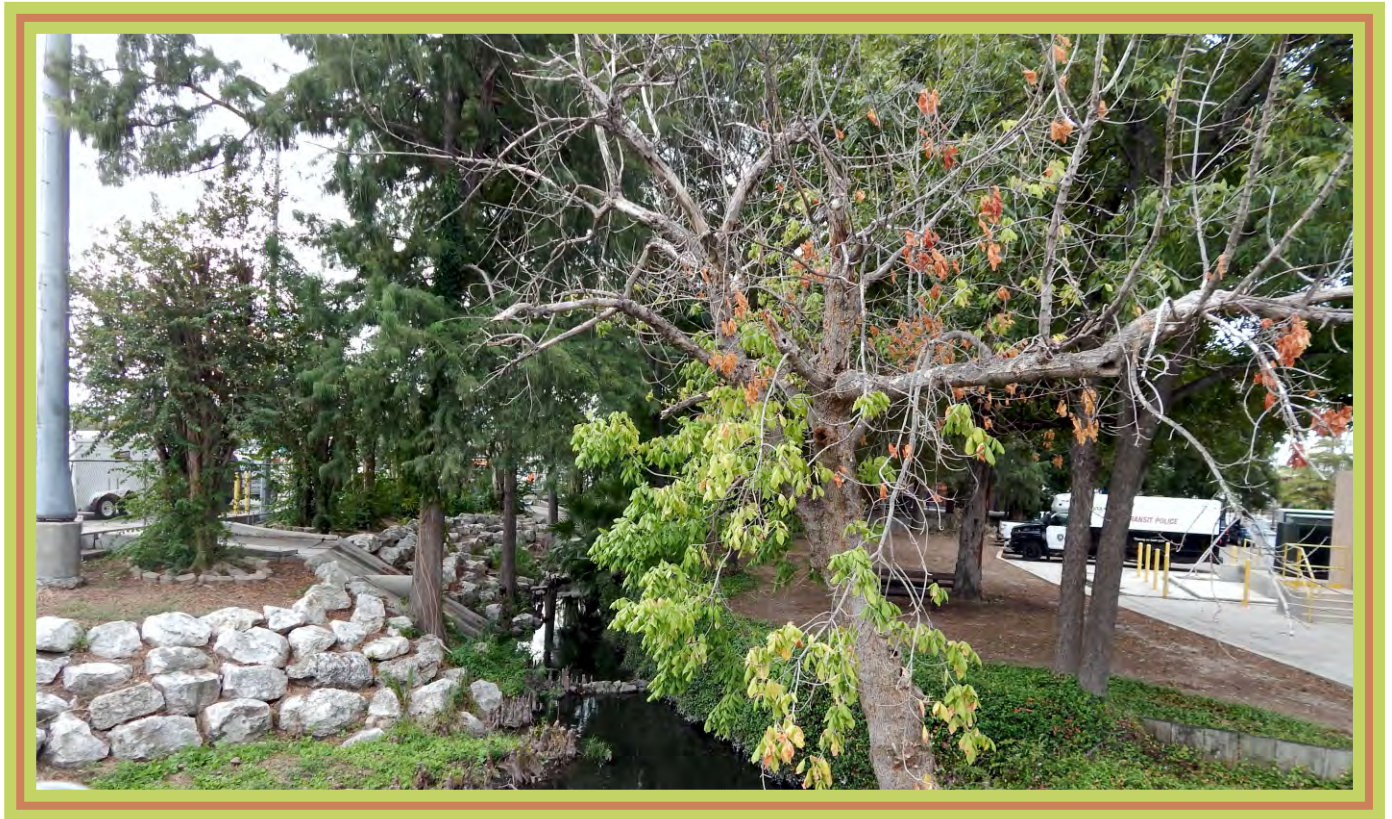


Archaeological Investigations for VIA Metropolitan Transit Authority Bus Charging Station, San Antonio, Bexar County, Texas

by
Sarah Wigley and David Yelacic

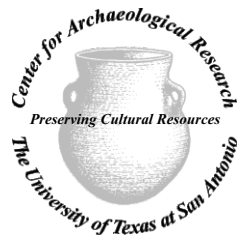


Texas Antiquities Permit No. 30822

REDACTED

Principal Investigator
David Yelacic

Prepared for:
VIA-Metropolitan Transit Authority
123 N. Medina Street
San Antonio, Texas 78207



Prepared by:
Center for Archaeological Research
The University of Texas at San Antonio
One UTSA Circle
San Antonio, Texas 78249-1644
Technical Report, No. 99

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Abstract:

From October to December 2022, the Center for Archaeological Research (CAR) at the University of Texas at San Antonio (UTSA), in response to a request from VIA Metropolitan Transit Authority (VIA-MTA) conducted archaeological monitoring for proposed development at 1720 N. Flores Street in San Antonio, Bexar County, Texas. Monitored activities included trenching for electrical conduit and boreholes for canopy piers/supports. As the project area is located on VIA-MTA property, the project requires compliance with the Texas Antiquities Code and review under the Unified Development Code of the City of San Antonio (Article 6 35-630 to 35-634). The project was conducted under Antiquities Permit No. 30822. David Yelacic, CAR Director, served as the Principal Investigator, and Sarah Wigley served as the Project Archaeologist.

The project area, spanning 2.7 acres (1.1 ha), is located immediately east of San Pedro Creek, within the current VIA bus parking lot at the VIA Metro Center. The primary concern was the known presence of the San Pedro Acequia (41BX337) within the project area (Cox 1986), as well as the project area's proximity to San Pedro Springs Park (41BX19; Mauldin et al. 2015). Sparse historic materials were recovered during the course of archaeological monitoring. No cultural features were recorded and no evidence of the San Pedro Acequia was encountered. However, based on the sensitivity of the area, the CAR recommends monitoring of any future ground-disturbing activities that have impacts below the pavement within the project area. All artifacts collected and records generated during the course of this project are curated in accordance with THC guidelines at the CAR under accession 2714.

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Thanks to Kevin Schnitzer of VIA for his assistance facilitating and coordinating this project. Thanks to Matthew Elverson, City Archaeologist with COSA-OHP, for his assistance and review of this project, and Heath Bentley, CPS Archaeologist, for his assistance with CPS pole design discussions. Excavations were conducted by Veregy, LLC., PDI Construction and Bexar Pipeline.

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Chapter 1: Introduction

Beginning October 18 through December 22, 2022, the Center for Archaeological Research (CAR) at the University of Texas at San Antonio (UTSA), conducted backhoe trenching and archaeological monitoring in advance of development of a bus charging station on VIA-MTA property. CPS Energy provided assistance with design and planning for electrical infrastructure associated with this development. The work was conducted in response to a request from VIA Metropolitan Transit Authority. The project requires compliance with the Texas Antiquities Code and review under the Unified Development Code of the City of

San Antonio (Article 6 35-630 to 35-634) due to its location on property owned by a municipal entity. The work was conducted under Texas Antiquities Permit (TAP) Number 30822. David Yelacic, CAR Director served as the Principal Investigator and Sarah Wigley served as the Project Archaeologist.

The project area encompasses 0.4 ha (2.7 acres) bounded by W. Myrtle Street on the north, San Pedro Avenue on the east, San Pedro Creek on the west, and E. Laurel Street on the south (Figures 1-1 and 1-2). It is located within north-central Bexar

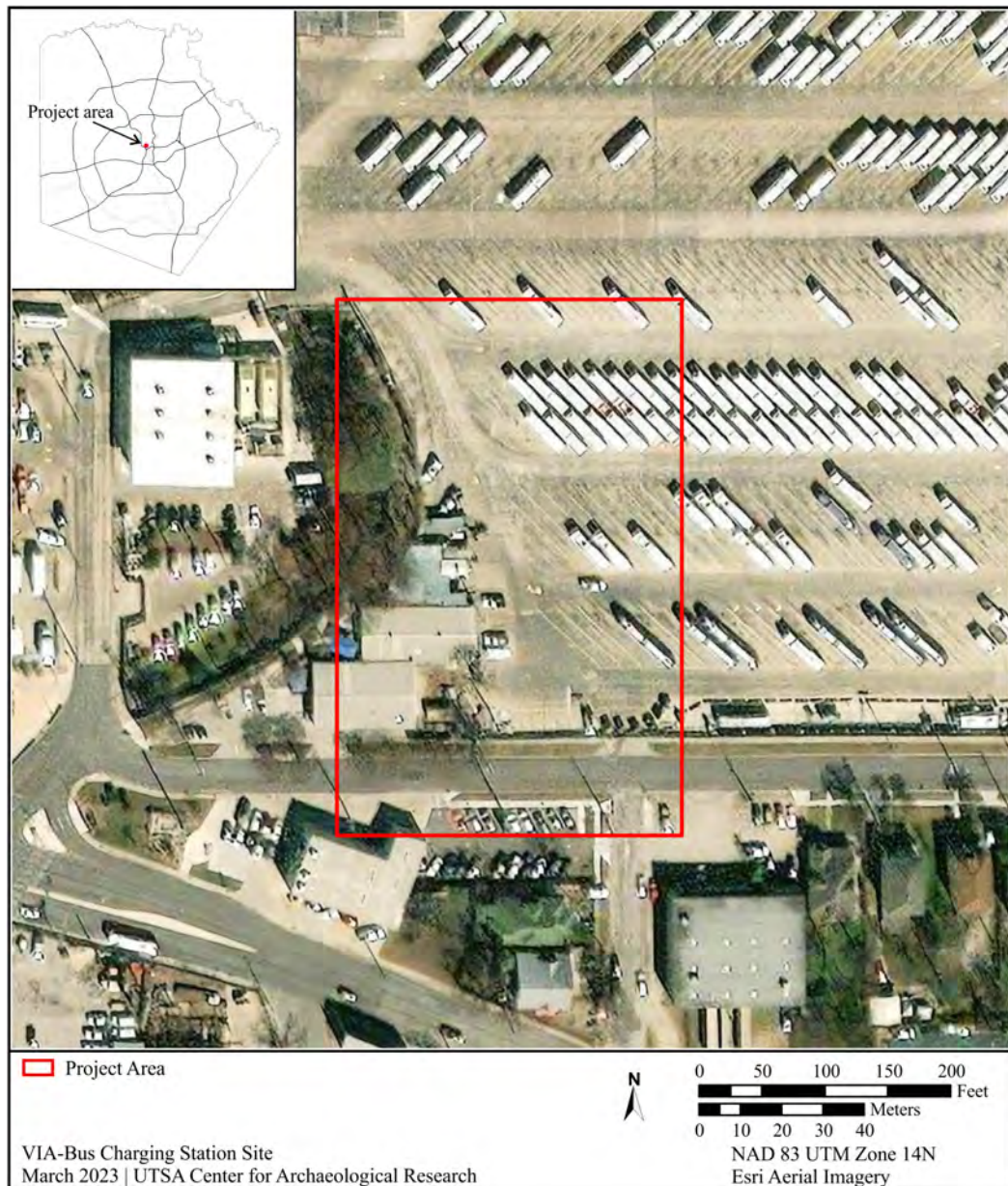


Figure 1-1. The project area on aerial imagery.

County, Texas. Segments of the San Pedro Acequia (41BX337) have been previously recorded within the project area, and additional segments have been recorded nearby (Figure 1-3; Cox 1986, 1993; Wigley 2020). In addition, the project area's proximity to San Pedro Creek indicates potential for

prehistoric deposits (Mauldin et al. 2015; Meissner 2000; Zapata and Meissner 2003).

CAR monitored the excavation of three backhoe trenches within the exposed footprint of electrical infrastructure,

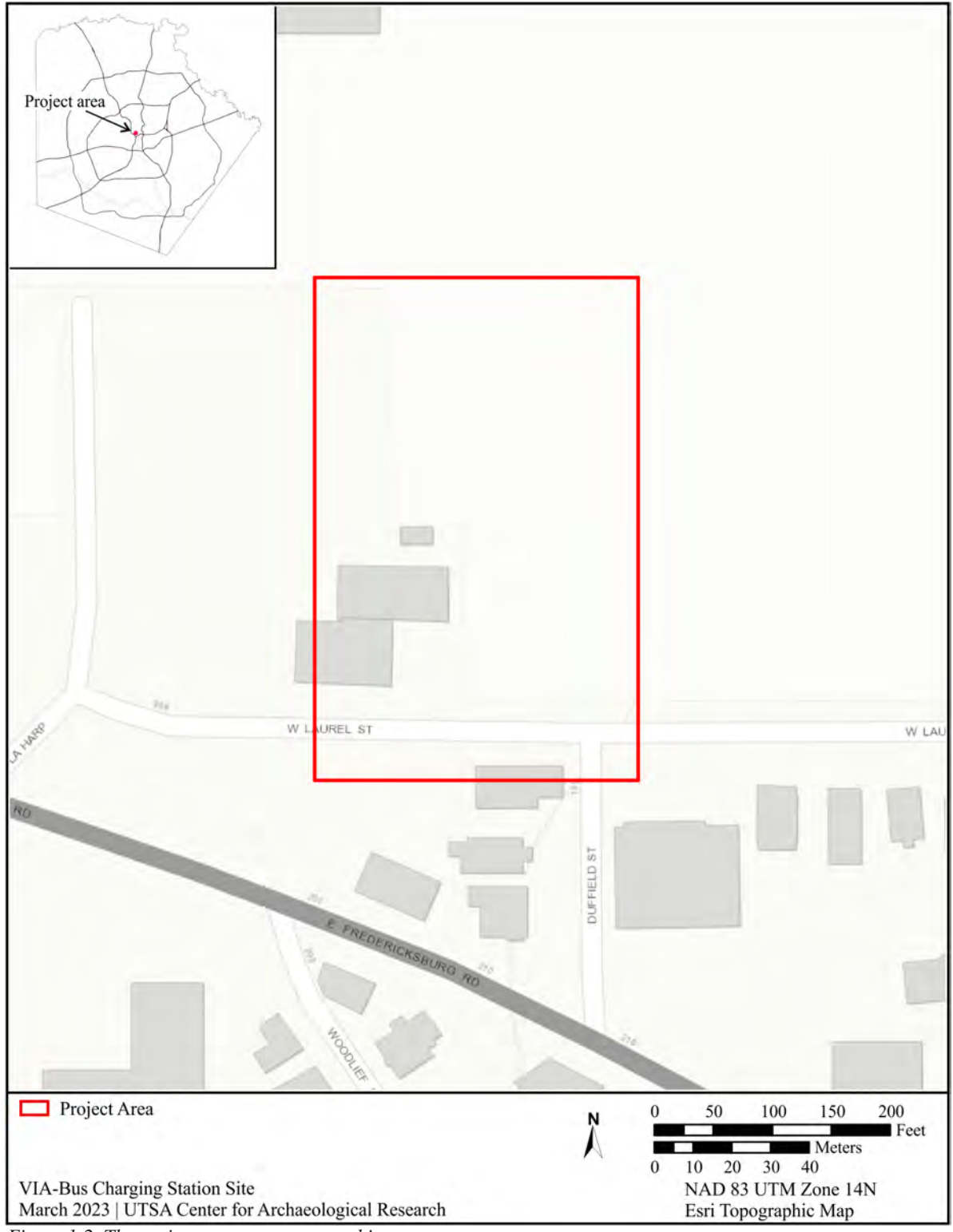


Figure 1-2. The project area on a topographic map.

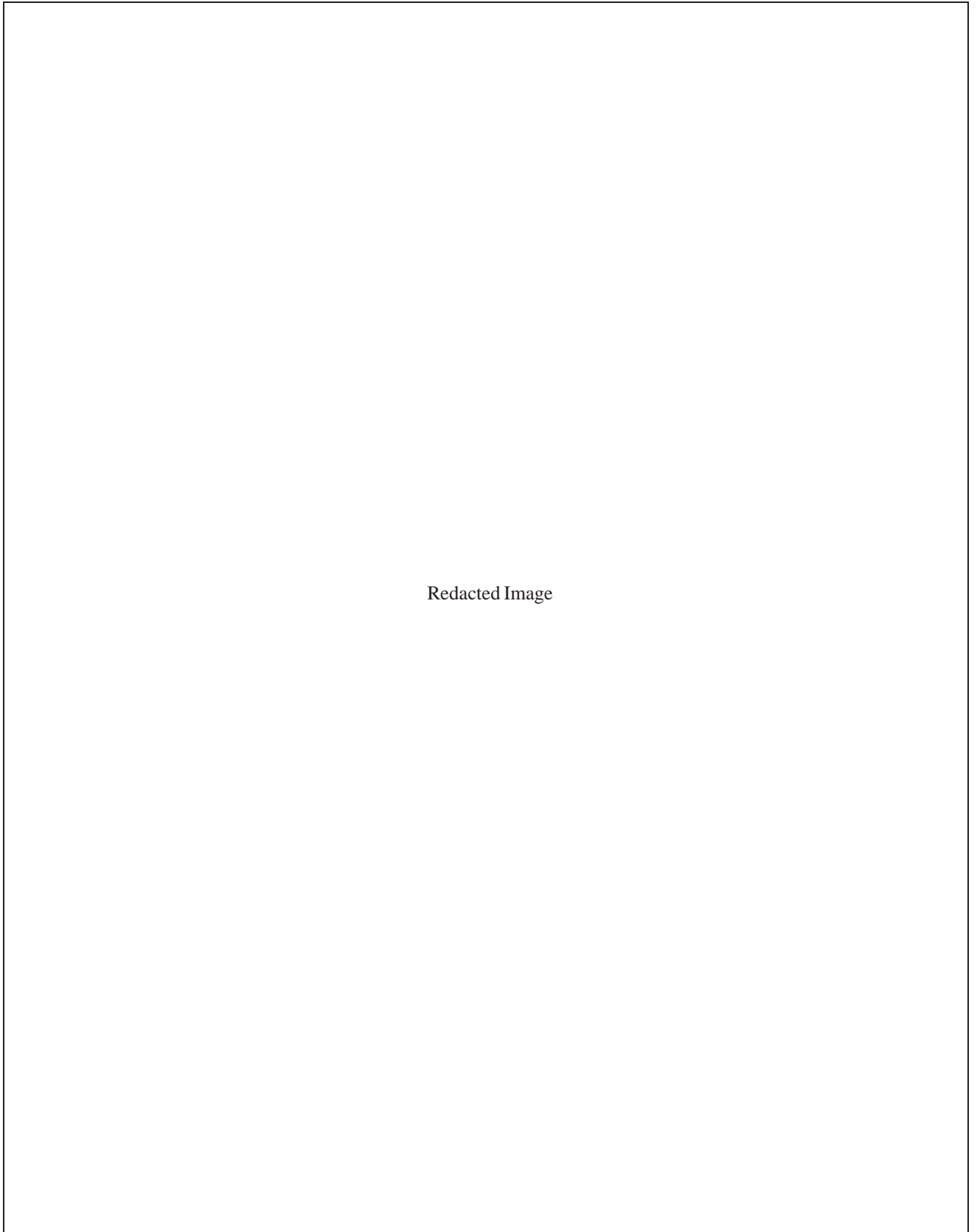


Figure 1-3. Location of the San Pedro Acequia within the project area as projected by COSA-OHP, and as documented by Cox (1986, 1993) and Wigley (2020) previously.

as well as boreholes and excavations additional electrical infrastructure, bus shelters, and safety bollards. Deposits were heavily disturbed and cultural material was sparse and in mixed context. Only late historic artifacts were recorded. No cultural features were documented. However, due to the sensitivity of the area and previous work recording the *acequia* within the project area, CAR recommends archaeological monitoring of any future impacts below the hardscapes. All records associated with the project as well as all artifacts collected are curated at the CAR under accession 2714.

Report Outline

This report includes five chapters. Following this introduction, the second chapter provides a brief environmental and culture history background, followed by a review of the archaeological sites previously recorded in the area. The third chapter discusses the lab and field methods employed by the CAR during the completion of this project. The fourth chapter discusses the results of the investigation, and the fifth chapter provides a project summary and CAR's recommendations.

Chapter 2: Project Background

This chapter includes a brief discussion of the natural environment and culture history of the project area to provide context for the results of the project. The chapter concludes with a discussion of the archaeological sites recorded within 1 km of the project area.

Environment

The project area is located in north-central San Antonio in a neighborhood known as Five Points, so named due to the unique intersection of Fredericksburg Road, N. Flores Street, N. Laredo Street, La Harpe Street, and Laurel Street in the vicinity (COSA 2009). The project area is located immediately east of San Pedro Creek at 201-214 m above sea level. The project area is currently in use as a parking lot for VIA buses as part of the VIA Metro Center. The surrounding area is a mix of residential and commercial development. San Pedro Springs Park is located approximately 260 m to the north of the project area.

Soils within the project area are composed of Branyon clays (HtB) of one to three percent slopes (Figure 2-1). These soils are found on stream terraces and reach depths of more than 200 cm. They are well drained and considered prime farmland (NRCS 2022). The project area is located within the Southern Blackland Prairie ecoregion. This community historically consists of a true tallgrass prairie dominated by big bluestem (*Andropogon gerardii*), Indiangrass (*Sorghastrum nutans*), switchgrass (*Panicum virgatum*), eastern gramagrass (*Tripsacum dactyloides*), and little bluestem (*Schizachyrium scoparium*). Other plant species include midgrasses, a variety of forbs, and live oak (*Quercus virginiana*) and hackberry (*Celtis* spp.) trees. In most areas, the vast majority of the natural vegetation has been lost, first to row crop agriculture, and later to urban development (NRCS 2022). This is true within the project area as well.

San Antonio is positioned where the southernmost Great Plains meets the Gulf Coast, demarcated by the Balcones Escarpment. It is also near a significant climate boundary, partitioning a humid-subtropical from an arid zone (Petersen 2001). The city's location near these significant geological and climatic boundaries results in a varied resource base. The area contains a number of reliable freshwater sources, including the San Antonio River, freshwater artesian springs, and the Edwards Aquifer. The growing season averages 270 days (Petersen 2001:22). The temperature reaches average lows of 39°F (4°C) in January and average highs of 97°F (36°C) in July (Long

2023). Though highly variable, the average annual rainfall is approximately 30 in (76 cm), with seasonal peaks in the spring and fall (Petersen 2001:22). The project area is located near the borders of the Balconian biotic province, which is described as an intermediate ecological area between the eastern forest and the western desert, and the Tamaulipan biotic province, which has a semi-arid climate and is dominated by thorny brush (Blair 1950).

Culture History

The vicinity of the project area includes significant precontact and historic sites. A broad review is provided for these periods in order to provide context for project results.

Texas Prior to European Contact

The precontact record in Texas is generally divided into the Paleoindian, Archaic, and Late Prehistoric periods. Bexar County's archaeological record has been included in reviews of both Central (Collins 2004) and South (Hester 1980) Texas as the county is near the assumed boundary between the two cultural areas. The following summary generally follows a Central Texas chronology.

The Paleoindian period in Central Texas spans 13,000-9000 years before present (BP). In-depth reviews of this time period are available (see Bousman et al. 2004). Groups inhabiting the area during this period are generally characterized as highly mobile (Bousman et al. 2004). Temporally diagnostic artifacts from the period include Folsom and Clovis points, among others (see Turner et al. 2011). Faunal remains from Paleoindian components on sites such as Lubbock Lake (41LU1) and Wilson-Leonard (41WM235) suggest a broad subsistence base (Bousman et al. 2004). Within Bexar County, multiple sites have Paleoindian components. These include the St. Mary's Hall site (41BX229; Hester 2020), and the Richard Beene site (41BX831; Bousman et al. 2004; McGraw and Hindes 1987; Thoms and Clabaugh 2011).

The Archaic period in Central Texas ranges from 9000-1200 BP. The period is characterized by several technological developments, including an increased diversity of material culture and the use of heated rock technology (Carpenter and Hartnett 2011; Collins 2004; Johnson and Goode 1994; Thoms and Clabaugh 2011). The period is often subdivided into Early, Middle and Late Archaic periods (see Collins 2004; Hester 2004). Temporally diagnostic artifacts

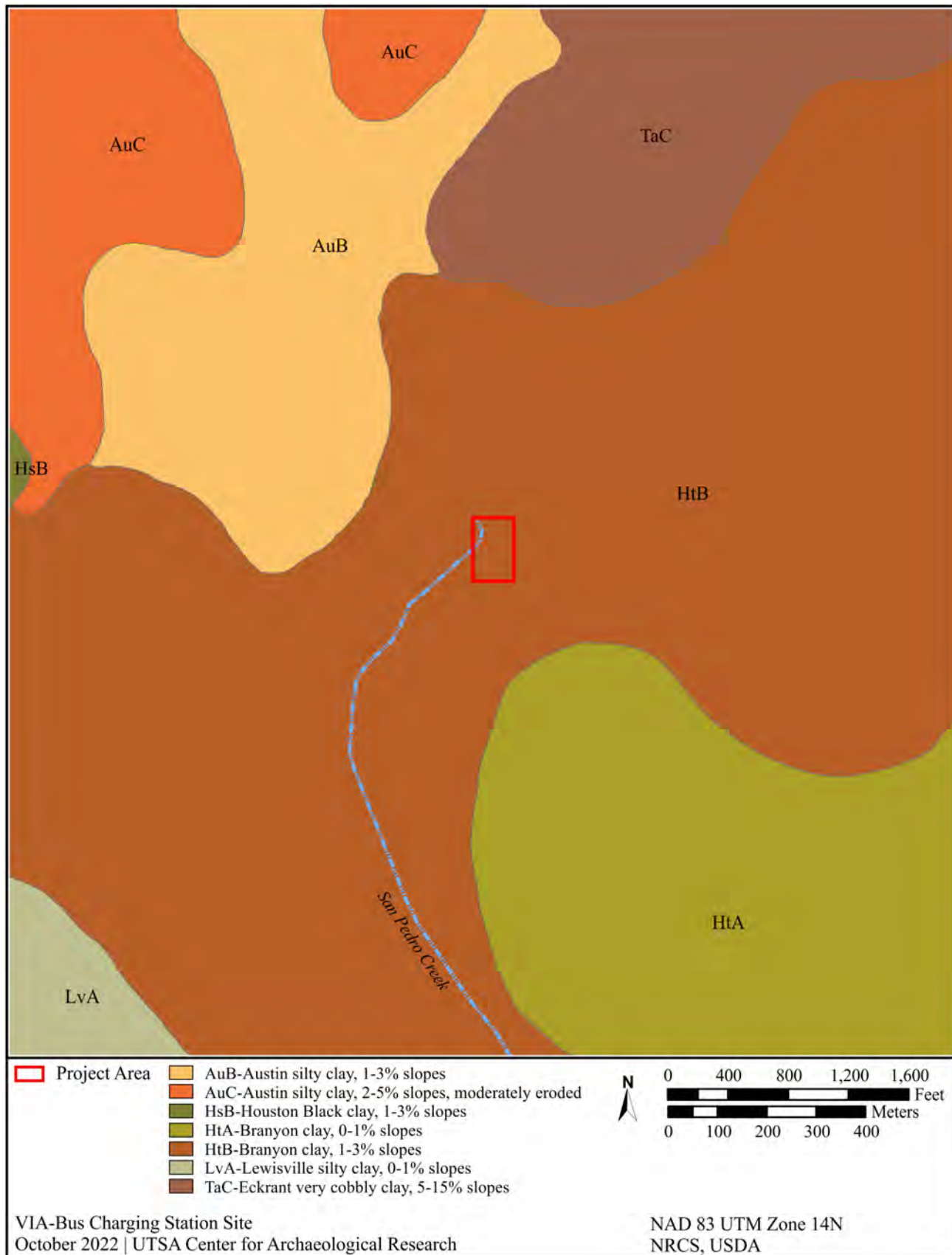


Figure 2-1. Soils within the project area.

from the Early Archaic period (9000-6800 BP) include Angostura, Early Split Stem, and Martindale-Uvalde dart points, among others (Collins 2004). The Middle Archaic spans 6800-4200 BP. Temporally diagnostic artifacts from this period include Calf Creek, Bell-Andice, Nolan, and Travis points, among others (Collins 2004; Turner et al. 2011). The Late Archaic spans 4200-1200 BP. Temporally diagnostic artifacts from the Late Archaic include a wide variety of types, with Pedernales, Ensor, and Frio points being common (Collins 2004). Numerous Archaic Period components have been recorded in Bexar County, including 41BX1 (Lukowski 1988), Olmos Dam (Orchard and Campbell 1954), 41BX17 (Munoz et al. 2011; Schuetz 1966; Wigley 2018), 41BX323 (Figueroa and Dowling 2007; Houk et al. 1999; Houk and Miller 2001; Katz and Fox 1979; Meskill et al. 2000; Meskill and Frederick 1995; Miller et al. 1999; Miller and Barile 2001), and 41BX1396 (Barile et al. 2002; Katz and Fox 1979). In addition, significant Late Archaic deposits have been previously recorded at 41BX19, approximately 395 m north of the project area (Mauldin et al. 2015).

The Late Prehistoric period begins at 1200 BP and terminates around 350 BP (see Carpenter 2017; Kenmotsu and Boyd 2012). The time period is divided into two intervals, Austin (1200-750 BP) and Toyah (750-350 BP). The period is characterized by a shift to bow and arrow technology, evidenced by arrow points such as Scallorn and Perdiz (Collins 2004). The Toyah style interval of this period also includes the adoption of ceramic technology (Collins 2004). There is evidence that burned rock middens increased in use (Black et al. 1997; Mauldin et al. 2003). Bison remains are common on Late Prehistoric sites (Mauldin et al. 2012), though they may have been more intensively exploited toward the end of the period (Lohse et al. 2014). Sites with significant Late Prehistoric components in Bexar County include two multi-component sites discussed previously, site 41BX256 (Scurlock et al. 1976; Osburn et al. 2007; Padilla and Nickels 2010; Padilla and Trierweiler 2012) and site 41BX323 (Figueroa and Dowling 2007; Houk et al. 1999; Houk and Miller 2001; Katz and Fox 1979; Meskill et al. 2000; Meskill and Frederick 1995; Miller et al. 1999; Miller and Barile 2001). Late Prehistoric deposits have also been documented at 41BX19 (Mauldin et al. 2015).

Historic Period

In Central and South Texas, the historic period began with the first documented appearance of Europeans. Spain laid claim to the area that would become Texas early, following the 1519 Alonso Álvarez de Pineda voyage along the Texas Coast, but the first Europeans arrived in

AD 1528 when Cabeza de Vaca and other survivors of the Narvaez expedition washed up on the Texas Coast (see Krieger 2000). Although interactions between Europeans and Indigenous people in the area were infrequent within Central Texas, the lifeways of the Indigenous populations there were significantly impacted by the spread of European disease as well as displacement of populations by European incursions (Foster 1998; Kenmotsu and Arnn 2012). Spain made little attempt to establish settlements in Texas prior to 1700 (Chipman and Joseph 2010). However, motivated by concerns about the French encroachment into Texas in 1685 by Robert Cavalier Sieur de la Salle's expedition, and colonization in Louisiana in the early 1700s, the Spanish government endeavored to strengthen its hold on Texas, which previously was sparsely populated by Europeans (Cruz 1988). Missions established in East Texas in the early 1700s were attempts to secure Spain's hold on the area. Additionally, a Spanish expedition intended to initiate contact with the Indigenous population and prevent them from establishing trade relationships with the French reached San Pedro Springs in present-day San Antonio on April 13, 1709 (Cruz 1988).

The primary institutions Spain employed to secure its colonies were the missions, intended to assimilate the indigenous population through religious conversion; the presidio, which played a military defensive role; and, ultimately, the establishment of chartered town settlements (Cox 1997; de la Teja 1995). The mission and the presidio were intended to be transitory institutions, whose land and possessions would ultimately be distributed among successfully converted indigenous families (de la Teja 1995). The Spanish Colonial *acequia* system in San Antonio was established to serve as a source of water and irrigation for the inhabitants of these institutions. San Antonio is one of the few large cities of Spanish origin that still contains traces of its original *acequia* system, spanning more than 80 km (Cox 2005).

Mission San Antonio de Valero, the first Spanish settlement established in what would become San Antonio, was founded on May 1, 1718, on the west bank of the San Antonio River south of San Pedro Springs (Habig 1968:38). The Presidio de Bexar and the Villa de Bexar were established four days later. Initially, archival evidence indicates that these settlements were located near the San Pedro Springs, possibly within modern-day San Pedro Park (Meissner 2000), although firm archaeological evidence of these early settlements has not been documented. The mission was moved to the east bank of the San Antonio River about a year later, and it was moved a third time to its final location following storm damage in 1724 (Habig 1968:44). The villa and presidio were relocated in 1722 (Habig 1968:38). Archaeological material associated with

this second location of the presidio, including a Spanish colonial sheet midden, has been documented at site 41BX2088 (McKenzie et al. 2016). Four more missions were founded to the south along the San Antonio River between 1720 and 1731 (de la Teja 1995).

Although an early, unofficial town settlement associated with the presidio began to develop with the arrival of presidio soldiers and their families, this settlement lacked legal status (de la Teja 1991). The arrival of a group of immigrants from the Canary Islands in 1731 marked the establishment of the Villa de San Fernando (Buck 1980; de la Teja 1995; Poyo 1991). The villa was granted water rights to the San Pedro Creek (de la Teja 1995). The early years of the settlement were marked with conflict between the villa, the missions, and the earlier settlers, particularly over land and irrigation (Buck 1980; de la Teja 1991, 1995; Poyo 1991). An *acequia* for the new settlement, the San Pedro (41BX337), was in operation by 1735 (Cox 2005: 35). The San Pedro Acequia was approximately 6.4 km (4 mi.) in length, it and watered 161 ha south of the villa (Cox 2005). It ran south from San Pedro Springs between San Pedro Creek and the San Antonio River (Cox 2005).

In 1793, Mission Valero was secularized, and the lower farms were surveyed and distributed (Cox 1997; de la Teja 1995). The mission compound subsequently served primarily a military function in the city, and it was, significantly, the site of the Battle of the Alamo in 1836. The other missions were not fully secularized until 1824, when their churches and furnishings were inventoried and surrendered (Habig 1968). However, they were partially secularized in 1794, when their farmlands were surveyed and redistributed, and the distribution of former mission farmlands contributed to the growth of the town (de la Teja 1995).

A failed uprising for independence from Spain in 1812 depleted San Antonio's population and negatively affected the city's development for decades (Cox 1997). Mexico gained independence from Spain in 1821, and Texas became part of the state of Coahuila. Texas revolted against Mexico in 1835. Mexican General Martín Perfecto de Cos fortified the old Mission Valero against the Texans, including diverting a branch of the *acequia* to flow outside the Mission compound (Cox 1997). The Texans defeated General Cos, but they were defeated themselves by Santa Anna after 13-day siege in 1836 at what became known as the Battle of the Alamo (Cox 1997). In the fall of 1836, Santa Anna was ultimately defeated, and Texas became a Republic (Cox 1997). Several sites downtown include features associated with this military activity, including a trench feature associated with General Cos' occupation of Main Plaza at 41BX1752 (Hanson 2016), and a Mexican

fortification trench associated with the Siege of Bexar at 41BX2170 (Kemp et al. 2019).

During the century that followed Texas's break with Mexico, San Antonio saw considerable growth despite the impact of numerous conflicts. In December of 1837, San Antonio was incorporated as one of the early acts of the newly established Republic of Texas. A number of epidemics impacted the city's population during the early to mid-1800s, spread in part by pollution of the city's *acequia* system. The City attempted to combat the issue by establishing standards of cleanliness, but the issue remained ongoing (Cox 2005). After a turbulent period in which Texas saw conflict with both Mexico, which did not accept the new Republic's independence, and local Native American groups, Texas became part of the United States in 1846. This sparked the Mexican War between the United States and Mexico. The conflict ultimately resulted in setting the Rio Grande as Texas's southern boundary, as well as the United States gaining significant territory on the western side of the continent, including California, Arizona, and New Mexico (Bauer 2023).

In the 1840s, French and German immigrants began to settle in San Antonio and the surrounding area. The Five Points neighborhood in particular included a number of German businesses during the 1800s (Uecker 1991). Cultural material associated with one such business in the area, Wohlfarth's mercantile, was recorded by the CAR in 2014 (McKenzie 2015). By the 1850s, recent European settlers outnumbered the Mexican and Anglo populations in the city (Cox 1997). Texas seceded from the United States, joined the Confederacy in 1861, and primarily served a supply role during the Civil War. Five years later, Texas surrendered to the Union and rejoined the United States (Wooster 2018).

The arrival of the railroad in 1877 resulted in significant growth in San Antonio (Cox 1997). The Five Points neighborhood began to be subdivided for residences in the late 1800s (Uecker 1991). The late 1800s saw infrastructure and economic development throughout the city, including water, electric, and gas utilities (Heusinger 1951). The City also attempted to update the *acequia* system with the construction of new ditches, including the construction of the Alazán ditch in 1875 (McKenzie 2017). The adoption of the new water works system in 1878 transformed the *acequia* system into, primarily, a drainage system, and water flow was reduced in the 1890s due to the increased drilling of wells. As a result of these infrastructural changes in the city, as well as ongoing cleanliness issues the San Pedro Acequia was closed in 1912 (Cox 2005). From 1906-1918, the project area was

occupied by an electrified amusement park called Electric Park, which made use of the *acequia* as well as the San Pedro Creek (Zapata and McKenzie 2017).

Previous Archaeology

A search of the Texas Archaeological Sites Atlas identified seven archaeological sites within 1 km of the project area (Table 2-1 and Figure 2-2). In addition, previous surveys conducted by the CAR (Cox 1986, 1993; Wigley 2020) have documented segments of the San Pedro Acequia (41BX337) within the project area. Multiple archaeological surveys that have no recorded archaeological sites have taken place within 1 km of the project area (THC 2022).

Site 41BX19 includes the San Pedro Springs and surrounding area in modern-day San Pedro Park. The site contains precontact and historic materials, and it is a National Register of Historic Places (NRHP) site as well as a State Antiquities Landmark (SAL). The site has an extensive history of avocational exploration dating back to the 1870s, which includes reports of human remains (Mauldin et al. 2015). The site was formally recorded by the Witte Museum in 1966 as a prehistoric site and the location of earliest Spanish settlement in San Antonio (Mauldin et al. 2015; THC 2022). Portions of the Alazán Ditch (41BX620) have been documented within the park boundaries (Fox 1978; Meissner 2000). Multiple investigations have attempted to locate intact portions of the San Pedro Acequia and dam within the park, but none have been successful (Houk 1999; Mauldin et al. 2015). Intact historic deposits have been documented (Zapata and Meissner 2003) as well as intact prehistoric deposits dating to the Late Archaic and Late Prehistoric (Mauldin et al. 2015), despite evidence of extensive disturbance in many areas of the park as a result of construction (Mauldin et al. 2015).

Multiple sections of the San Pedro Acequia (41BX337) have been documented within or near the project area.

Sections had been previously documented during the course of archaeological work conducted downtown (Fox 1978; Valdez and Eaton 1979), at which point the site trinomial was recorded. Multiple sections of the *acequia* were recorded within the project area by the CAR during trenching in 1986 (Cox 1986). The north-south trajectory of the *acequia* through the VIA bus parking lot was documented (see Figure 1-3). The *acequia* in this area was recorded as lined with cut limestone and located just below the surface. The walls were approximately 46 cm wide, and the total width of the *acequia* approximately 1.5 m. Predominately 20th century artifacts were recovered, likely associated with the period in which the *acequia* was closed (Cox 1986). An additional unlined section was recorded at a depth of 46 cm, approximately 200 m north of the project area, just outside San Pedro Springs Park (Cox 1993). In 2020 a partially lined section was recorded on the other side of Laurel Street approximately 20 m south of the project area, also on VIA property (Wigley 2020). Numerous additional sections of the San Pedro Acequia, both lined and unlined, have been documented in San Antonio (THC 2022).

The Texas Archaeological Sites Atlas includes no data on site 41BX514 other than its location, but Fox’s 1979 review of cultural resources in the area describes this site as the “Chapel of Miracles” (Fox 1979:11). The site is listed on the NRHP (National Park Service [NPS] 1980), where it is named “Ximenes Chapel.” Ramsdell (1976) describes the site as the shrine of a large crucifix reportedly rescued from the San Fernando Cathedral following a fire in 1813. The NRHP lists the chapel’s “periods of significance” as 1850-1874 (NPS 1980). No other records could be located for 41BX514.

Site 41BX620 is the Alazán Ditch. This site was recorded by Fox in 1978, but a trinomial was not assigned until 1983 (Fox 1978; THC 2022). Construction of this late addition to the *acequia* system was completed in 1875. It includes portions encased in limestone that run below ground (Nickels and Cox 1996). The Alazán Ditch functioned poorly from

Table 2-1. Archaeological Sites Recorded within 1 km of the Project Area

Trinomial	Time Period	Site Description
41BX19	Prehistoric/Spanish colonial/Historic	San Pedro Springs
41BX337	Spanish colonial/Historic	San Pedro Acequia
41BX514	Spanish colonial/Historic	Chapel of Miracles/Ximenes Chapel
41BX620	Historic	Alazan Ditch
41BX1273/41BX2043	Spanish colonial/Historic	Upper Labor Acequia
41BX2366	Early to mid-19th century	Limestone house foundation
41BX2422	Late 19th to early 20th century	Abandoned infrastructure and foundation remnants



Redacted Image

Figure 2-2. Archaeological sites previously recorded within 1 km of the project area.

the beginning of its construction, and was closed by 1903 (Thomas and McKenzie 2019). Portions of the Alazán Ditch have been documented during a number of archaeological projects (Fox 1978; Labadie 1987; Nickels and Cox 1996; Thomas and McKenzie 2019; THC 2022).

Site 41BX1273/41BX2043 is the Upper Labor Acequia and associated dam. A small, unlined portion of the *acequia* was recorded by the CAR in 1987 (Fox and Cox 1988). In 1996, a portion of the Upper Labor dam was recorded when it was exposed following a rainstorm. Backhoe trenching exposed additional portions of the *acequia*, including a Spanish colonial component composed of rough limestone and a 19th century modification consisting of cut, ashlar-dressed limestone blocks (Cox et al. 1999). At this time, the trinomial 41BX1273 was assigned to both the dam and *acequia*. The site was revisited by the CAR in 2013-2014 (McKenzie 2017) and the dam and the *acequia* were given a new trinomial, 41BX2043 (THC 2022). This trinomial is not used in the associated report, which instead uses the designation 41BX1273 for both the dam and *acequia* (McKenzie 2017). Multiple additional sections of the *acequia*

have been documented in downtown San Antonio, three of them within 1 km of the project area (Figure 2-1; THC 2022).

Site 41BX2366 is a historic limestone house foundation recorded by South Texas Archeological Research Services, LLC during backhoe trenching in 2020 (THC 2022). Associated artifacts included concrete chunks, plaster, cut faunal bone, flat glass, and a square nail. The house was determined during background research to have been constructed in the 1830s to 1840s. The was recommended not eligible for listing in the NRHP but potentially eligible for designation as a SAL.

Site 41BX2422 consists of late 19th to early 20th century infrastructure recorded by Cox McLain Environmental Consulting during archaeological monitoring in 2020 (THC 2022). Five clay sewer main remnants and two concrete blocks with square rebar were recorded. The site is located at the intersection of North Flores and Fredericksburg Road. Artifacts recovered included container glass, metal, and brick. The site was determined to be not eligible for designation as a SAL or listing in the NRHP within the ROW.

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Chapter 3: Field and Laboratory Methods

This chapter discusses the field and laboratory methods used by the CAR during the completion of this project.

Pre-Field Methods

Prior to the commencement of fieldwork, CAR staff performed a limited review of available archaeological and archival resources concerning the location of the San Pedro Acequia (41BX337) within the project area. This review included historic maps, previous archaeological reports (specifically Cox 1986 and 1993) and existing GIS data.

Field Methods

CAR staff monitored excavations associated with the installation of electrical infrastructure, bus shelters, and bollards. Monitors maintained a standard form, consisting of a daily log of activities. All activities observed were documented in this log and supported by digital data, including Trimble GPS observations and photographs, where appropriate. Monitors maintained a photographic log and downloaded and archived digital photographic data.

Laboratory and Curation Methods

Throughout the project, the analysis and organization of records, artifacts, and daily logs was ongoing. All records generated during the project were prepared in accordance with Federal Regulations 36 CFR Part 79 and THC requirements for State Held-in-Trust collections. Field forms were printed on acid-free paper and completed with pencil. Any artifacts collected during the monitoring were brought to the CAR laboratory, washed, air-dried, and stored in 4-mil zip-lock, archival-quality bags. Any materials needing extra support were double-bagged, and acid-free labels were placed in all artifact bags. Each laser printer generated label contained provenience information and a corresponding lot number.

All field notes, forms, photographs, and drawings were placed in labeled archival folders. Digital photographs were printed on acid-free paper. All recovered artifacts and project-related materials, including the final report, are permanently stored at the CAR's curation facility under accession number 2714.

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Chapter 4: Results of Monitoring

CAR monitored excavations within the project area for electrical infrastructure, bus shelters, and safety bollards from October 18 through December 22, 2022 (Figure 4-1). No cultural features, intact cultural deposits, or

archaeological sites were encountered during monitoring, and no evidence of the San Pedro Acequia was observed. All excavations were conducted below a thick (approximately 25 cm) layer of concrete overlaying the VIA parking area,

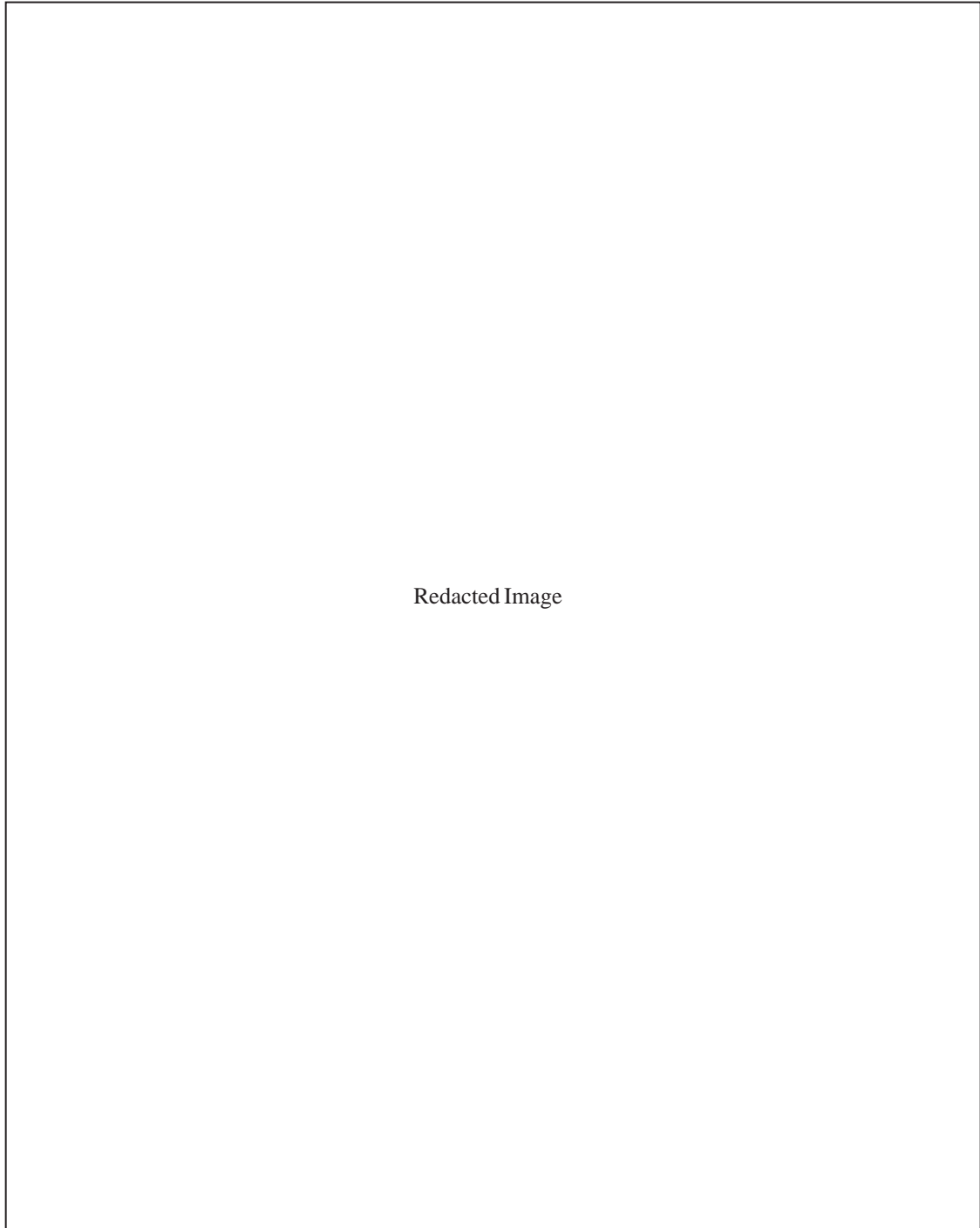


Figure 4-1. Excavations monitored within the project area.

entirely obscuring the site surface outside of excavation areas. Soils were often unstable due to extensive disturbance and waterlogging, and multiple excavations flooded before depth was reached due to the project area's proximity to San Pedro Creek. Multiple storm drains dissected the project area to empty into San Pedro Creek.

Trenches for Electrical Infrastructure

Three intersecting trenches for electrical boxes and conduit were excavated within the project area. Trenches reached depths of 1.2 to 2.4 m deep and ranged from 75 cm to 1.8 m in width. Soils within all three trenches were heavily disturbed (Figures 4-2 and 4-3) with large, loose chunks of construction rubble, including concrete, rebar, orange brick, and limestone, below a thick layer of road base. Soils consisted of wet, clumpy clays ranging in color from light brown to light gray. One of the trenches flooded completely during excavation. Aside from the rubble, no

cultural material or cultural features were encountered during trenching. Storm drains and electrical conduit dissected the area where trenching occurred, likely playing a significant role in the disturbance that was observed.

Boreholes/Postholes

CAR monitored eight boreholes and/or postholes for electrical and bus shelter infrastructure, including new CPS poles, safety bollards, and bus shelter piers. No cultural features or intact cultural deposits were encountered within the boreholes. Of primary concern prior to the beginning of excavation was the location of the new CPS poles, which were near the alignment of the San Pedro Acequia as previously recorded (Cox 1986). CPS Energy assisted with planning and design for installation of the new poles, and excavations were carried out by Bexar Pipeline. After consultation with CPS, the pole locations were slightly adjusted to avoid the projected alignment.



Figure 4-2. Electrical conduit trench locations. Note partially completed bus charging area and San Pedro Creek in background, thick pavement overlaying project area.



Figure 4-3. Electrical trench profile facing north, note heavy disturbance, construction rubble.

The CPS pole locations were hand-excavated to a depth of 1.5 m to avoid potential damage to the *acequia* if encountered. No evidence of the *acequia* was documented during the project.

Holes bored for the bus shelter piers were 7-8 m in depth, and spanned about 0.5-0.6-m in diameter (Figure 4-4). These boreholes were all located along the east bank of San Pedro Creek. Holes hand-excavated for CPS poles reached 2.7 m and holes bored for associated safety bollards reached 0.6 m. These excavations were located more centrally within the parking lot, closer to the *acequia* alignment. Soils generally consisted of dark gray (10YR 4/1) clumpy clays, often wet, which extended into sterile gley material at approximately 1.8 m below surface. Multiple areas containing gravelly brown fill were also encountered, similar to the deposits recorded in the conduit trenches. Soils appeared less disturbed farther away from the San Pedro Creek. This is likely due to the heavy modification of the creek, as well as the multiple storm drains that empty into San Pedro Creek in the project area.

Few historical materials were recovered from two of the bus shelter pier boreholes: Two ceramic sherds, both blue edgeware with faded gold filigree and likely from the same vessel, were collected from excavated sediment recovered from 0-1.8 mbs of the borehole fourth from the north (Figure 4-5). Undecorated white earthenware was observed but not collected within gravelly clay backdirt (0-3 mbs) from the northernmost borehole. Both ceramic types date to the mid to late 19th century (THC 2006). Aside from construction rubble, these were the only artifacts documented during monitoring. Additionally, a recent cedar post was observed near the surface in the hand-excavated hole for the southernmost CPS pole (see Figures 4-1, 4-6). The cedar was encased in mottled, mixed sediment, and no other materials were associated with the post.

Although some sparse historic material in disturbed contexts was recorded, no intact cultural deposits or cultural features were documented during the course of this project. No evidence of the San Pedro *Acequia* was documented during this project. The results of this project indicate that deep



Figure 4-4. Borehole for bus shelter pier along the San Pedro Creek.



Figure 4-5. Blue edgeware recovered from bus shelter pier borehole.



Figure 4-6. CPS pole excavation at 2.7 m. Note fill deposits, cedar post in profile.

disturbance exists within the project area, particularly in proximity to the creek which has been heavily modified for drainage purposes. The *acequia* section previously documented within the project area was lined with cut

limestone 46 cm thick and was exposed just below the surface by grading activities for the parking lot (Cox 1986). Cox's results (1986, 1993) show that potential exists for intact, significant deposits within the property.

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Chapter 5: Summary and Recommendations

Beginning in October 2022 through December 2022, CAR staff monitored excavations associated with installation of infrastructure for a bus charging station to be developed in the VIA bus parking lot. This development had potential to impact the San Pedro Acequia (41BX337).

The backhoe trenches excavated encountered highly disturbed deposits reaching to 2.4 m below surface. Monitoring of boreholes along the creek for charge points encountered disturbance by storm drains. Aside from construction rubble, the only cultural materials recorded in these contexts consisted of a few sherds of ceramics dating to the mid to late 19th century. No cultural features

were recorded in this area. Deposits encountered during monitoring of CPS pole excavation showed less evidence of disturbance. No artifacts were documented in this area, but a cedar post was noted in the profile of one of the CPS pole excavations. No evidence of the San Pedro Acequia was recorded. However, due to the recorded presence of the San Pedro Acequia in the area, as well as the potential for significant prehistoric and Spanish colonial deposits due to the proximity to San Pedro Springs, the area retains a high probability of containing significant deposits. Therefore, CAR recommends that any future excavations within the project area that impact below the hardscapes be subject to archaeological monitoring.

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