River approximately 2,000 feet (609 meters) southeast of the parcel. Other than the buried sewer line and utilities corridor, the parcel has not been utilized, but commercial development of the general area is rapidly encroaching into the area.

Brett Lang (Project Archeologist) of Cox|McLain Environmental Consulting, Inc. carried out the survey in support of a Clean Water Act Section 404 Permit (SWF-2019-00383, Commercial Development Bower Road) for the United States Corps of Engineers, Fort Worth District. The project was subject to Section 106 of the National Historic Preservation Act of 1966, as amended. However, a Texas Antiquities Permit was not required for this project. Melissa Green served as Principal Investigator.

Based on background review of available data, the potential for intact archeological deposits was considered low for both prehistoric and historic sites within the archeological area of potential effects (APE) due to previous disturbances. Ground surface visibility varied between 0 and 30 percent across the parcel. Four shovel test units were excavated to examine the potential for subsurface archeological deposits in areas around an unnamed tributary of the Elm Fork Trinity River, none of which contained archeological materials. No evidence of historic or prehistoric deposits, materials, or features were identified, and no further work is recommended within the 6.5-acre (2.6-hectare) APE.

In addition, there are no extant historic-age buildings or structures and no National Register of Historic Places- (NRHP) or State Antiquities Landmark-eligible (SAL) 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.

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

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 THC concurred with the findings and recommendations of this report on February 5, 2020.

ARCHEOLOGICAL SURVEY FOR THE AUSTIN INDUSTRIES PROPOSED PARKING LOT EXPANSION AT EAST UNION BOWER ROAD, IRVING, DALLAS COUNTY, TEXAS

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1.0 Introduction

Overview of the Project

Austin Industries, Inc., plans to construct a parking expansion at the rear (south) of its equipment yard in east central Irving, Dallas County, Texas (**Figure 1**). Austin Industries, Inc. was contracted with Cox|McLain Environmental Consulting, Inc. (CMEC) to conduct a survey with shovel testing for archeological resources on the 6.5-acre (2.6 hectare) parcel. The proposed parking lot parcel is undeveloped, heavily vegetated, and surrounded by industrial buildings and parking lots in an urban industrial setting. From East Union Bower Road, the parcel's main access point is located along an alley and utility corridor on the west side of the Austin Industries equipment yard. An existing sewer line runs along the alley/utility corridor from East Union Bower Road and north of the unnamed drainage that runs southeast across the north part of the parcel. This drainage eventually drains into the Elm Fork of the Trinity River approximately 2,000 feet (609.6 meters) southeast of the project area. Other than the buried sewer line and utilities corridor, the parcel has not been utilized, but commercial development of the general area is rapidly encroaching into the area.

The archeological area of potential effects (APE) for this project consists of a 6.5-acre (2.6-hectare) area. The proposed project would convert the overall grade of the area to a consistent slope toward the unnamed tributary to the Elm Fork of the Trinity River near the center of the parcel, and to a steeper slope along the eastern portion of the APE. The entire APE was fully examined and intensively shovel tested. Any areas that are too sloped or disturbed to shovel test was walked and documented through photography.

Regulatory Context

Brett Lang (Project Archeologist) of Cox|McLain Environmental Consulting, Inc. (CMEC) carried out the survey in support of a Clean Water Act Section 404 Permit (SWF-2019-00383, Commercial Development Bower Road) for the United States Corps of Engineers, Fort Worth District (USACE-FW). The project was subject to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR 800). 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. Melissa Green served as Principal Investigator. This investigation would evaluate the eligibility of identified resources for inclusion in the National Register of Historic Places or NRHP (36 CFR 60).

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.

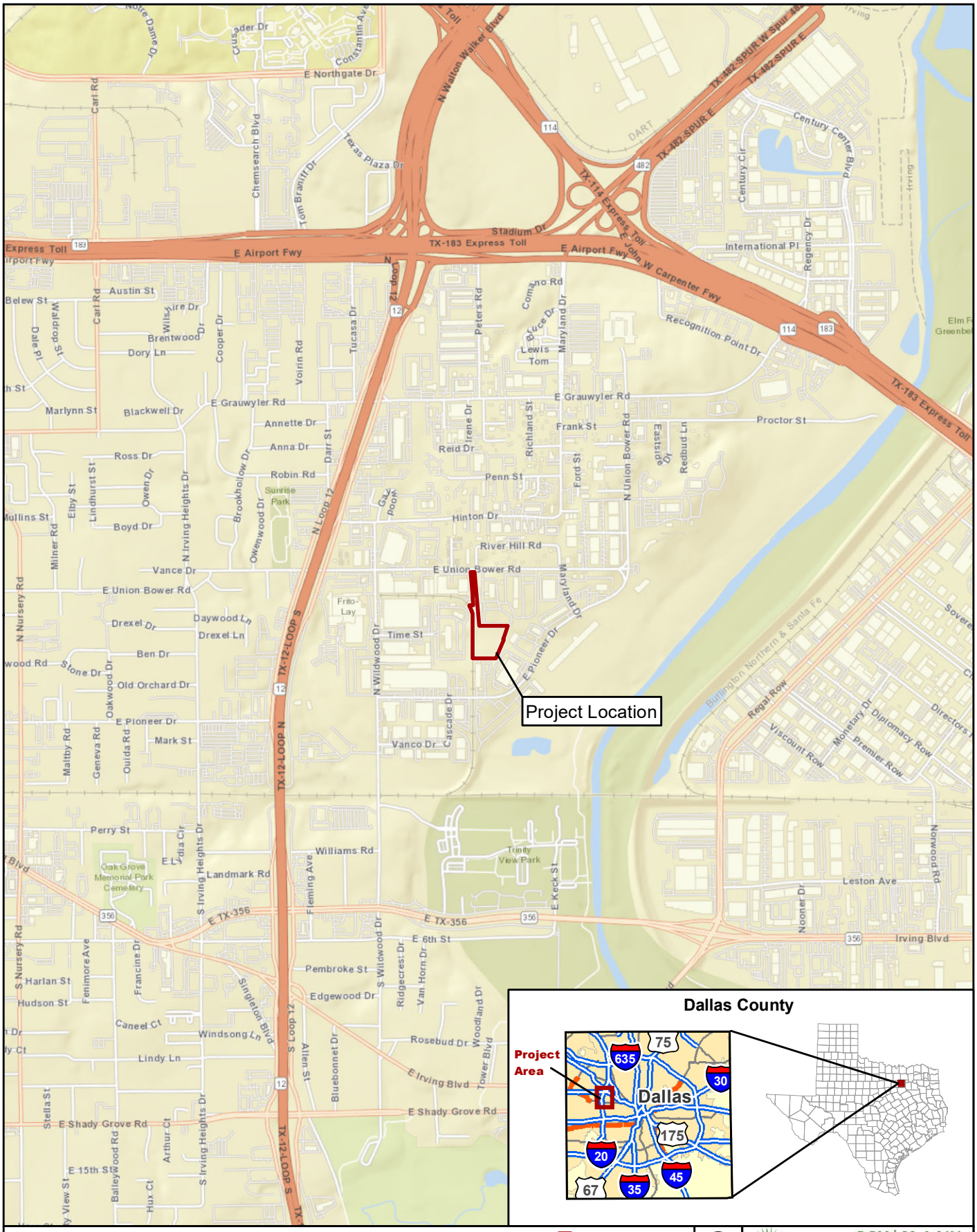

Figure 1

Project Location

Union Bower Parking Lot Expansion

Project Location

Basemap Source: Esri (2019)

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0 2,000 Feet

0 600 Meters

1 in = 2,000 feet

Scale: 1:24,000

Date: 12/17/2019

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2.0 Environmental Context

Topography and Drainage

The 6.5-acre (2.6-hectare) APE is located at approximate elevations of 437–465 feet (133–142 meters) above mean sea level on undeveloped land along an unnamed tributary of the Elm Fork of the Trinity River. The APE is sloped and undulating with an unnamed drainage that runs southeast across the north part of the APE and eventually drains into the Elm Fork of the Trinity River approximately 2,000 feet (609.6 meters) to the southeast.

Geology and Soils

The APE is underlain by Quaternary Fluviatile terrace deposits that consist of gravel, sand, silt, and clay (USGS 2019a). According to Natural Resources Conservation Service (NRCS) data, the majority of the parcel is covered by undulating Ustorthents with only the easternmost sliver of the parcel mapped as Silawa fine sandy loam on 3 to 8 percent slopes. Ustorthents are made up of area where loamy and sandy soil material has been removed and the surface is generally much lower than surrounding areas (Coffee et. al. 1980). Silawa soils are very deep, moderately permeable soils that formed in sandy and loamy sediments and are located on nearly level to strongly sloping terraces. It has an Ap horizon 15 centimeters (6 inches) deep over an 18-centimeter (7-inch) E horizon that overlies a Bt horizon to 97 centimeters (38 inches) deep (Soil Survey Staff 2019).

Vegetation and Land Use

The project area is located within the Floodplains and Low Terraces subregion of the Texas Blackland Prairies ecological region of Texas (Griffith et. al. 2010). This subregion includes only the broadest of floodplains (such as those associated with the Trinity River), and covers mostly Holocene-age deposits, as opposed to the older, higher terraces. Forests of this subregion are generally characterized as bottomland forests and include bur oak, Shumard oak, sugar hackberry, elm, ash, eastern cottonwood, and pecan, although most of this subregion has been converted to pasture and cropland (Omernik and Griffith 2013); however, the area around the APE has been entirely converted to an urban industrial setting. According to the Texas Parks and Wildlife Department's *Texas Ecosystems Analytical Mapper* map and database, the entire APE is mapped as Urban Low Density (Texas Parks and Wildlife 2019); the APE is surrounded by industrial 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*

Period	Years Before Present (BP)**
Paleoindian	11,500 – 9,000
Archaic	9,000 – 1,300
Early Archaic	9,000 – 6,000
Middle Archaic	6,000 – 4,000
Late Archaic	4,000 – 1,300
Late Prehistoric	1,300 – 400
Late Prehistoric I	1,300 – 700
Late Prehistoric II	700 – 400
Protohistoric	400 – 200
Historic	200 – 50

* 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 CE 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).

DALLAS COUNTY

Dallas got its start when John Neely Bryant visited in 1839 looking for a place to establish a trading post with local Native Americans. He left the Dallas area for his home in Van Buren, Arkansas, but returned in 1841 to settle on a bluff overlooking the Trinity River. Bryan discovered that the Republic of Texas troops were removing Native American populations; thus, he had to abandon his plans for a trade center. He decided to establish a town instead and proceeded to encourage residents of nearby Bird's Fort to join him (Harper 2013).

After the annexation of Texas into the United States in 1846, the burgeoning town of Dallas was soon influenced by several events occurring elsewhere in the nation. First, it was a major trail for the "49ers", those traveling to California in search of gold, that utilized a ford access of the Trinity River about 7 miles north of town, and second, several of its residents, including Bryant, left due to "gold fever". In 1855, another major colonizing venture was begun in the Dallas area when 200 French, Belgian, and Swiss immigrants arrived to establish the utopian settlement of La Reunion about 3 miles west of Dallas along the West Fork of the Trinity River. Although the settlement was well-funded, the residents did not adapt well to the frontier conditions, the colony never really prospered, and many eventually drifted away (Works Progress Administration [WPA] 1992:46–47, 286–290).

Leading up to the Civil War, Dallas County residents were in favor of the Confederate cause and sided with the state to secede. Many residents joined and/or contributed both cash and foodstuffs to the Confederate Army during the war. Although the fighting never reached North Central Texas, the region was gradually impoverished by the war and many commodities that were imported to the region became difficult to obtain. Following Lee's surrender on April 9, 1865, the Federal Army occupied Texas and announced the emancipation of Texas' slaves on June 19, 1865 (WPA 1992: 55–58).

After the war, the influx of immigrants from other parts of the country, particularly the South, that were headed to the yet unsettled West helped fuel the economy of Dallas County. Also, Dallas' location on one of the large cattle trails to Kansas and its role as a center of the buffalo hide market continued to stimulate the economy. In 1872, the Houston & Texas Central Railroad was the first to arrive, with the Texas & Pacific Railway following in 1973. The arrival of the railroads brought in many other trappings of a major city beginning with a water distribution system (1873), gas lighting (1874), a private telegraph company (1875), the telephone (1880), and electricity (1882) (WPA 1992: 60–70).

By 1900, Dallas had become a major commercial and manufacturing center and with a population of 42,638, was the third largest city in Texas. In 1908, a devastating flood occurred along the Trinity River, with the river cresting at 51.3 feet. The flood caused tremendous property loss (estimated at $2,500,000) and left 4,000 people homeless. During World War I, Dallas served as a training base for aviators with Love Field and Camp Dick (at the State Fairground) being used for training. During the 1920s, the Ku Klux Klan became a factor in local politics, achieving particular importance between 1921 and 1924. Dallas' radio station, WRR, was established in 1921 originally as a means of broadcasting emergency messages to the fire department. By 1927, WRR had become a commercial

station. Beginning in 1930, Dallas began to be severely impacted by the Great Depression (WPA 1992: 80-97, 266–267).

The economy of Dallas County did not begin to recover from the Depression until the mobilization for World War II began. After the war, the economy continued to grow along with the rest of the nation. A major economic downturn occurred in the late 1980s when a drop in oil prices and the collapse of the real estate market dealt a severe blow to the Texas economy. This forced the Dallas region to diversify economically, investing heavily in modern high-tech industries.

Previous Investigations and Previously Identified Cultural Resources

A data search of the Texas Archeological Sites 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, and no archeological sites, cemeteries, or landmarks are located within the APE. However, there are 5 archeological surveys, 1 historic cemetery, and 2 previously recorded archeological sites in the 1-mile buffer area (THC 2019); these are shown in **Figure 2**. All the surveys were conducted along the Elm Fork of the Trinity River, including a 1974 linear survey conducted by the Southern Methodist University for the USACE-FW, a 1979 linear survey for the Environmental Protection Agency, a 1982 linear survey for the USACE-FW, a 1999 linear survey for the Trinity River Authority and USACE-FW, and a 1999 linear survey and monitoring investigation for the Texas Water Development Board. No additional information was available through the Atlas on the first 4 surveys. The 1999 Texas Water Development Board survey was conducted by Geo-Arch Consultants for the Elm Fork Trinity River interceptor pipeline; during this project, 36 backhoe trenches were used to examine the subsurface within the proposed pipeline corridor. Trenches and natural cuts along the corridor revealed that "the extensive late Holocene (ca. 3,500 to 300 years old) deposits have the potential for low density and low frequency archeological deposits;" no archeological sites were identified during the survey (Ferring 2000; THC 2019).

Located approximately 0.32 miles (0.51 kilometers) northeast of the APE, archeological site 41DL63 was originally recorded as a surface camp on the "side and top of a sandy hill" in 1941 by Forrest Kirkland. Only scrapers, blades, and flakes were reported, and it was thought that the site was "never extensively used" (Kirkland 1941). It was revisited in 1999 as part of a communications corridor survey (not recorded on the Atlas) conducted by Burns and McDonnell; no artifacts were identified during the revisit and no recommendations were made. Site 41DL64 is located approximately 0.62 miles (1 kilometer) from the APE on the east side of the river; there was no data about this site beyond the mapped location (THC 2019).

There are 154 souls buried in the Smith Cemetery, located 0.30 miles (0.48 kilometers) north-northwest of the APE, according to the *Find A Grave* website (Tipton 2019). The earliest marked grave with a death date is that of Amie Blanch Smith in 1886, while the most recently listed date is 2013.

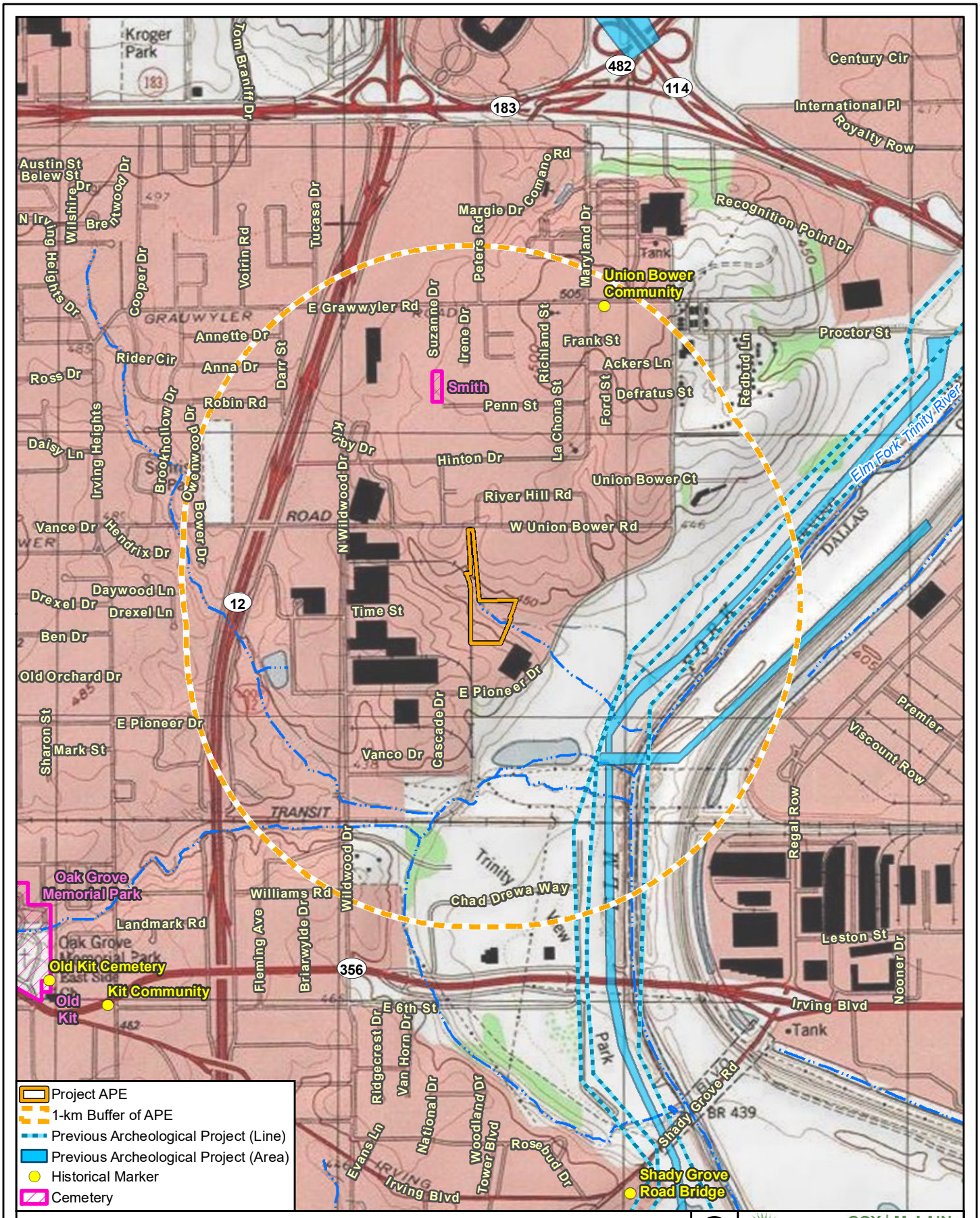

Figure 2

Location of Archeological APE

Union Bower Parking Lot Expasion

Data Sources: THC (2019), NHD (2018)
Topographic Source: USGS Irving 7.5' Quadrangle (1981)

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0 1,500 Feet
0 400 Meters

1 in = 1,500 feet
Scale: 1:18,000
Date: 2/6/2020

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Historic Topographic Map and Aerial Imagery Review

Prior to conducting the survey, a review of available historic aerials on Google Earth™ and the Nationwide Environmental Title Research (NETR) website was undertaken to determine how the area has been utilized over time and whether structures or buildings had been present within the APE at any time. Available topographic maps date as early as 1891 and 1893, showing this area along the river as completely undeveloped and well outside of either the Irving or Dallas platted limits. Subsequent maps reviewed include 1954, 1958, 1959, 1960, 1963, 1968, 1969, 1973, 1974, 1981, 1982, 1986, 1995, 2002, and 2016. The next map dates to 1954 (1:250,000 scale) and indicates the both the cities of Irving and Dallas have encroached on this area, but the APE is still not mapped within either city's mapped limits. The 1959 and 1960 maps (1:24,000 scale) show the area still undeveloped, but the scale shows that a transmission line has been built and crosses the parcel in a northeast/southwest direction and the adjacent parcel to the west is labeled as a large gravel pit. It is not until 1973 that development begins in the APE and adjacent parcels. Buildings on the larger parcel first appear along East Union Bower Road in 1981, when the area is shown within the expanded Irving city limits. The 1995 map (1:24,000 scale) shows the area as completely urbanized, with little individual details (Nationwide Environmental Title Research (NETR) 2019; USGS 2019b).

Available photographs reviewed date from 1952, 1958, 1968, 1972, 1979, 1981, 1989, 1995, 2001, 2003–2005, and 2007–2019. The earliest photographs indicate a mostly wooded area with the heavily incised creek; East Union Bower Road is extant, and several two-track roads run around and through the parcel. On the 1958 imagery, some gravel excavations are occurring to the immediate northeast and southwest of this parcel. By the 1968 imagery, nearly all the trees within the APE have been removed except along the creek and new roads (e.g., East Pioneer Parkway) and a supply rail spur are being built immediately to the west. By 1979, the industrial/commercial buildings that front East Union Bower Road north of this parcel are extant as is the one directly to the south also along the rail supply spur tracks. By 1989, buildings to the south and east are built or under construction as is the extension of East Pioneer Drive to the east and north along the river. By 2008, the entire parcel is surrounded with large industrial buildings and complexes; very little has changed in the area since that time (Google Earth™ 2019; NETR 2019).

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
>
> (c) 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. The survey included a pedestrian survey of the entire APE parcel with the excavation of judgmentally placed shovel test (ST) units concentrated at the four corners of the parcel and on either side of the creek (**Figure 3**). Shovel test units were excavated in natural levels to major color/texture changes or restrictive features and 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. CMEC personnel also kept a complete record of field notes supplemented by digital photographs, with observations including (but not limited to) cultural materials, location markers, contextual integrity, estimated time periods of occupations, vegetation, topography, hydrology, land use, soil exposures, general conditions at the time of the survey, and field techniques employed.

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.

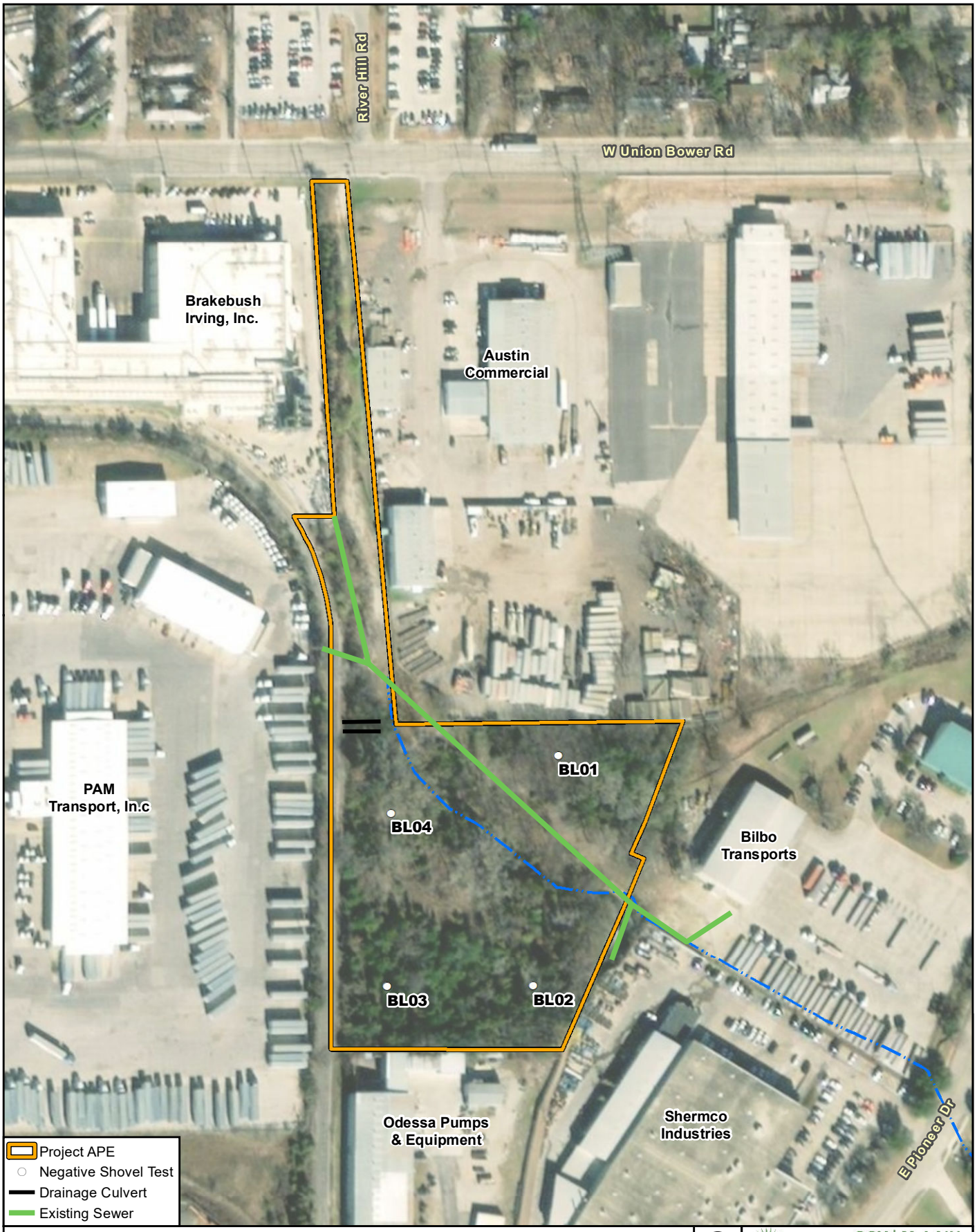

Figure 3

Survey Results

Union Bower Parking Lot Expansion

Data Sources: CMEC (2019), THC (2019), TARL (2019), NHD (2018)
Aerial Source: DigitalGlobe 2018)

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0 200 Feet
0 60 Meters

1 in = 200 feet
Scale: 1:2,400
Date: 12/20/2019

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5.0 Results

On December 12, 2019, CMEC personnel conducted a pedestrian survey augmented with shovel testing of a 6.5-acre (2.6-hectare) APE for the proposed Austin Industries parking lot expansion project (see **Figure 3**). The pedestrian survey was conducted along the access road off East Union Bower Road; this access road is located at the west end of the Austin Industries equipment yard and extends southward into a somewhat rectangularly-shaped parcel that is surrounded by commercial and/or industrial buildings and complexes. Additionally, a small rail supply spur borders the west side of the APE. An unnamed tributary that drains the surrounding parcels crosses the northern portion of the parcel and eventually empties into the Elm Fork of the Trinity River approximately 2,000 feet (609.6 meters) to the southeast. The creek is very eroded and incised, measuring approximately 33–50 feet (10–15) meters wide and at least 33 feet (10 meters) deep near the east end.

The APE is located in a fairly level to sloping wooded, upland terrace setting above the tributary of the Elm Fork of the Trinity River (see **Figure 3**) that has been primarily undeveloped with the exception of a buried utility corridor and some dumping north of the creek. From the rear of the current Austin Industries fence and to the creek, the slope increases about 25–30 percent. The access road off East Union Bower (**Figure 4**) is also a utility corridor, as it contains an existing sewer line that follows the road down toward the creek then turns to the east following the north bank of the creek. A large manhole was observed in the corridor on the north bank of the creek (**Figure 5**). In addition, two large drainage culverts that direct water into the creek from the parcel to the west were also noted at the base of the supply rail spur berm (**Figure 6**).

Figure 4. Access road/utility corridor from East Union Bower Road; view south.

Figure 5. Manhole on north bank of creek; view west.

Figure 6. Drainage culverts under rail spur berm; view south.

Vegetation across most of the APE consisted of cedar, elm, oaks, cottonwood, pecan, ankle to knee-high grasses, greenbrier, and other invasive species (**Figures 7** and **8**); prickly pear was noted at the southern end of the parcel. Ground surface visibility was generally low, ranging between 0 and 30 percent due to grasses and leaf litter. Four shovel tests were excavated in each corner (more or less) of the parcel and on either side of the creek. Soil in three of the shovel tests consisted of coarse sand and pebbles consistent with overbank flooding deposition and good indications as to the use of the area for gravel extraction. No cultural material was observed in any of the shovel tests. A complete description of all shovel test units can be found in **Table 2.**

Geotechnical soil logs for three 2-inch bores taken within the project parcel and on adjacent Austin Industries parcels and analyzed in 2014 were provided by Austin Industries; two from north of the creek and one from the access road. The two bore locations north of the creek indicated sand and gravel and sandy clay that was considered possibly fill or reworked soil to a depth of 6.5 and 8 feet (2 and 2.4 meters). The soils in the access road bore indicated an intact profile of top soil to a depth of 2 feet (0.6 meters) over sand to 6 feet (1.8 meters).

Multiple disturbances and impacts were noted in addition to the buried sewer corridor. In the northeast corner of the APE, dumping of concrete blocks and chunks has occurred (**Figure 9**). Some erosion control measures have been undertaken on the north side of the creek and at the edge of the current equipment yard boundary fence (**Figure 10**). Shallow wash-out gullies were noted on the south side of the creek. The general terrain was more level compared to north of the creek, although slightly undulating and fewer disturbances were observed.

Figure 7. Variety of grasses, shrubs, and trees in APE. Blue flag indicated existing sewer line; view east.

Figure 8. Dense wooded area near BL03 in southwest corner area; view north.

Table 2. Shovel Test Results

ST #	Depth (cmbs*)	Description	Artifacts
BL01	0–10	Strong brown (7.5YR 4/6) sandy clay with 25% very dark grayish brown (10YR 3/2) sandy clay	None
	10+	Dumped materials or bedrock; terminated	None
BL02	0–50	Reddish brown (2.5YR 4/4) coarse sand	None
	50–60	Reddish brown (5YR 5/4) sandy clay with 25% pea-sized gravels; terminated at subsoil	None
BL03	0–25	Yellowish red (5YR 4/6) coarse sand with 20% rounded pebbles	None
	25–100	Strong brown (7.5YR 5/6) coarse sand with rounded pebbles increasing with depth; terminated at permit depth	None
BL04	0–40	Yellowish red (5YR 4/6) coarse sand with 5% river pebbles	None
	40+	Root bound; terminated	None

* centimeters below surface

Figure 9. Concrete dumping in the northeast corner area near BL01; view south.

Figure 10. Erosion control measures behind truck yard fence in northeast corner; view north.

6.0 Summary and Recommendations

On December 12, 2019, an archeological pedestrian survey augmented with the excavation of shovel test units was completed to evaluate potential archeological impacts associated with the expansion and construction of a commercial parking lot in eastern Irving, Dallas County, Texas. The APE is nearly level to sloping with an unnamed tributary to the Elm Fork of the Trinity River running through it. Several disturbances were observed on the surface, including an existing buried sewer pipe, erosion stemming from both natural and man-made causes, and dumping of blocks or concrete. Soil profiles from four shovel tests and three 2-inch bore samples indicated that the southern portion of the parcel appears to have somewhat intact soils, however, the northern portion of the APE is more variable and generally more disturbed.

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 parking lot construction and construction 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.

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.

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.

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APPENDIX A

Regulatory Correspondence

Missi Green

From: Chris Dayton
Sent: Wednesday, February 05, 2020 2:50 PM
To: Missi Green
Subject: Fwd: Project Review: 202005499

Chris Dayton, PhD, RPA
Cox|McLain Environmental Consulting, Inc.
8401 Shoal Creek Blvd., Suite 100
Austin, TX 78757
(512) 338-2223

Sent via Outlook for Android

From: noreply@thc.state.tx.us <noreply@thc.state.tx.us>
Sent: Wednesday, February 5, 2020 2:26:49 PM
To: Chris Dayton <chris@coxmclain.com>; reviews@thc.state.tx.us <reviews@thc.state.tx.us>; james.e.barrera@usace.army.mil <james.e.barrera@usace.army.mil>
Subject: Project Review: 202005499

TEXAS HISTORICAL COMMISSION
real places telling real stories

Re: Project Review under Section 106 of the National Historic Preservation Act and/or the Antiquities Code of Texas
THC Tracking #202005499
Union Bower
Union Bower Road
Irving,TX

Dear Chris Dayton:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff led by Rebecca Shelton and Caitlin Brashear has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

- No historic properties are present or affected by the project as proposed. However, if historic properties are discovered or unanticipated effects on historic properties are found, work should cease in the immediate area; work can continue where no historic properties are present. Please contact the THC's History Programs Division at 512-463-5853 to consult on further actions that may be necessary to protect historic properties.

Archeology Comments

- No historic properties present or affected. However, if buried cultural materials are encountered during construction or disturbance activities, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archeology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.
- Draft report acceptable. Please submit another copy as a final report along with shapefiles showing the area where the archeological work was conducted. Shapefiles should be submitted electronically to Archeological_projects@thc.texas.gov.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: rebecca.shelton@thc.texas.gov, caitlin.brashear@thc.texas.gov

This response has been sent through the electronic THC review and compliance system(eTRAC).Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions.For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

Rebecca Shelton

For Mark Wolfe, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

cc: james.e.barrera@usace.army.mil