Volume 2017 Article 84

2017

Report for Intensive Archeological Survey for Zaragoza Port-of-Entry: Proposed Improvements to Pan American Drive and Winn Road El Paso County, Texas

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Cite this Record

Rush, Haley; Stotts, Matthew; Sandrock, David; and Green, Melissa M. (2017) "Report for Intensive Archeological Survey for Zaragoza Port-of-Entry: Proposed Improvements to Pan American Drive and Winn Road El Paso County, Texas," *Index of Texas Archaeology: Open Access Gray Literature from the Lone Star State*: Vol. 2017, Article 84. ISSN: 2475-9333
Available at: https://scholarworks.sfasu.edu/ita/vol2017/iss1/84

Report for Intensive Archeological Survey

Zaragoza Port-of-Entry: Pan American Drive and Winn Road Improvements

El Paso County, Texas

CSJ: 0924-06-418

Principal Investigator: Melissa M. Green
Cox | McLain Environmental Consulting, Inc.

October 31, 2017

The Environmental review, consultation, and other actions required by applicable Federal environmental laws for this project area being, or have been, carried out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.

This technical report is produced for the purposes of meeting requirements under Section 106 of the National Historic Preservation Act, the Antiquities Code of Texas, and other cultural resource legislation related to environmental clearance, as applicable.

Report for Intensive Archeological Survey for Zaragoza Port-of-Entry: Proposed Improvements to Pan American Drive and Winn Road
El Paso County, Texas
CSJ: 0924-06-418

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For
City of El Paso
and
Camino Real Regional Mobility Authority
and
Texas Department of Transportation

Under
Texas Antiquities Permit 7927

COX | McLAIN
Environmental Consulting

Cox|McLain Environmental Consulting, Inc. Archeological Report 145
(CMEC-AR-145)

October 31, 2017

Abstract

An intensive archeological survey was completed in order to inventory and evaluate archeological resources within the footprint of proposed improvements to Pan American Drive and Winn Road in El Paso County, Texas. The proposed improvements would extend Winn Road from Pan American Drive to Rio Del Norte Drive, resurface Pan American Drive from Loop 375 to Winn Road, and expand an existing detention pond. The proposed improvements along Pan American Drive and Winn Road are approximately 2.03 miles (3.27 kilometers) long with a typical width of 90 feet (27.43 meters). The archeological area of potential effects (APE), including the expansion of the detention pond, covers an area of 31.18 acres (12.62 hectares). Typical roadway construction would extend 2 feet (0.6 meters) to 3 feet (0.91 meters) below the ground surface, with deeper impacts at the detention pond.

Fieldwork was conducted on March 1 and 2, 2017, under Texas Antiquities Permit 7927. Both shovel testing and mechanical trenching were utilized during survey. Most of the proposed new right-of-way falls in sparsely vegetated sand dunes along the edge of a heavily modified playa that has been converted to a detention pond. No archeological sites or isolated artifacts were documented during the survey. Project records will be curated at the Center for Archaeological Studies at Texas State University-San Marcos.

The Texas Department of Transportation-Environmental Affairs Division and Texas Historical Commission concurred with the findings of this report on June 8, 2017 (see **Appendix B**).

Management Summary

On March 1 and 2, 2017, an intensive archeological survey was completed in order to inventory and evaluate archeological resources within the footprint of proposed improvements to Pan American Drive and Winn Road in El Paso County, Texas. The proposed improvements would extend Winn Road from Pan American Drive to Rio Del Norte Drive, resurface Pan American Drive from Loop 375 to Winn Road, and expand a detention pond. The proposed improvements along Pan American Drive and Winn Road are approximately 2.03 miles (3.27 kilometers) long with a typical width of 90 feet (27.43 meters). The archeological area of potential effects (APE), including the expansion of the detention pond, covers an area of 31.18 acres (12.62 hectares). Typical roadway construction would extend 2 feet (0.6 meters) to 3 feet (0.91 meters) below the ground surface, with deeper impacts at the detention pond.

The fieldwork was carried out under Texas Antiquities Permit 7927 and Section 106 requirements by David Sandrock (Project Archeologist) of Cox|McLain Environmental Consulting, Inc. (CMEC).

The entire alignment was intensively surveyed, including the excavation of shovel tests and mechanical trenches. The portion of the APE that follows the existing Winn Road and Pan American Drive roadways has been disturbed by previous development, roadway construction, maintenance, and utility installations (electric, gas, telecommunication) that follow and/or cross the right-of-way. Unpaved areas within the APE generally exhibited high (60 to 100 percent) ground surface visibility, although there were small areas of lower (30 percent) visibility due to vegetation. In all, 17 shovel tests and 10 backhoe trenches were excavated within the APE. Shovel tests were placed only in unpaved or undeveloped areas, as much of the area flanking the roadways was either developed and paved, or highly disturbed with high ground surface visibility. Shovel tests revealed loose, granular sand underlain by friable clay loam deposits across the entirety of the APE. Backhoe trenches were excavated near the eastern edge of the modified playa detention pond. Soil profiles on the landform above the detention pond contained multiple strata of sand deposits of variable thickness, underlain by strata of silty clay. Soil profiles within the detention pond were primarily loose, granular sand with occasional thin lenses of gravel.

No archeological deposits or artifacts were identified or collected; therefore, only project records will need to be curated per TAC 26.16 and 26.17. Project records will be permanently housed at the Center for Archaeological Studies (CAS) at Texas State University-San Marcos.

The Texas Department of Transportation-Environmental Affairs Division and Texas Historical Commission concurred with the findings of this report on June 8, 2017 (see **Appendix B**).

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1.0 INTRODUCTION

Overview of the Project

The purpose of this investigation is to identify archeological resources within the footprint of proposed improvements for the Zaragoza Port-of-Entry along Pan American Drive and Winn Road in El Paso County, Texas (**Figure 1**). The proposed project is being undertaken by the City of El Paso, Camino Real Regional Mobility Authority (CRRMA), and the Texas Department of Transportation (TxDOT).

The proposed project would consist of widening the existing Winn Road to a four-lane divided facility with concrete pavement, raised medians, sidewalks, illumination, safety appurtenances, and drainage improvements. The proposed project would also involve construction of a new-location segment of Winn Road between Southside Road and Rio Del Norte Drive. The proposed right-of-way for the Winn Road extension is 90 feet wide and would include raised medians, sidewalks, and culverts or a bridge to accommodate stormwater across the Playa Intercepting Drain. Proposed improvements to Pan American Drive would entail adding raised medians where none exist, adding illumination, landscaping, resurfacing the existing pavement, and restriping to four lanes. In an aerial view, the overall project forms a "J" shape and is approximately 2.03 miles long. Stormwater runoff would be accommodated with a 4.33-acre expansion of an existing detention basin west of the extension of Winn Road (**Appendix A**). The proposed design would alleviate congestion, facilitate movement of cross-border traffic through the Zaragoza-Ysleta Port-of-Entry, and help reduce freight congestion on Loop 375. Approximately 8.01 acres of new right-of-way would be required for project implementation, including land for roadway construction and the expansion of the detention pond.

The archeological area of potential effects (APE) consists of 8.01 acres or 3.24 hectares of proposed right-of-way and 23.17 acres (9.38 hectares) of existing right-of-way for a total APE of 31.18 acres (12.62 hectares).

David Sandrock (Project Archeologist) of Cox|McLain Environmental Consulting, Inc. (CMEC) performed the fieldwork on March 1 and 2, 2017, to determine the presence/absence of archeological deposits. In all, 17 shovel test units and 10 trenches were placed judgmentally within areas of the APE based on observed disturbance levels, ground surface visibility, and guidelines established by the Council of Texas Archeologists (CTA) and approved by the Texas Historical Commission (THC). The methods employed during this study and relevant constraints are discussed further in Chapters 3 and 4. Approximately 80 labor-hours have been invested in the archeological phase of compliance work for the overall project.

Regulatory Context

This project (CSJ 0924-06-418) is being undertaken by the City of El Paso, CRRMA, and TxDOT and is therefore subject to the Antiquities Code of Texas (9 TNRC 191); Antiquities Permit 7927 was assigned to this project by the THC. Due to the use of Federal Highway Administration (FHWA) funds administered by TxDOT, this project is also subject to Section 106 of the National Historic Preservation Act (NHPA), as amended (16 USC 470; 36 CFR 800).

All materials (notes, photographs, and other project data) generated from this work will be curated at the Center for Archaeological Studies (CAS) at Texas State University where they will be made permanently available to future researchers per 13 TAC 26.16-17.

Structure of the Report

Following this introduction, Chapter 2 presents environmental parameters, a brief cultural context, and a summary of previous archeological research near the APE; Chapter 3 discusses research goals, relevant methods, and the underlying regulatory considerations; Chapter 4 presents the results of the survey and summarizes the implications of the investigations; and references are in Chapter 5.

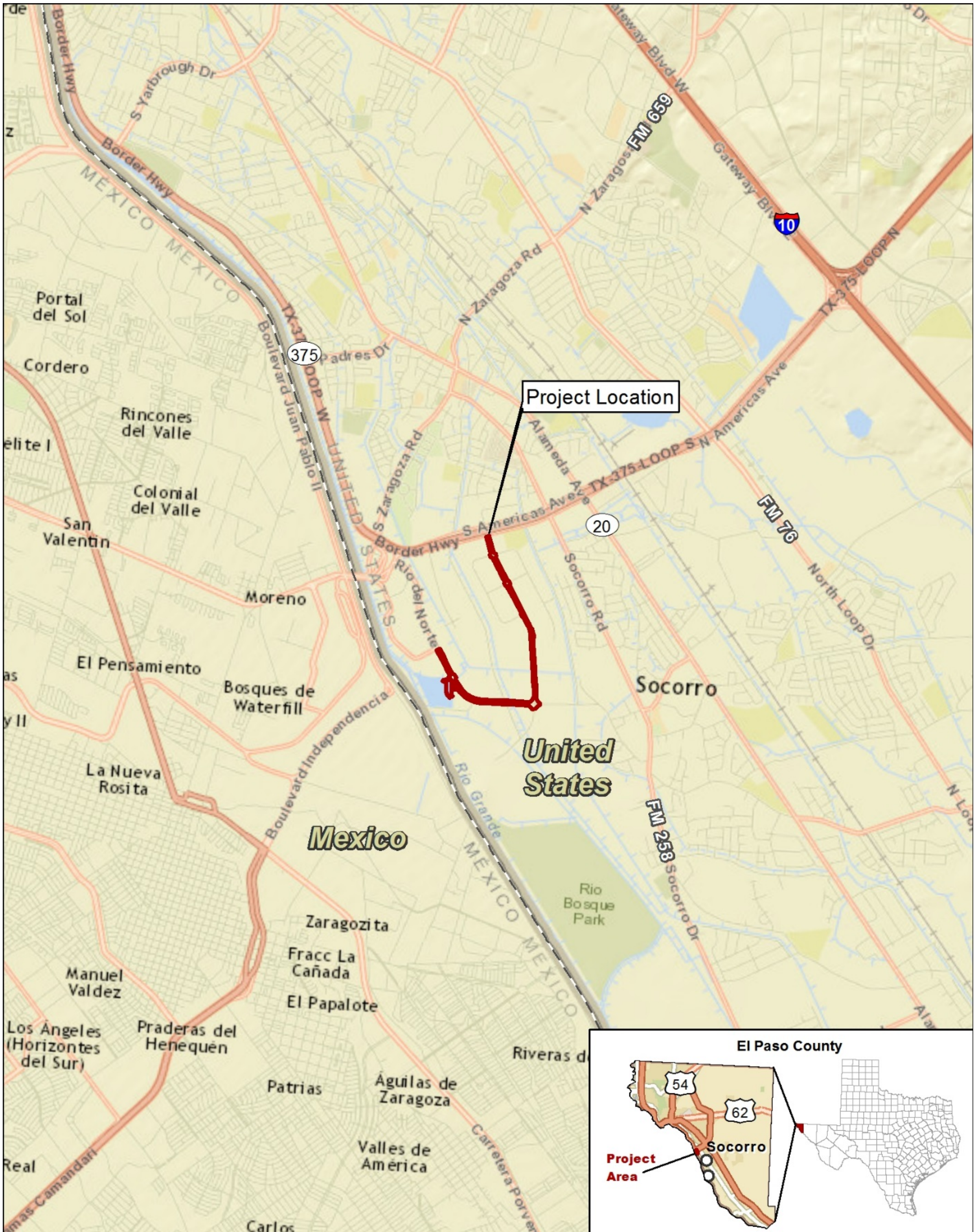

Figure 1

Project Location

Zaragoza POE, Pan American/Winn Road Build Improvements

Project Location/APE

Basemap Source: ESRI (2017)

0 — 1 Mile
0 — 1.5 Kilometers

Prepared for: TxDOT, CRRMA	1 in = 1 mile
	Scale: 1:63,360
CSJ: 0924-06-418	Date: 3/15/2017

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2.0 ENVIRONMENTAL AND CULTURAL CONTEXT

Topography, Geology, and Soils

The approximately 31.18-acre (12.62-hectare) APE is situated at elevations between 3,662 and 3,675 feet (1,116 and 1,120 meters) above mean sea level (**Figure 2**). The APE is adjacent to the Rio Grande River, which has been channelized at this location. The project area is a mix of developed and undeveloped areas, with development along the existing roadways, and minor or no development in the new-location portions.

The APE is geologically underlain by Holocene-age Alluvium of the Rio Grande River (USGS 2017). According to Natural Resources Conservation Service (NRCS) data, the primary soils mapped in the undeveloped portion of the project are Harkey loam, Harkey silty clay loam, Glendale loam, and Vinton fine sandy loam (NRCS 2017). Soils mapped in the developed portion of the project are Anapra silty clay loam, Gila fine sandy loam, Gila loam, Glendale silty clay loam, Saneli silty clay loam, and Saneli silty clay; there are small overlaps of the Glendale and Harkey soils. These well-drained soils have shallow A Horizons underlain by C Horizons.

Vegetation, Physiography, and Land Use

The project is in the Trans-Pecos, Mountains and Basins Physiographic region (BEG 1996) and the Chihuahuan Basin and Playas ecoregion (Griffith et al. 2004). The Trans-Pecos region is west of the Pecos River and the Rio Grande forms the boundary of the region to the south. The region is characterized by Basin and Range topography with steep mountains and flat, dry deserts between. Vegetation cover is typically semi-desert grasses and shrubs. At higher elevations oak, juniper, and pinyon are common.

According to the Texas Parks and Wildlife Department's Vegetation Types of Texas map and accompanying descriptions, the APE falls in crop land (McMahan et al. 1984). Vegetation in the APE consisted of small, sparse patches of desert brush spread across the project area and planted ornamental palms and shrubs located along Pan American Drive.

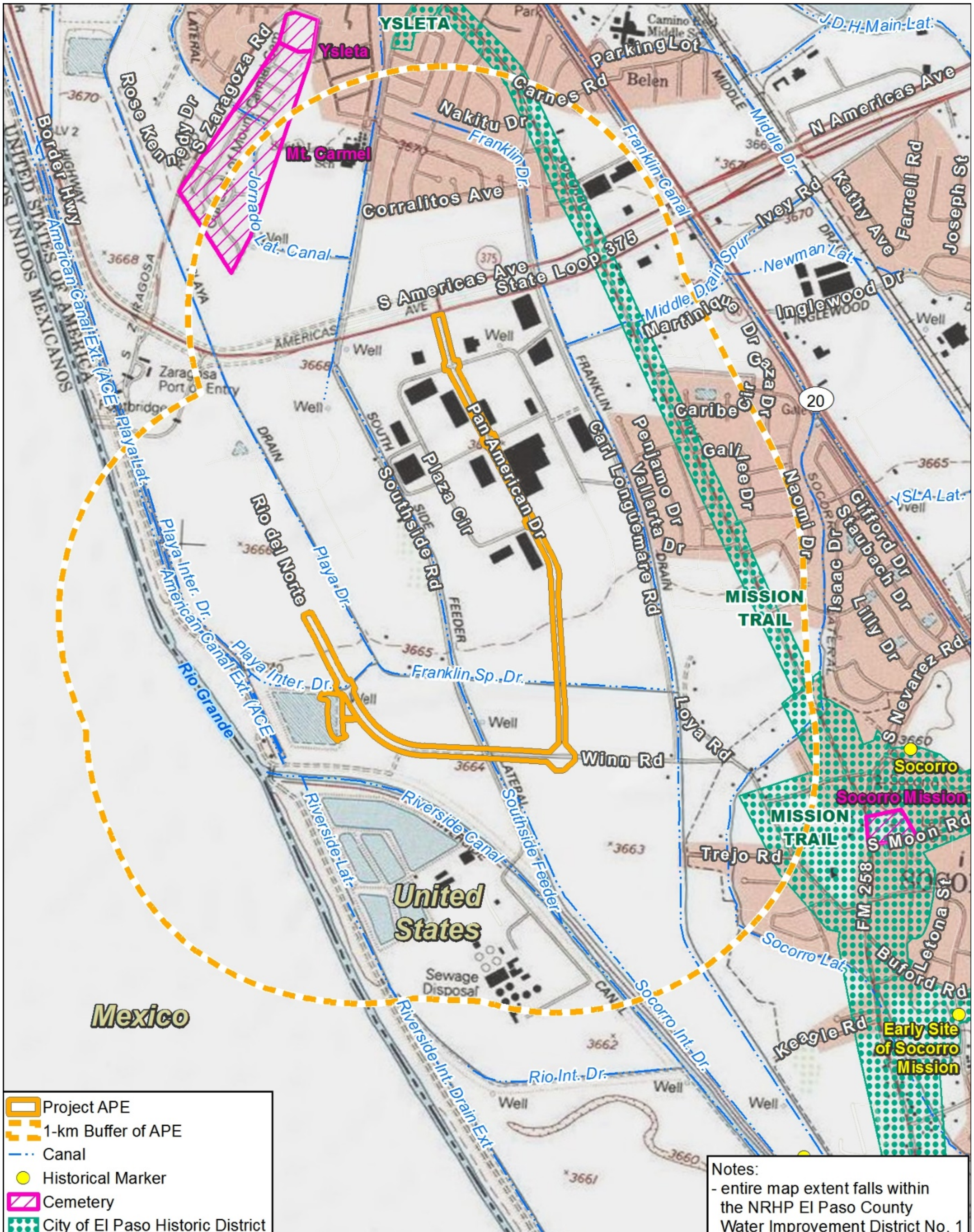

Figure 2

Location of Archeological APE

Zaragoza POE, Pan American/Winn Road Build Improvements

Data Sources: THC (2015), TARL (2016), TxDOT (2016), City of El Paso (2005)
Basemap Source: USGS Ysleta 7.5' Quadrangle (1994)

0 2,000 Feet
0 500 Meters

Prepared for: TxDOT, CRRMA
1 in = 2,000 feet
Scale: 1:24,000
CSJ: 0924-06-418
Date: 11/2/2017

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Archeological Chronology of the Western Trans-Pecos Region

The APE is located in the western portion of the Trans-Pecos archeological region, which is bounded by the Rio Grande to the south, New Mexico to the north and west, and the Pecos River to the east. The Paleoindian through historic periods are well represented in the archeological record of the Trans-Pecos. Evidence of Pre-Clovis occupations in the area is debatable but is worth mentioning because of the proximity of one of the major pre-Clovis sites to the current project. Alex D. Krieger first suggested the presence of Pre-Clovis occupations in the 1950s and 1960s (Miller and Kenmotsu 2004). More recent excavations at Pendejo Cave recovered a small number of crude lithics, bone fragments, and hair/skin imprints, which Richard MacNeish attributes to a Pre-Clovis occupation based on their stratigraphic position. Subsequent studies cast doubt on the integrity of this Pre-Clovis claim, interpreting the lithic material as potentially non-cultural and highlighting extensive rodent bioturbation as possibly compromising the stratigraphic sequence (Chrisman et al. 1996; Miller and Kenmotsu 2004). Similarly unsubstantiated Pre-Clovis discoveries were also made in the eastern Trans-Pecos by A. A. Andretta, putatively dating to approximately 19,000 years ago (Miller and Kenmotsu 2004). **Table 1** presents the generally accepted chronology of the region beginning at 12,000 radiocarbon years before present (BP) (Miller and Kenmotsu 2004).

Table 1: Archeological Chronology for the Western Trans-Pecos Region (Jornada)

Period	Years Before Present (BP)
Paleoindian (Clovis and Folsom)	12,000 - 8,500
Archaic (Undivided)	8,500 - 2,000
Early Formative (Mesilla Phase)	2,000 - 1,000
Late Formative (Doña Ana Phase)	1,000 - 750
Late Formative (El Paso Phase)	750 - 600
Post-Pueblo	600 - 500
Spanish Colonial	500 - 150

Source: After Miller and Kenmotsu 2004: 210-211, Figure 7.4 (Western Trans-Pecos Cultural Sequence).

The Paleoindian Period (12,000–8,500 BP) in the western Trans-Pecos archeological region can be subdivided into the Clovis, Folsom, and Plano Complexes. This division is largely based on technological and stylistic changes of lithic tools, as few Paleoindian sites in the region have been well dated by other means (e.g., radiocarbon). At least 15 Paleoindian sites and at least 30 isolated Paleoindian finds have been recorded in the region (Miller and Kenmotsu 2004). Information about Clovis sites in the region is largely based upon isolated surface finds. Comparatively, the information available for the Folsom and Plano Complexes is much greater, but few excavations have been conducted.

Settlement and subsistence strategies utilized during the Paleoindian are not well known in this region. Generally, the groups who lived during the Paleoindian Period are viewed as small, mobile bands that focused on hunting large game animals. Diagnostic artifacts recovered in the El Paso area include Plainview, Scottsbluff, Agate Basin, Angostura, and Eden dart points (Shafer, et al. 1999).

The beginning of the 6,000-year-long Archaic Period (8,500–2,000 BP) coincides with a trend toward increasingly arid conditions, the development of the Chihuahuan Desert, and the extinction of megafaunal species. Populations were seasonally mobile but generally traveled across a more restricted geographic range than during the Paleoindian Period. The Archaic period, further divided into Early, Middle, and Late subperiods, is represented in open campsites and rock shelter sites throughout the region (Miller and Kenmotsu 2004). In general, an increased emphasis on plant procurement over big game hunting distinguishes Archaic hunters and gatherers from the preceding Paleoindian groups (Shafer et al. 1999). The increased reliance on plant processing in the Archaic Period resulted in a proliferation of thermal features, a trend that continues into the subsequent Formative Period (Miller and Kenmotsu 2004). Stemmed projectile point technology was adopted in the Early Archaic subperiod, and is associated with a notable divergence from the high-quality, fine-grained raw material selection characteristic of the lanceolate Paleoindian dart points (Miller and Kenmotsu 2004). Artifact assemblages throughout the Archaic period trend toward locally available and frequently lower-quality raw material. Temporally diagnostic dart point types recovered from the western Trans-Pecos region include Jay, Bajada, and Uvalde.

Perhaps because of sampling bias, most of the radiocarbon dates indicating Early Archaic occupations are associated with rock shelter sites (e.g., Pendejo, Fresnal, Todsen), and those indicating Middle Archaic utilization are open air campsites (e.g., Vista del Sol [41EP2970], Keystone Dam [41EP493], 41EP2611). Mallouf, however, also noted a pattern of settlement along drainages during the Middle Archaic subperiod, suggesting "exploitation of new environmental niches" (Miller and Kenmotsu 2004). Rudimentary structural remains have also been documented at Middle Archaic sites, including daub with stick and pole impressions and possible post molds, implying settlements of increased seasonal duration (Miller and Kenmotsu 2004). Botanical remains recovered from Middle Archaic contexts include saltbush, cheno-ams, purslane, mesquite, rushes and grasses, and cacti (Miller and Kenmotsu 2004). During the Middle Archaic, projectile point technology shifted from strong stemmed or split-stemmed Early Archaic forms to contracting, expanding, and concave base forms (Miller and Kenmotsu 2004).

The most significant developments during the Archaic Period come with the Late Archaic subperiod and the conclusive evidence of cultigens, specifically corn, beans, and squash (or gourd) along with the use of early ceramic types (MacNeish 1993; Miller and Kenmotsu 2004; Shafer, et al. 1999). As beans became part of the Archaic diet, brownware pottery such as that documented at Fresnal shelter, would have been used to soak the dried beans prior to preparation. Accelerated mass spectrometry (AMS) radiocarbon dates from Fresnal and Tornillo rock shelters provide dates on corn cobs ranging from 3,175 +/- 240 BP to 1,350 BP (Miller and Kenmotsu 2004). As was noted during the Middle Archaic, expansion into open campsites situated on alluvial fans and terraces of the Rio Grande increased during the Late Archaic subperiod. Along with an increase in the number of documented rock shelter sites during the Late Archaic, numerous buried and preserved open campsites with pit houses and thermal features have been recorded in the Trans-Pecos region (Miller and Kenmotsu 2004). Projectile point technology and raw material utilization both shift during this period as well, to corner- and side-notched forms commonly produced from abundant, locally available, and relatively low-quality material found in secondary gravel deposits along the Rio Grande (Miller and Kenmotsu 2004).

The Formative Period (2000–600 BP) represents a continuation of the transition away from mobile lifestyles and toward sedentism—a trend observed throughout the Archaic Period. This Formative Period is subdivided into Early (Mesilla) and Late (Doña Ana and El Paso) phases, also termed “Pit House” and “Pueblo” by Whalen (1994) (Miller and Kenmotsu 2004; Shafer, et al. 1999). Although there is substantial variation in structural form from site to site, there is a trend of decreased mobility and increased energy expenditure that characterizes the Formative Period.

During the Early Formative or Mesilla Phase, populations continued to be mobile as suggested by the rudimentary shelters they constructed, which required minimal energy expenditure. Referred to as wickiups or brush huts, these structures were roughly circular with shallow basins, unprepared floors, and insubstantial walls (Miller and Kenmotsu 2004). The Early Formative period sites are, therefore, not particularly distinct from those dating to the Late Archaic (Miller and Kenmotsu 2004; Shafer, et al. 1999). El Paso Brownware pottery is commonly associated with the Mesilla Phase sites. The Doña Ana phase represents a transition from pit houses to pueblos; the pueblo structures are generally larger with rectangular or sub-rectangular forms and deeper floors. Post holes, storage pits, and unlined hearths are found within the pit floors. El Paso Plain Brown, Bichrome, and Polychrome ceramics were produced at this time, and the presence of non-local wares suggests increasing contact with other regions (Miller and Kenmotsu 2004).

Noncontiguous or isolated rooms later become more formalized with a square form, centrally located fire pits, plastered subfloors and collars, support posts along a central axis, and occasional plastered walls and burial pits. Eventually, the pattern of isolated rooms transitioned into the form of joined pueblo rooms (Miller and Kenmotsu 2004). Pueblo rooms were usually grouped around a central plaza or arranged in a linear pattern along an east-west axis (Shafer, et al. 1999). Ceramic types associated with the El Paso Phase include El Paso Polychrome, Villa Ahumada Polychrome, Tuscon Polychrome, Bila Polychrome, and St. Johns Polychrome (Shafer et al, 1999).

Throughout the Formative Period, populations generally became more agriculturally specialized and sedentary. Investigations of occupations from the Late Formative El Paso Phase have provided evidence of some of the most complex Native American religious expression and community structures seen in the North American prehistoric archeological record (Miller and Kenmotsu 2004; Shafer, et al. 1999).

Historic Context

Many of the larger pueblos in the El Paso area were abandoned by the time the Spanish arrived in the middle of the sixteenth century (TBH 2008a). The first Spaniards in the El Paso area may have been Álvar Núñez Cabeza de Vaca and his companions in 1535 or 1536 (Cabeza de Vaca 2011 [1555]; Timmons 2017). Francisco Vázquez de Coronado arrived in the area about 1540 and he explored large portions of what would become the American Southwest. El Paso del Norte or Pass of the North was named by the Spaniards based on its geographic setting between two high mountain ranges (Timmons 2017).

The first Spanish explorers who undoubtedly saw El Paso del Norte were those of the Rodríguez-Sánchez expedition in 1581. The later Spanish explorer Juan de Oñata crossed the Rio Grande at the site of El Paso in 1598 (NPS 2017). For the next 300 years, this route was the only wagon road connecting what would become the southwestern United States with Mexico City. The north-south route of El Camino Real de Tierra Adentro connected Mexico City with Spanish settlements in what is now New Mexico through the Pass of the North (NPS 2017). The route followed earlier routes established by indigenous people prior to the arrival of the Spanish in the area.

During the earliest Spanish movements into the region they encountered two groups of Native Americans referred to by the Spanish as the Mansos and the Sumas (TBH 2008a). These groups typically lived in small communities and relied on hunting and gathering of rabbit, fish, rats, mesquite beans, prickly pear, agave, and other roots or seeds.

The first Spanish mission, Nuestra Señora de Guadalupe, was established in the 1650s for the Mansos by Fray García in Ciudad Juárez, which is located across the Rio Grande from El Paso (Timmons 2017). In 1680, following Oñata's violent conquest of the Pueblo people of the American Southwest, the Pueblo Indians overthrew the Spanish in what is now known as the Pueblo Revolt (Hackett 1942). Spanish colonists and the Tigua Indians escaping the Pueblo Revolt retreated to the El Paso area and began to establish settlements along the Rio Grande, including El Paso, San Lorenzo, Senecú, Ysleta, and Socorro (Timmons 2017). Other Spanish missions in the region were also established at that time (TBH 2008b). One such mission is the Mission Nuestra Señora de la Limpia Concepción del Socorro, which was established in 1682. The location of the Socorro Mission changed five times prior to 1843. The structure built in 1843 is still standing and was repaired in the 1980s.

About 5,000 people were living in the El Paso area by the middle of the 1700s. The use of a dam and a series of acequias made it possible to maintain productive agricultural fields, but the Rio Grande often flooded, causing devastation. In 1789 the Presidio of San Elizario was founded to help protect inhabitants from Apache raids. When Mexico gained freedom from the Spanish in 1821, El Paso became part of Mexico. The current boundary was established in 1848 by the Treaty of Guadalupe Hidalgo, which ended the Mexican-American War and used the Rio Grande, Gila, and Colorado Rivers as border references (Timmons 2017).

Fort Bliss was established in 1854, and the United States' portion of El Paso was platted in 1859. The railroads arrived in El Paso between 1881 and 1882, and by 1883 the population was over 10,000 (Timmons 2017). The city's population grew during the Mexican Revolution as many refugees arrived fleeing violence. Fort Bliss continued to play a role in the growth of El Paso as military personnel made up much of the population. The completion of the Elephant Butte Dam in 1916 helped put a stop to the devastating floods that occurred in the El Paso area. In the 1930s, portions of the Rio Grande were channelized, and the river continues to provide water for agriculture by a series of channels and drainages. One early canal system is detailed below.

Previous Investigations, Previously Identified Resources, and Map Research

A search of the Atlas maintained by the THC and the TARL was conducted in order to identify archeological sites, historical markers, Recorded Texas Historic Landmarks, properties or districts listed in the National Register of Historic Places (NRHP), State Antiquities Landmarks (SALs), cemeteries, or other cultural resources that may have been previously recorded in or near the APE, as well as previous surveys undertaken in the area.

According to the Atlas survey coverage data, the APE has not been surveyed, but based on details from the site forms for archeological sites [redacted] at least two archeological surveys crossed portions of the present APE. [redacted]

The entire project area falls within the boundaries of the El Paso County Water Improvement District No. 1 (EPCWID) NRHP District. The EPCWID includes 2 major canals, 67 distributary canals, and 37 drains (Ackerly and Phillips Jr. 1997). Construction of the EPCWID began in 1912 and was finished by 1940. The basic configuration of the system is almost unchanged and is still in use today.

Within the 1-kilometer study area, Atlas survey coverage data depicts 8 surveys and 15 previously recorded archeological sites (including 41EP#### discussed above), 1 cemetery, and the Socorro

Mission Trail City Historic District (THC 2017). The eight surveys include four linear surveys conducted for El Paso Utilities (Perez 2002, 2004; Peterson and Willis 2002; Bury and Perez 2011); no archeological sites were recorded during those surveys. The other four surveys conducted within the study area include one performed by SWCA Environmental Consultants for TxDOT for a border safety inspection facility (Barile and Miller 2002); a large areal survey conducted by Michael Baker Jr., Inc. for the Department of Homeland Security in 2004 (THC 2017); and two small areal surveys conducted in 2013 by Northland Research Inc. for the U.S. Customs and Border Patrol (THC 2017).

Recorded archeological sites in the APE and the 1-kilometer study area are listed in **Table 2**.

Table 2: Previously-Recorded Archeological Sites in the APE and the 1-kilometer Study Area (REDACTED)

Trinomial	Description	NRHP Eligibility

The Mount Carmel Cemetery, also known as Our Lady of Mount Carmel Cemetery, is found in the northwest corner of the 1-kilomenter buffer area. The cemetery was established by the Catholic Church in 1882 and is still in use today with over 4,500 interments recorded (Tipton 2017). The Socorro Mission Trail connects the still standing Socorro Mission and Ysleta Missions to the Presidio Chapel of San Elizario.

A review of available historic aerial photographs and topographic maps was also undertaken to determine how the project area has been utilized over time. The earliest aerial photograph available, produced in 1967, shows the entire APE as cultivated agricultural land. Minor development along Pan American Drive is in place by 1991. Subsequent aerial photographs (1996, 2002–2016) show that the development near and immediately adjacent to the APE begins sometime after 2001 and continues through 2005. However, the portion of the APE where new right-of-way is proposed is still undeveloped today (NETR 2017).

Topographic maps from 1941, 1945, 1958, 1959, 1967, and 1975 show multiple canals associated with EPCWID, including the Southside Feeder and Franklin Canals, which cross the APE. The Pan American Drive corridor appears on the 1941 topographic map with four buildings along that corridor. Based on the 1945, 1958, 1959, 1967, and 1975 topographic maps, the area changed little for much of the twentieth century. The biggest change in the area is the construction of the industrial park at the northern portion of the APE along Pan American Drive. The industrial park is shown on the 1994 topographic map.

3.0 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 1
2. To perform a preliminary evaluation of the identified resources' potential for inclusion in the NRHP and/or for designation as a SAL (typically performed concurrently)
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 CTA

Section 106 of the National Historic Preservation Act

Section 106 of the NHPA of 1966, as amended (16 USC 470; 36 CFR 800), directs federal agencies and entities using federal funds to "take into account the effects of their undertakings on historic properties" (36 CFR 800.1a), with "historic property" defined as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior" (36 CFR 800.16).

In order to determine the presence of historic properties (with this phrase understood in its broad Section 106 sense), an APE is first delineated. The APE is the area in which direct impacts (and in a federal context, indirect impacts as well) to historic properties may occur. Within the APE, resources are evaluated to determine whether they are eligible for inclusion in the NRHP, and to determine the presence of any properties that are already listed on the NRHP. To determine whether a property is significant, cultural resource professionals and regulators evaluate the resource using these criteria:

> …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; its phrasing allows regulators to consider a broad range of research questions and analytical techniques that may be brought to bear (36 CFR 60.4[d]).

Occasionally, certain resources fall into categories which require further evaluation using one or more of the following Criteria Considerations. If a resource is identified and falls into one of these categories, the Criteria Considerations listed below may be applied in conjunction with one or more of the four National Register criteria listed above:

a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

b. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his productive life; or

d. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

g. A property achieving significance within the past 50 years if it is of exceptional importance. (36 CFR 60.4)

Resources that are listed in the NRHP or are recommended eligible are treated the same under Section 106, and are generally treated the same at the state level as well.

After cultural resources within the APE are identified and evaluated, effects evaluations are completed to determine whether the proposed project has no effect, no adverse effect, or an adverse effect on the resources. Effects are determined by assessing the impacts that the proposed project will have on the characteristics that make the property eligible for listing in the NRHP as well as its integrity. Types of potential adverse effects considered include physical impacts, such as the destruction of all or part of a resource; property acquisitions that adversely impact the historic setting of a resource, even if built resources are not directly impacted; noise and vibration impacts evaluated according to accepted professional standards; changes to significant viewsheds; and cumulative effects that may occur later in time. If the project will have an adverse effect on cultural resources, measures can be taken to avoid, minimize, or mitigate this adverse effect. In some instances, changes to the proposed project can be made to avoid adverse effects. In other cases, adverse effects may be unavoidable, and mitigation to compensate for these impacts will be proposed and agreed upon by consulting parties.

Antiquities Code of Texas

Because the project is currently owned and funded by the City of El Paso, CCRMA, and TxDOT, all political subdivisions of the State of Texas, the project is subject to the Antiquities Code of Texas (9 TNRC 191), which requires consideration of effects on properties designated as—or eligible to be designated as—SALs, which are defined as:

> ...sites, objects, buildings, structures and historic shipwrecks, and locations of historical, archeological, educational, or scientific interest including, but not limited to, prehistoric American Indian or aboriginal campsites, dwellings, and habitation sites, aboriginal paintings, petroglyphs, and other marks or carvings on rock or elsewhere which pertain to early American Indian or other archeological sites of every character, treasure imbedded in the earth, sunken or abandoned ships and wrecks of the sea or any part of their contents, maps, records, documents, books, artifacts, and implements of culture in any way related to the inhabitants, prehistory, history, government, or culture in, on, or under any of the lands of the State of Texas, including the tidelands, submerged land, and the bed of the sea within the jurisdiction of the State of Texas. (13 TAC 26.2)

Rules of practice and procedure for the evaluation of cultural resources as SALs and/or for listing on the NRHP, which is also explicitly referenced at the state level, are detailed at 13 TAC 26. An archeological site identified on lands owned or controlled by the State of Texas may be of sufficient significance to allow designation as a SAL if at least one of the following criteria applies:

1. the site has the potential to contribute to a better understanding of the prehistory and/or history of Texas by the addition of new and important information;
2. the site's archeological deposits and the artifacts within the site are preserved and intact, thereby supporting the research potential or preservation interests of the site;
3. the site possesses unique or rare attributes concerning Texas prehistory and/or history;
4. the study of the site offers the opportunity to test theories and methods of preservation, thereby contributing to new scientific knowledge; and
5. there is a high likelihood that vandalism and relic collecting has occurred or could occur, and official landmark designation is needed to ensure maximum legal protection, or alternatively, further investigations are needed to mitigate the effects of vandalism and relic collecting when the site cannot be protected (13 TAC 26.10).

For archeological resources, the state-level process requires securing and maintaining a valid Texas Antiquities Permit from the THC, the lead state agency for Antiquities Code compliance, throughout all stages of investigation, analysis, and reporting.

Survey Methods and Protocols

With the goals and guidelines above in mind, CMEC personnel conducted an intensive survey on March 1 and 2, 2017, per category 6 under 13 TAC 26.15 and using the definitions in 13 TAC 26.3, searching for previously identified and unidentified archeological sites. Field methods complied with the coverage requirements of 13 TAC 26.15, as elaborated by the THC and CTA, as well as applicable TxDOT standards.

Shovel test units were placed in 100-meter intervals, focused in areas with soils appearing to be of sufficient depth to contain subsurface cultural materials and areas where previous disturbance appeared to be minimal. All shovel tests were excavated in natural levels to subsoil or to a depth of 2 feet (60 centimeters), whichever was encountered first. Excavated matrix was screened through 0.25-inch or 0.635-centimeter hardware cloth. Deposits were described using conventional texture classifications and Munsell color designations, and all observations were recorded on standard CMEC shovel test forms. The testing protocol detailed in the approved scope for Texas Antiquities Permit 7927 called for radial shovel tests to be placed at 16-foot (5-meter) intervals around each shovel test positive for cultural material until two negative units have been established in each cardinal direction, as allowed by project limits, observed disturbance, and other constraints. No positive shovel tests were encountered.

One previously identified site (41EP####) is located within the APE; the centroid of another site (41EP####), for which a site boundary has not been plotted, is located adjacent to the APE. Both sites have been previously determined ineligible for inclusion in the NRHP—and testing of these two individual sites was not specifically required as part of this investigation. Nevertheless, while following the shovel testing protocol for the spacing and placement of shovel tests, the Project Archeologist ensured that some shovel tests would be located within the previously established boundary of site 41EP####, and that at least one shovel test was placed in proximity to the centroid for site 41EP####. None of the shovel tests contained cultural materials.

Mechanical trenching was conducted in the proposed detention pond area in the western portion of the APE. The trenching progressed in 50-centimeter (20-inch) depth increments, and profiles and backdirt were examined for the presence of cultural materials and features. The depth goal of the trenching was 8 feet (2.4 meters), as allowed by drainage, soil stability, base level of soils, and other field constraints. Each trench was excavated to a depth of at least 2.2 meters below ground surface, and measured approximately 4 feet (1.2 meters) across and 25 feet (9 meters) length-wise. Due to the highly unstable nature of the sandy deposits, the trench profiles were examined and described from the ground surface outside the trenches. Descriptions used conventional texture classifications and Munsell color designations. All trenches were completely backfilled and leveled at the end of in-field analysis.

All materials (notes, photographs, administrative documents, and other project data) generated from this work will be curated at CAS and be made permanently available to future researchers as per 13 TAC 26.16-17.

4.0 RESULTS AND RECOMMENDATIONS

General Field Observations

On March 1 and 2, 2017, CMEC personnel conducted an archeological survey of the 31.18-acre (12.62-hectare) APE (**Figures 3a-3g**). Much of the APE includes the existing Pan American Drive and Winn Road roadways (**Figures 4** and **5)** and a small portion of the APE is located in an undeveloped area **(Figure 6**). The border fence of the United States-Mexico border is located roughly 650 feet (198 meters) to the west of the APE's western boundary. Ground surface visibility (GSV) across the unpaved areas of the APE varied from medium to high or 50 percent to 100 percent (**Figure 7**). Previous disturbances were primarily located along existing roadways and include impacts related to roadway and drainage construction and utility installation. Other disturbances include earth-moving activities at the edge of the water detention pond and the playa.

The only cultural material encountered in the surveyed areas consisted of surficial modern trash deposits, including abandoned furniture, automobile parts, and general refuse such as broken glass beer bottles and beer cans.

Survey and Excavations

In all, 17 shovel test units were placed within the APE (**Table 3**), all of which were negative for cultural material. Soil within these shovel tests was typically loose, granular, 10YR6/4 (light yellowish brown) sand intermixed with gravels from 0 to 50 centimeters below surface (cmbs), underlain by firm to friable, 10YR4/4 (dark yellowish brown) clay loam from 50 to 70 cmbs (**Figure 8**).

Ten backhoe trenches (T) were excavated, with eight placed in the margin of the detention pond and two placed within the basin (see **Table 4** and **Figures 3f** and **3g**). Backhoe Trenches 1, 2, 3, 4, 5, and 7 were placed on an embankment or terrace above the basin that appeared to correspond to the original playa margin. Trench 6 was placed to the east of the southernmost of these trenches (Trench 7). Trenches 1, 2, 3, 4, and 5 typically contained loose, granular sand from 0 to 80 cmbs (typically very pale brown or 10YR7/3), underlain by friable clay loam extending from approximately 80 cmbs (typically dark yellowish brown or 10YR4/4 in color) to the trenches' base. The stratigraphies of Trench 6 and 7 are similar. In these two trenches, layers of the loose, very pale brown granular sand alternated with layers of the dark yellowish brown friable clay loam (**Figure 9**).

Figure 3a

Survey Results

Zaragoza POE, Pan American/Winn Road Build Improvements

Data Sources: CMEC (2017), TxDOT (2016)
Aerial Source: ESRI (2015)

Prepared for: TxDOT, CRRMA	1 in = 200 feet
	Scale: 1:2,400
CSJ: 0924-06-418	Date: 11/2/2017

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Figure 3b

Survey Results

Zaragoza POE, Pan American/Winn Road Build Improvements

Data Sources: CMEC (2017), TxDOT (2016)
Aerial Source: ESRI (2015)

0 200 Feet
0 60 Meters

Prepared for: TxDOT, CRRMA	1 in = 200 feet
	Scale: 1:2,400
CSJ: 0924-06-418	Date: 11/2/2017

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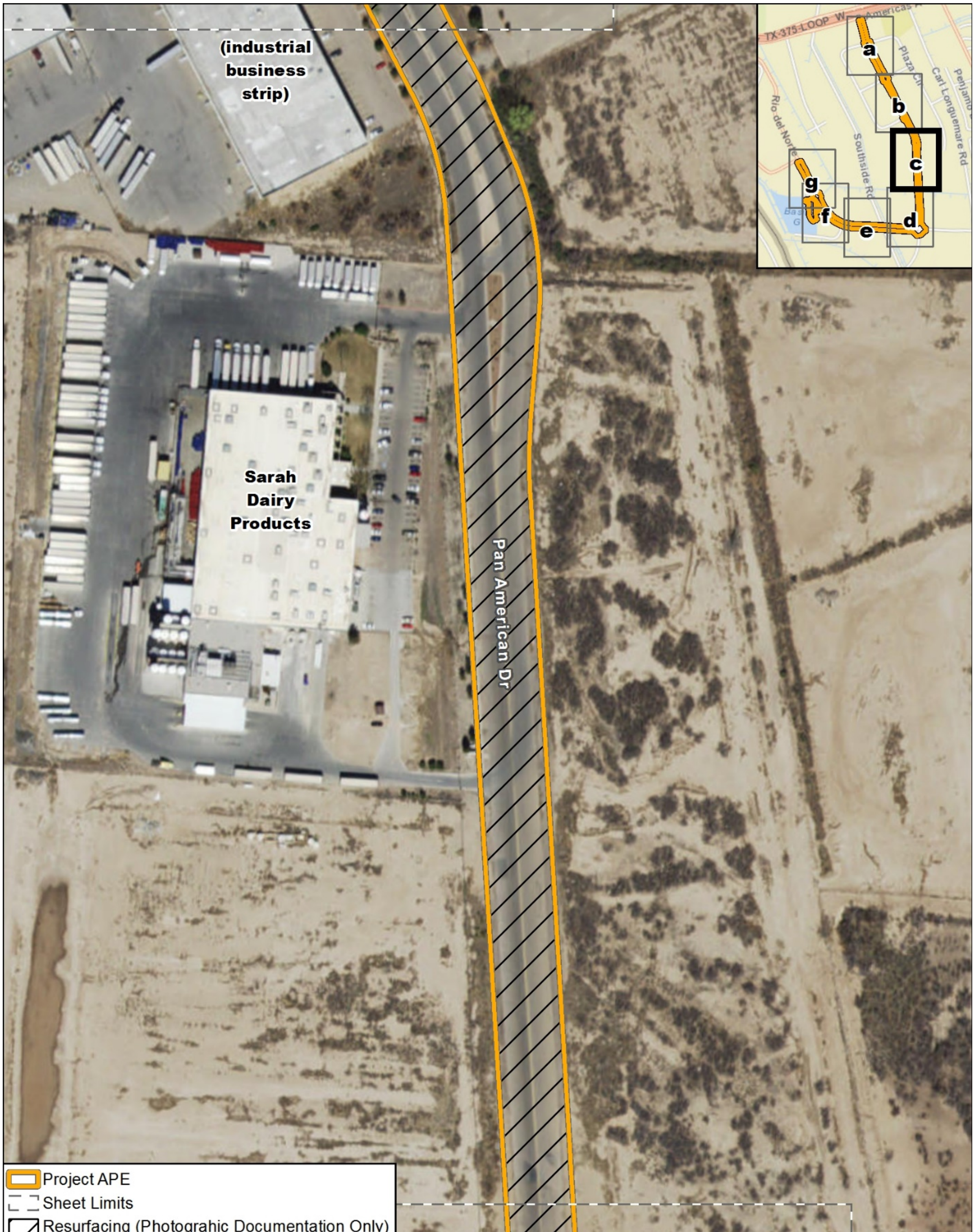

Figure 3c

Survey Results

Zaragoza POE, Pan American/Winn Road Build Improvements

Data Sources: CMEC (2017), TxDOT (2016)
Aerial Source: ESRI (2015)

0 — 200 Feet
0 — 60 Meters

Prepared for: TxDOT, CRRMA	1 in = 200 feet
	Scale: 1:2,400
CSJ: 0924-06-418	Date: 11/2/2017

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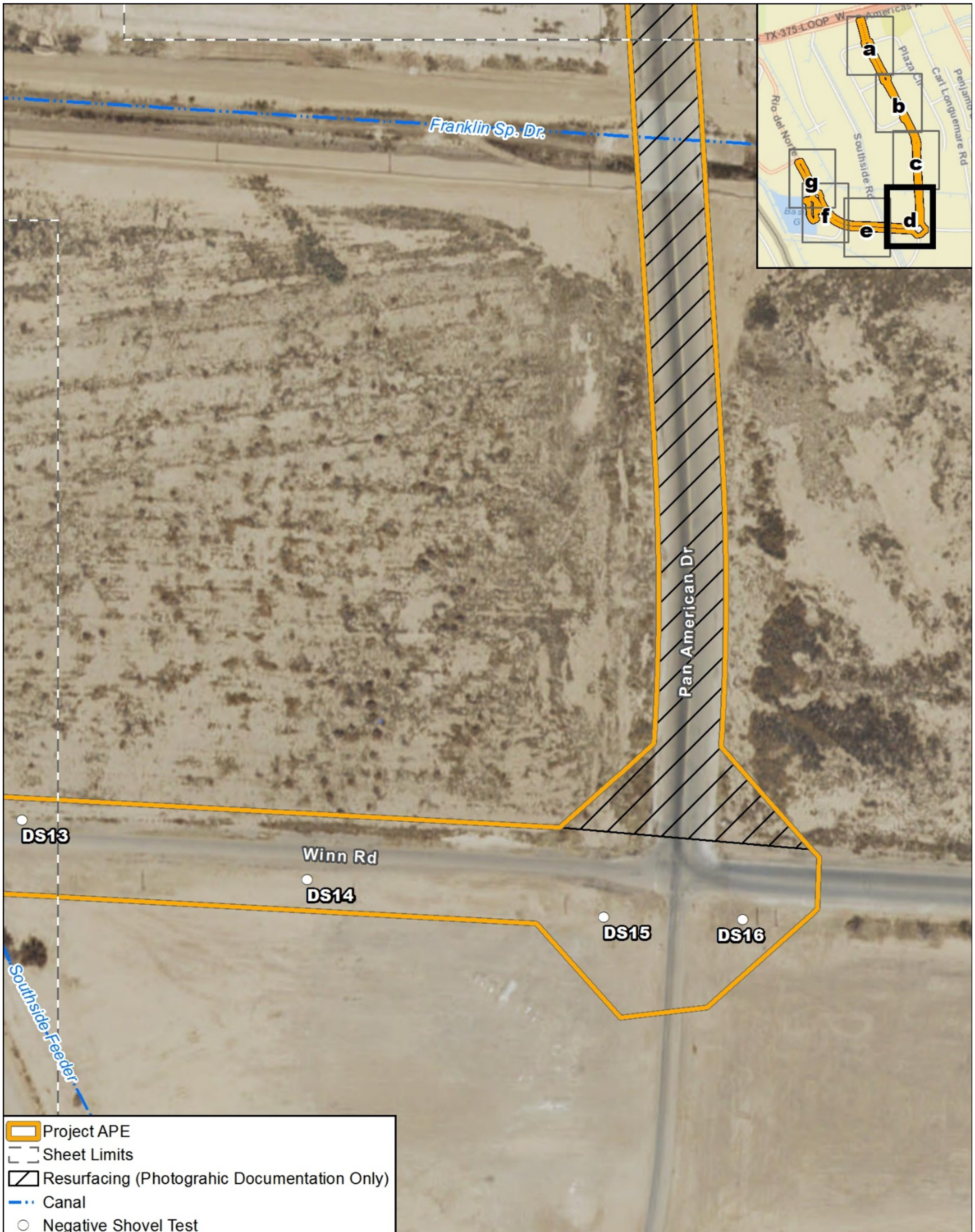

Figure 3d

Survey Results

Zaragoza POE, Pan American/Winn Road Build Improvements

Data Sources: CMEC (2017), TxDOT (2016)
Aerial Source: ESRI (2015)

Prepared for: TxDOT, CRRMA	1 in = 200 feet
	Scale: 1:2,400
CSJ: 0924-06-418	Date: 11/2/2017

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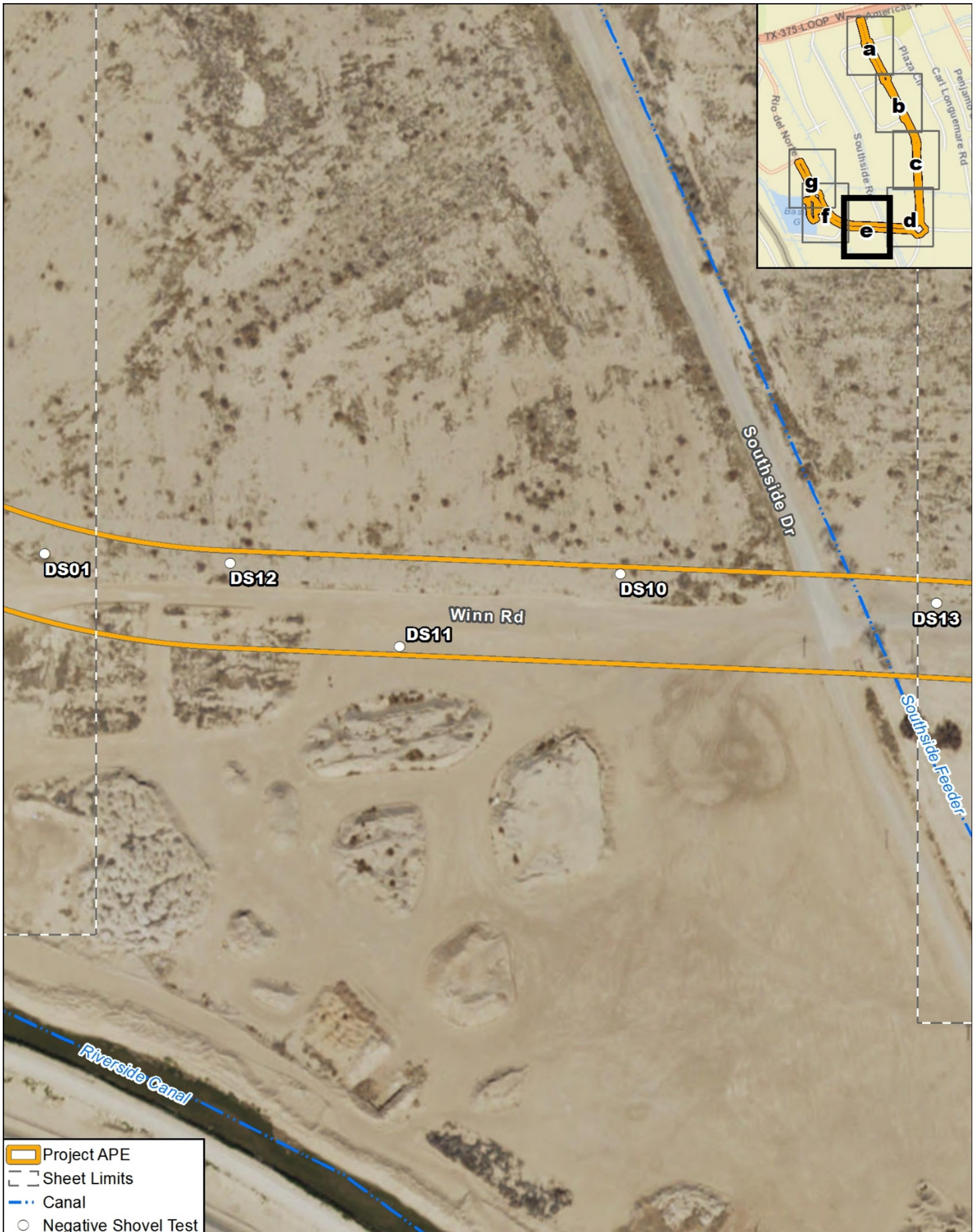

Figure 3e
Survey Results
Zaragoza POE, Pan American/Winn Road Build Improvements

Data Sources: CMEC (2017), TxDOT (2016)
Aerial Source: ESRI (2015)

Prepared for: TxDOT, CRRMA	1 in = 200 feet
	Scale: 1:2,400
CSJ: 0924-06-418	Date: 11/2/2017

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Figure 3f

Survey Results

Zaragoza POE, Pan American/Winn Road Build Improvements

Data Sources: CMEC (2017), TxDOT (2016)
Aerial Source: ESRI (2015)

Prepared for: TxDOT, CRRMA
CSJ: 0924-06-418
1 in = 200 feet
Scale: 1:2,400
Date: 11/2/2017

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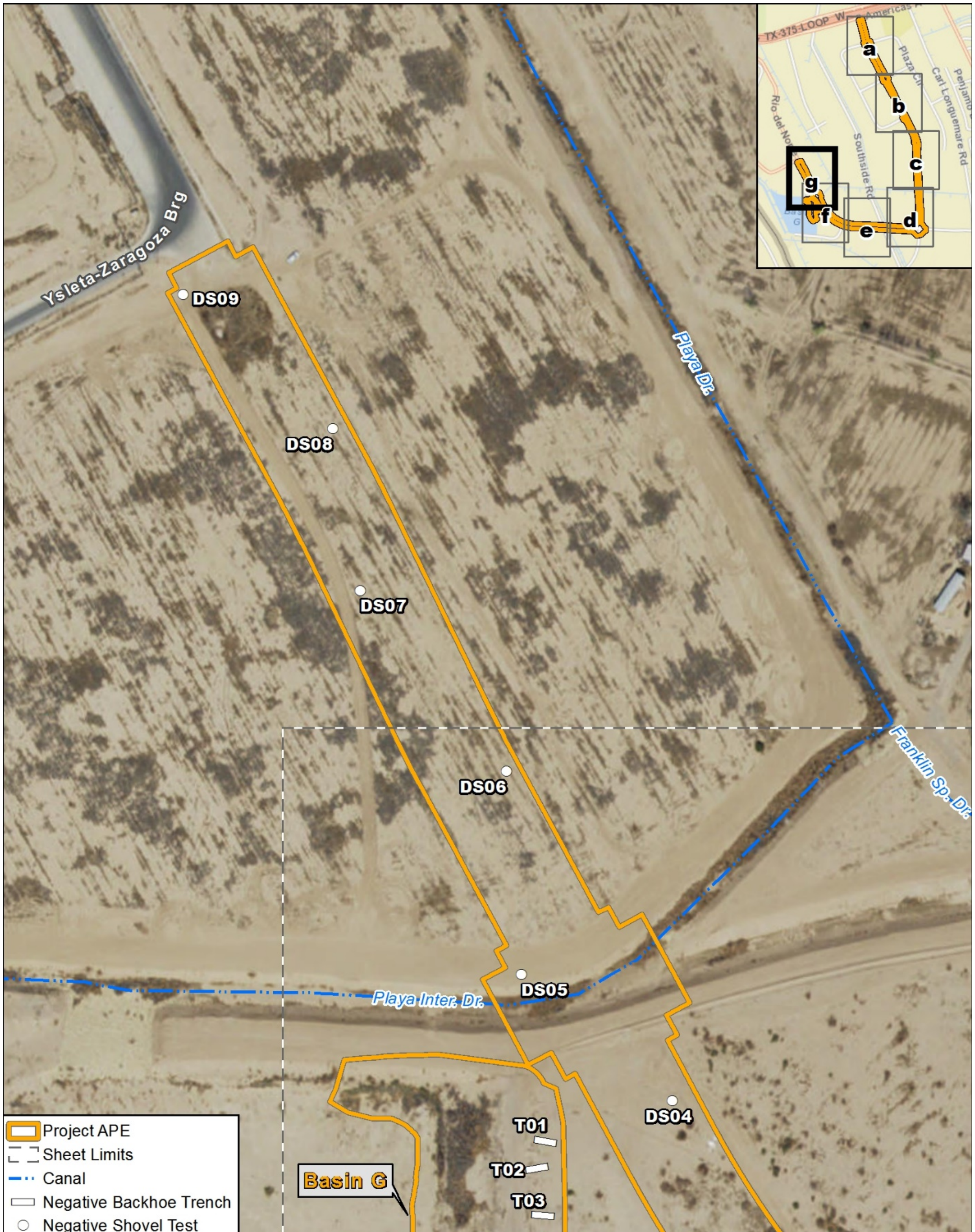

Figure 3g
Survey Results
Zaragoza POE, Pan American/Winn Road Build Improvements

Data Sources: CMEC (2017), TxDOT (2016)
Aerial Source: ESRI (2015)

Prepared for: TxDOT, CRRMA	1 in = 200 feet
	Scale: 1:2,400
CSJ: 0924-06-418	Date: 11/2/2017

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Figure 4. The existing Pan American Drive; facing south.

Figure 5. The existing Pan American Drive and Winn Road intersection; facing south.

Figure 6. Undeveloped portion of the APE; facing south.

Figure 7. Undeveloped portion of the APE showing typical vegetation and ground surface; facing east.

Table 3: Shovel Test Unit Excavation Results

ST #	Depth (cmbs*)	Description/Notes	Artifacts / Contents
DS01	0-10	Light yellow brown (10YR6/4) loose/friable sand with ~30% gravels, mixed road base, rare roots; brushy desert, rolling dunes (small), GSV 70%	None
DS02	0-60	Light yellow brown (10YR6/4) loose/friable sand with ~10% gravels, no roots; brushy desert, rolling dunes (small), GSV 70%	None
DS03	0-65	Light yellow brown (10YR6/4) loose/friable sand with ~15% gravels, rare roots; brushy desert, rolling dunes (small), GSV 70%	None
DS04	0-60	Light yellow brown (10YR6/4) loose/friable sand with ~5% gravels, asphalt chunks, rare roots; brushy desert, rolling dunes (small), GSV 70%	None
DS05	0-15	Very pale brown (10YR7/3) loose/friable sand, concrete chunks, road base, dump/levee fill; brushy desert, rolling dunes (small), GSV 70%; just north of drainage/canal	None
DS06	0-55	Very pale brown (10YR7/3) friable, granular sand, ~10% gravels, no roots; brushy desert, rolling dunes (small), GSV 70%; just north of drainage/canal	None
	55-70	Yellow brown (10YR5/4) friable clay loam, ~10% gravels, no roots	None
DS07	0-50	Very pale brown (10YR7/3) friable, granular sand, ~10% gravels, no roots; just east of roadway, GSV ~8%	None
	50-65	Yellow brown (10YR5/4) friable sandy clay loam, ~10% gravels, no roots	None
DS08	0-50	Very pale brown (10YR7/3) friable, granular sand, ~10% gravels, no roots; just east of roadway, GSV ~80%	None
	50-60	Yellow brown (10YR5/4) friable, sandy clay loam, ~10% gravels, no roots	None
DS09	0-10	Yellow brown (10YR5/4), friable sand, road base/asphalt chunks; junction south of Rio Del Norte, GSV ~70%	None
DS10	0-60	Very pale brown (10YR7/3) loose/friable sand, ~10% gravels, few roots; just north of Winn Road, GSV ~80%	None
	60-70	Clay loam, 10YR4/4, friable/firm, ~5% gravels, no roots	None
DS11	0-55	Very pale brown (10YR7/3) loose/friable sand, ~10% gravels, few roots; just south of Winn Road	None
	55-65	Dark yellow brown (10YR4/4) compact clay loam, clear upper boundary, <5% gravels, no roots	None
DS12	0-50	Very pale brown (10YR7/3) loose/friable sand, <5% gravels, no roots; just north of Winn Road	None
	50-60	Dark yellow brown (10YR4/4) compact clay loam, clear upper boundary, <5% gravels, no roots	None
DS13	N/A	Disturbed by level 2, construction; northeast of intersection of Winn and Southside	None
DS14	N/A	Disturbed by utility construction; south of Winn Road	None
DS15	N/A	Disturbed by utility construction; southwest of intersection of Winn Road and Pan American	None
DS16	N/A	Disturbed by utility construction; southeast of intersection of Winn Road and Pan American	None
DS17	0-50	Sand, loose/friable, 10YR7/3, ~5% gravels, few roots; dune area, east of pond, west of main APE	None
	50-65+	Clay loam, 10YR4/4, firm, clear upper boundary, ~5% gravels, few roots	None

* Centimeters below surface.

Figure 8. Shovel test DS01; plan view.

Trenches 8 and 9 were placed within the basin, just below the modified terrace that forms the basin's eastern edge. Trenches 8 and 9 contained dark yellowish brown (10YR7/4) loose, granular sand across the entire trench profile (from 0 to 180 cmbs), with a series of thin, discrete gravel lenses in the eastern ends of the trenches, between roughly 60 and 90 cmbs (**Figure 10**). Trench 10 was placed on a small, flat area on the terrace between the higher landform and the basin below. This trench profile was entirely dark yellow brown (10YR4/4) loose, granular sand, with no other stratigraphic layers recorded anywhere in the profile.

Trenches 1, 2, 3, and 4 contained large chunks of broken concrete and other various construction refuse (**Figures 11** and **12)**. Given the location of these deposits relative to the basin and dirt road, it is likely these materials were placed here as fill to maintain the landform above the basin and the basin's eastern edge. Other than the construction fill found in Trenches 1, 2, 3, and 4, and the smattering of modern beer bottles and cans found around the basin, no evidence of human activity was noted on or below the ground surface around the basin.

Table 4: Backhoe Trench Excavation Results

T #	Depth (cmbs*)	Description/Notes	Artifacts/ Contents
1	0-125	Very pale brown (10YR7/3) loose and friable sand, 10% gravels; few roots; disturbed soil, mix of gravel, refuse, and sand 40-125 cmbs	Jars, bottles, trash
	125-220	Dark yellowish brown (10YR 4/4) friable and firm clay loam, < 5% gravels; rare roots	None
2	0-110	Very pale brown (10YR7/3) loose and friable sand, 15% gravels; 40-110 cmbs mix of construction refuse, gravel and sand; asphalt chunks start at 40 cmbs	Modern trash
	110-260	Dark yellowish brown (10YR4/4) loose and friable clay loam, < 5% gravels; few roots	None
3	0-150	Light gray (10YR7/2) friable, loose sand, 10% gravels; few roots; 40 cmbs disturbed soil with construction refuse, gravel, and sand; huge asphalt chunks, modern trash, glass, aluminum, and a garden hose	Modern trash
	150-240	Dark yellowish brown (10YR 4/4) friable, firm clay loam, gravels rare; no roots	None
4	0-100	Very pale brown (10YR7/3) friable, loose sand, 10% gravels; 50 cmbs some asphalt chunks	Modern trash
	100-160	Dark yellowish brown (10YR 4/4) friable, firm clay loam, rare gravels; rare roots	None
	160-170	Very pale brown (10YR7/3) loose sand	None
	170-230	Dark yellowish brown (10YR 4/4) firm clay loam, rare gravels	None
5	0-80	Very pale brown (10YR7/3) friable, loose sand, 10% gravels; bovine molar at 10 cmbs	Molar
	80-230	Dark yellowish brown (10YR 4/4) friable, firm clay loam, 25% gravels; possible carbonates begin about 160 cmbs	None
6	0-40	Very pale brown (10YR7/3) loose sand, 8% gravels; metal pipe at at 8 cmbs	Pipe
	40-80	Dark yellowish brown (10YR4/4) clay loam, 25% gravels	None
	80-105	Very pale brown (10YR7/4) loose sand	None
	105-170	Very pale brown (10YR7/3) loose, friable sand; 2cm lens of clay loam with 25% gravels	None
	170-220	Brown (10YR4/3) clay loam, rare gravels	None
7	0-18	Very pale brown (10YR7/4) loose, granular sand	Metal
	18-80	Dark yellowish brown (10YR4/4) friable, firm clay loam;	Modern glass
	80-160	Very pale brown (10YR7/3) loose sand; at 130 cmbs a 2-cm-thick clay loam and gravel lens with 40% gravels; at 133 cmbs a 2-cm-thick sand lens with 40% gravels	None
	160-240	Dark yellowish brown (10YR4/4) firm clay loam; clear upper boundary	None
8	0-180	Very pale brown (10YR7/4) loose sand, 10% gravels; few roots; at 30-55 cmbs a gravel lens with 3 gravel strats separted with calcium carbonate; at 120-145 cmbs another laminated gravel/calcium carbonate band the same as from 30-55 cmbs	None
	180-210	Brown (10YR4/3) firm clay loam; clear upper boundary	None

Table 4: Backhoe Trench Excavation Results

T #	Depth (cmbs*)	Description/Notes	Artifacts/ Contents
9	0-200	Very pale brown (10YR7/4) sand; many roots; golf ball at 15 cmbs; gravel lens in the east, south and north walls at 60-70 cmbs that disipates from the east to the west; at 80-90 another gravel lens that dispates from the east to the west in the east, south and north walls	Golf ball
	200-230	Dark yellowish brown (10YR4/4) clay loam, rare gravels; no roots	None
10	0-240	Very pale brown (10YR7/3) loose, friable sand, rare gravels; rare roots; at 25-30 cmbs a gravel lens that spans the entire trench with clear boundary; at 130-135 cmbs a gravel lens that spans the entire trench with clear boundary	None

* Centimeters below surface

Figure 9. North wall of BHT 6.

Figure 10. South wall of BHT 8.

Figure 11. North wall of BHT 1.

Figure 12. Large concrete slab section being removed from BHT 3.

Previously Recorded Site Re-visits

Although sites 41EP#### and 41EP#### were previously determined ineligible for listing in the NRHP or as SALs, shovel tests were excavated within the mapped boundary of 41EP#### and near the centroid (as allowed by the APE) of site 41EP####.

The three shovel tests excavated at site 41EP#### and the one shovel test excavated near 41EP#### were negative for cultural material. Furthermore, no artifacts or evidence of features was noted on the ground surface in these areas. Additional shovel tests were not excavated due to the very high ground surface visibility and clear evidence of previous surface disturbance prevalent across the site.

Recommendations

The intensive survey and trenching of the approximately 31.18-acre (12.62-hectare) APE revealed no archaeological material. In all, 17 shovel tests and 10 backhoe trenches were excavated within the APE. Shovel tests were placed only in unpaved or undeveloped areas, as much of the area flanking the roadways was either developed and paved, or highly disturbed with high ground surface visibility. No evidence was found of preserved deposits with a high degree of integrity; associations with distinctive architectural and material culture styles; rare materials and assemblages; the potential to yield data important to the study of preservation techniques and the past in general; or potential attractiveness to relic hunters (13 TAC 26.10; 36 CFR 60.4). Therefore, no additional archeological investigations are warranted prior to construction activities.

No artifacts were collected. Therefore, only project records will be curated per TAC 26.16 and 26.17; those records will be curated at CAS.

If any unanticipated cultural materials or deposits are found at any stage of clearing, preparation, or construction, the work should cease in that area and TxDOT personnel should be notified immediately. During evaluation of any unanticipated finds and coordination between TxDOT and THC, clearing, preparation, and/or construction could continue in any other areas along the corridor where no such deposits or materials are observed.

The Texas Department of Transportation-Environmental Affairs Division and Texas Historical Commission concurred with the findings of this report on June 8, 2017 (see **Appendix B**).

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Appendix A

Project Design Documents

Appendix B

TxDOT ENV- THC Concurrence Letter