Intensive Pedestrian Survey of the Leon Creek Greenway Trail from Levis Strauss Park to the Lackland Corridor Monument, San Antonio, Bexar County, Texas

by

Leonard Kemp

Texas Antiquities Permit No. 8527

Principal Investigator
Paul Shawn Marceaux

Prepared for:
Bain Medina Bain, Inc.
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Prepared by:
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The University of Texas at San Antonio
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San Antonio, Texas 78249
Technical Report, No. 80

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Abstract:

The University of Texas at San Antonio's Center for Archaeological Research (CAR), in response to a request from Bain Medina Bain, Inc., conducted an intensive pedestrian survey of an extension for the Leon Creek South Greenway Trail from Levi Strauss Park to the Lackland Corridor Monument in northwest San Antonio, Bexar County, Texas. The project is located on property owned by the City of San Antonio (COSA) and includes public funding. The Texas Historical Commission (THC) granted Texas Antiquities Permit No. 8527 to Paul Shawn Marceaux, CAR Director, who served as the Principal Investigator, and Leonard Kemp served as the Project Archaeologist.

The Area of Potential Effect (APE) consists of approximately 3.4 km (2.1 miles [mi.]) of proposed trail divided into three segments for discussion purposes. Segment 1 of the proposed trail runs 0.64 km (0.39 mi.) adjacent to Leon Creek south from Levi Strauss Park and crosses U.S. Hwy. 90. Segment 2 continues west 2.2 km (1.4 mi.) to the Lackland Corridor Monument (under construction) at the intersection of U.S. Hwy. 90 and W. Military Drive (Segment 2). Segment 3 begins at the southern portion of Segment 1 at U.S. Hwy. 90 and runs east 0.55 km (0.34 mi.) to Mateo Camargo Park. Fieldwork was conducted on August 20 and 22, 2018. CAR surveyed the 3.4 km (2.1 mi.) of proposed trail and excavated 24 shovel tests. All shovel tests were negative for cultural materials with the exception of three shovel tests that contained modern debris. This material was not collected, but it was noted on the shovel test form.

CAR recommends that the construction of the extension of the Leon Creek Greenway from Levi Strauss Park to the Lackland Corridor Monument proceed as it will not impact any previous or new archaeological sites or features. However, in the event that construction reveals archaeological deposits, work should cease, and the City Archaeologist of COSA Office of Historic Preservation and/or THC should be notified. If in the event that a Section 404 Permit is required because the construction is located near a waterway, CAR will consult with the United States Army Corps of Engineers.

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Acknowledgements:

Dr. Marceaux and Mr. Kemp would like to acknowledge the following individuals who have contributed to the project: the CAR field crew consisted of Megan Brown and Peggy Wall. Dr. Jessica Nowlin provided geospatial and mapping support. Thanks to José E. Zapata and Dr. Kelly Harris for editing this report. We are also grateful to Kay Hindes of the City of San Antonio Office of Historic Preservation and Casey Hanson of the Archeology Division of the Texas Historical Commission for their assistance. Finally, we want to thank Russell Rincon from Bain Medina Bain, Inc. for his support and the opportunity to work together on the project.

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Chapter 1: Introduction

The University of Texas at San Antonio's Center for Archaeological Research (CAR), in response to a request from Bain Medina Bain, Inc., conducted an intensive pedestrian survey of the Leon Creek South Greenway Trail from Levi Strauss Park to Lackland Corridor Monument in northwest San Antonio, Bexar County, Texas. This project is one component of the Lackland Master Plan to recognize and enhance the approach and gateway to Lackland Air Force Base (AFB) undertaken by the City of San Antonio. The proposed hike and bike trail will connect Levi Strauss Park to Mateo Camargo Park and the Lackland Corridor Monument.

The project is under the auspices of the City of San Antonio (COSA) with its Office of Historic Preservation (OHP) having review authority for the project. The scope of work (SOW) takes into account recent communications with COSA-OHP regarding requirements from its office. The project falls under the purview of the Texas Antiquities Code as the property belongs to and is funded by the COSA, a local public entity. The Texas Historical Commission (THC) granted a Texas Antiquities Permit No. 8527 to Paul Shawn Marceaux, Car Director, who served as the Principal Investigator, and Leonard Kemp served as the Project Archaeologist.

Part of the trail segment is adjacent to and crosses Leon Creek, a tributary to the Medina River. Consequently, the project may require a Section 404 permit under the Clean Water Act as the trail construction may result in the deposition of fill materials in the creek at a rate requiring such a permit and coordination with the United States Army Corps of Engineers (USACE). Prior to the issuance or authorization of any Section 404 permit, the USACE must first consider the effect that the permit may have on historic properties under Section 106 of the National Historic Preservation Act of 1966, as amended. If necessary, CAR will consult with the USACE as well.

Area of Potential Effect

The principal goal of the survey was to identify and document all prehistoric and/or historic archaeological sites that may be impacted by the proposed park trail. To accomplish this goal, CAR undertook a combination of background research, pedestrian survey, and shovel testing across the project Area of Potential Effect (APE). The APE (Figures 1-1 and 1-2) consists of approximately 3.4 km (2.1 miles [mi.]) of proposed trail divided into three segments for discussion purposes. Segment 1 of the proposed trail runs 0.64 km (0.39 mi.) adjacent to Leon Creek south from Levi Strauss Park and crosses U.S. Hwy. 90. Segment 2 continues west 2.2 km (1.4 mi.) to the Lackland Corridor Monument (under construction) at the intersection of U.S. Hwy. 90 and W. Military Drive (Segment 2). Segment 3 begins at the southern portion

of Segment 1 at U.S. Hwy. 90 and runs east 0.55 km (0.34 mi.) to Mateo Camargo Park. The easement of the proposed trail is 9.44-m (30-ft.) wide. The completed project will consist of a concrete walking/bike trail that follows the current grade with five proposed culverts and a prefabricated bridge (see Figure 1-1).

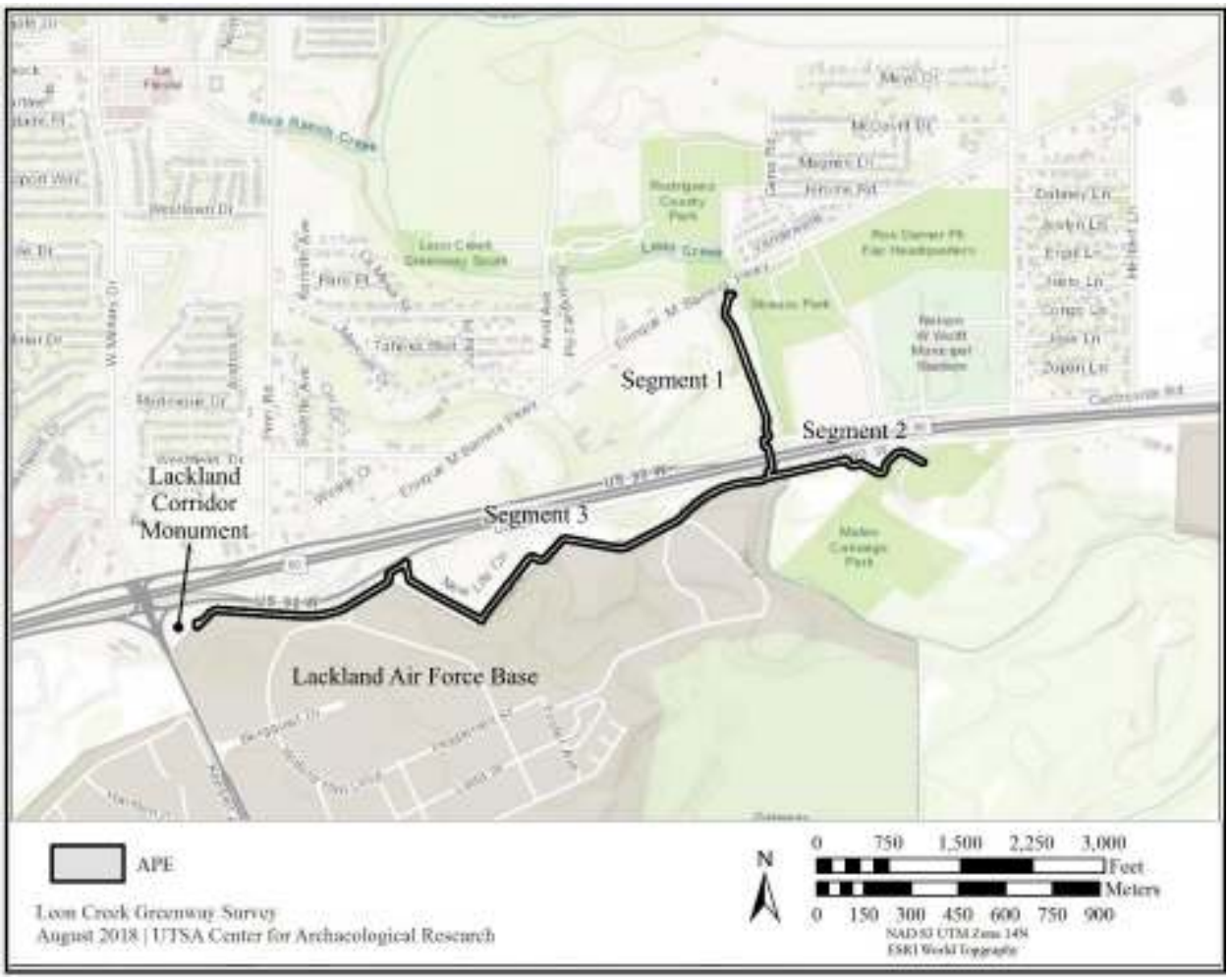

Figure 1-1. The Leon Creek Greenway Survey APE on an ESRI topographic map.

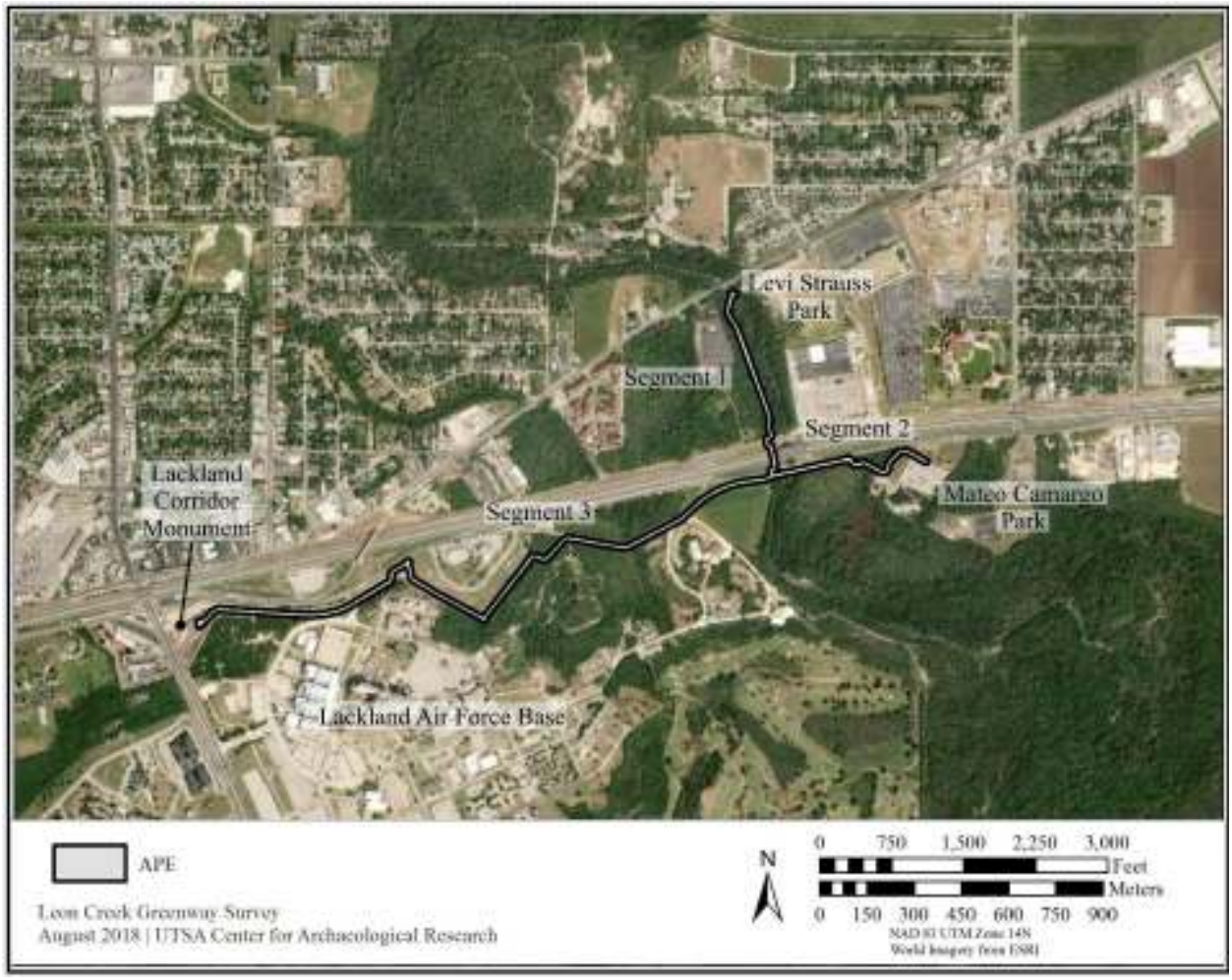

Figure 1-2. The Leon Creek Greenway Survey APE on ESRI satellite imagery.

Report Organization

This report contains five chapters. Following this introduction, Chapter 2 provides an overview of the modern setting of the project area and archaeological surveys near the project area. Chapter 3 presents the methods used to conduct the survey, laboratory processing, and curation. Chapter 4 documents the results of the pedestrian survey and shovel tests. Chapter 5 provides a summary and recommendation based on the project findings.

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Chapter 2: Project Environment and Setting

The Leon Creek project area is located in southwest Bexar County within the city limits of San Antonio along a section of Lower Leon Creek Watershed and U.S. Highway 90, north of Lackland AFB. The vicinity surrounding the project area, less the base, consists of multiple city park facilities (Levi Strauss Park, Mateo Camargo Park, Nelson Wolff Stadium, and the Darner Parks and Recreation Headquarters), the suburban community Cable Westwood, and small commercial businesses. This chapter begins with a review of the environmental background and concludes with a discussion of the development of the area in the twentieth century.

Climate

The modern environment of the San Antonio region has a moderate, subtropical, humid climate with generally cool winters and hot summers (Taylor et al. 1991). The average annual temperature in San Antonio from 1981-2013 was 69.5°F based on meteorological data from the National Oceanic and Atmospheric Administration (NOAA 2018). The warmest months are July and August, and the coolest months are December and January. Average annual rainfall amounts to 81.96 cm (32.27 in.) for the same period of time (1981-2013; NOAA 2018). Yearly rainfall is greatest in May and June with smaller spikes occurring in September and October.

San Antonio is close to the Gulf of Mexico, where severe storms, including hurricanes, will develop in the late summer and fall. Storms that produce extreme rainfall events can lead to localized or regional flooding depending on the storm's severity and longevity. The project area (Figure 2-1) is subject to flash flooding during these intense periods of rain as shown in the Risk Mapping, Assessment, and Planning map by the Federal Emergency Management Agency and San Antonio River Authority (FEMA/SARA 2018). Over the years, flooding has resulted in the deposition of gravels and cobbles from further upstream within and adjacent to the floodplain making gravels a commercially viable product (former gravel pits are shown in Figure 2-1).

Figure 2-1. The APE within the 100-year floodplain (FEMA/SARA 2018). Locations of former gravel pits are marked with a yellow star.

Geology and Soils

The Late Cretaceous Navarro Group limestone and marls that form the underlying bedrock within the project area are overlain by Quaternary age floodplain and terrace deposits (Barnes 1983). Six soils types (Taylor et al. 1991) are found in the APE including: Frio clay loam (Fr); Trinity and Frio soils frequently flooded (Tf); Patrick soils (Pa); Venus clay loam (VcA); Houston Black gravelly clay, 3 to 5 percent (HuC); and a mapping unit called Pit and Quarries (Pt; Figure 2-2). The Fr and Tf soils comprise the majority soil type and are associated with flood depositions (Taylor et al. 1991). The remaining soil types (Pa, VcA, HuC) are alluvial and found on flood plain terraces (Taylor et al. 1991). Nordt (1997) describes the chronology of Leon Creek as poorly understood at present. His analysis found two alluvial units, I and II, on Lackland AFB, 3.04 m (10 ft.) and 6.09 m (20 ft.) above the modern channel, respectively. Nordt (1997) suggests these units were Holocene and Late Holocene in age and indicated potential for buried archaeological deposits**.**

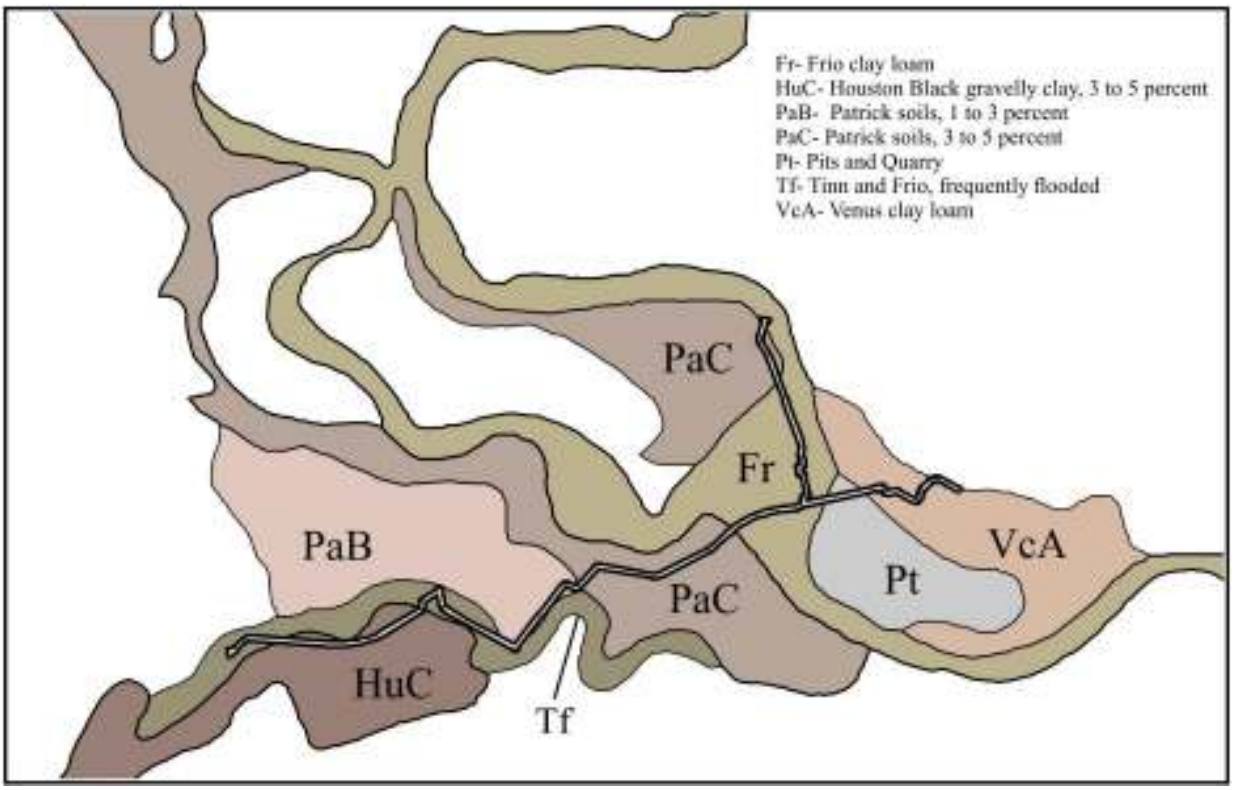

Figure 2-2. Soils found within the APE and the project area (Taylor et al. 1991).

Project Setting

The APE was undeveloped prior to the twentieth century, and a review of the 1903 USGS San Antonio topographic map (on file at CAR) shows agriculture as the dominate industry with few houses in the area. Castroville Road, connecting Castroville and points west, was the main thoroughfare to San Antonio. The map shows that the older, non-extant portions of the road went through the APE and ran adjacent to it. Since the beginning of World War II and the founding of Lackland AFB in 1942, the area has been extensively developed with supporting infrastructure (road, sewer, and storm channels). The development of the area is visible in a comparison between the 1953 and the 1967 topographic maps showing the residential communities north and west of Lackland AFB (Figure 2-3). The modernization of U.S. Hwy. 90 in the mid-1960s created a non-stop route from San Antonio to Loop 410 and facilitated the movement of traffic to Lackland AFB and the adjacent Kelly Airfield (Texas Highwayman 2018). Its construction impacted portions of the east to west segment of the APE. Between 1960 and 1980, the City annexed the areas surrounding Lackland AFB (COSA 2018).

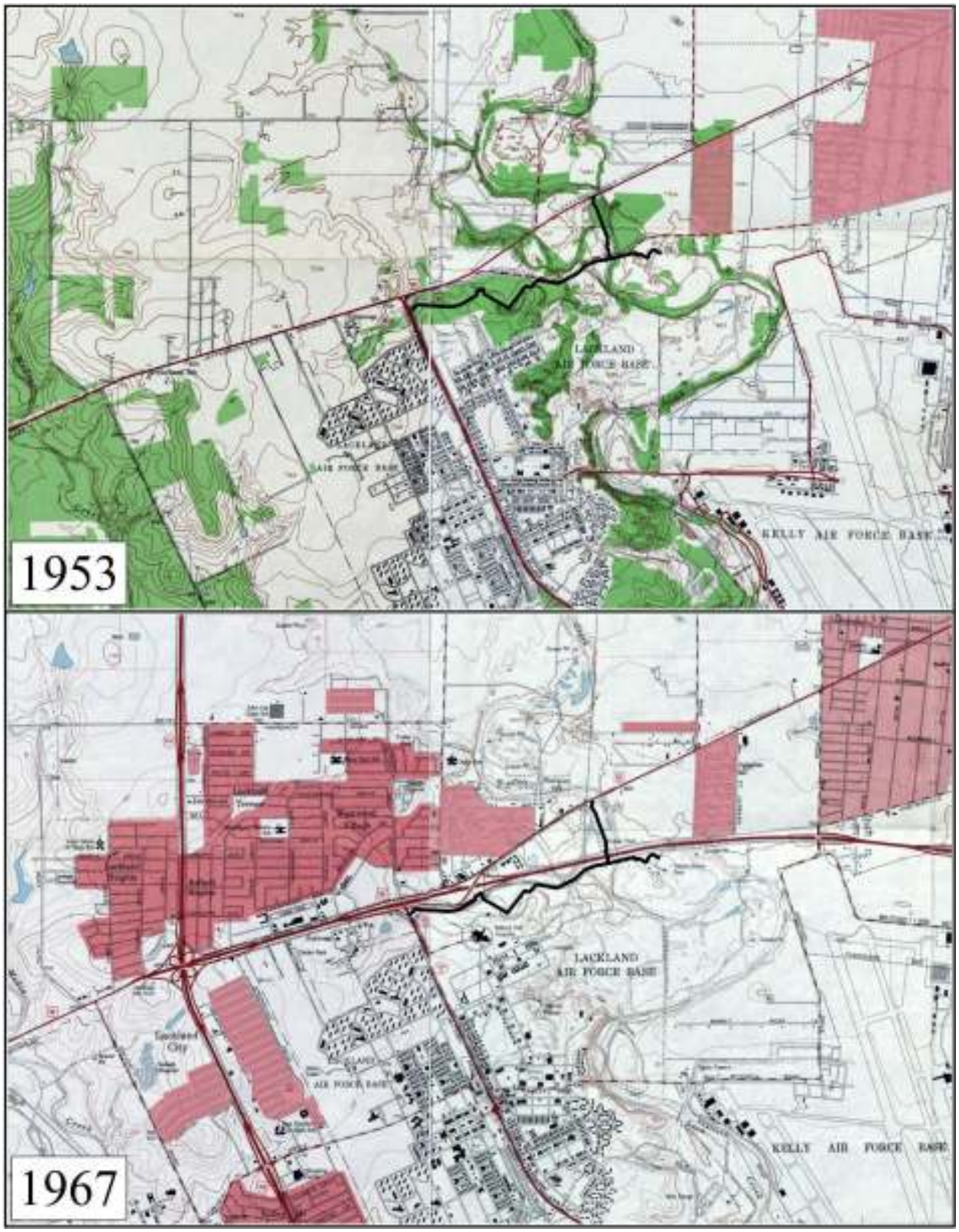

Figure 2-3. The 1953 and 1967 topographic maps with the APE. It shows a rapidly developing area centered on Lackland AFB. The lower map also shows a newly constructed Loop 410 as well as the realignment of U.S. Hwy. 90.

The Leon Creek Greenway is part of citywide system of hike and bike trails connecting city parks along creeks and nature areas. The present project is an expansion of the Leon Creek South Greenway Trail system. The portion of the APE adjacent to Leon Creek is a wooded area with cottonwood (*Populus*), hackberry (*Celtis occidentalis*), mesquite (*Prosopis glandulosa*), and greenbrier (*Smilex*). In addition, there is evidence of deer (Cervidae), raccoon (*Procyon lotor*), and feral pig (*Sus scrofa*) within this environment. The proposed Leon Creek trail then crosses under U.S. Hwy. 90 and runs east to Camargo Park and west to the Lackland Corridor Monument. These portions of the APE have been impacted by the construction of the roadway and storm channels, and the vegetation consists mostly of grasses.

Previously Recorded Sites

A search of the Texas Historic Sites Atlas indicated no previously recorded sites are within the APE nor within 0.5 km (0.31 mi.) of the APE (THC 2018). However, multiple archaeological investigations have occurred near the APE. SWCA Environmental Consultants, Inc. performed the most current archaeological investigation in 2011 for the Leon Creek Hike and Bike Trail Project from Highway 151 to Camargo Park (Stotts and Galindo 2013). The work consisted of shovel testing and trench excavations. No sites were recorded during the investigations (Stotts and Galindo 2013). In 2011, GeoMarine, Inc. conducted a survey of a large meander of Leon Creek just south of Camargo Park (Fullerton 2011). One site, a mid-twentieth-century homestead was identified (Fullerton 2011). CAR conducted an archaeological survey for the Loop 410 Improvements Project at the intersection of Loop 410 and U.S. Hwy. 90 in 2005 (Figueroa et al. 2008). No sites were identified in the vicinity of the project (Figueroa et al. 2008). CAR conducted an intensive survey of Lackland Air Force Base from 1994 to 1995 (Nickels et al. 1997). The project consisted of two survey areas: the Main Base (this parcel is directly south of the current APE) and the Medina Annex. Five sites were identified on the Main Base parcel with the closest site approximately 0.95 km (0.6 mi.) to the south of the APE (Nickels et al. 1997). In 1988, CAR conducted an archaeological survey of Rodriguez Park just north of Levi Strauss Park (Highley and Hafernik 1988). No sites were identified during that survey (Highley and Hafernik 1988).

Just west of the APE, Texas Historic Marker No. 3021 (Figure 2-4) identifies the location where the Comanche killed Moses Lapham, a veteran of the Texas Revolution, and 10 others in 1838 (Frantz 2010). At the time, Lapham was surveying property for Samuel Maverick, a signatory of the Texas Declaration of Independence, two-time mayor of San Antonio, lawyer, and land speculator (Frantz 2010).

Figure 2-4. Texas Historic Marker No. 3021.

Chapter 3: Archaeological Field and Laboratory Methods

Prior to the fieldwork, CAR staff reviewed extant literature and documents relating to the project area. Background research consisted of reviewing all previous archaeological investigations within 0.5 km (0.31 mi.), as well as relevant reports, maps, and publications related to the project area.

Pedestrian Survey and Shovel Testing

In order to identify and document prehistoric and historic properties, the fieldwork consisted of a pedestrian survey and shovel testing conducted on August 20 and 22, 2018. CAR staff completed a 100 percent pedestrian survey of the 3.4 km (2.1 mi.) trail corridor and the 9.44-m (30-ft.) wide easement. A handheld Trimble Juno GPS unit, with an uploaded shapefile of the trail, was used to plot a course along the unmarked trail, and a Trimble Geo XT unit was used to record surface finds and shovel test (ST) locations. CAR staff began by locating the trail segment on the Juno and proceeded to survey the easement placing shovel tests from north to south along Leon Creek and east to west along U.S. Hwy. 90.

Planning for the placement of the shovel tests began with a desktop review of the proposed trail, overlain on satellite imagery. The planned shovel tests were plotted on the map at intervals of approximately 100 m (328 ft.). CAR staff excavated 24 of the proposed 32 shovel tests.

The shovel tests were 30 cm (11.8 in.) in diameter and were to terminate at 60 cm (23.6 in.) below the ground surface (cmbs), but the majority of the shovel tests (n=22) were terminated before the desired 60 cm, when CAR staff encountered impenetrable obstructions, such as gravels and cobbles. Previous surveys (Fullerton 2011; Nickels et al. 1997) suggest that early termination of shovel tests is the norm in this area due to the high density of gravels. All shovel tests were excavated in arbitrary levels of 10 cm (4 in.) with soils from each level screened for artifacts. A small soil sample from each level was collected for documentation of soil texture and color. Upon termination of the ST, the hole was refilled with the screened soil.

The Project Archaeologist maintained a daily log, and a standard shovel test form was completed for each test. Activities and discoveries were documented and supported by digital data, including photographs. CAR staff recorded the location of each shovel test with a GPS unit.

Initially trenching was included in the SOW. However, following the pedestrian survey and shovel testing, CAR recommended that trenching would not be feasible due to multiple factors including the presence of 54-inch sewer line in the portion of the APE along Leon Creek, an abandoned roadway within the APE, the impacts of past construction of storm channels, and the lack of accessibility for the equipment (see further

discussion in Chapter 4). CAR consulted with the City Archaeologist and the THC on the matter, and both agencies concurred with this recommendation.

Site Recording and Collection Policy

For the purposes of this survey, an archaeological site must have contained cultural materials or features that are at least 50 years old within a given area. For this project, a site was defined as: (1) five or more surface artifacts within a 15-m (49.2-ft.) radius of each other; or (2) a single cultural feature, such as a hearth, observed on the surface or exposed while shovel testing; or (3) a positive shovel test containing at least three artifacts within a given 10-cm (4-in.) level; or (4) a positive shovel test containing at least five total artifacts; or (5) two positive shovel tests located within 30 m (98.4 ft.) of each other. No new sites were found during this project, and no archaeological material was found in any of the 24 shovel tests or collected from the surface.

Lab Analysis, Curation Preparation, and Final Curation

The analysis and organization of records and daily logs was ongoing throughout the project. All records generated during the project were prepared in accordance with THC requirements for State Held-in-Trust collections and Federal Regulations 36 CFR Part 79. Field forms were printed on acid-free paper and completed with pencil. No artifacts were collected from the pedestrian survey and shovel testing.

All field notes, forms, photographs, and drawings were placed in labeled archival folders. Digital photographs were printed on acid-free paper and placed in archival-quality page protectors. Following completion of the project, all project-related materials, including the final report, will be permanently stored at CAR's curation facility.

Chapter 4: Results of the Fieldwork

CAR staff conducted a pedestrian survey that included shovel testing for the Leon Creek South Greenway proposed hike and bike trail connecting Levi Strauss Park to Mateo Camargo Park and the Lackland Corridor Monument. This chapter presents the results of that fieldwork and concludes with a summary.

Pedestrian Survey and Shovel Testing

CAR excavated 24 shovel tests (STs), and their locations are shown on Figure 4-1. As noted in the SOW and in Chapter 3, areas that were obviously disturbed by prior construction (the abandoned Castroville Road, the storm drain channel along the U.S. Hwy. 90 access road, and the area under U.S. Hwy. 90) were visually examined for cultural material. The shovel tests planned for these areas were reduced in number, or no shovel tests were excavated at all. Table 4-1 presents the findings of the 24 shovel tests.

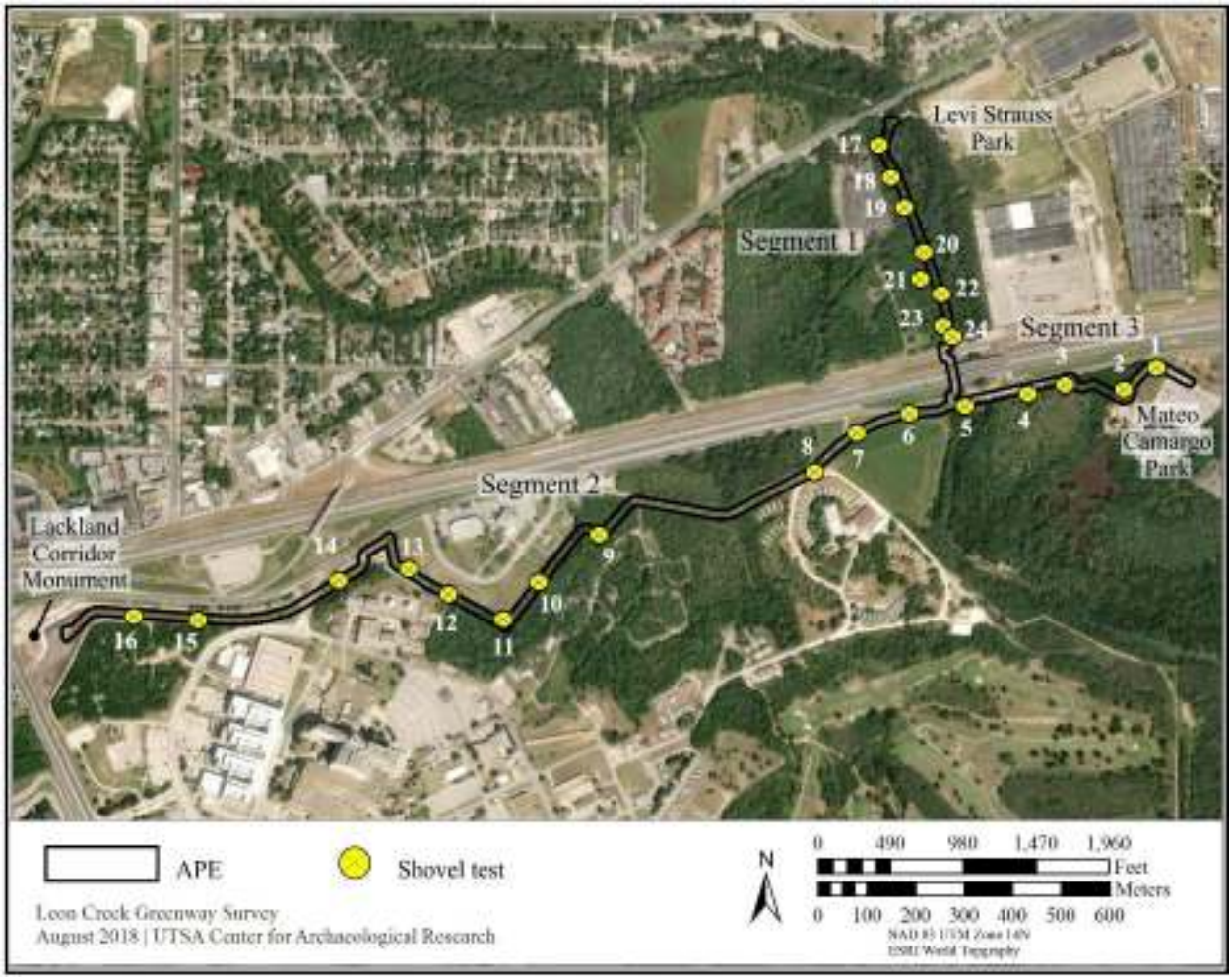

Figure 4-1. The Leon Creek APE with the locations of the 24 shovel tests.

Table 4-1. Summary of Shovel Tests

ST	Depth (cmbs)	Soil Description	Artifacts*	Comments
1	0-60	silty clay 10YR 4/2; clay 10YR 3/1	negative	within Camargo Park
2	0-8	silt 10YR 2/2; stopped at gravels/cobbles	negative	within Camargo Park
3	0-10	silt 10YR 5/4; stopped at gravels/cobbles	plastic	trash dump
4	0-30	clay/sand 10YR 5/2 and 2/2 with gravels; stopped at gravels	negative	east of Leon Creek
5	0-10	silty clay 10YR 4/2; stopped at gravels	negative	west of Leon Creek
6	0-30	silty clay 10YR 4/2 and 3/2; clay 10YR 4/3; stopped at gravels	negative	adjacent to access road
7	0-30	silty clay 10YR 4/2 and 3/2; clay 10YR 5/4; stopped at gravels	negative	
8	0-8	silty clay 10YR 5/3	negative	
9	0-20	silty clay with gravels 10YR 4/2 and 5/2; stopped at gravels	negative	in drainage area
10	0-13	silty clay with gravels 10YR 4/2; stopped at gravels	negative	chert cobble; asphalt and other construction debris in the vicinity
11	0-26	silt 10YR 3/2; clay 10YR 3/1	negative	
12	0-25	silty clay 10YR 3/2; clay 10YR 4/1; stopped at gravels	negative	next to concrete drainage
13	0-18	silty clay 10YR 2/1 and 3/2; stopped gravels/cobbles	negative	next to concrete drainage
14	0-60	silty clay with gravels and cobbles 10YR 3/1	negative	next to concrete drainage
15	0-48	silty clay with gravels 10YR 4/1	negative	next to concrete drainage
16	0-30	silty clay 10YR 2/2; clay 10YR 2/2	negative	next to concrete drainage
17	0-13	silty clay 10YR 5/2; stopped at large root and cobbles	negative	Levi Strauss Park; north end of APE
18	0-28	silt 10YR 4/2	plastic, cloth	in Leon Creek floodplain
19	0-50	silty clay 10YR 4/2; stopped at gravels	negative	in Leon Creek floodplain
20	0-32	silty clay 10YR 4/2; stopped at gravels	negative	in Leon Creek floodplain
21	0-20	silt 10YR 5/2; stopped at gravels	asphalt, glass fragments	in Leon Creek floodplain
22	0-10	silt 10YR 4/2; stopped at gravels	negative	in Leon Creek floodplain
23	0-12	silty clay 10YR 4/2; stopped at gravels	negative	in Leon Creek floodplain
24	0-10	silt 10YR 4/2; stopped at gravels	negative	in Leon Creek floodplain; south end of segment at U.S. Hwy. 90

*items listed for STs 3, 18, and 21 were not collected

The survey began on August 20, 2018, at Mateo Camargo Park (Segment 3) and proceeded west to the Lackland Corridor Monument (Segment 2). Sixteen shovel tests were excavated in this portion of the APE. The first four shovel tests were placed east of Leon Creek with two located in Camargo Park. The shovel tests in Camargo Park were both negative with ST 1 going to 60 cmbs (23.6 in.) with soils of dark grayish brown (10YR 4/2) silty clay and very dark gray (10YR 3/1) clay. Shovel Test 2, consisting of very dark brown (10YR 2/2) silt, terminated at 8 cmbs (3.1 in.) due to gravels. Shovel Tests 3 and 4 were located along the access road outside of Camargo Park heading west to Leon Creek (Figure 4-2) and fall with the Pit and Quarry map soil unit. The excavated soils ranged from dark grayish brown silty clay (10YR 4/2) to very dark brown (10YR 2/2) to yellowish brown (10YR 5/4) silt to grayish brown (10YR 5/2) clay sand.

Figure 4-2. The APE (highlighted) near ST 4 leading to Leon Creek. View to the east.

Shovel Tests 5 through 8 were placed on the west side of Leon Creek leading to the abandoned portion of Castroville Highway. Shovel tests were shallow ranging from 8-30 cmbs (3.1-11.8 in.) and were terminated due to gravels. The excavated soils were a dark grayish brown (10YR 4/2) to brown (10YR 5/3) silty clay. The abandoned roadway was walked and examined for artifacts (Figure 4-3). No shovel tests were excavated in this portion of the survey due to the asphalted roadway.

Figure 4-3. The APE (highlighted) in the abandoned Castroville Road section. Lackland AFB is on the left of this image.

Shovel Tests 9 through 13 are located behind the New Life Church property. Soils consisted of brown (10YR 5/3) to dark grayish brown (10YR 4/2) to very dark grayish brown (10YR 3/2) to black (10YR 2/1) silty clay terminating with gravels and/or cobbles. Shovel Tests 12 and 13 were excavated between the asphalt track and a large storm channel (Figure 4-4). The storm channel was constructed in the 1960s to divert floodwaters into a drainage leading to Leon Creek. No artifacts were observed on the surface or found in the shovel tests. Moderate-sized chert cobbles, 10-15 cm (3.9-5.9 in.) in length, were noted on the surface near ST 11, and the presence of the cobbles was likely due to past construction grading in that area.

Figure 4-4. The APE (highlighted) near ST 12. A large storm channel is adjacent to the APE.

The remaining three shovel tests (STs 14-16) in this portion of the APE also followed the storm channel (Figure 4-5). The distance between shovel tests was increased due to the construction impact. The soils were very dark gray (10YR 3/1) to dark gray (10YR 4/1) to very dark brown (10YR 2/2) silty clay with gravels and cobbles. No artifacts were found in the shovel tests. During CAR's investigation, a trench for gas utilities was being excavated in this portion of the APE. The excavated matrix from the trench was examined for artifacts, and none were observed.

Figure 4-5. Views to the east of the APE (highlighted) along the storm channel and north of Lackland AFB. The top photo shows the APE from the Security Gate at Lackland. The bottom photo shows the APE from the Lackland Corridor Monument (under construction).

Beginning at Levi Strauss Park (Segment 1) on August 22, 2018, eight shovel tests (STs 18-24) were placed along the Leon Creek portion of the APE (Figure 4-6). As noted in Chapter 2, this portion of the APE is within an active floodplain as identified on the 100-year flood map (see Figure 2-1). The depth of the shovel tests ranged from 10-50 cmbs (3.9-19.6 in.), and all of the tests were terminated due to gravels and cobbles. Gravel banks and washouts were observed along the APE indicating the strong velocity of flooding in this area. The excavated soils were a grayish brown (10YR 5/2) to dark grayish brown (10YR 4/2) silty clay. The results of two of the shovel test included modern debris consisting of asphalt, glass, plastic, and cloth fragments (not collected). Flood debris observed on the surface included tree limbs, plastic and glass bottles, aluminum cans, and highway safety cones and barriers. No shovel tests were excavated in the area under U.S. Hwy. 90 due to previous construction. However, it was visually surveyed with no artifacts recorded.

Figure 4-6. The APE (highlighted) within the Leon Creek floodplain near ST 19. Note the debris in the foreground and in the background.

CAR was also tasked to excavate trenches within the APE to identify deep archaeological deposits not accessible through shovel testing. However, following the pedestrian survey and shovel testing, CAR recommended that trenching would not be feasible due to multiple factors including impacts from impervious surfaces, previous construction, or the lack of accessibility for the equipment. CAR identified locations within or adjacent to the APE that were impacted from previous construction that account for approximately half (1.5 km; 0.94 mi.) of the APE. These locations were designated as Areas 1, 2, and 3:

Area 1: CAR did not test in the APE portion that contained sections of the abandoned Castroville Road, but the field crew walked the area in question.

Area 2: Between 1963 and 1966, a large storm channel was created that emptied into a drainage to Leon Creek to mitigate the effect of flooding on the south side of U.S. Hwy. 90 (Historic Aerials 2018). The western portion of the APE following the channel was impacted by its construction. CAR placed three shovel tests in this portion of the APE. During the current survey, there was ongoing trench excavation for a gas line in this area. The spoil pile was closely examined for artifacts, and none were observed.

Area 3: Along the Leon Creek portion of the APE, CAR reduced the distance between shovel tests to approximately 50-60 m (164-196.8 ft.) due to the greater potential of archaeological deposits adjacent to a waterway. On the southern end of that segment, two San Antonio Water System (SAWS) manholes were observed. Post-field research revealed that a 54-inch sewer line (built in 1973) ran adjacent to and in this segment of the APE (SAWS 2018).

Figure 4-7. Previous construction locations within or adjacent to the APE (red outline).

Summary

CAR conducted a pedestrian survey and shovel tests for the proposed extension of the Leon Creek Greenway. CAR observed no cultural material on the surface. The majority of shovel tests were shallow and terminated prior to the planned depth of 60 cmbs (23.6 in.). This was due primarily to gravels and cobbles encountered throughout the APE. No new sites were found, and all shovel tests were negative for cultural materials with the exception of three shovel tests that contained modern debris. This material was not collected, but it was noted on the shovel test form. In addition, no isolated finds were observed. Backhoe trenches were originally tasked in the SOW to discover deeper deposits. However, following the pedestrian survey and shovel testing, CAR recommended that the proposed trenching would not be feasible for multiple reasons including impervious surfaces (a roadway), previous construction, and lack of access for the equipment. Both the COSA-OHP and the THC approved this recommendation, and no trenches were excavated.

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Chapter 5: Summary and Recommendation

The University of Texas at San Antonio's Center for Archaeological Research (CAR), in response to a request from Bain Medina Bain, Inc., conducted an intensive pedestrian survey of the proposed expansion of the Leon Creek South Greenway Trail in west San Antonio, Bexar County, Texas. The COSA owns the area planned for the Leon Creek Trail segment and is funding the project. The project falls under the Texas Antiquities Code, and the archaeological work was conducted under Texas Antiquities Permit No. 8527. The project was conducted under the purview of the THC and COSA-OHP. Paul Shawn Marceaux, CAR Director, served as the Principal Investigator, and Leonard Kemp served as Project Archaeologist.

The APE consists of approximately 3.4 km (2.1 mi.) of proposed trail divided into three segments. Segment 1 of the proposed trail runs 0.64 km (0.39 mi.) adjacent to Leon Creek south from Levi Strauss Park and crosses U.S. Hwy. 90. Segment 2 continues west 2.2 km (1.4 mi.) to the Lackland Corridor Monument (under construction) at the intersection of U.S. Hwy. 90 and W. Military Drive (Segment 2). Segment 3 begins at the southern portion of Segment 1 at U.S. Hwy. 90 and runs east 0.55 km (0.34 mi.) to Camargo Park. The fieldwork was undertaken on August 20 and 22, 2018. CAR surveyed the 3.4 km (2.1 mi.) of proposed trail and excavated 24 shovel tests. All shovel tests were negative for cultural materials with the exception of three shovel tests that contained modern debris. This material was not collected, but it was noted on the shovel test form. The survey and post-survey research found that approximately half of the APE (1.5 km; 0.94 mi.) has been impacted by previous construction, including the presence of 54-inch sewer line in the portion of the APE along Leon Creek, an abandoned roadway within the APE, and the impacts of past construction of storm channels. These findings negated the necessity for trenching for deeper deposits.

CAR recommends that the extension of the Leon Creek Greenway from Levi Strauss Park to Lackland Corridor Monument proceed as planned as it will not impact any previous or new archaeological sites or features. In the event that construction reveals archaeological deposits, work should cease and the City Archaeologist and/or THC should be notified. In the event that a Section 404 Permit is required, CAR will consult with the United States Army Corps of Engineers.

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