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San Antonio Mission Trails Statewide Transportation Enhancement Project Volume II Construction Packages 2 and 3: Archaeological Testing and Monitoring Construction of the Mission Trails Hike and Bike Trails, City of San Antonio, Bexar County, Texas

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City of San Antonio, Bexar County, Texas

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**San Antonio Mission Trails
Statewide Transportation Enhancement Project**

Volume II
*Construction Packages 2 and 3:
Archaeological Testing and Monitoring Construction
of the Mission Trails Hike and Bike Trails,
City of San Antonio, Bexar County, Texas*

by

Barbara A. Meissner, I. Wayne Cox,
Jason D. Weston, and Bruce K. Moses

with a contribution by
Anne A. Fox

Prepared for:
Public Works Department
City of San Antonio
San Antonio, Texas

Prepared by:
Center for Archaeological Research
The University of Texas at San Antonio
Archaeological Report, No. 374, 2007

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Packages 2 and 3 of San Antonio Mission Trails Statewide Transportation Enhancement Project

Principal Investigator
Steve A. Tomka



Prepared for:
Public Works Department
City of San Antonio
San Antonio, Texas

Prepared by:
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The University of Texas at San Antonio
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Abstract

Beginning in October 1998, the Center for Archaeological Research (CAR) at the University of Texas at San Antonio (UTSA) provided archival research and archaeological services to the City of San Antonio and the Texas Department of Transportation (TxDOT) as part of the Mission Trails Statewide Transportation Enhancement Project. The project was intended to create a hike and bike trail system connecting the five Spanish missions in San Antonio. The trail should provide easier access to the missions for visitors, allow easier access to pleasant places to walk and cycle, and greatly improve the condition of some of the city streets.

This is the second and final volume issued by the CAR in the series of reports on the Mission Trails project. It describes the findings from archaeological work associated with Packages 2 and 3 of the five part Construction Package, including archival research, intensive survey, and monitoring of the portion of the Mission Trails project from Mitchell Street near Mission Concepción to Padre Drive at SE Military Drive. Both a “Direct” route, consisting of designated lanes along existing roads, and a “Scenic” route, consisting of new hike and bike trails near the San Antonio River, were included. In addition, new utility lines were placed under some streets, in particular Roosevelt Avenue, and Mission and Mitchell Roads. This report provides a historic background based on archival research for the project area and a detailed description of the intensive survey and monitoring done as part of these two Packages.

After preliminary examination of the archives and previous archaeological work (Cox 2000), areas where there was reason to believe that significant cultural resources would be impacted by the project were designated “Areas of Concern”. As part of archaeological investigations associated with Package 3, an intensive survey was undertaken in these areas, including shovel testing and backhoe trenching when appropriate, to assess the potential of an adverse impact to significant cultural resources.

Shovel testing was conducted at the following locations:

- (1) Outside the south and west walls of Mission San José y San Miguel de Aguayo (41BX3), where 50 shovel tests were completed to inspect the proposed route of a new section of hike and bike trail;
- (2) At the Pyron Homestead (41BX279), where 40 shovel tests were completed to examine the proposed route of an extension of Padre Road;
- (3) At the Brown Site (41BX241), where eight shovel test were excavated to confirm that no remnant of the previously recorded site was extant;
- (4) Along the southern edge of Padre Park, where 39 shovel tests were completed to investigate the proposed route of a new section of hike and bike trail.

In addition to the shovel testing, three backhoe trenches were dug along the route of a proposed utility line near Mission Road north of the San Antonio River. Undisturbed sediments were located in two trenches, at 140 cmbs and 360 cmbs respectively, but no evidence of cultural deposits was seen. Ten backhoe trenches also were dug along the north bank of the river south of Concepción Park, where they revealed only modern fill. CAR concluded that the project would result in no adverse impact to significant cultural resources in these areas.

Finally, in consultation with TxDOT-ENV and the Texas Historical Commission, and in accord with the original Scope of Work and project protocol, archaeological monitoring was conducted in selected parts of the project area. Specifically, monitoring of construction took place in the following locations:

- (1) Along the footprint of the hike and bike trail on the grounds of Mission San José;

(2) On Mission Road where buried utility lines were being replaced;

(3) On Roosevelt Avenue where new utility lines were being installed and old utility lines were being replaced.

None of the sub-surface investigations located undisturbed cultural deposits. All artifacts collected from the shovel tests were in mixed context. Based on the results of these investigations, CAR recommended that continuation of the construction project would not result in adverse impacts to cultural resources in these areas. This recommendation was accepted by TxDOT-ENV and the Texas Historical Commission (TxDOT-ENV letter dated to THC dated 02-26-2007 with THC concurrence signature dated 03-01-2007).

All artifacts and project-associated records are permanently curated at the curation facility of the Center for Archaeological Research.

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Our greatest appreciation is posthumously extended to Wayne Cox. His death in March 2004 was a great loss to those who care about understanding the history of the City of San Antonio. It has been said that Wayne knew where all the nineteenth century political bodies were buried in San Antonio and would be happy to tell anyone all about them. We all here at CAR, along with everyone else who knew and worked with him, deeply mourn his departure and will miss his charm, his wit, his knowledge, and his constant readiness to share all of those things with everyone around him.



Wayne Cox
(1934-2004)

Chapter 1: Introduction

This report is the second and final volume in a series issued by the CAR that documents the archival research and archaeological services provided under Texas Antiquities Committee Permit No. 2051. These services were provided by the Center for Archaeological Research at the University of Texas at San Antonio to the City of San Antonio and the Texas Department of Transportation during the Mission Trails Statewide Transportation Enhancement Project, hereafter identified as the Mission Trails Project. The purpose of the project was to construct a set of hike and bike trails connecting all five of the historic Spanish missions in San Antonio: Mission San Antonio de Valero (41BX6), Mission Nuestra Señora de la Purísima Concepción de Acuña (41BX12), Mission San José y San Miguel de Aguayo (41BX3), Mission San Juan Capistrano (41BX5), and Mission San Francisco de la Espada (41BX4). All of the missions are located near the San Antonio River, extending south from San Antonio de Valero in downtown San Antonio to Mission Espada on the southern edge of the city (Figure 1-1).

The Mission Trails system was conceived as a mix of direct “dry” and scenic “wet” routes. The “dry” routes follow existing city streets, and scenic “wet” routes remain close to the river and required some new road and trail construction. The project-associated improvements included new bike lanes on city streets in selected areas, incorporating existing hike and bike trails, rebuilding existing streets, constructing new street segments, and constructing new hike and bike trail segments. In addition, the city planned to improve utilities during some of the street construction. An early part of the Mission Trails project was the conversion to underground electrical utilities at four of the missions, during which CAR also provided archaeological services to the city through City Public Service. The results of CAR’s involvement in this earlier part of the Mission Trails project (Tennis 2001) will be discussed briefly in Chapter 5 (Summary and Conclusion).

The hike and bike trails were planned in a series of five Construction Packages. Construction Package 1 included the installation of hike and bike lanes and multipurpose roads (drive, hike, and bike lanes) connecting Mission Espada with Mission San Juan and drainage improvements in the area (see Cargill et al. 2004). Package 2 covered street and drainage improvements along Mission Road between SE Military Drive and Southcross Boulevard, street and drainage improvements of a section of Roosevelt Avenue near Mission San José, construction of a hike and bike trail along Padre Drive from VFW Boulevard to SE Military, and a new hike

and bike trail along the river between E. White Avenue and Padre Park. Package 3 involved trail and street improvements near Mission Concepción, including construction of a new hike and bike path from Mission Road to Concepción Park. Package 4 covers future work involving the installation of hike and bike lanes on Mission Road and South St. Mary’s Street between Mitchell Road and East Market Street. Package 5 will consist of the placement of signage along the entire system. The CAR will not be involved in archaeological services associated with Packages 4 and 5.

Because the road, trail, and utility construction are near the missions and other historic places, including National Register of Historic Places (NRHP) and State Archeological Landmark (SAL) properties, archaeological services were required so that all participating parties complied with the Programmatic Agreement Regarding the Implementation of Transportation Enhancement Activities under the Intermodal Surface Transportation Act of 1991. This agreement was executed in 1994 between the Advisory Council on Historic Preservation, the Federal Highway Administration, the Texas State Historic Preservation Office, and the Texas Department of Transportation (TxDOT) and required compliance with all pertinent historic preservation regulations, particularly Section 106 of the National Historic Preservation Act of 1966 (as amended) and the City Historic Preservation Ordinance. In September 1998, the City of San Antonio, through its Department of Public Works, contracted with CAR to provide the archaeological services required on the project. Fieldwork on Packages 1 and 2 continued intermittently from October 2000 to April 2005.

Briefly, the Scope of Work (SOW) required CAR to (1) perform archival research and examine previous archaeological reports to determine Areas of Concern, i. e., areas within the project area where there was reason to suspect that significant cultural resources might be present; (2) perform archaeological surveys within these Areas of Concern to determine whether the planned project would adversely impact historic or prehistoric sites and/or features within sites, and, if so; (3) perform investigations to determine the significance of the cultural deposits to be adversely impacted and make recommendations for further work if necessary; (4) perform any further work required by the Texas Historical Commission (THC), under a treatment plan designed in collaboration with TxDOT and the THC; and (5) monitor construction work in sensitive areas that might contain unknown historic or prehistoric archaeological sites.

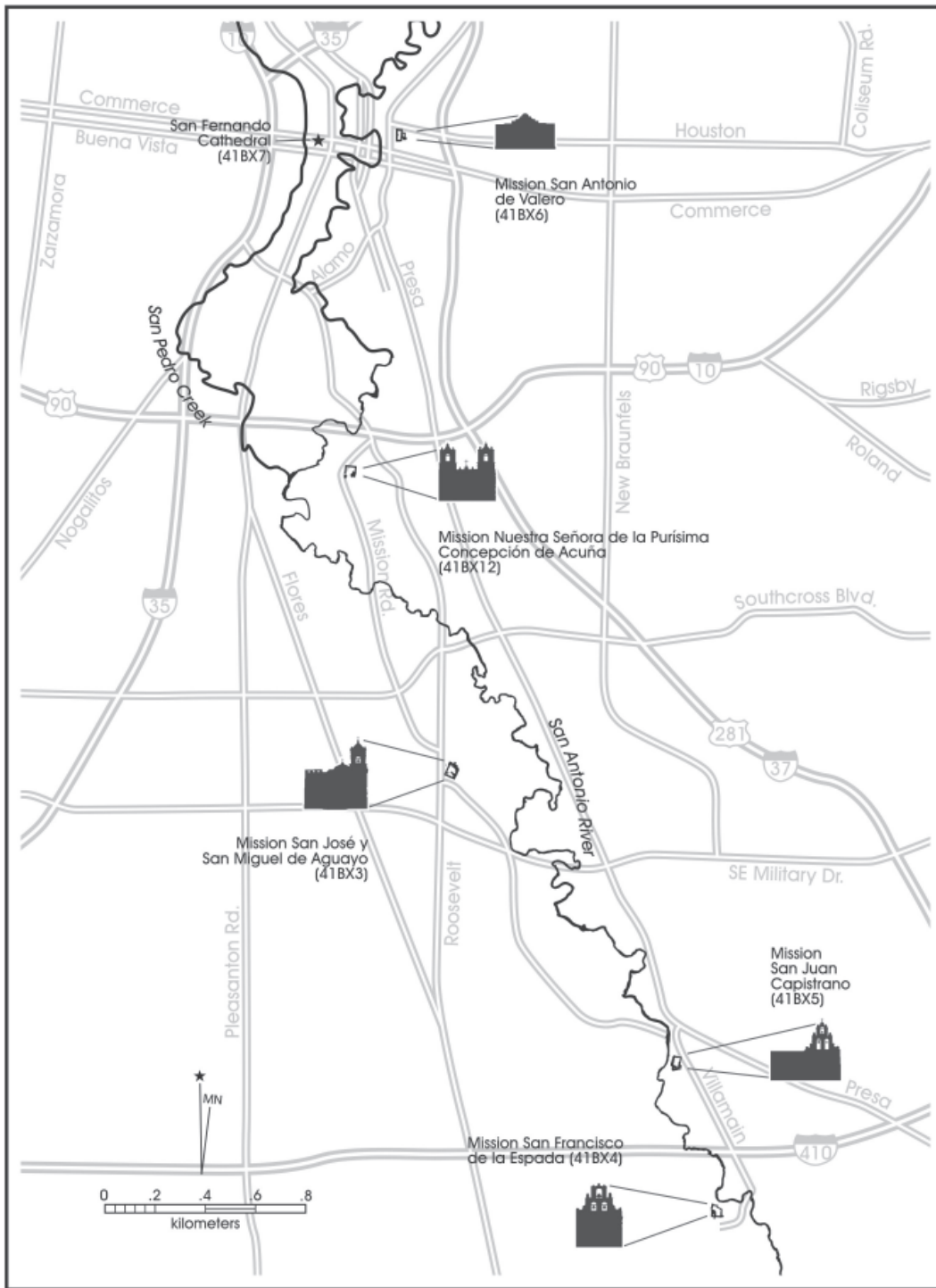


Figure 1-1. Locations of the five Spanish Colonial missions in San Antonio.

Interim reports on some of the work done for this project have been prepared (Meissner 2002; Weston 2002). This report incorporates such interim reports along with other work done by CAR related to Construction Packages 2 and 3 and is organized around these Packages.

Before outlining each Package, however, it is necessary to provide a brief history of the San Antonio River Rechannelization Project. Although the Mission Trails project concerns the modern river channel, the historic and prehistoric past that is the focus of this report concerns the

river as it was before rechannelization. An understanding of where the river once ran and how rechannelization affected historic and prehistoric sites along its course must lie at the base of all research conducted as part of the Mission Trails project.

The remainder of this chapter will include descriptions of Packages 2 and 3, including maps and a discussion of the Areas of Concern that were defined based on information found during the archival research (Cox 2000). Chapter 2 provides pertinent background information with emphasis on Missions Concepción and San José and a discussion of previous archaeological work done in each Package area. A summary of Volume I (Cargill et al. 2004) concludes Chapter 2. Chapter 3 describes the methods used during the project. Chapter 4 discusses the results of work in each of the Package areas. Chapter 5 summarizes those findings and includes recommendations concerning future work around the missions.

The River Channelization Project

The geo-physiographic location of Texas and modern weather systems combine to make flooding a common occurrence in the state. Six of the known twelve worst short-term (48 hours or less) flood events in the world occurred in Texas (Flood Safety Education Project 2006). The Balcones Escarpment in Central Texas is one of the most flash-flood prone areas in North America due to a combination of factors (Bomar 1994:65; Caran and Baker 1986). Intense, but usually short-duration, rainfalls punctuate an otherwise semi-arid environment in an area (the edge of the Edwards Plateau) where shallow clay soils and limestone outcrops result in massive runoff into the many creeks draining the Balcones Escarpment in northern Bexar County. These in turn converge in and near downtown San Antonio. In the past, this has resulted in devastating floods. Beginning in the early twentieth century, increased population led to increased concern about the loss of life and damage to property inherent in these flood events. A series of six major floods in seven years (1914-1921) moved flood control to the forefront of city political agendas (Eckhart 2006a).

The flood of September 1921 covered most of downtown San Antonio in 2 to 10 ft. of water and killed 50 people. By 1929, two major flood control projects had been completed. The Olmos Dam, just north of downtown, was designed to hold floodwaters so that they could be released slowly. A cutoff across the neck of the big loop of the river that encompassed the center of town was excavated in an effort to force flood waters to move straight downstream, theoretically sparing

the business and government district (Eckhart 2006a). The latter project was the first event in the rechannelization of the river. Another major flood in 1946, spurred more flood control projects. In 1954, Congress authorized the Army Corps of Engineers to continue rechannelization (San Antonio River Authority 2006). The purpose of the project was to widen and straighten the San Antonio River channel to allow floodwaters to drain rapidly from the central San Antonio area. The project, which took place over twenty years, covered 31 miles of the river and turned the meanders of the river into a more or less straight channel. Figure 1-2 shows the changes in the river channel within the Package 2 and Package 3 area. Most of the old river meanders were filled, but a few, including a portion adjacent to Padre Park, remain as oxbows to collect storm water runoff that is fed into the new river channel.

The rechannelization did provide greatly improved flood protection for downtown San Antonio, but destroyed much of the beauty of the river (Figure 1-3). As Eckhart (2006a) notes, “in this area the River looks more like a drainage channel than a natural river.” Plans are currently underway to create a linear green space from Breckenridge Park in downtown San Antonio to Mission Espada, including an attempt to restore some of the natural beauty of the river while maintaining its function for flood control (San Antonio Channel Improvement Project 2006).

Areas of Concern

During the archival research, CAR defined a number of Areas of Concern as places where the Mission Trails project might have an adverse impact on important historic and prehistoric sites (Cox 2000). During the construction planning stages, special consideration was given to these areas in efforts to do as little damage as possible in these areas. The Scopes of Work for each Package listed these areas and addressed each according to its specific circumstances. In some cases, changes in the original routes of the Mission Trails project meant that an Area of Concern would not be impacted. Areas of Concern that seemed especially sensitive were tested before construction. Other Areas of Concern were monitored during construction. All Areas of Concern within the project area identified from the archival research are described below. Areas of Concern associated with Package 2 are followed by those from Package 3.

Areas of Concern associated with Package 2

Package 2 covered work done on two automobile routes along Mission Road and Padre Drive and the

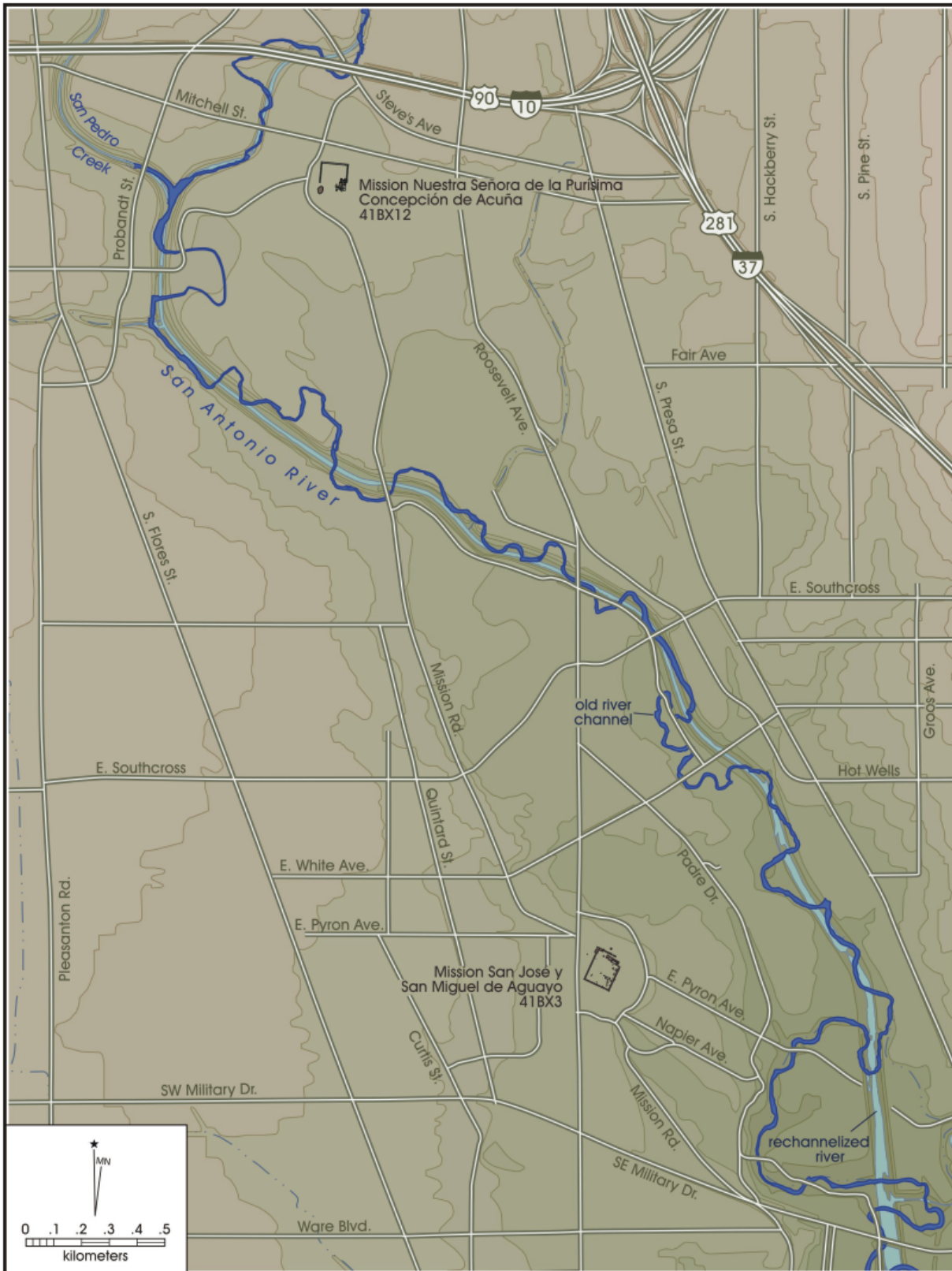


Figure 1-2. The portion of the San Antonio River in the Mission Trails Enhancement Project, Package 2 and 3 area, showing the old river channel and the rechannelized river.

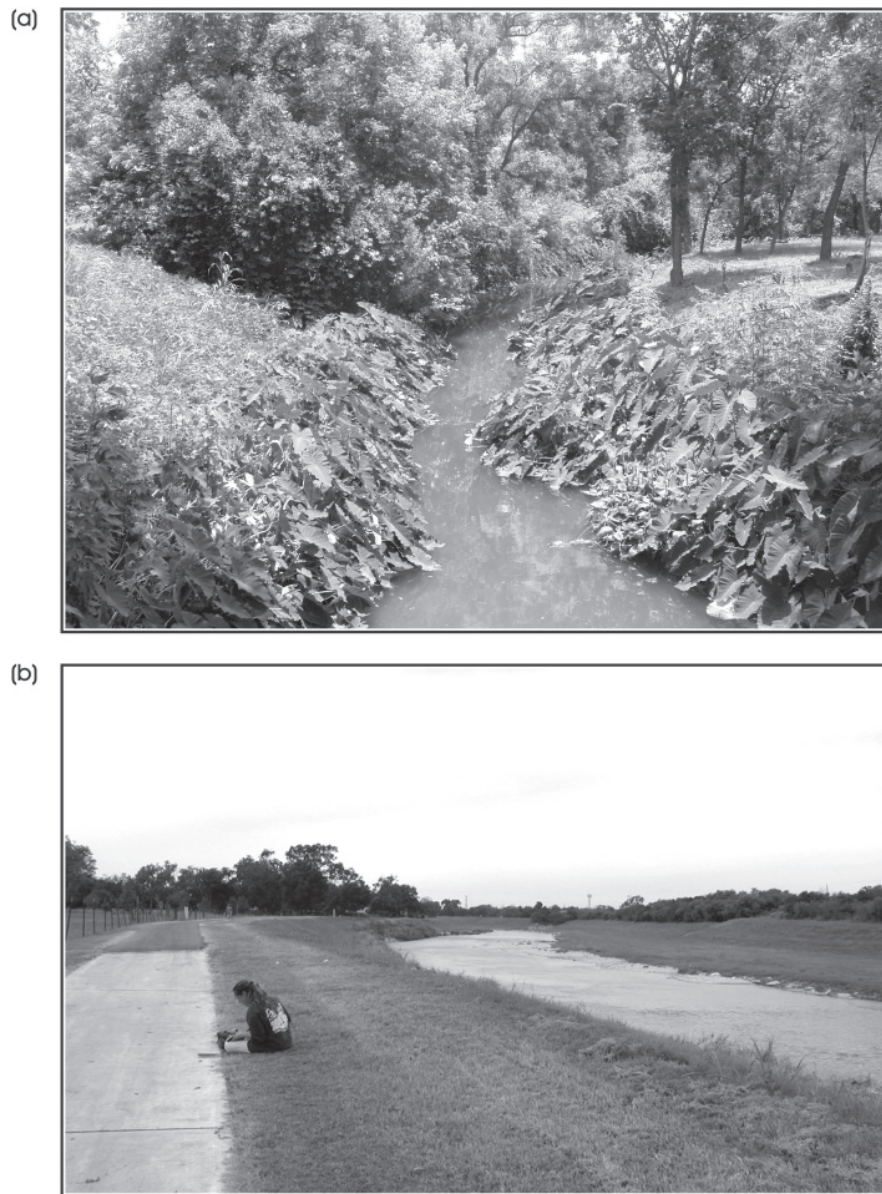


Figure 1-3. (a) View of old channel of the San Antonio River near Padre Park, looking south from the Pyron Street bridge; (b) CAR staff working near the rechannelized river adjacent to Padre Park, looking northeast.

extension of a hike and bike trail along Mission Parkway. The Direct “dry” Route followed Mission Road from just south of SE Military Drive north to Southcross Boulevard. A Scenic “wet” route included Padre Drive from a new extension linking it to SE Military Drive north to VFW Boulevard. An existing hike and bike trail was expanded south along Mission Parkway to an old river channel in Padre Park, and from there, crossed through the park west to Padre Drive. The trail follows Padre Drive south to join an existing hike and

bike path adjacent to Mission Parkway near SE Military Drive (Figure 1-4).

Pyron Homestead (41BX279)

The planned extension of Padre Drive along the Scenic wet route necessitated new road construction and significant subsurface disturbances near the Pyron Homestead. The new segment extended Padre Drive south 240 m to intersect it with SE Military Drive near Mission Road, rather than following the old San Antonio River channel around to the east (Figure 1-5). Although the planned Scenic route did not directly impact the site of the old Pyron house (41BX279), the extension of Padre Drive south to connect with SE Military Drive passed in the vicinity of the now-raised structure and crossed the area between the home and the old San Antonio River channel (Figure 1-5). An on-site inspection of the property in the early 1990s revealed that the foundation of the home remained just below surface level (Cox 1992). No testing had been done at the site.

The construction cut through the approximate center of the Pyron Homestead. Given the projected impact of the proposed construction, archaeological survey including shovel testing was needed to determine the nature of the archaeological remains in the proposed right-of-way (ROW) and assess the potential impacts of the construction upon these resources. This survey and testing was conducted as part of the Package 2 phase of the project between October 8 and 18, 2002 (Weston 2002).

Mission San José (41BX3)

The path of a portion of new hike and bike trail crosses the area immediately to the south of the Mission San José compound near the Visitor’s Center (Figure 1-5). This portion of the hike and bike trail is located approximately 50 m from the mission’s south wall (Figure 1-6). The path of the new



Figure 1-4. Map of Scenic and Direct routes of the Mission Trails project covered by Construction Package 2, showing Areas of Concern.

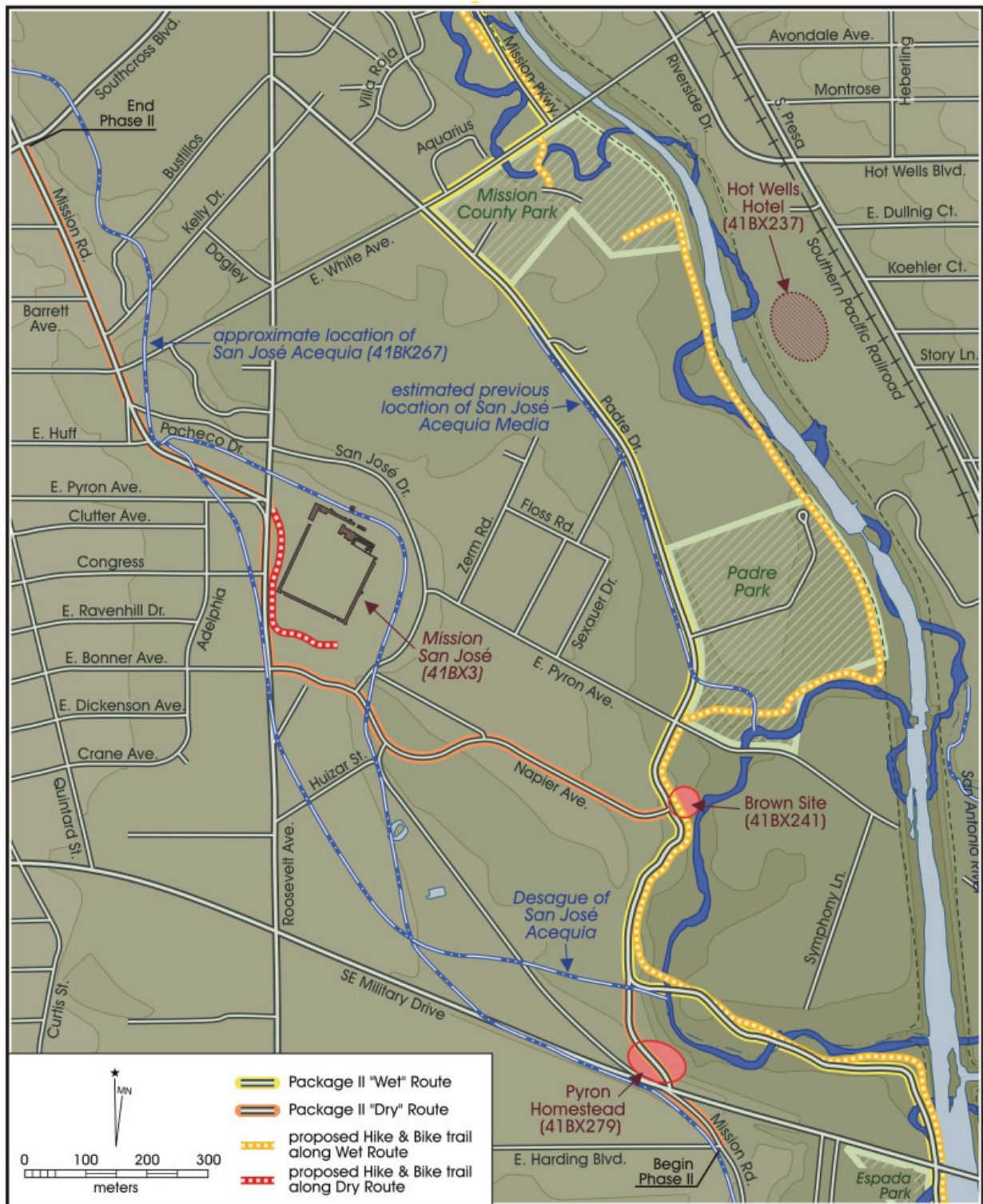


Figure 1-5. Closer view of the Package 2 Areas of Concern.

hike and bike trail turns north running for approximately 200 m between the mission’s west wall and Roosevelt Avenue (Figure 1-7). The areas near the south and west walls of Mission San José have been surveyed and tested by

numerous archaeological projects (Hafernack and Fox 1984; Hard et al. 1995; Henderson and Clark 1984; Schuetz 1970; Tennis 1998; Tomka and Fox 1998, 1999; Tomka et al. 1999). These reports are discussed in more detail in Chapter 2. Here,



Figure 1-6. CAR archaeologist writing notes by shovel test south of Mission San José.

we discuss three specific areas of concern identified near the mission: a colonial midden deposit, a foundation trench, and a burial site.

Colonial Midden Deposits

There was a potential that two areas of known Colonial midden deposits near Mission San José would be affected by the Mission Trails project. Several previous projects, especially Tomka and Fox (1999) and Tomka et al. (1999), reported dense cultural deposits, including undisturbed Colonial deposits, along the south wall of the mission compound. Dense midden deposits were also noted by Schuetz (1970:8-12) along the central area of the west wall, south of the old main entrance near the granary. Both these deposits decrease in density as a function of distance from the wall. Though CAR suggested that artifacts in the area of the new hike and bike trail would be both relatively sparse and in disturbed context, they concluded that the Mission Trail modifications could impact previously unidentified, historic Colonial deposits.

Foundation Trench

In 1981, archaeologists from the State Department of Highways and Public Transportation conducted test excavations to the south and southeast of Mission San José (Henderson

and Clark 1984:Figure 16). In a location approximately 127 m south of the mission's south wall, a trench containing a number of postholes was uncovered and mapped. These postholes were assumed to represent the walls of a possible corral at this location. This trench was located not far south of the planned route of the new hike and bike trail.

Burial

During the same 1981 excavations, a human burial disturbed by a utility trench, was found on the west bank of an *acequia*, 220 m from the southeast corner of the mission wall (Henderson and Clark 1984:Figure 13). An iron belt buckle near the waist helped to date the burial as post-Contact and very probably post-Colonial. The archaeological

assessment concluded that this burial likely represented an isolated grave, but might also be a part of a previously unrecognized cemetery. Although the current project was not expected to be anywhere near the location of this burial, there was considerable concern that other single burials might be found near the mission. Both shovel testing and monitoring of the construction near the walls of the mission was recommended.

The Brown Site (41BX241)

The multi-component Brown Site sits between Padre Drive and the old San Antonio River near Napier Ave (Figure 1-5). The proposed Hike and Bike Wet route cut through the western edge of this site for 50m. Previous surveyors found the site could retain some integrity around a well and house foundation. Little additional information existed regarding this site and the extent of the prehistoric materials was poorly defined. CAR recommended shovel testing on the site.

Acequia Media

The Acequia Media is a small branch of the San José Acequia that watered the upper fields of the mission between the river and the San José Acequia (Figure 1-5). The upper portion of this ditch is known only from the records of a land division of the grants of the Huízar family recorded in 1882 in the



Figure 1-7. View of area between west wall of Mission José and Roosevelt Avenue in 2002, with footprint of new hike and bike trail staked (looking north).

field notes of a survey by J. W. Garretson, County Surveyor (Almaráz 1989:43; Bexar County Deed Records 2006: Volume 22, 242). The *acequia* reentered the river near where the new section of the hike and bike trail passes the old part of the river, though the exact location was unknown.

The location of this *acequia* supports the assertion that the second site of Mission San José may have been near the upper portion of the *acequia* (Scurlock et al. 1976:133). However, no archaeological evidence has been recovered to identify definitively the second location. There is little chance that this mission was located within the project area; however, the Mission Trails Scenic Route along Padre Drive passes near a section of the lower part of the Acequia Media that is an important cultural resource (Cox 2005:30). Therefore, CAR recommended survey of the area near the river bend to pinpoint the *acequia*'s confluence with the river.

Padre Park

Although most of the new hike and bike trail along the river from E. White to Padre Park was planned to run along a rechanneled part of the river, the trail within Padre Park would be located very near an old loop of the river, where both historic and prehistoric sites might be located. To

ensure that significant cultural deposits or features were located and evaluated before construction CAR recommended survey and shovel testing of this area (Figure 1-5).

Areas of Concern Associated with Package 3

Package 3 covered the Mission Trails system from Mitchell Street just north of Mission Concepción, along Mission Road to just south of the Mission Road bridge. It also included the Scenic “wet” route trail to Concepción Park (Figure 1-8).

The Battle of Concepción

The Battle of Concepción was the first conflict of the Siege of B́exar fought between the Texan and the Mexican forces in late 1835 (Figure 1-8). The Texans, who had been sent from

Stephen F. Austin's temporary headquarters at Mission Espada to locate a protected position for the planned assault on San Antonio, selected a spot that appeared suitable, where a large bend of the river west of Mission Concepción formed a natural cul-de-sac about 100 yards across (Barr 1990:22; McKeehan 2003). For many years tradition dictated that the battle took place in what is now part of Concepción Park; however, other historic research (Ramsdell 1947) suggests that the site of the battle may have been further north, between Mitchell Road and Interstate Highway 10. The location of the battle is discussed in more detail in Chapter 2.

In order to avoid impacting material from the Battle of Concepción and any sites near Concepción Park, CAR recommended shovel testing prior to subsurface alterations for trails or drainage improvements planned in this area. Monitoring of actual construction work along this portion of the planned scenic route was also recommended.

Poor Family Cemetery (41BX264)

A map in Scurlock et al. (1976:158) indicated that the Poor Family Cemetery is located west of Mission Road just south of the river crossing, near a small remaining portion of the old San Antonio River channel (Figure 1-8). It was approximately 50 ft. above the bank in a wooded area on the west side of the channel. The cemetery served as the Poor family burial

site and reportedly dates to the period from 1865 to 1920 (Scurlock et al. 1976:158).

CAR recommended confirming the location of the cemetery and rerouting the Scenic trail to avoid the area. If rerouting was not possible, all work in the area should be closely monitored.

Acequia Crossings on Mitchell Road

Part of the Mission Trails project included new utility placement and the repaving of Mitchell Road just north of Mission Concepción. The main Concepción Acequia (also known as the Pajalache Acequia) crossed Mitchell Road somewhere east of the Mission. In addition, there may have

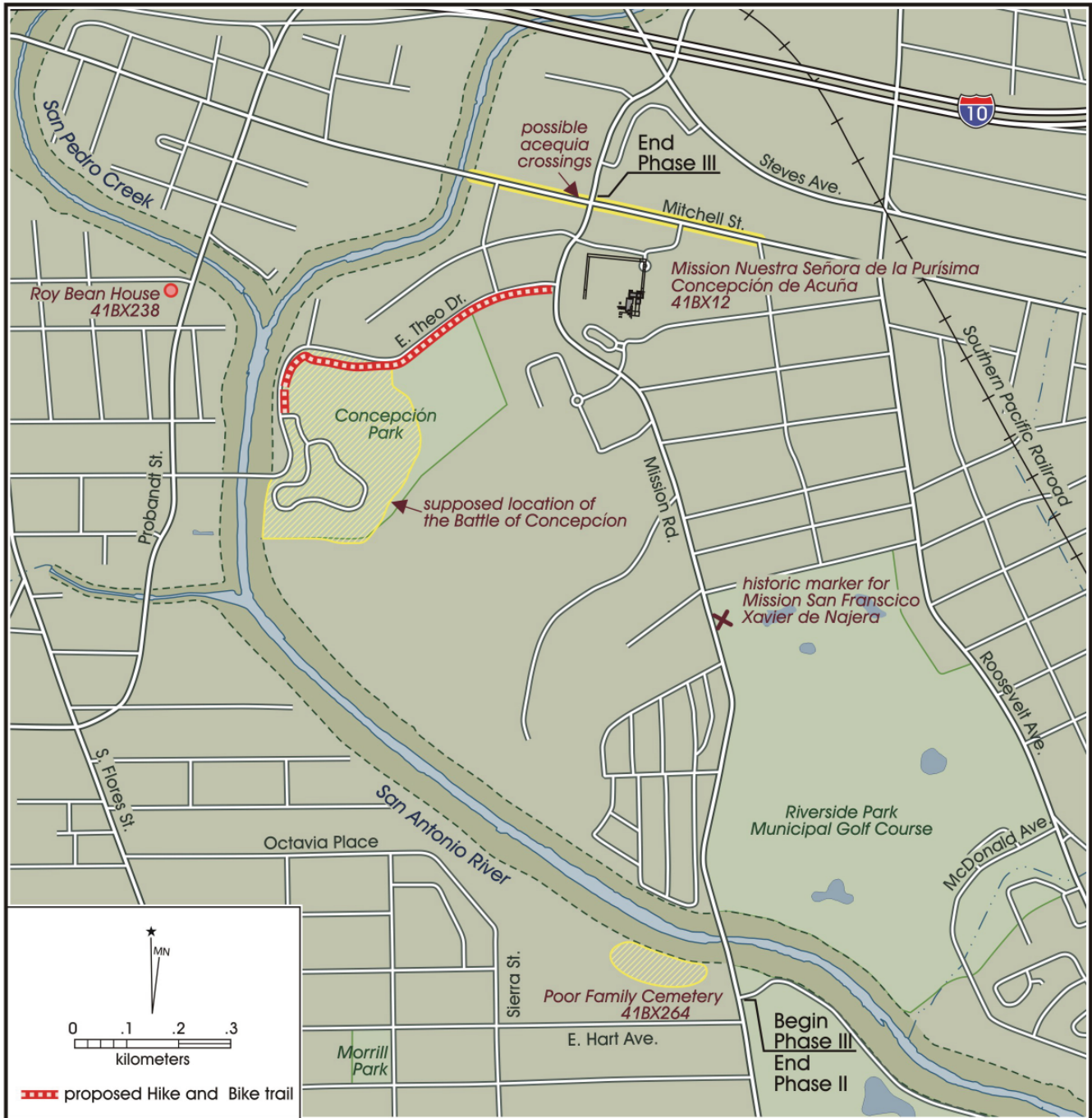


Figure 1-8. Map of Direct and Scenic routes of Mission Trails covered by Construction Package 3, showing Areas of Concern.

been evidence of a *desague* from the San Pedro Acequia and a portion of a small *acequia* rerouted in the latter part of the nineteenth century. Monitoring was recommended during the utility placement along Mitchell Road.

Mission San Francisco Xavier de Nájera

On the east side of Mission Road across from the Blessed Sacrament Academy is a State Historical Marker commemorating the possible site of Mission San Francisco Xavier de Nájera (Figure 1-8). This marks what was believed to be the site of the mission proposed by the Marqués de Aguayo at the request of his guide Chief Rodríguez for the Native Americans of Ranchería Grande. In 1722, the chief returned to the area with 50 families of Sanas for the new mission, but due to a lack of interest on the part of the Native Americans the mission never fully developed (Habig 1968a:78-79).

In 1936, a historic marker was placed on Mission Road north of the river, commemorating this mission (THC 2006).

However, current research has established that Mission San Xavier actually occupied the site that later became the location of Mission Concepción (de Almazán 1731:20) and had probably been built on the first site of Mission San José (Ivey and Fox 1999:45-46). As the Direct route of the new Mission Trail followed the existing route of Mission Road in this area, monitoring was considered necessary only if new excavations extended below the level of the previously disturbed street or if utility trenches away from the roadway were required.

Additional Work Associated with Package 3

Utility trenches were proposed to contain storm drain outflow to the river east of the Mission Road bridge where historic or prehistoric sites may have been capped with fill during river rechannelization. Because the proposed utility trenches lay 3 m (9 ft) deep, CAR was requested to test the route of the planned trench to identify any potential impact on such sites (Meissner 2002). This work was done on October 31, 2000.

Chapter 2: Background

The first part of this chapter provides a very brief historical review of the two missions associated with the Package 2 and 3 construction: Mission Concepción and Mission San José. It also gives a brief history of some of the Areas of Concern mentioned in Chapter 1, in particular, the Pyron House and the Battle of Concepción. The second part of the chapter provides summaries of past archaeological projects completed in the area. The third part summarizes the results of the investigations reported in Volume I of this series (Cargill et al. 2004).

History of Areas of Concern

History of Mission San José

By Anne A. Fox

During the period between 1718 and 1731, the Spanish founded six missions (one of which, San Francisco Xavier de Nájera, failed within two years) along the San Antonio River, as part of a program intended to turn this wild northeastern part of their New World realm into a place that would entice more settlers.

The first mission, San Antonio de Valero, was founded near San Pedro Springs on May 1, 1718, followed four days later by the establishment of Presidio San Antonio de Béxar and the civil settlement Villa de Béxar (Schoelwer 2001). The mission was moved at least twice, eventually settling in its current location, which lay across the river from the little town and the presidio (Habig 1968a:84). It was around those three institutions that the city of San Antonio developed, though the community was originally intended primarily as a secure way station along the road from central Mexico to the more important settlements along the border of French Louisiana. When the French forced a retreat from east Texas the next year, it was to Mission San Antonio that the ousted Franciscan missionaries came. A member of this group was Fr. Antonio Margil de Jesús, who soon requested permission to begin a new mission for those Coahuiltecan bands that did not want to settle with the groups already at Mission San Antonio (Habig 1968b:26). Mission San José y San Miguel de Aguayo was founded in February 1720 on the east bank of the San Antonio River about 3.5 miles south of Mission San Antonio de Valero. By the following spring, 227 Native Americans resided there (Habig 1968a: 86).

The mission was moved across the river to a second, currently unknown, location a few years later, and then moved again to its current location by 1727. As mentioned in Chapter 1, it is believed that the short-lived Mission San Francisco Xavier was located on the first site of San José and that Mission Concepción was later located on the same spot.

During the 70 years after 1727, a granary, a friary, stone houses for Native American neophytes, and a stone church were built (Habig 1978). In 1768, the population had risen to 350 (Habig 1968b:55). The mission was enclosed by a series of apartments comprising quarters for neophytes forming a walled enclosure with gates at each corner and two bastions on diagonal corners (Habig 1968b:55). The Native American population began to decline in the last quarter of the eighteenth century, and by 1789, only 106 Native Americans remained in residence. Secularization of the mission began in 1794, when the property was divided among the remaining 93 Native Americans (Habig 1968b:102).

During the nineteenth century, the population consisted of local families, both the descendants of the Mission families and others who had taken up residence in and around the mission. A gradual decline in use and a lack of interest on the part of San Antonians allowed deterioration of the mission buildings. Stone robbing took most of the stones from the walls of the old neophyte quarters. Even the church was neglected, resulting in the collapse of the north wall in 1868, which in turn caused the collapse of the dome in 1874 (Habig 1968a:148-149). Figure 2-1 is a photograph taken April 25, 1915, showing the lack of a dome and sunlight pouring through the front door from inside the building because of the collapse of the north wall. The tower partially collapsed in 1928, but was immediately rebuilt (Habig 1968b:153).

In the early 1930s, Bexar County obtained title to the various plots of land in the vicinity to create a park and the Civil Works Administration (CWA) began reconstruction of the original south, west, and east walls of the mission, including the Native American quarters. By the time the CWA began reconstruction of the mission little was left above ground of the mission compound but the church, some of the friary and the granary.

In 1941, the entire site was acquired by the State of Texas, and San José was designated a National Historic Site (Habig



Figure 2-1. *Photograph of Mission San José before reconstruction, April 1915. From the Robert Runyon Photograph Collection, [04151], courtesy of The Center for American History, The University of Texas at Austin. Available online at <http://runyon.lib.utexas.edu/r/RUN04000/RUN04100/RUN04151.JPG>.*

1968b:185-186). In 1983, San José was combined with the other missions south of the Alamo into the San Antonio Missions National Historic Park.

History of Mission Concepción

As mentioned above, there is reason to believe that the Mission Concepción site was used by the Spanish prior to the establishment of that mission in 1731. Ivey and Fox (1999) suggest that this site may have been occupied by both Mission San José at its initial founding and the short-lived Mission San Francisco de Xavier.

Concepción was the second of six Franciscan missions established on both sides of the present Texas-Louisiana border by the Ramón expedition of 1716-17. After an official inspection tour in 1727, General Pedro de Rivera y Villalón recommended partial abandonment of East Texas, drastic

cuts in expenses, and the closing of Presidio Nuestra Señora de los Dolores de los Tejas. Rivera's recommendations were put into effect in 1729. The Superior at the Querétaro College in Mexico requested permission from the viceroy to remove the three missions to a more suitable location. By July 1730, the missions were relocated at the Colorado River in hopes of attracting Native Americans in Central Texas. Conditions proved to be unfavorable on the Colorado, so the missions were moved to the San Antonio area a few months later (Habig 1968a:119-124).

On March 5, 1731, one of these missions was reestablished on the east bank of the San Antonio River and renamed Nuestra Señora de la Purísima Concepción de Acuña in honor of Viceroy Juan de Acuña, Marqués de Casafuerte (González 1996:1070). An epidemic in 1739 reduced the inhabitants of Concepción from 250 to 120 (Habig 1968a:126). The missionaries went on a determined recruitment trip to the coast and by late in 1740 they recorded 210 Native Americans

living at the mission (Habig 1978:92). By 1745, the report of Fray Francisco Xavier Ortiz recorded a stone wall surrounding the mission compound at Concepción. Inside, there were already a few stone structures and a new stone church was half finished. Outside, the irrigated fields produced 800 bushels of corn a year plus large quantities of beans and other vegetables. The mission's ranch was also well stocked with cattle and horses (Habig 1968a:129). By Ortiz's second visit in 1756, the church had been completed and dedicated on December 8, 1755. Most of the 247 residents lived in adobe houses. Orchards had been planted, and cotton was becoming a staple crop. The mission had 40 yokes of oxen, more than 700 cattle, and 1,800 sheep. About 200 Native Americans, newcomers from the coastal group nicknamed *Manos de Perro*, were expected (González 1996:1071).

By the time the San Antonio missions were desecularized in 1794, the native population at Concepción had dwindled to 41 (González 1996:1071). The church buildings were placed under the care of the missionary from San José. Religiously, Concepción was reduced to a sub-mission of San José; politically, it came under the control of the civil authorities of San Antonio (Habig 1968a:141-145). In 1813, the revolutionary forces of Bernardo Gutiérrez de Lara chose Concepción as headquarters. Most of Concepción's records, kept at San José, were destroyed during this revolution (González 1996:1072).

Mexican independence brought final secularization. The new government issued the decree on September 13, 1823. With the exception of the church and fifteen acres of land, all mission property was sold at auction by the government (González 1996:1072).

For many years the mission and its church were unused except, occasionally, as a cattle barn (Habig 1968a:148). General Stephen F. Austin made his headquarters at the church for a brief period after the Battle of Concepción in 1835, which was fought nearby (Austin 1907). By the mid-nineteenth century, the Catholic Church briefly owned the property again before transferring it to the Brothers of Mary, who controlled it into the twentieth century. The Sisters of Charity of the Incarnate Word ran an orphanage and eventually built a convent there (Habig 1968a:149-154). The mission became a part of the San Antonio National Historical Park under the National Park Service in 1983.

Despite years of abandonment in the nineteenth century, the church at Concepción withstood the centuries well and is the only mission church in San Antonio that was not reconstructed. It is believed to be the oldest unreconstructed stone church in the United States (González 1996:1070).

The Battle of Concepción, October 28, 1835

On October 11, 1835, Stephen F. Austin was elected commander-in-chief of the Army of the People (Barr 1990:6), also known as the Army of Texas (Austin 1907). At that time, the rebellious Texans were still referring to themselves as "Federalists" with goals to restore the Mexican Constitution of 1824 and prevent Santa Anna from further consolidating his power.

Austin planned to take control of San Antonio, usually called Béxar or Béjar at the time, and force the Mexican military out of Texas (Barr 1990:7). To this end, he took 300 men and began a slow and careful approach from the town of Gonzales to San Antonio, sending out scouts before each move and trying to ensure that his small contingent of volunteers would not be caught by surprise (Barr 1990:10, 15). In the process, he gained more recruits so that by the time he was encamped at the remains of Mission Espada, he had about 400 men. He wrote the following orders from Espada:

Head Quarters, Mission Espada, October 27th, 1835. Colonel James Bowie, Volunteer Aid:

You will proceed with the first division of Captain Fannin's company and others attached to that division and select the best and most secure position that can be had on the river, as near Béjar as practicable to encamp the army tonight, keeping in view in the selection of this position pasturage and the security of the horses, and the army from night attacks of the enemy.

You will also reconnoiter, so far as time and circumstances will permit, the situation of the outskirts of the town, and the approaches to it, whether the houses have been destroyed on the outside, so as to leave every approach exposed to the raking of cannon.

You will make your report with as little delay as possible, SO AS TO GIVE TIME TO THE ARMY TO MARCH AND TAKE UP ITS POSITION BEFORE NIGHT [emphasis in the original]. Should you be attacked by a large force send an express immediately with the particulars.

S. F. Austin By order. P W Grayson, Aid-de-camp [Austin 1907].

Ninety-two men followed Bowie and Fannin north along the river. They decided on a place where a large bend of the river west of Mission Concepción formed a natural cul-de-sac approximately one hundred yards across. The river was 6 to 10 ft. below the flat plain that extended east to the mission. Rather than returning to the main army at Espada as ordered, Bowie decided to camp at the river bend. He placed Fannin's company along the southern portion of the bend and Colman's men along the northern curve, enabling them to provide crossfire across the plain. Aware that his position left him vulnerable to a surprise attack from the forces of General Martín Perfecto de Cós, the commandant of the Mexican forces in San Antonio, he posted a sentry in the tower of the mission and pickets from each company (McKeehan 2003).

General Cós decided to move upon the small force before they could be reinforced by the main body of the army. He dispatched Colonel Domingo de Ugartechea with a total of about 400 men and 2 cannons. The morning of October 28, 1835, the countryside was wrapped in a dense fog (McKeehan 2003). Mexican infantry approached from the south, between the Texans and the Mission, while cavalry were placed along the west bank of the river to cut off retreat (Figure 2-2). The Texans crouched below the river bank, which formed a natural trench, while musket balls, canister, and grapeshot swept the pecan trees over their heads (Barr 1990:24; *A Visit to Texas in 1831* 1975:172).

Sharpshooters with Texan long rifles devoted their attention to the gunners and quickly silenced the artillery. As Fannin's position began to draw heavy fire, Bowie maneuvered Colman's men into position to offer them aid. Faced by the additional firepower, the Mexican force faltered. The infantry attempted to bring pressure, but Texan rifles were hitting them long before their smoothbore muskets were in range (Barr 1990:26). One eyewitness claimed the Mexicans' gunpowder was so bad that some Texans were hit by bullets that did not have the velocity to pierce their skin, leaving only a bruise (*A Visit to Texas in 1831* 1975:173). The Mexicans began to fall back. Taking advantage of this retreat, Bowie led a headlong charge against them and was soon able to turn one of their own cannons upon them. The first conflict of the Siege of Béxar ended. Only one Texan had been killed (McKeehan 2003).

Reports of how many Mexicans were killed vary. Austin (1907), in his official report, claimed 16 were left on the field with reports of as many more carried away. Bowie (McKeehan 2003) claimed the number was about 67. A count of 27 bodies with about 20 believed to have been carried away or thrown in the river was made in a report that is by far the most interesting contemporary account of the battle. This

is a secondhand account told to an anonymous writer that appeared in the second edition appendix of *A Visit to Texas in 1831* (1975), which originally was published in 1836, after the war in Texas was over. This account from an eyewitness is the most detailed of all the reports that were made at the time. The account is of particular interest as it is one often missed by historians, because the battle is described as the Battle of Salado and the author confuses Mission Espada and Mission Concepción. However, every detail described in other accounts is mentioned with new descriptions such as the poor quality of the Mexican gunpowder. This was described as "little better than pounded charcoal" (*A Visit to Texas in 1831* 1975:174).

Regardless of the number of Mexicans killed in the battle, there is no doubt that the result of the battle made a great impression on both the Texans and the Mexicans. Though the Texans had been outnumbered roughly 3 to 1 and had placed themselves in an area blocked from retreat, they won the battle.

Two markers, one honoring Richard Andrews, the first Texan casualty of the war, and the other noting the site of the Bowie/Fannin camp, were placed in Concepción Park (THC 2006; Walraven and Walraven 1993:41), where tradition stated the battle had taken place. While conducting the historic research for this project, it was noted that the map of the battle in Barr (1999:23) seemed to indicate that the battle did not take place in what is now Concepción Park but in another bend of the river further north. Barr's (1990) map was based on one in Andrew J. Houston's book *Texas Independence* (1938). Houston's map is shown in the top figure of Figure 2-2. Houston, the son of Sam Houston, included a number of "military" maps in his book, one of which depicts the Battle of Concepción. However, no specific reference to the source of the information in the map is given by Houston, whose description of the battle was apparently based on Bowie's report rather than Austin's (see McKeehan 2003 and Austin 1907).

In any case, Figure 2-2 shows that the map is a fairly accurate description of the old river before rechannelization. Barr describes the battle location as one-quarter mile west of Mission Concepción "where the river curved in a horseshoe away from the mission" (Barr 1990:22). Two places fit this description. One is at the point where San Pedro Creek enters the river across from Concepción Park, and the other is further north. Both bends are roughly one-quarter mile, to the southwest and northwest respectively, from the mission. According to Houston's (1938) map, the battle took place in the northern of these two bends. The unnamed eyewitness in *A Visit to Texas in 1831* (1975) mentions that the site Bowie

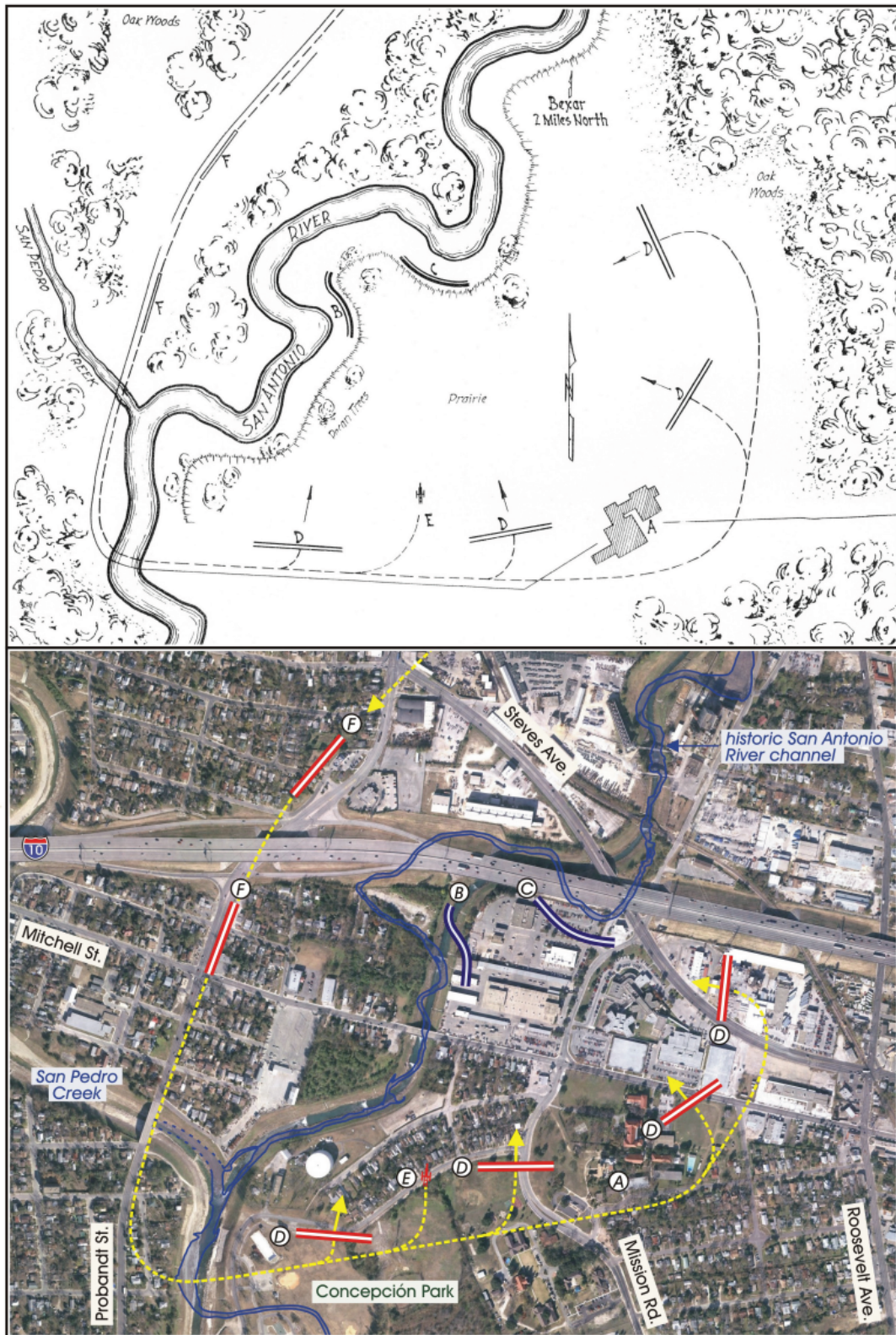


Figure 2-2. Maps of the Battle of Concepción. Top figure from Houston (1938). Bottom: Reconstruction of Houston map (top) overlaid on 2005 aerial photograph of the project area. For both maps: (A) Mission Concepción, (B) Captain Fannin's Company, (C) Captain Colman's Company, (D) Mexican infantry, (E) Mexican cannon, (F) Mexican dragoons.

chose for his camp was a quarter-mile “beyond” the mission. Since they were coming from the south, “beyond” likely refers to points north of the mission. This location is approximately half a mile north of Concepción Park. Rechannelization cut across this bend, and IH 10 now covers the original northern half, where Houston’s (1938) map places Captain Colman’s company at the beginning of the battle.

We are not the first to notice the discrepancy in the maps and records and the traditional placement of the battle in what is now Concepción Park. In 1947, Charles Ramsdell, a local historian, wrote an article for the Express Magazine of the San Antonio Express newspaper conveying his belief that the battle took place in the more northern bend of the river (Ramsdell 1947).

The research needed to settle this question of the battle’s location, if, indeed, it can be settled more than 170 years after the event, is beyond the scope of this project. However, planning of future projects along the river in that area should consider that the battle could have taken place in either of these two locations.

The Mission Acequias

These wandering waterways made the missions possible, predetermined the city’s seemingly random first thoroughfares, dictated its settlement and growth patterns, and affected the lifestyle of the community well into the twentieth century, providing agricultural and landscape irrigation as well as drinking water [Cox 2005:2].

Water management is critical in the hot, arid lands of south Texas. The Spanish first settled along the San Antonio River expressly because the San Antonio and San Pedro Springs were reliable water sources even in the driest years. Control of that water remains a major concern of the inhabitants of San Antonio today. One of the first permanent structures ever built in San Antonio was an *acequia*, or irrigation ditch, that ran from San Pedro Springs to the San Antonio River and irrigated the fields of Mission San Antonio starting in its second summer (Cox 2005:20). During the rest of the Colonial period, more *acequias* were constructed to water the ever-expanding fields of the other four missions.

Post-Colonial engineers found that construction of these ditches was difficult. The two *acequias* built after the end of the Spanish domination of Texas were failures (Cox 2005:58). The city continued to use the old Spanish *acequias* until growing awareness of the health hazards inherent in

these often-polluted open ditches and development of better technologies signaled the end of their tenure. By 1879, the establishment of a piped water system was begun (Cox 2005:60). In 1912, the last of the urban *acequias* was closed and filled (Cox 2005:70), leaving only one, the San Juan *acequia*, still watering some of the fields around that mission. It still provides that service to this day, and the aqueduct that carries it over Piedras (now known as Six-Mile) Creek, still functions well after more than 200 years (Cox 2005:33).

As mentioned above, Concepción is known to have been located on ground previously belonging to the short-lived Mission San Francisco Xavier de Nájera, and there is good evidence that the first location of Mission San José was on the same spot. It is, therefore, possible that the Concepción Acequia, often called the Pajalache Acequia, was begun before Mission Concepción was located at the site. The channel began on the east side of the river, in downtown San Antonio, and because the entry point was at one of the highest points in the area, it required a massive cut to initiate the water flow. The Concepción Acequia was always noted as the largest of the ditches (Corner 1890:44). A dam was constructed at the entrance of the *acequia* to raise the water level and divert water into the irrigation ditch. From this point, it progressed southward along the west side of the road to the lower missions, passing not far east of Mission Concepción, then turning west and emptying into the river again south of its confluence with San Pedro Creek 3.3 miles (5.3 km) from its beginning. It was later expanded to a new total of 7.5 miles (12.0 km) (Cox 2005:30). At one point, an extension of the Alamo Acequia crossed over the Concepción Acequia, first in a hollow log, and later in a stone aqueduct (Cox 2005:30). An 1865 flood was blamed in part on the dam at the beginning of the *acequia*. To avoid further threat of flooding, the dam was breached in 1869 (Cox 2003:4) and the lower portion of the Concepción Acequia was abandoned and filled (Cox 2005:71).

The history and location of the Pajalache/Concepción Acequia is fairly well known. The building, location, and abandonment of smaller *acequias* near the missions, especially at Mission Concepción and San José, are more of a mystery. Archaeological research around Mission Concepción has found numerous sections of *acequia* (Meissner 2001:103), while a photograph probably taken sometime in the late nineteenth century shows an active trench that runs from north of the church southwest across the old mission compound (Figure 2-3). Some of these *acequia* segments contained evidence that they were constructed before Concepción was founded (presumably associated with the first location of Mission San José and San Xavier) and filled during the Colonial period (Ivey and Fox 1999:19; Meissner 2001:102-105). Other segments were likely constructed late



Figure 2-3. Photograph of Mission Concepción probably taken in the late nineteenth century, showing a new acequia crossing the old mission compound.

in the nineteenth century and only used for a short time (Cox 2003:10).

Another *acequia* of interest for this report is the Acequia Media of San José. This was a branch of the San José Acequia that began west of Roosevelt, crossed Roosevelt near Southcross, and continued south to empty into the river at Padre Park. Its exact location over its course is not well known. The upper portion of this ditch is known only from the records of a land division of the grants of the Huízar family recorded in 1882 in the field note of a survey by J. W. Garretson, County Surveyor (Almaráz 1989:43; Bexar County Deed Records 2006: Volume 22, 242). It was once believed that the drainage ditch running along the west side of Padre Drive and the associated ditch under Padre Drive that empties into the old San Antonio River channel near Padre Park may have been constructed over the remnants of the Acequia Media. However, examination of detailed topographic maps conducted during this study has changed this belief somewhat as will be discussed in Chapters 3 and 4.

Charles Pyron

Charles Lynn Pyron was born in Alabama around 1819. He served in the Mexican War in John C. Hays' First Regiment, Texas Mounted Rifles, then returned to Port Lavaca, Texas in 1846 (Cutrer 1996:375). In 1848, he bought about 200 acres near Mission San José that had once belonged to the Verimendi family (Cox 1992:3). Oral history from one of his

descendents claims that the house was already standing at that time (Letter from Robert Canfield to Wayne Cox, Center for Archaeological Research, March 6, 1999, on file at the Center for Archaeological Research). Pyron married and began a quiet life as a rancher.

In April 1861, Pyron was one of the earliest to raise a company of troops into the service of Texas. His company was mustered into the Confederate Army in May of that year where he served throughout the Civil War as a cavalry officer fighting mainly in New Mexico and Texas. He played an important role in the battles of Val Verde and Glorieta in New Mexico and returned home to the house near San José in 1865 (Cox 1992:3).

Pyron resided in the simple structure until his death from tuberculosis in 1869. The property passed to his heirs and remained there into the next century (Cutrer 1996). It was later sold and the building converted to a used tire store before it was finally razed in the early 1980s. An on-site inspection of the property in the early 1990s revealed that the foundation of the home remains just below surface (Cox 1992:5).

Mission San Francisco Xavier de Nájera

As mentioned above, in 1719, the French aggression in east Texas forced the missionaries there to fall back to San Antonio. The Marqués de Aguayo arrived in San Antonio in 1721 with an expedition to reestablish the Spanish presence in east Texas (Habig 1968b:25). While in San Antonio, he suggested to his guide, Chief Rodríguez of the Sana, who congregated with several other tribes at Ranchería Grande near the Trinity River, that he bring his people to Mission San Antonio. The Chief liked the idea of the mission, but said he could not bring his people to live with the others at Mission San Antonio or the recently founded San José because they were not on good terms with some of the groups already living there (Habig 1968a:78). Instead, he asked for another mission to be established in the area. In 1722, the chief returned to the area with fifty Sana families to live at the new mission. Mission San Francisco Xavier de Nájera was established on the east bank of the river. There is some evidence that they took over the original location of Mission San José, which had been moved to its second location (Ivey and Fox 1999:45). The founding documents of Mission Concepción clearly state

that San Xavier had been at the same location (de Almazán 1731:20; Habig 1968a:79).

The 50 families did not stay at San Xavier. Perhaps the Sanas decided they did not like living under the rule of the Catholic missionaries. By 1726, there were only about twelve Native Americans still at the mission (Habig 1968b:80). Strenuous efforts to encourage more Sanas and Yerbipiamas to come from Ranchería Grande failed. By the end of 1726, the few remaining families at San Xavier were moved to Mission San Antonio and the mission was closed (Habig 1968b:81). Five years later, Mission Concepción was moved from east Texas and placed at the location where San Xavier had been (Habig 1968b:81).

Previous Archaeological Projects within the Area of Packages 2 and 3

The area of San Antonio traversed by the Mission Trails project includes many important historic sites. Since the 1960s, many archaeological projects have been completed in the vicinity. Scurlock and colleagues, in their major assessment of cultural resources along the river, briefly investigated the Pyron Homestead, the Brown Site, and the Poor family cemetery (Scurlock et al. 1976). Cox also surveyed the Pyron Homestead (Cox 1992). However, in the areas directly impacted during Packages 2 and 3, the only previous archaeological excavations were those associated with Mission San José.

Surveys of the Pyron Homestead, Brown Site, and Poor Family Cemetery

The house on the Pyron homestead (41BX279) was still standing in 1974, at the time of the initial survey. The building had been substantially remodeled after being seriously damaged by a hurricane in 1942 (Scurlock et al. 1976:112), as can be seen by a painting of the house as it was ca. 1935 and a photograph of the building as it was in 1974 shown in Scurlock et al. (1976:109). The Pyron Homestead site was surveyed again in 1991, by which time the old building had been razed, leaving only the foundation (Cox 1992:5). It was noted that the remains of the house and those of any outbuildings such as kitchens, privies, or wells, still held important research potential.

At the Brown Site (41BX241), the 1974 survey team found a well at a location just south of the intersection of Padre and Napier Roads and reported anecdotal information from local residents who found stone projectile points and other

prehistoric stone artifacts around the well (Scurlock et al. 1976:80). Across the street, the crews identified the foundation of a house possibly related to the well. Little additional information existed regarding this site and the extent of the prehistoric materials was poorly defined.

The same crew also surveyed the Poor family cemetery (Scurlock et al. 1976:158). At that time, in 1974, a single remaining broken, unreadable headstone was found. Local informants told the surveyors that some of the burials had been removed in the 1930s.

Archaeological Excavations at Mission San José

At least 16 archaeological projects have taken place at Mission San José since 1968. Most of these did not include the area impacted by the Mission Trails project. An excellent summary of these projects is available in Tennis (2001:55-61). For this report, only the previous projects that investigated outside the south and west walls of the mission will be discussed. Figure 2-4 shows the locations of these projects.

In 1970, the Texas Historic Survey Committee published reports on two unrelated projects completed in 1968 (Schuetz 1970). The projects in question were volunteer salvage archaeological projects, supported by the Witte Museum and directed by Mardith Schuetz. The second of these reports discusses excavation performed in April 1968 and the results of monitoring a series of trench excavations within and around the compound of Mission San José for a sprinkler system. No systematic collection of artifacts was employed. Some artifacts were collected from the backdirt, which was occasionally screened. Schuetz also mapped the locations of features, wall foundation fragments, and old roads and paths. Two of the trenches, B and C, were within the area impacted by the Mission Trails project. Because these excavations relied heavily on volunteer efforts and no funding was available for analysis, only a small inventory of the artifacts was tabulated by Schuetz. Numerous colonial and nineteenth century items were recovered from Trench B, including fragments of two spoons; the handles of chocolate pots; horse tack; a scythe blade; and several ceramic doll fragments (Schuetz 1970:5-8). Artifacts of particular interest from Trench C include half of a copper powder flask; three gunflints; a chert knife; large hand-forged spikes; a hand-made hammer head; gun parts and cartridges; horse-related and wagon-related items; metal knives and forks; kerosene lamp parts; early automobile parts; and toys like marbles and ceramic doll fragments.

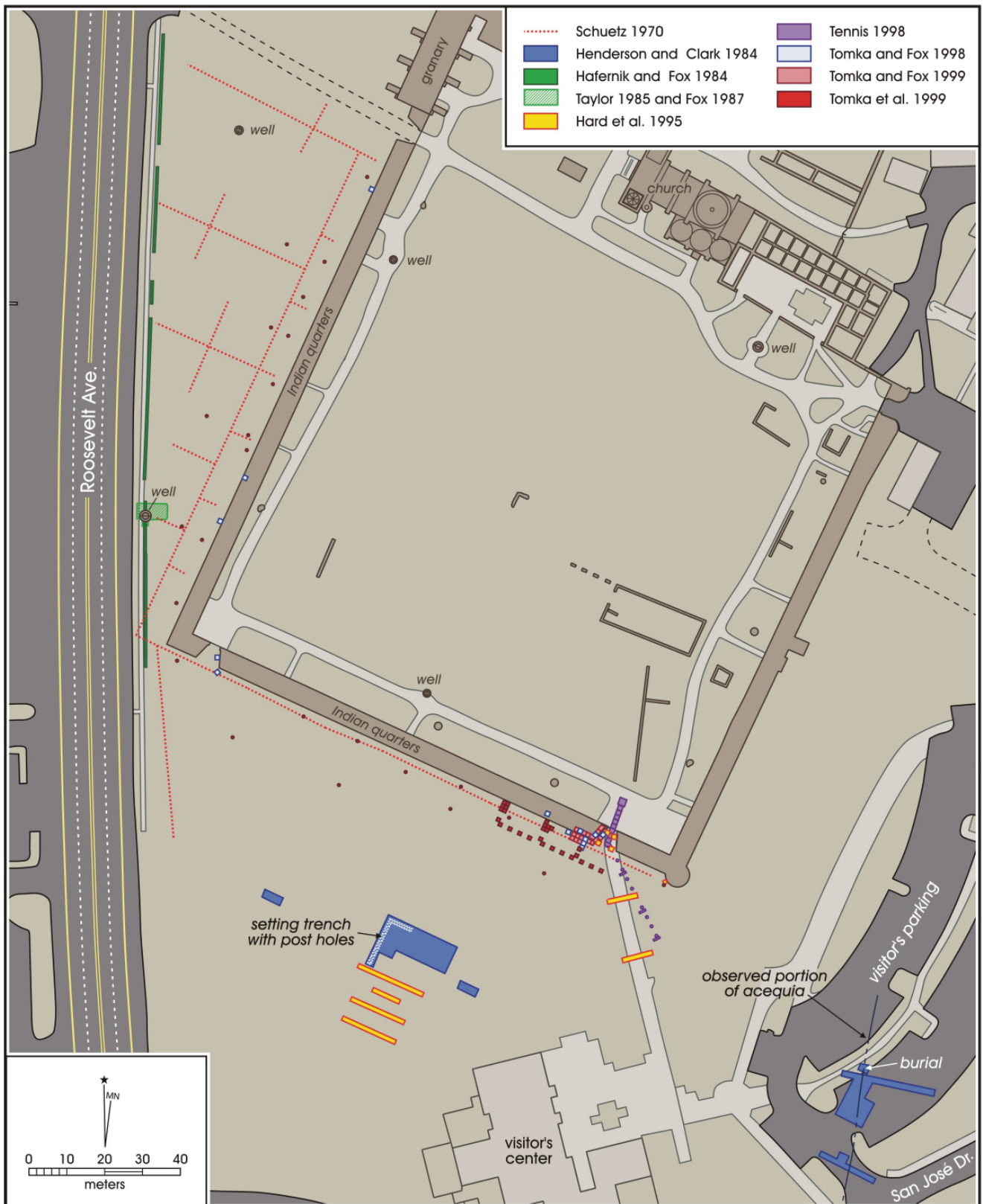


Figure 2-4. Map of Mission San José showing previous excavations only in areas adjacent to the Mission Trails project area.

An addendum to the report records excavation of two 8-x-8-ft. pits for electrical boxes 9 ft. deep, one of which was placed in the middle of the west wall where Schuetz had identified a Colonial period midden (Schuetz 1970:28). In addition, Schuetz listed artifacts found during the 1930s reconstruction that had been turned over to the Witte Museum.

In March and April of 1981, the State Department of Highways and Public Transportation (now TxDOT) conducted excavations south of the southern wall of the mission, as part of a project intended to improve and extend Park Road 39 (Napier Avenue) to provide better access from Roosevelt Avenue to Mission Parkway (Henderson and Clark 1984:1-2). In order to test the potential impact of this project, a series of test trenches were dug with a Gradall and a backhoe along the edge of the old road (Figure 2-4). No evidence of cultural deposits was recovered in these trenches except in Trench 7, where a shallow trench was observed. This trench averaged about 40 cm wide and contained a possible posthole. They uncovered a segment that ran 8.8 m east west, then turned south and ran another 12.9 m extending beyond the edge of the right-of-way. It averaged only 15 cm deep over most of its length. Henderson and Clark (1984) suggested this represented the bottom of a trench that had been truncated. The sediments within the trench were sandier than the surrounding clay and contained a great deal of ash, along with a scatter of Colonial period artifacts. Several postholes were excavated within the trench, two of which were close together and appeared to represent a large (30 cm) post and adjacent support. Henderson and Clark (1984) interpreted the structural features as the remains of a large corral with an attached bullpen.

A major concern of this project was the potential impact to a segment of the San José Acequia known to cross under the road southeast of the mission walls (Henderson and Clark 1984:9). In order to pinpoint the *acequia* location two additional backhoe trenches, Trenches 9 and 10 were dug. Twenty-eight meters of the *acequia* within the right-of-way was identified and the northern 16 m was excavated (Figure 2-4). This examination made it clear that what was exposed was just a remnant of the bottom of the original feature. The upper sediments of the filled *acequia* and the surrounding clay soils had been removed at some time in the past, leaving only the bottom part of the *acequia* intact (Henderson and Clark 1984:19). The *acequia* had been crossed several times by utility trenches.

In the process of removing old roadbed near one of these old utility trenches, a partial human burial was discovered (Figure 2-4). Excavation of the burial showed the upper half had been previously destroyed during the construction of the

utility trench, leaving only the pelvis and lower limbs intact. The individual was on its back in a semi-flexed position. Although no formal analysis of this burial was undertaken, the sealed epiphyses of the long bones and the narrow angle of the sciatic notch in the pelvis suggested the individual was an adult male. The only artifact recovered from within the grave pit was an iron buckle found near the waist. The relative date of the burial is unclear but is post-European contact. Though this burial was well outside the immediate Mission Trails project area, it posed a concern that other burials or a cemetery existed near the southern wall of the mission.

In April 1984, CAR excavated a backhoe trench along Roosevelt Avenue west of the west wall of the mission to test for significant cultural deposits and features in advance of the installation of a new sewer utility line (Hafernack and Fox 1984). The trench was dug from a point just south of the southwest corner of the mission compound and continued north to Pyron Road (which at that time entered the west gate of the mission), a distance of approximately 165 m (Figure 2-4). The artifacts recovered from this trench reflected the entire length of habitation since the relocation of the mission to this location by 1727 (Hafernack and Fox 1984:10) to the twentieth century and included ceramics, glass, buttons, machine parts, both wire and cut nails, and electrical insulators.

A single feature was also discovered. This was a stone-lined well constructed after the Colonial period. The interior of the well was only excavated to about 76 cm (30 in) below ground surface, yet produced many artifacts. The well was likely constructed sometime in the nineteenth century, presumably after secularization, and filled in the 1930s, in preparation for the reconstruction of the walls. Hafernack and Fox (1984) considered the well had been used as privy during the last years of its existence when it was no longer providing water. This was a common practice at the end of the nineteenth century when above-ground cisterns and later piped water became more common (Hafernack and Fox 1984:8; Gross and Mendez 1997:247). Thus, although the well may have been filled in the 1930s, it was possible that earlier deposits, associated with the use of the well as a privy, would be present, and might provide significant data to the understanding of life near Mission San José between secularization and the reconstruction (Hafernack and Fox 1984:11).

In response to the discovery of the well uncovered in 1984, CAR returned to the west side of Mission San José to mitigate damage to this structure potentially caused by installation of a sewer main. In May and June 1985, CAR staff excavated the northern half of the well. The well was lined only with a mortar-like mix of small gravels. The excavations ended

at 5.1 m below the top of the well, slightly deeper than the grade of the sewer main. The bottom of the well had not been reached at this point, and artifacts, though few, were still being recovered (Taylor 1985).

A. J. Taylor prepared a brief preliminary report (Taylor 1985). Two years later, Anne Fox began a more detailed report of the findings, however that manuscript was never completed and the final report on this excavation was never published (Fox 1987). The notes for this report are on file at the Center for Archaeological Research. They describe twentieth century artifacts were present in the well sediments to the bottom excavated level. Colonial period Goliad ware and lead and tin-glazed wares were also present throughout the fill, as were many ceramics dating to the nineteenth century. Thus, the entire span of historic occupation of the site is represented in the fill found in the well.

The numbers and types of other artifacts listed in the notes are interesting. A surprising 59 buttons were found, suggesting that several pieces of clothing were part of the trash thrown into the well. Excavators uncovered numerous shoe parts below the eighteenth level that may indicate the trash from a cobbler's shop had been included in the fill. Many fragments of kerosene lamps were found. Several hundred undecorated whiteware fragments and hundreds of pieces of glass of many colors were also present.

A total of 832 faunal bones were recovered. According to Hunter (1985), the bones appeared to be largely those of food animals, with many showing cut marks made by handsaws, making it likely that these bones were the remains of purchased meat cuts. Some bones, particularly those of pigs, were those of the head and feet, and possibly indicated some butchering occurred at the site (Meissner and Hunziker 1997:333).

In the spring and summer of 1993, CAR was asked to perform an extensive cultural resource survey of the mission compound and areas south of the mission wall as part of the preparations for extensive re-routing of roads and parking areas near the mission and construction of a Visitors' Center south of the mission (Hard et al. 1995). The work was done in four areas, A-D, though only Area A and B fall within the area under study here. Area A was located south of Napier Road as it ran in 1993. Area B, encompassed the southeast gate and a strip of land going southeast to Napier Road (Figure 2-4).

Four backhoe trenches were dug in Area A to relocate the trench with postholes that had been recorded by Henderson

and Clark (1984). The trenches were carefully dug, but no evidence of the trench was seen. No artifacts of the Colonial period were collected.

Excavations in Area B included six 4-x-4-ft test units placed in the southeast gate aligned with the inner and outer mission walls to test the accuracy of the Works Projects Administration (WPA) reconstruction of the gateway. One unit was placed against the inner wall of the mission near the southeast gate and another was placed against the bastion at the southwest corner of the mission to examine the foundations of this structure. In addition, two backhoe trenches were dug southeast of the mission to document the remnants of Mission Road, which had once crossed diagonally across the mission compound from the northwest gate and continued beyond the walls to the southeast (see Hard et al. 1995:10, 11, 23-25). No artifacts were collected from these trenches.

Remnants of wall trenches with some limestone and sandstone in line with both the inner and outer walls of the compound strongly suggested that the WPA reconstruction was inaccurate. These findings indicated that there may have been no gate in the wall at this point or the gate had been smaller than the extant opening. The foundation of the bastion was shown to be exactly like the reconstructed part of the mission, showing that this structure was probably not present during the Colonial period (Hard et al. 1995:96).

The majority of analysis in Hard et al. (1995) is focused on the findings in Area D, inside the mission compound where 83 shovel tests were performed. Examination of the artifact provenience lists for Area B however, makes it clear that with one exception (a pop-top found 30-40 cm below ground surface) twentieth century artifacts were not found in sediments below about 20 cm below ground surface. Considering the degree of disturbance that occurred during the original stone robbing of the mission walls and subsequent rebuilding, it is a little surprising that these lower sediments seem relatively undisturbed.

In April 1996, CAR determined there had been no gate at the southeast corner of the mission compound in Colonial times. CAR excavated a series of 11 test units, nine shovel tests, and three backhoe trenches to explore the route of a new storm drain. Because previous excavations (especially Hard et al. 1995 and Henderson and Clark 1984) had shown little likelihood of significant cultural deposits outside the mission walls, shovel tests and backhoe trenches were placed in this area. The test units were excavated inside the inner mission wall to a depth of 24 in. below ground surface (Figure 2-4).

This trench confirmed that the footer trench and a remnant of the original inner and outer mission walls crossed the entire area of the current gateway, proving that the WPA had been wrong about the Colonial gate location (Tennis 1998:10).

In June and September 1997, CAR returned to Mission San José to expose the wall foundations in several areas where vertical cracks were causing concern about the stability of the wall (Tomka and Fox 1998). The National Park Service needed to observe the foundations in those areas in order to determine how best to stabilize the walls. In addition, in some places the 1930s-era mortar was crumbling. In order to expose the foundations at points where the walls were cracked and determine if the mortar deterioration extended below the ground surface, CAR excavated 20 3-x-3-ft. (91-x-91-cm) units and one 1.5-x-1.5-ft. (46-x-46-cm) unit. Eleven of these units were outside the walls, five were inside the walls, and five were inside the rooms of the reconstructed Indian Quarters (Tomka and Fox 1998:6). Seven of these units were placed outside the south and west walls of the mission, in the area under consideration for this report (Figure 2-4).

In summary, Tomka and Fox (1998) noted that in general the upper 12 in. (30.4 cm) of sediments both inside and outside the walls of the mission represented a mixture containing artifacts from every period of mission habitation. Any excavations below 18 in. (45.7 cm) would very likely impact minimally disturbed eighteenth and early nineteenth century deposits (Tomka and Fox 1998:44).

In February and March of 1998, CAR excavated 27 3-x-3-ft. (91-x-91-cm) units placed to examine sediments in three areas where new drainage basins adjacent to the south wall of the mission were planned to carry rainwater away from the mission walls (Tomka and Fox 1998). They would also test the route of a new storm drain that would be placed approximately 6.2 m south of the mission wall. Recent excavations near the south wall had shown that there was potential for undisturbed Colonial deposits in some of the area to be impacted by this project. All units were dug to 30 in. (76.2 cm) below the ground level, with the upper 6 in. (15.2 cm), known to be fill or severely disturbed by previous landscaping, removed by machine. Units adjacent to the mission wall clearly showed the excavation of a trench dug by the WPA along the Colonial foundation as part of the reconstruction project (Tomka and Fox 1999:8)

A total of 25,265 artifacts were recovered during this project. Of these, 18,938 (75.0 percent) were animal bone, most of which were in a distinct layer located near the wall of the mission. This layer of animal bone was also seen in previous

excavations along the south wall (Tomka and Fox 1998). Other artifacts of interest included 4 complete or almost complete Guerrero points and 6 projectile point fragments, 2 gunflints, 10 other lithic tools, and 194 pieces of chert debitage. A large, almost complete base of a charcoal brazier of unglazed ceramic was found, as well as two intersecting hearths containing large amounts of charcoal and early twentieth century artifacts (Tomka and Fox 1999:18-19). Analysis of spatial distribution showed that Colonial deposits were clustered within 9 ft. (2.7 m) of the wall while post-Colonial artifacts became more common to the south, 12-15 ft. (3.7-4.6 m) from the wall (Tomka and Fox 1999:47-51).

Ultimately, the National Park Service determined that in some places the walls would need major improvements to the underpinning. In addition, they determined that an alteration in the grade of the ground surface would encourage rainwater away from the wall, lessening future damage (Tomka et al. 1999:1). In October 1997, CAR excavated 39 shovel tests outside the east, south, and west walls of the mission to test the depth of undisturbed Colonial deposits in the area to be graded. These shovel tests were between 6 ft. (1.8 m) and 50 ft. (15.2 m) from the wall (Tomka et al. 1999:7-8).

Shovel testing outside the south wall recovered mostly post-Colonial or undateable artifacts. However, 16 were Colonial period ceramics and lithics. The faunal bone contributed 114 items (30.4 percent) to the collection. This was consistent with previous projects that had shown that beyond approximately 3 m south of the wall there was only a thin scatter of Colonial period artifacts in disturbed context (Henderson and Clark 1984; Schuetz 1970; Tennis 1998; Tomka and Fox 1999).

Shovel testing outside the west wall produced 1,107 artifacts, of which 653 (59.0 percent) were bone. Seventy-one items (6.4 percent) were Colonial period ceramics (n=64) or lithics (n=7). The rest were post-Colonial or undateable (Tomka and Fox 1998). Despite these low counts of Colonial artifacts, these data combined with those from previous projects (Hafernack and Fox 1984; Schuetz 1970) indicate that remnants of Colonial period deposits are more common on this side of the mission.

In June and July of 1998, extensive excavation at the southeast gateway area was completed in order to facilitate the removal of the remnants of Colonial foundations and the building of new concrete foundations under the 1930s WPA-reconstructed walls. Eighteen units were placed to remove sediment along the east and south walls of Room 54, which is adjacent to the west wall of the southeast gateway. Other units exposed the exterior of these walls (Figure 2-4). Backfilled

units excavated in previous projects were removed without screening (Hard et al. 1995 and Tomka and Fox 1998).

Collectively, the interior units recovered 4,126 artifacts of which 2,448 (59.3 percent) were animal bone. Of the 336 pieces in the ceramic collection, 202 were Goliad ware. The total Colonial period ceramic types (n=230) constituted 68.5 percent of the ceramic collection. Only two post-Colonial ceramics were recovered in Level 3. Only Colonial period ceramics were found below this level (Tomka et al. 1999:17-18).

Other projects (Hard et al. 1995; Tennis 1998) had proven that the southeast gateway was a product of the WPA reconstruction and that in the Colonial period this would have been inside the Native American quarters. Although small areas that appeared to be fragments of Colonial living surfaces similar to those found in the interior units were found (Tomka et al. 1999:40), it was clear that WPA reconstruction and numerous subsequent disturbances had essentially destroyed the Colonial deposits in this location. The units within the gateway recovered only 95 artifacts.

These excavations again showed that there was an extensive collection of Colonial and nineteenth century artifacts near the south wall, and although many were in mixed context, there were unmixed Colonial deposits present near the wall. Though large areas near the south wall have been excavated in recent years, there remain extensive areas that are probably still intact.

Summary of Volume I of this Series

The first volume in this series (Cargill et al. 2004) concerned archaeological work conducted when construction efforts impacted significant historic and prehistoric deposits near Mission San Francisco de la Espada without archaeological monitoring (Figure 1-1). According to the original Scope of Work for the project, the city and TxDOT were to give 48 hours notice before any construction for the Mission Trails project near Mission Espada began. However, prior to issuance of a THC permit and without any notification to the San Antonio Historic Preservation Office (SAHPO) or CAR, extensive construction work was carried out (Cargill et al. 2004:1-2). When these activities came to the attention of the Historic Preservation Office, the construction was halted and the extent of unmonitored work was assessed. The following damage was noted:

- (1) Drainage System A: A trench for a new storm drain was planned to run from a manhole about 18 m east of the mission gate, north and then east to the river. At the time excavations were halted, this trench had been completed to within 20 m of Espada Road and backfilled (Cargill et al. 2004:21). The part of the trench that was still open displayed the damage done to the remains of a brick feature believed to be a Colonial kiln and a large pit feature (see photos in Cargill et al. 2004:25-26).
- (2) Drainage System B: The plans called for the previously dug ditch north of Loop 410 (Cargill et al. 2004:4) to be widened by 20 ft. (6.1 m). At the time construction was stopped this trench and been cleared of vegetation but had not yet been dug.
- (3) Hike and Bike Trail: At the time construction stopped, the footprint of the new section of hike and bike trail adjacent to the northern part of the west wall had been lowered 6 to 8 in. Numerous Colonial period artifacts were seen in the backdirt of this unmonitored excavation.

After consultation with the Texas Historical Commission, the City of San Antonio, and TxDOT, CAR developed a new SOW with an extension to mitigate the damage already done and any damage that might be done as construction work continued. In accordance with this SOW, the following work was completed.

Drainage System A

In order to expose and record the brick feature partially damaged by the trench in Drainage System A, four 1-x-1-m units and one 1-x-0.5-m unit were excavated. The exposure of the feature confirmed that it was a kiln. The bricks used to construct this kiln were made from unrefined clay and fired in a low-temperature setting, possibly dating to the Colonial period (Cargill et al. 2004:23). At the bottom of the kiln, excavators discovered approximately one-half of a French-made faience plate with an original diameter of 22 cm (8.5 in). Also at the bottom were fragments of a large Valero ware jug (Cargill et al. 2004:63) and a fragment of a large copper cooking vessel shaped out of a single piece of copper in a style seen at other mission sites in south Texas (Cargill et al. 2004:78).

Other artifacts found within the kiln included 952 ceramics of a type believed to have been made in the kiln. These were wheel-thrown utility wares of a type not seen in Colonial period sites. No mention of a potter's wheel is found in the extensive mission inventories submitted from time to time by inspectors from the founding colleges of the missions (see Habig 1968a, 1968b, 1978). The only kilns mentioned were specifically designed for burning limestone (to create lime for mortar) or for firing bricks (Cargill et al. 2004:104). Therefore, the kiln is likely a post-Colonial feature though the bricks used in its construction might be Colonial. The 1772 inventory of Mission Espada mentions that more than 10,000 bricks of various types were stockpiled and the bricks in the kiln are exactly like bricks that were used in several undoubtedly Colonial constructions at the mission. This in turn suggests that the kiln may have been constructed in post-Colonial times, soon after secularization because the stockpiled bricks would have been used for other purposes, as were the stones from the mission buildings. In any case, the kiln does not seem to have been in operation long, since the pottery type has not been a noticeable component of the archaeological record in San Antonio, even at Espada (Cargill et al. 2004:104).

When the kiln was filled, it appears that the spoil pile of pottery broken during firing that would have been nearby was used first and then sediments containing large numbers of Colonial artifacts were dumped in. Artifacts that could be dated to after the mid-nineteenth century were limited to the upper three of the nine levels in the kiln, suggesting that it had been filled during at least two episodes, the last of which had been in the twentieth century (Cargill et al. 2004:24). A total of 1,190 bone fragments were recovered, of which 46.4 percent (n=578) were heat-altered. Of these 74.4 (n=430) were completely calcined, an indication the bone was exposed to very high temperatures for a long period. This is a very unusual finding that could indicate that bone, especially the long bones of cattle, was being used as part of the fuel for the kiln (Meissner 2004:96).

Approximately 8 m southwest of the kiln the trench dug for Drainage System A removed part of a pit that was filled with Colonial and post-Colonial ceramics, metal items, lithics, and animal bone. Two 1-x-1-m test units were excavated in this pit, and two backhoe trenches were completed nearby to test for other features. This pit may have represented a borrow pit for clay for the pots, and later a trash dump, mostly for animal bone. The bone comprised 3,017 (90.0 percent) of the 3,352 items recovered in the two test units dug into the pit feature. Artifacts dated to the twentieth century were confined to the upper levels of this feature (Cargill et al. 2004:23).

Drainage System B

A 100 percent pedestrian survey of the cleared ditch in Drainage System B encountered no evidence of cultural deposits. A series of seven backhoe trenches, each approximately 2.5 m deep, were dug, evenly spaced along the area where the ditch was scheduled for widening. No cultural deposits were observed in these trenches. No further archaeological work was deemed necessary.

Hike and Bike Trail

Originally, CAR planned to place 15 50-x-50-cm units along the portion of the hike and bike trail footprint west of the reconstructed mission wall to determine the degree to which the unmonitored construction work had damaged the Colonial period midden outside the west wall of Mission Espada (Cargill et al. 2004:29). However, shortly after this fieldwork began, the driveway leading from Espada Road into the parking lot inside the walls north of the church was graded at the request of the parishioners. This was done while CAR staff were not present, lowering the grade by some 8 to 12 in., removing layers of old asphalt paving and gravel, and uncovering what appeared to be a Colonial period foundation. As a result, an additional 15 1-x-1-m units were excavated in the gateway.

These gateway units uncovered and documented a portion of the foundation of a southern gate room similar to the reconstructed room on the northern side of the gateway (Cargill et al. 2004:109), as well as remnants of a sandstone-flagged floor partially mortared to the limestone foundation. Though this area had been disturbed many times, (see photographs in Cargill et al. 2004:32-33), large numbers of Colonial artifacts were recovered in this area. Examination of the Colonial foundation indicated that it was roughly 65 cm in width and offset slightly from the reconstructed wall nearby.

The test units in the footprint of the hike and bike trail along the outside of the west wall were placed to recover a sample of artifacts for temporal and spatial analysis and to assess the damage done during removal of 6 to 8 in of sediments from the footprint of the trail. The analysis of dateable artifacts indicated that there was a Colonial midden associated with the gateway, and that although there was considerable evidence of disturbance of Colonial deposits in the area north of the gate, there were still undisturbed Colonial deposits outside of the driveway area. The units displaying this midden extended about 10 m north of the gateway area (Cargill et al. 2004:19, 107).

North of this gate midden is an area about 30 m long where artifact density is much lower and consists of an even mixture of eighteenth, nineteenth and twentieth century items. In the roughly 24 m that were tested north of this area artifact density picks up again, though it does not reach the levels seen just north of the gateway (Cargill et al. 2004:107). The datable artifacts in the northernmost section of the tested hike and bike trail included Colonial sherds with higher percentage of nineteenth century ceramics. Very few late nineteenth/early

twentieth century items were recovered in this area. It was suggested that the artifacts in this area represented a deposit of trash from the nineteenth century houses known to have been in this area along with artifacts from the Colonial period. The artifacts in this area appear to represent incidental trash rather than deliberate use of the area as trash dump in either the Colonial period or in the nineteenth century (Cargill et al. 2004:19, 106-108).

Chapter 3: Package 2 and 3 Field Methods

This chapter describes the methods used during the work on Packages 2 and 3. It includes a discussion of areas that were not included in the archaeological testing or monitoring. The Mission Trails system was designed to make use of previously built roads and hike and bike trails as much as possible. In these areas, survey or other archaeological work was deemed necessary only when utility placement or other sub-surface work would be part of the project. In addition, selected areas were known to have been severely disturbed by previous construction, especially the channelization of the river. (Figure 1-5).

The degree of impact to the project area and level of disturbance guided the implementation of various field methods. The utility trenches installed in the existing ROWs were 4 to 12 ft. deep and 2 to 4 ft. wide. The proposed hike and bike trail is 10 ft. wide. Trail footings are 12 inches deep and 10-12 inches wide. Any electrical conduits between Roosevelt Avenue and the west wall of Mission San José will be installed in 18-inch-wide trenches dug to depths no more than 2.5 ft. Specific construction activities associated with the trail will involve grade modifications, the placement of substrate and trenching.

Field Procedures

During pedestrian surveys, ground surface was examined and the landscape compared with historic documents and maps to identify specific details about individual properties. Shovel testing was employed to examine the vertical and areal distribution of cultural materials present in the project area. In some instances, a mechanical auger was used instead of shovel testing to reach the desired depth. Backhoe trenching was necessary in areas where deeply buried sediments required exposure. Finally, monitoring of on-going construction occurred in areas thought to be particularly sensitive.

Pedestrian Survey

Two areas in Package 2 and one area in Package 3 underwent pedestrian survey. The Package 2 areas included a new section of hike and bike trail planned from E. White to Padre Park. A non-systematic pedestrian survey was conducted in the area. CAR staff walked over the entire area, inspecting the

land surface and comparing it with maps. The same methods were employed for locating sections of the Acequia Media. In Package 3, the Poor Family Cemetery location was surveyed to locate the cemetery grounds.

Shovel Testing

Shovel testing occurred in four locations of Package 2. The testing was carried out from October 8 to October 18, 2002 and was conducted in accordance with the requirement of the THC for linear survey projects (Weston 2002). In general, shovel testing conformed to the following procedures: All shovel tests were 30-35 cm in diameter, and all sediments recovered were screened in arbitrary 10-cm levels, through 1/4-in. hardware cloth. Shovel tests were dug at varying intervals and depths according to conditions described below. All recovered artifacts were collected and returned to the CAR laboratory for processing. Shovel tests were excavated at 5-m intervals along the staked path of the hike and bike trail passing by Mission San José. Interval spacing was increased along portions under construction or otherwise disturbed. At the Pyron Homestead, shovel tests were excavated every 5 m along two transects spaced 5 m apart. In some cases, a mechanical auger was used to reach depths up to 100 cmbs.

Monitoring

Monitoring of the construction activities that were part of Package 2 was considered necessary when construction was planned in highly sensitive areas and when extensive subsurface excavations were planned in areas where such activities might impact *acequias* or other features near the missions. Construction activities in areas that had been previously tested and found to be highly disturbed were not monitored. During monitoring CAR staff remained as close as possible to trenches being dug and observed as each bucket of sediment was dug. Notes were taken on observations of profiles and presence of any artifacts noted. Only temporally diagnostic artifacts were collected. Monitoring was conducted during utility installation along Mission Road to Southcross and during construction of the hike and bike trail outside the walls as Mission San José. Monitoring was conducted intermittently as needed during utility trench installation on the west side of Roosevelt Avenue between E. Bonner and Mission Road.

Backhoe Trenching

Three backhoe trenches were dug along the edge of Riverside Municipal Golf Course near the Mission Road Bridge (Figure 3-10). These trenches were placed to examine the sediments along the proposed course of a new storm drain outlet from Mission Road to the river. These trenches were all approximately 1 m wide, 3.5 to 4 m long, and varied in depth from 2.8 to 3.8 m, depending on circumstances (see Chapter 4). The trench excavations were closely observed, and backfill was examined carefully for evidence of cultural deposits. All trenches were profiled and photographed. An interim report on the findings of this testing was produced (Meissner 2002).

Originally, Package III was to have included construction a new of Scenic hike and bike trail along the north side of the river from the Mission Road Bridge to Concepción Park and some drainage improvements along the bluff above this trail south of the park. These plans were eventually changed and that section of trail was not constructed. However, before those changes were made, CAR dug nine backhoe trenches placed to test the areas where new drainage construction had been planned. It was believed that this area had been severely impacted by the river channelization, however the close proximity to Mission Concepción and, in particular, the nearby location of Concepción Park, the supposed location of the Battle of Concepción, made it important to confirm that the entire area was disturbed. The work was completed October 31 and November 1, 2000. These backhoe trenches were approximately 1 m wide and 3.5 m long, and varied in depth from 1.5 to 3.7 m, depending on conditions. Profiles for each were drawn.

Areas Not Tested or Monitored in Package 2

An overlay of the old channel of the San Antonio River compared with the current channel (Figure 1-5) shows that most of the old channel between Padre Park and E. White Avenue was removed by channelization. This means the areas where archaeological deposits may remain are confined to the trail in Padre Park running from Padre Drive eastward to the San Antonio River paralleling an oxbow of the old channel and at the old bends in the river near E. White Avenue (Figure 1-4). The non-systematic survey near E. White Avenue showed massive disturbance in this area, and no archaeological work was considered necessary within the hike and bike route beyond Padre Park.

Another area that was not tested or monitored was the repaving of Padre Drive from VFW Boulevard to the beginning of the new road section near the Pyron Homestead (Figure 1-4). This was originally an Area of Concern due to the presence of the route of the Acequia Media west of Padre Drive. However, a survey of the area conducted April 1, 2004 clearly showed that the remnant of the old *acequia* channel was located south of the current drainage ditch that leads from Padre Drive to the oxbow that was once a loop of the San Antonio River and now forms part of a drain that empties into the new channel of the River. The route of the Acequia Media then crosses under Padre Drive in a highly disturbed area and can be followed for a short distance as it turns north, roughly paralleling Padre Drive, but not immediately adjacent to it. The surveyors could not follow the path of the *acequia* further because it crossed into private property.

Because the *acequia* would not be impacted by the repaving of Padre Drive, it was not considered necessary to monitor that portion of the project. However, on November 3, 2003 CAR was called because construction workers had found some animal bones and a large number of bottles and other trash during the rebuilding of Padre Drive near the beginning of the new section of road. While extending the drainage ditch on the west side of the road, they had noted what appeared to be an old trash dump. A CAR archaeologist was dispatched to the location. It was determined that the bones were those of cattle, pigs, and sheep and/or goats and the mandible of a large canid (probably a dog). The bottles in association with these bones were all machine-made, dating them after 1903 (Lorraine 1968:43). Small amounts of plastic were also present, making it likely that the dump was dated after World War I. Examination of the ditch further north showed that the sediments through which it was dug were disturbed as had been expected, and further monitoring of that area was not considered necessary.

Areas Not Tested or Monitored in Package 3

Since the majority of the construction associated with Package 3, once the original plans were changed, would not involve more than very shallow scraping of the ground surface in most areas, most of this work was not monitored. One Area of Concern, the supposed location of the short-lived Mission San Francisco Xavier de Nájera (Figure 1-8), might have required monitoring or testing. However, those researching the subject (Habig 1968a; Ivey and Fox 1999) have shown conclusively that this mission was actually located at the

current location of Mission Concepción. It was decided, therefore, that the building of the hike and bike trail adjacent to Mission Road near the historic sign could be completed without monitoring.

Laboratory Procedures

Cultural materials obtained and records generated during the course of the project were prepared for analysis and curation in accordance with federal regulations 36CFR part 79, and THC requirements for State-Held-in-Trust collections. Artifacts processed in the CAR laboratory were washed, air-dried, and stored in 4-mil zip-locking archival-quality bags. Acid-free labels were placed in all artifact bags. Each label

displayed provenience information and a corresponding lot number laser printed or written in pencil. Artifacts were separated by class and stored in acid-free boxes identified with standard labels.

Field notes, forms, and photographs were placed in labeled archival folders. All field forms were completed in pencil. Documents and forms were printed on acid-free paper and any soiled forms were placed in archival-quality page protectors. A copy of this report and all digital material pertaining to the project, including a copy of this report in Adobe Acrobat® file format, were burned onto a CD and permanently curated with the field notes and documents at the Center for Archaeological Research.

Chapter 4: Results

Fieldwork for the Mission Trails project was conducted by several archaeologists over several years. No significant archaeological deposits were found within the project area that required further excavation. This chapter describes the findings associated with each construction package during each level of investigation at the various areas of concern across the project area.

Package 2

Pedestrian Survey

A non-systematic survey was conducted on the south side of E. White Avenue, adjacent to the river, to determine if any landforms within the footprint of the new trail were part of the old riverbank prior to rechannelization. A comparison of the old river course with the current channel showed that there was a potential that parts of the old riverbank would be disturbed by trail construction near E. White. The inspection showed the remnants of the original west bank, which was outside of the project area by 5 to 20 m, are at least partially intact and topped by park structures (see Weston 2002:19). The old river channel is filled and the east bank is cut down. Such dramatic landscaping associated with channelization eliminates any potential for intact cultural deposits. Owing to the massive disturbance, it was judged that no archaeological work was needed within the hike and bike route north of Padre Park.

April 1, 2004, CAR conducted a non-systematic survey near Padre Drive and located a remnant of the Acequia Media at the old river channel then followed it as far as possible. This survey clearly showed that the remnant of the old *acequia* channel was located southwest of the current drainage ditch that leads from Padre Drive to the oxbow that was the original river channel (Figure 4-1[a]). The route of the Acequia Media then crosses under Padre Drive in a highly disturbed area and can be followed for a short distance as it turns north, roughly paralleling Padre Drive, but not immediately adjacent to it (Figure 4-1[b]). The surveyors could not follow the path of the *acequia*

further because it crossed into private property, and it is not known where or if the *acequia* channel again comes close to Padre Drive. The route was mapped with GPS units (Figure 4-2). This data compared with deed records and a detailed topographic map were used to plot the likely course of the Acequia Media (see discussion in Chapter 5).

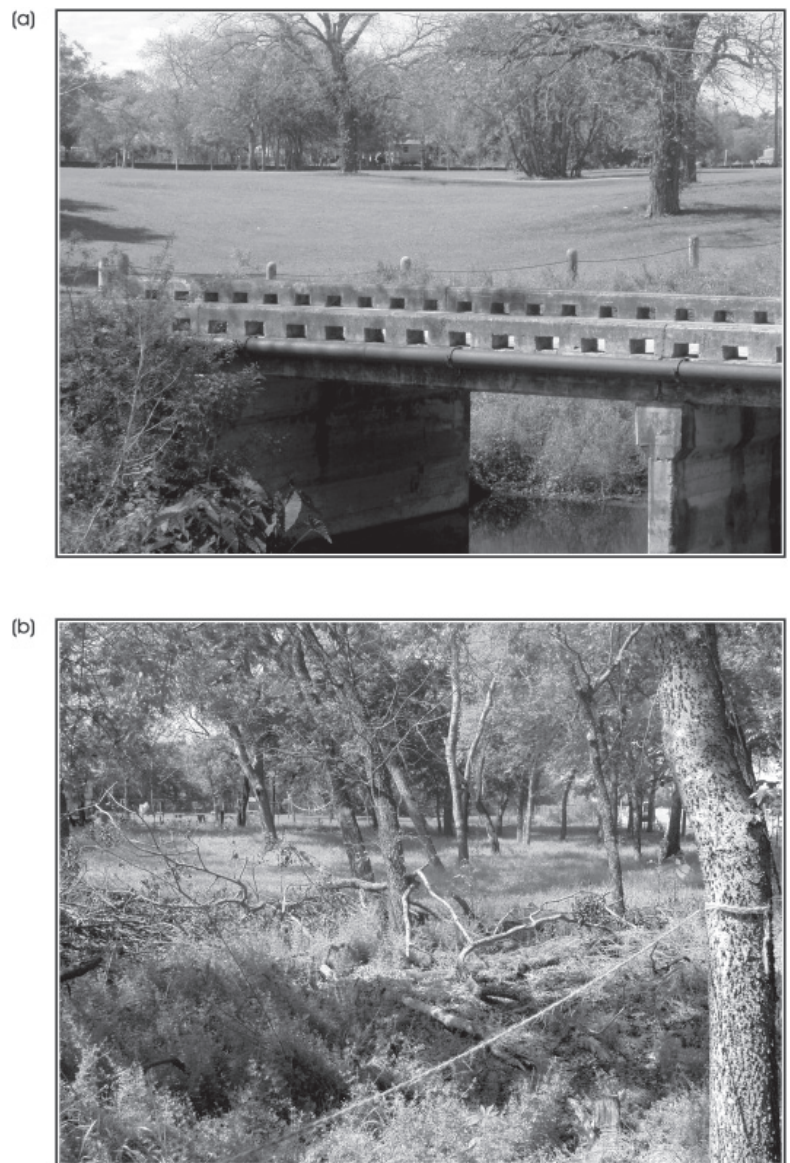


Figure 4-1. *The remnants of the acequia near Padre Drive: (a) the Pyron Avenue bridge, looking northwest, where the acequia can be seen as a swale extending from the old river channel and running just left of the clump of trees in the right middle foreground; (b) The acequia remnant on the west side of Padre Drive as it turns north.*

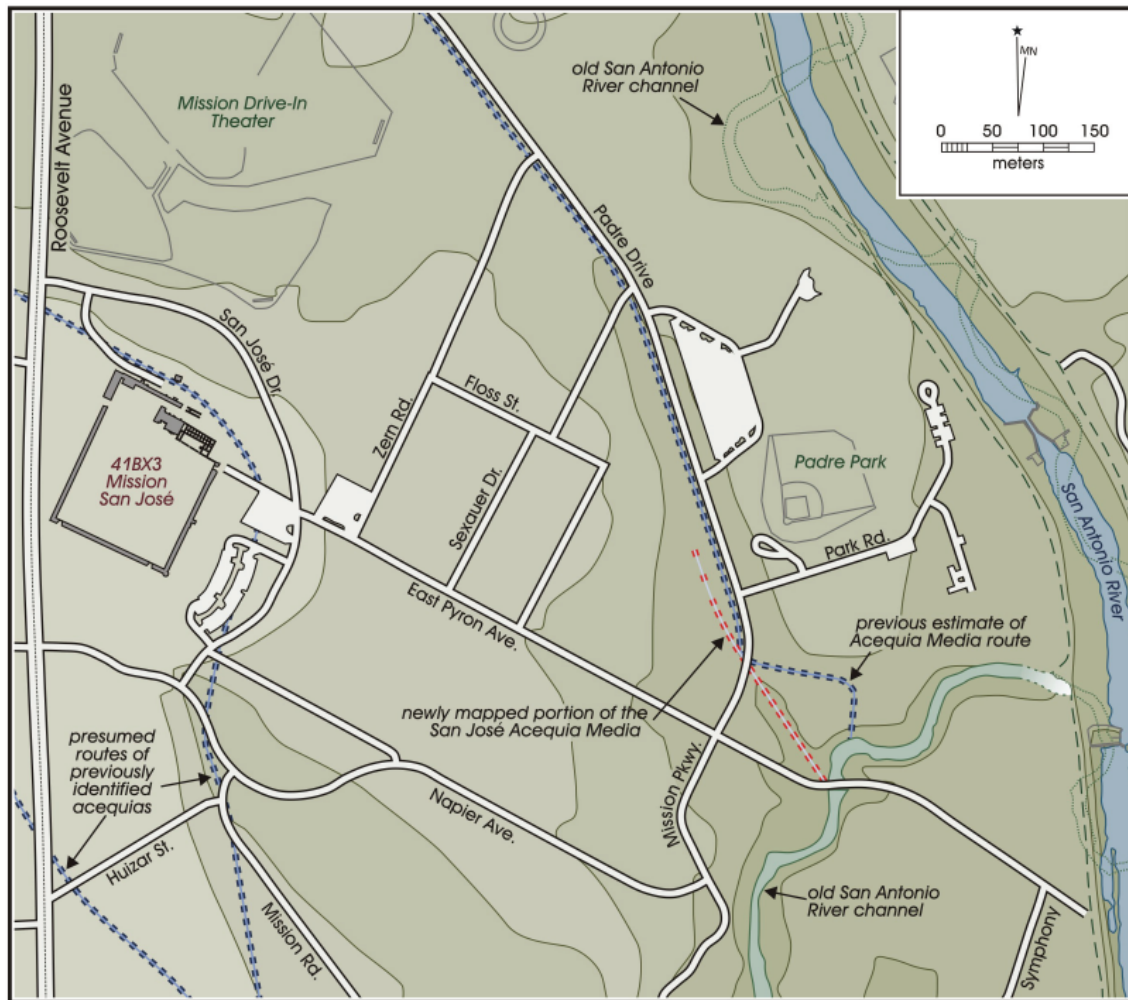


Figure 4-2. Map showing location of Acequia Media from the old channel of the San Antonio River to where it turns north and runs west of Padre Drive.

The drainage ditch along the west side of Padre Drive also was examined for remnants of the *acequia*. Given the condition of the ditch, the land surface in the area, and the location of part of the route of the old *acequia*, it was determined that once it crossed the road the *acequia* did not pass immediately adjacent to Padre Drive in the project area, but was located ca. 10 m to the west (Figures 4-3 and 4-1).

Shovel Testing

CAR shovel tested four areas as part of Package 2. From October 8-18, 2002. The results of the shovel testing are described below. A listing of artifact types that have been assigned to date categories is in the Appendix Table A-1. A complete list of artifacts collected during shovel testing is found in the Appendix, Tables A-2 to A-5.

Mission San José (41BX3) Shovel Test Areas

Fifty shovel tests were dug along the staked path of the hike and bike trail passing by Mission San José (Figure 4-4). For the purposes of this report, the shovel tests are divided into three areas:

- (1) Area 1 (Shovel Tests 1 through 23), south of the mission walls, running from the sidewalk between the Visitor's Center and the southeast gate of the mission to the sidewalk along Roosevelt Avenue. This is an area where previous excavations suggested that most of the sediments would be disturbed and few Colonial or nineteenth century artifacts would be found. As mentioned above, this is the area where shovel testing did not conform to the eventual path of the new hike

and bike trail. As can be seen in Figure 4-4, the actual new trail is south of the route marked for the CAR archaeologists by about 18-22 m;

(2) Area 2 (Shovel Tests 24 through 29), near the southwest corner of the mission, where previous excavations (Schuetz 1970) suggested there might be the remains of a gate midden; and

(3) Area 3 (Shovel Tests 30 through 50) following the hike and bike trail route as it curves away from the sidewalk at Mission San José's southwest corner, rejoining the sidewalk near the granary (Figure 4-4).



Figure 4-3. CAR staff shovel testing in Padre Park near old sidewalk.

Table 4-1 shows artifact counts and notes counts and percentages of artifacts that can be assigned to three specific eras: the Colonial period (1730 to 1820); the nineteenth century (1820 to 1910); and the twentieth century (1910 to the present). A list of artifacts assigned to each category and a brief description of each is presented in Table A-1. The complete artifact list is provided as Table A-2. A brief discussion of artifacts types recovered follows the shovel test descriptions.

Area 1 (Shovel Tests 1-23)

Shovel Tests 1-23 were placed at 5-m intervals from east to west across the grounds south of the mission. The area was known to contain archaeological features including a burial, foundation trench (Henderson and Clark 1984), and possible midden (Schuetz 1970; Tomka and Fox 1998, and Tomka et al. 1999). The typical depth of the shovel tests was 40 cmbs. Many tests were stopped at shallower depths after encountering asphalt, concrete, roadbed gravels, or other construction materials.

The soils in all the shovel tests in Area 1 were heavily disturbed and deposits are not intact. Only five possibly Colonial period items were recovered in these tests, four pieces of lithic debitage and a sherd of Goliad ware. All were in clearly disturbed contexts. Only a single piece of solarized amethyst glass could be tentatively assigned to the nineteenth century. Four shovel tests in this area were sterile: Shovel Tests 8, 16, 18 and 19. Although previous excavations along the wall (Tomka and Fox 1998, 1999; Tomka et al. 1999)

found intact Colonial deposits closer to the reconstructed mission walls, the ground tested in Area 1 has clearly been seriously disturbed. Little evidence of the Colonial period remains in the upper 40 cm of sediments along the route of the hike and bike trail (Table 4-1). The average count of artifacts per shovel test for Area 1 was 11.8, the lowest of the three areas.

Area 2 (Shovel Tests 24-29)

Area 2 tested the path of the new hike and bike trail at 5-m intervals in an area between the existing sidewalk and the southwest corner of the mission, where Mardith Schuetz had located evidence of a gate midden (Schuetz 1970). This area is heavily disturbed by utilities, sidewalks, road construction, and the sprinkler system that Schuetz had observed (Schuetz 1970). A 1984 archaeological test trench dug prior to installation of a sewer line also contributed to the disturbance (Hafernik and Fox 1984). All of the tests in Area 2 showed clear evidence of disturbed context. Shovel Tests 25 and 29 contained the most artifacts, with the latter producing the largest artifact count of this project (Table 4-1). The average number of artifacts per shovel test, 52.2, was highest in this area, as was the percentage of dateable artifacts that were from the Colonial period.

Artifacts recovered included nine sherds of Goliad ware, a sherd of an untypeable, unglazed ware, and two pieces of lithic debitage. In addition, an assortment of late nineteenth century

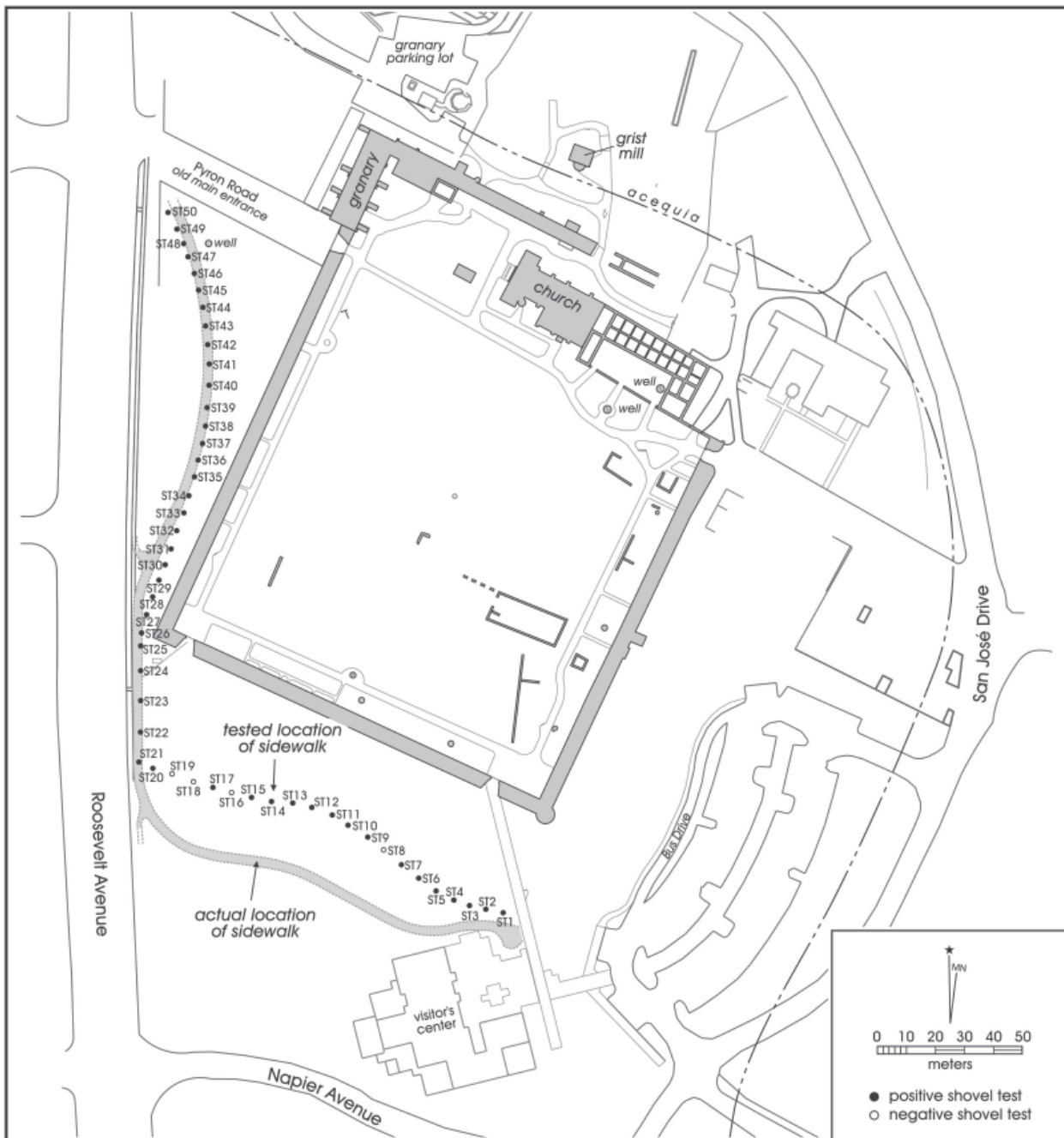


Figure 4-4. Location of shovel tests at Mission San José.

ceramics, including a ceramic doll arm were recovered. In Shovel Test 25, wire nails, a marker for the twentieth century, were found in Level 4, along with a Goliad ware sherd and a decal decorated whiteware fragment from the Hot Wells Hotel (41BX237). Shovel Test 25 also produced a fragment of sandstone matching the type and weathering of the rock that makes up the mission walls. This may be debris from the restoration done during the 1930s (see Chapter 2).

Area 3 (Shovel Tests 30-50)

Shovel Tests 30 through 50 followed the hike and bike trail route as it curved away from the sidewalk at Mission San José's southwest corner rejoining the sidewalk at the corner of Roosevelt Avenue and the old main entrance (Figure 4-4). Shovel tests in this area were also placed in 5-m intervals.

Table 4-1. Artifacts from Mission San José and their Assigned Temporal Period, by Area

Shovel Test No.	Total Artifacts	Colonial Period Artifacts*	% of Total	Nineteenth Century Artifacts*	% of Total	Twentieth Century Artifacts*	% of Total
<i>Area 1</i>							
ST 1	51	0	0.0%	0	0.0%	5	9.8%
ST 2	85	0	0.0%	0	0.0%	0	0.0%
ST 3	9	3	33.3%	0	0.0%	0	0.0%
ST 4	36	0	0.0%	0	0.0%	2	5.6%
ST 5	2	0	0.0%	0	0.0%	2	100.0%
ST 6	6	0	0.0%	0	0.0%	0	0.0%
ST 7	3	0	0.0%	0	0.0%	0	0.0%
ST 8	Sterile						
ST 9	5	0	0.0%	0	0.0%	0	0.0%
ST 10	8	0	0.0%	0	0.0%	3	37.5%
ST 11	1	0	0.0%	0	0.0%	1	100.0%
ST 12	4	1	25.0%	0	0.0%	0	0.0%
ST 13	2	1	50.0%	0	0.0%	0	0.0%
ST 14	6	0	0.0%	0	0.0%	1	16.7%
ST 15	4	0	0.0%	0	0.0%	0	0.0%
ST 16	Sterile						
ST 17	2	2	100.0%	0	0.0%	0	0.0%
ST 18	Sterile						
ST 19	Sterile						
ST 20	1	0	0.0%	0	0.0%	0	0.0%
ST 21	1	0	0.0%	0	0.0%	0	0.0%
ST 22	3	0	0.0%	0	0.0%	1	33.3%
ST 23	1	0	0.0%	0	0.0%	0	0.0%
Area 1 Totals	230	7	3.0%	0	0.0%	15	6.5%
<i>Area 2</i>							
ST 24	2	1	50.0%	0	0.0%	0	0.0%
ST 25	84	7	8.3%	2	2.4%	2	2.4%
ST 26	5	0	0.0%	2	40.0%	1	20.0%
ST 27	19	1	5.3%	4	21.1%	2	10.5%
ST 28	51	2	3.9%	2	3.9%	0	0.0%
ST 29	151	3	2.0%	10	6.6%	4	2.6%
Area 2 Totals	312	14	4.5%	8	2.6%	21	6.7%

Table 4-1. Continued...

Shovel Test No.	Total Artifacts	Colonial Period Artifacts*	% of Total	Nineteenth Century Artifacts*	% of Total	Twentieth Century Artifacts*	% of Total
<i>Area 3</i>							
ST 30	33	0	0.0%	0	0.0%	7	21.2%
ST 31	4	0	0.0%	0	0.0%	0	0.0%
ST 32	147	5	3.4%	14	9.5%	19	12.9%
ST 33	78	0	0.0%	1	1.3%	6	7.7%
ST 34	44	1	2.3%	3	6.8%	5	11.4%
ST 35	55	1	1.8%	7	12.7%	15	27.3%
ST 36	15	0	0.0%	1	6.7%	5	33.3%
ST 37	8	0	0.0%	0	0.0%	1	12.5%
ST 38	15	0	0.0%	1	6.7%	0	0.0%
ST 39	6	0	0.0%	0	0.0%	0	0.0%
ST 40	27	1	3.7%	1	3.7%	0	0.0%
ST 41	4	0	0.0%	0	0.0%	0	0.0%
ST 42	13	1	7.7%	0	0.0%	0	0.0%
ST 43	10	0	0.0%	0	0.0%	0	0.0%
ST 44	12	1	8.3%	0	0.0%	0	0.0%
ST 45	9	0	0.0%	1	11.1%	1	11.1%
ST 46	23	0	0.0%	1	4.3%	0	0.0%
ST 47	7	0	0.0%	0	0.0%	1	14.3%
ST 48	9	1	11.1%	0	0.0%	0	0.0%
ST 49	2	0	0.0%	0	0.0%	0	0.0%
ST 50	5	0	0.0%	0	0.0%	0	0.0%
Area 3 Totals	526	11	2.1%	30	5.7%	60	11.4%
Overall Totals	1068	32	3.0%	38	3.6%	96	9.0%

* See list of artifacts assigned to each date category in Appendix A, Table A-1

The tests in this area averaged 25.1 artifacts per unit, however this area also had the highest percentage of twentieth century artifacts (Table 4-1). All shovel tests showed clear evidence of previous disturbance, either by the nature of the sediments or by the dating of the artifacts. As an example, Shovel Test 32, which had the second highest artifact count, had, in Level 3, a piece of Colonial lead-glazed ceramic, as well as early to mid-nineteenth century ceramics and cut nails, but it also had twentieth century wire nails (Table A-2).

Shovel Test 48 encountered overlapping sandstone rocks at 15 cmbs. Although some distance from the mission's west wall, it is near a replica well and a rock and iron sign base both making use of the same sandstone.

Artifacts Recovered

A total of 1,064 artifacts was collected during the testing at Mission San José. A complete list of these artifacts can be found in Table A-2. The following is a brief discussion of the dateable artifacts recovered at Mission San José. A summary of artifact types assigned to date categories can be found in Table A-1.

Most of the collected artifacts, such as unidentifiable fragments of metal and animal bone cannot be assigned to any given period. Others can be assigned to a general period with some degree of probability. In many cases assignment of a type of artifact to a date category is based on the likelihood

that most artifacts of that type were produced in the assigned periods. For instance, clear glass was available in the Colonial period but was very expensive. Most clear glass is probably from the late nineteenth century or later (Lockhart 2006). Another example is clear bottle glass that has turned an amethyst color when exposed to sunlight for a long period of time. We know that this glass was made with manganese dioxide, a manufacturing process that was in use between about 1870 and about 1920 (Lockhart 2006:54). This period overlaps our arbitrary date categories of nineteenth century (1820-1910) and twentieth (after 1910) somewhat, but glass with the characteristic amethyst color has been assigned to the nineteenth century category, because it is known that the use of manganese dioxide as a decoloring agent ended largely because that glass formula did not work as well in the Owens bottle machine as glass decolorized with other agents, in particular selenium (Lockhart 2006:53-54; Munsey 1970:33). The Owens machine, patented in 1903 (Lorraine 1968:43), produced bottles roughly fifty times faster than the old methods and did not require experienced craftsmen to do so. The machine was a significant producer of bottles in the United States within five years (Munsey 1970:33). Therefore, although some bottles continued to be manufactured with manganese dioxide after 1910, the vast majority will have been made before that time.

Some artifacts overlap the dating categories too much to allow us to assign them to a date category. For instance, stoneware was very popular for large storage containers in the last half of the nineteenth century, but this popularity extended into the first half of the twentieth century as well (Greer and Black 1971). Another example is Galera ware, by far the most common lead-glazed ceramic type found in historic sites in San Antonio. It was made in Mexico during the Colonial period, but remained popular well into the nineteenth century and is still being made in small quantities today (Cargill et al. 2004:64). Although it is safe to assume that Galera ware is nineteenth century or earlier, it is not safe to assume that all Galera ware is Colonial in date.

Lithics

A single unifacial lithic tool (Figure 4-5[a]) and eight chert flakes were collected during the shovel testing at Mission San José. The tool was made from a secondary flake. Although it is possible that all the lithics recovered were prehistoric, we are assuming that they are of Colonial origin, as use of lithic tools (by both Native Americans and Spanish) continued throughout the Colonial period, partially due to the lack of iron at the colony (Hard et al. 1995:49). Others have noted that lithic tool collections from Colonial sites in San Antonio appear to consist largely of lightly (and usually unifacially)

retouched flakes and flakes utilized without modification (Hard et al. 1995:57; Tomka 2000:38; Tomka et al. 1999:33-34). With occasional exceptions, bifacial tools at Colonial sites are limited to the beautifully made Guerrero projectile points and to gunflints (Hard et al. 1995:57; Tomka 2000:38; Tomka et al. 1999:33-34).

Ceramics

Unrefined Ceramics

These ceramics are fired at temperatures around 1800-2000 degrees F. The resulting biscuit is relatively soft, non-vitrified and porous, and opaque. Surface finishes were necessary to make them waterproof. A variety of unrefined ceramics was produced in Europe from medieval times through the mid-nineteenth century. Many are the products of local craftwork and lack standardization in size, shape, and decoration as seen in industrially produced wares. They can be unglazed or covered with lead or tin-based glazes.

Goliad Ware

Goliad ware is an unrefined, low-fired, unglazed, bone-tempered earthenware made locally in a tradition that began in the Late Prehistoric, before European contact (Perttula 2002:255). Apparently used to make simple bowls and jars throughout the Colonial period, Goliad ware varies in color from black to dark gray and red, sometimes on the same vessel, indicating they were fired on open fires, not in kilns. The dark band of poorly fired clay that can usually be seen in the center of a sherd is another indication that these wares were not kiln-fired. Twelve sherds of Goliad ware were recovered from the shovel test at Mission San José.

Lead-Glazed Ware

There are several varieties of lead-glazed wares seen during the Mission Period and continuing well into the nineteenth century (Cargill et al. 2004:64). A total of seven sherds of lead-glazed wares was recovered. One type found during this project was Yellow Glaze (n=1), a thick-walled type used for heavy bowls and pitchers and covered with a thin yellowish glaze (Fox 2002:205). Another type is defined by Fox (2004:207) as Dark Brown Ware. Two examples of this type were recovered. Both of these types are Colonial in date.

A single sherd of Tonalá glazed ware was also recovered (Fox 2002:208). This is a thin sherd with cream-colored paint, decorated with red-brown lines and covered with a thin lead glaze (Figure 4-5[b]). Fox (2002:208) noted that these were

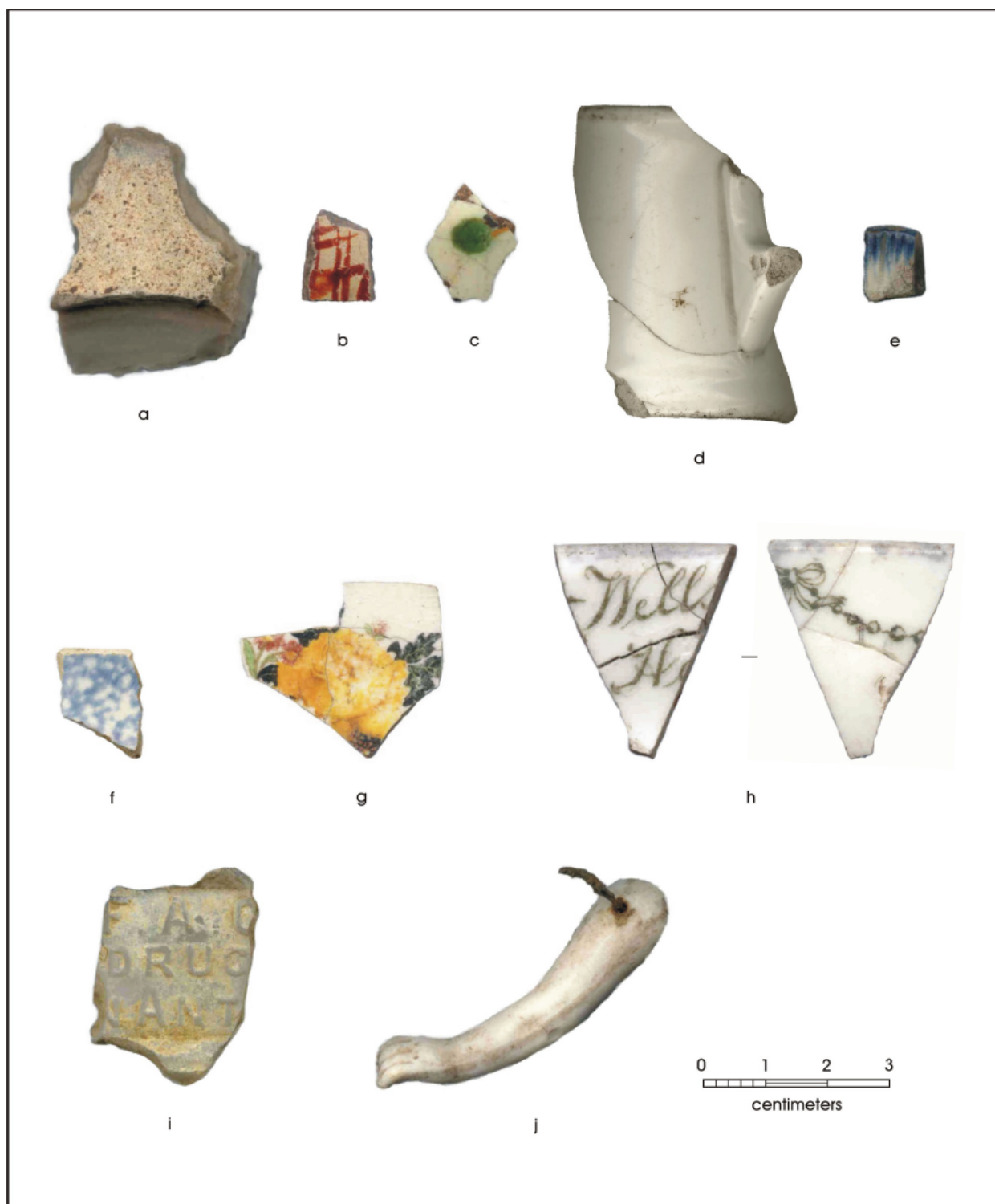


Figure 4-5. Selected artifacts from Mission San José: (a) Unifacial lithic tool; (b) Tonalá glazed sherd; (c) Early nineteenth century Majolica sherd; (d) Undecorated cup fragment; (e) Edge decorated whiteware fragment; (f) Sponge decorated whiteware fragment; (g) Decal decorated whiteware fragments; (h) Fragment of a whiteware dish from the Hot Wells Hotel; (i) Fragment of a medicine bottle from an unidentified San Antonio druggist; (j) Bisque doll's arm with wire that attached it to the doll body.

probably an attempt to make cheaper copies of majolicas. This type of ceramic can be dated between ca. 1780 to 1830 (Gerald 1957:173).

One sherd of a lead-glazed ware identified as Black Luster was recovered (Cargill et al. 2004:64). Wares of this type, with a reddish brown paste, are not temporally diagnostic, as small pots of this type are still being made in Mexico today (Barnes 1980:100).

The remainder of the lead-glazed wares recovered during shovel tests (n=3) were thin-walled Galera ware. This type, usually molded, with a fine-textured paste, was used for chocolate and bean pots. Although they were most popular in the eighteenth and nineteenth centuries, they are still being made in a very similar fashion in Mexico today (Cargill et al. 2004:207). Galera ware often has painted decoration over the glaze.

Tin-Glazed, Majolica

When tin is added to lead glazes the result is an opaque white to cream colored surface. These ceramics are usually called Majolica. Made in Mexico, the majolicas found in Texas can be dated to some extent, as fashions in their painted decorations changed through time (Fox 2002:208). Only one majolica sherd was recovered during this project, a small sherd that appears to be an as yet unclassified early nineteenth century type (Figure 4-5[b]). The early nineteenth century majolicas had new colors (including rust, green, and brown/black) on a greenish cream background. The classification of these late majolicas is in the early stages. Fox (2002:214) tentatively classifies a specimen similar to the sherd recovered at Mission San José as Other Late Polychrome, Type 3.

In addition to the above, there is one unglazed sherd of an unknown type of unrefined ceramic.

Refined Ceramics

Anglo-American and later German and French settlers in the early to mid-nineteenth century brought new types of ceramics with them. These new wares were made of highly refined clays and fired at much higher temperatures than the Mexican and local wares. Five categories of these refined ceramics were recovered at Mission San José: Copper Luster, whitewares, Yellow ware, Porcelain, and Stoneware.

Copper Luster

Copper luster is made by applying a thin metallic film to a refined earthenware with a dark, usually reddish paste. The result is a very polished, metallic luster. Most Copper Luster items have white paint on some or most of the piece with the copper luster as accent (Godden 1975:214). Copper Luster decorations began in the early nineteenth century, were most popular in the mid- to late nineteenth century, and are still in some use today (Godden 1975:214-215). One piece of copper luster ware was recovered.

Whitewares

White paste earthenwares, called whitewares in this report, were made of highly refined clays, generally had a cream to white paste, and were heavily glazed. Before the late nineteenth century, these whitewares were usually decorated. In the last part of the nineteenth and early twentieth century, they were often undecorated. Even during the period when ceramics were routinely decorated, parts of many plates and bowls were left undecorated. Thus a sherd of undecorated whiteware in this collection may have come from anytime after about 1820 (Cargill et al. 2004:69). A total of 47 undecorated whiteware sherds were recovered, of which two fragments, found in Shovel Test 32, Level 2, mend to form part of a small cup 2 in. tall with a lip that is 1.5 in. in diameter (Figure 4-5[d]). The base flares out slightly, but otherwise the walls of the cup are straight. This is a very small cup, but is probably too large to be a toy. It is probably a demitasse cup, holding two or three fluid ounces, and used to serve Turkish or espresso coffee (Wikipedia 2006).

Decoration types can often be loosely dated. The types of decorated whitewares found at Mission San José during this project are listed below.

Edge-Decorated

Blue, green, or occasionally other colors on the rim only, was a popular form of decoration for nearly a hundred years, from late eighteenth to late nineteenth centuries, but the styles changed over time, allowing more detailed dating (Cargill et al. 2004:69). The single piece of edge-decorated whiteware recovered is from a plate with a scalloped rim, colored blue, with straight incised marks (Figure 4-5[e]). This type was used between 1795 and 1840, and was most popular between 1810 and 1830 (Stelle 2001), making it likely that this tiny

sherd was brought to San Antonio in the first half of the nineteenth century. The sherd was heavily burned.

Hand-Painted

This type of decoration was popular from the late eighteenth century to about 1850. At first hand-painted colors were brown, mustard yellow, and olive green. In the 1820s wares painted with large blue flowers became popular. After 1830 new colors, including red, black, and lighter shades of blue and green, were introduced (Miller 2000:93). Of the four hand-painted sherds recovered, all belong to the latter color scheme.

Transfer Printed

This type of decoration was made by engraving intricate designs on copper plates and then impressing them in colored ink on tissue paper, which was then transferred to the surface of a fired ceramic, then glazed and re-fired. Transfer printed ceramics were popular from the 1750s to the 1850s, with a resurgence of popularity at the end of the century (Miller 2000:94). Particular patterns were registered in Great Britain and it is sometimes possible to identify specific patterns on sherds. Unfortunately, the two tiny sherds of transfer recovered during this project were too small to identify. One has a dark blue color and can be roughly dated between 1820 and 1840.

Annular Ware

Annular wares (sometimes called banded slip wares) were made with bands of different-colored slips. They were popular from the late eighteenth to the mid-nineteenth centuries (Miller 2000:91-92). There were three tiny sherds of this type in the collection.

Sponge Decorated

This type of decoration is made by dipping a piece of sponge in paint and applying it to the fired ceramic, after which the item is glazed and re-fired (Figure 4-5[f]). This style was very popular from the 1840s to the 1880s. Two sherds of this type were recovered.

Luster Decorated

One sherd of whiteware has a thin film of pink, faintly iridescent color on it. This type of luster decoration is often seen on porcelain, but a few other examples of whiteware with pink luster have been noted at nineteenth century sites (Hard et al. 1995:45).

Decal Decorated

Decal decorated wares (also called Decalcomania) were produced by transferring colored tissue-like paper onto the glazed surface of whiteware. The technique was first used in the 1850s and remained popular well into the twentieth century (Durrenberger 1965; Lehner 1980). The decals often suffer in archaeological context because they are outside the glaze, but the bright colors and intricate designs can sometimes remain intact (Figure 4-5[g]). A total of six decal decorated whiteware sherds were recovered, three of which mend to form a rim sherd (Figure 4-5[h]) with enough of the decal design remaining to identify the logo of the Hot Wells Hotel (Fox and Highley 1985:4-16), a resort built in 1894 to take advantage of the hot sulfurous water from the artesian well that had been drilled across the river from Mission San José (see Figure 1-5). This hotel was a world-class resort, catering to such people as Will Rogers, Douglas Fairbanks, Charlie Chaplin, Teddy Roosevelt, Tom Mix, Francis Ford and Cecil B. De Mille (Eckhardt 2006b; Fox and Highley 1985:14-16). World War I seriously impacted the economic health of the hotel and Prohibition in 1919 finished it. It was sold to a Christian Science congregation in 1923 (Fox and Highley 1985:16). It has burned a number of times, leaving only ruins today. Several attempts to fund the rebuilding of the resort have failed (Eckhardt 2006b).

Yellow Ware

This type of refined earthenware has a yellow paste covered with a clear or dark brown glaze. It was first used in the late eighteenth century and continued to be used for making heavy kitchen bowls and pitchers until well into the twentieth century (McAllister and Michel 1993:14). One brown-glazed yellow ware sherd was recovered.

Porcelain

Porcelain is made by firing extremely fine clays at very high temperatures. European porcelains such as those recovered in this project are rare in San Antonio historic sites that date before about 1860 (Tennis 1997:15). Many of the same decorative techniques used on whitewares have been used on porcelain. Seven undecorated sherds of porcelain were recovered, as well as two decal decorated, and one transfer printed sherd.

In addition, one piece of semi-porcelain, that is, low quality, partially vitrified porcelain, was also recovered with a Band

and Line decoration. This style of decoration consists of one or more thin lines of color painted near the rims of ceramics. The color was often green or green and brown. This style began in the last quarter of the nineteenth century and was popular for hotel, restaurant, and institutional wares for more than 75 years (Miller 2000:92). It was usually found on fairly thick, utilitarian whiteware. The colors on this example are two black lines separated by a thinner orange line. The use of semi-porcelain for this type of ware may indicate a somewhat more elegant and expensive version of Band and Line ware.

Stoneware

Like porcelains, stonewares have hard vitrified pastes due to the extremely high temperatures at which they were fired (Greer 1981). Although stoneware manufacture began long before the Anglo-American influx into Texas, stonewares are not usually seen at historic sites earlier than about 1850, and they become much more prevalent after about 1880. At least nine potteries manufacturing stonewares are known to have been in operation near San Antonio in the nineteenth century, due to the prevalence of suitable clays (Tennis 1997:16), and some continued to the middle of the twentieth century (Greer and Black 1971). Stonewares were used primarily for containers to store liquids, for drinking vessels, and other utilitarian purposes (Fox 2002:217). There are five sherds of stoneware in this collection, only one of which is large enough to suggest vessel type. This is a flat-bottomed jar or jug 6 in. (15.2 cm) in diameter. It has a salt glaze on the outside and an Albany glaze on the inside. This combination most likely dates between about 1860 and 1900 (Greer 1981; Stelle 2001; Tennis 1997:20).

Glass

A total of 333 glass artifacts was recovered, of which 32 were identified as window glass. The remaining 301 glass artifacts represent container glass, one of which was a portion of a molded medicine bottle with the remains of the druggist's logo embossed on it, reading "...F. A. C[or O]/Drug/...n Ant..." (Figure 4-5[h]). In the last quarter of the nineteenth century, local druggists had bottles made with their personal logos embossed on them. A number of these have been identified in San Antonio. Unfortunately, a list of druggists in San Antonio compiled from the old City Directories by Wayne Cox does not include any that could be readily matched to this fragment. The making of these individualized bottles ended when the Owen's Bottle Machine, patented in 1903, began to dominate glass manufacturing (Lorraine 1968:43). It was no longer economical to make small batches embossed for individual pharmacies and the practice had largely ended by the early 1920s (Lockhart 2006:54).

Although the popularity and manufacturing techniques of glass colors varied through time so that glass color can be used, with caution, as a general indication of dating, most glass dating is only very general. As mentioned above, we do know that glass that turns an amethyst to lavender color after a long period in the sun was decolorized with small amounts of manganese dioxide. We know that clear glass that has turned a grayish yellow is made with selenium. Munsey (1970:55-56) dates the use of selenium to decolorize glass to between 1914 and about 1930. However, more recent scholarship by Lockhart (2006), while not addressing end-date of the use of selenium, notes that this practice became more popular with the expansion of machine manufacturing of bottles because the selenium mixture worked better than the manganese mixture in the type of tanks used by the bottle-making machine (Lockhart 2006:53). Lockhart (2006:53) also quotes Sharp (1933:763): "selenium is almost invariably used in bottle glass," strongly suggesting that the end of selenium as a popular decolorizer was well after Munsey's (1970:55-56) end date of 1930. Three pieces of clear glass in this collection were sun-colored amethyst and eight were sun-colored yellow (see Table A-2).

One glass color, an extremely dark olive green—so dark that it appears to be black until held up to a light source—can be dated to the nineteenth century until about 1870-80 (Lindsey 2006a; Munsey 1970:27). Seven fragments of this glass color were identified. On the other hand, the very bright "7-Up®" green color is confined almost exclusively to the twentieth century and later and can be used as a marker for that period (Lindsey 2006a). One fragment of this color was identified.

Toys

Two toy items were identified. One was a handle from a transfer printed porcelain doll's dish. The other is a bisque doll's arm, made with a hole at the top, and the remains of the metal wire that held the arm to the body still present (Figure 4-5[i]). This means that the body of the doll was also ceramic. The arm is complete, and measures 2.25 in. The doll would have been about 6 in. tall. The quality of the little arm is not high. There is no colorization of the white bisque and the mold mark has not been skillfully removed. It would have been a doll of moderate expense, probably made between 1875 and ca. 1910 (Meissner 1997:74).

Clothing

Two metal, clothing strap buckles were recovered. One porcelain button fragment was found in Shovel Test 32. This button was a 4-hole button with a deep well, with blue under-glaze paint on the raised rim. Porcelain was used for

moderately priced buttons from about 1840 (Epstein and Safro 1991:74), when a cheap method of manufacture was developed, to about 1910 (Albert and Kent 1949:35).

Other Artifacts

Most of the remaining artifacts were mammal bone (n=308) and unidentifiable metal scraps (n=109). There were 27 cut nails, a nineteenth century artifact type. Sixty nails were wire nails, a type that began to take over the market about 1890 and thus is a reliable twentieth century marker (Wells 1998:87). Asphalt (n=19) was used in both the late nineteenth and twentieth century. One can key was recovered. This type of can opener was first developed at the very end of the nineteenth century and was in common use until about 1960 (Vaughan 1997:213). Cans that open with similar keys are still occasionally seen today.

The Pyron Homestead (41BX279)

The foundations of the Pyron Homestead are outside the project area. The planned extension of Padre Drive does pass through the homestead property (Cox 1992), however. The ground surface along the ROW was overgrown, decreasing ground surface visibility to zero (Figure 4-6).

A total of 40 shovel tests along two transects at 5-m intervals was placed within the ROW to test for undisturbed archaeological deposits associated with the Pyron Homestead (Figure 4-7). A series of shovel tests were also placed around Shovel Test 18 to find the limits of a concrete slab encountered at 30 cmbs in Shovel Test 18. Of the 40 shovel tests, 35 were positive, with a total of 334 artifacts recovered. A complete list of these artifacts is in Table A-3. The depth of these shovel tests ranged between 10 and 60 cmbs, depending upon contact with large broken fragments of concrete. A powered auger was used to dig between 80-100 cmbs on a few randomly selected shovel tests. No cultural materials were found below 60 cmbs.

Although the Pyron Homestead is known to have been occupied by at least 1848 (Cox 1992:3), and possibly many years earlier, there was little evidence of this pre-twentieth century occupation in the area tested. Seven pieces of

chert that may be the debitage of stone tool manufacture were recovered. Only a single nineteenth century artifact was collected. It is a fragment of the lip of a bottle that can be positively dated to the mid-nineteenth century (Figure 4-8). This bottle lip is olive glass of a type commonly used throughout the nineteenth century (Lindsey 2006a). The bottle was either free-blown or blown into a mold. The neck of the bottle was then broken off, ground smooth, and fire polished. Then a small “string” of molten glass was applied and shaped around the neck, creating a flange around the lip to strengthen it. This lipping technique was in use for centuries, especially for champagne and other wine bottles. By about 1880 a more finished lip, in which a blob of glass was added and shaped to form the lip, entirely covering the original bottle neck, was nearly universal (Lindsey 2006b). This bottle almost certainly dates before that time. Knowing whether the bottle was free blown or mold-blown would help with dating, but the fragment is too small to identify the blowing technique used.

The only other artifact that might have come from the nineteenth century was a small piece of clear glass that has been solarized amethyst. This, as mentioned above, is a trait of glass decolorized using manganese dioxide, a technique that was most commonly used after about 1870 and that ended about 1920 (Lockhart 2006).

All other materials from the Pyron Homestead testing can either not be dated, or can be dated to the twentieth century or later. Artifacts of the latter type include wire nails, bright



Figure 4-6. *The Pyron Homestead, showing dense vegetation.*

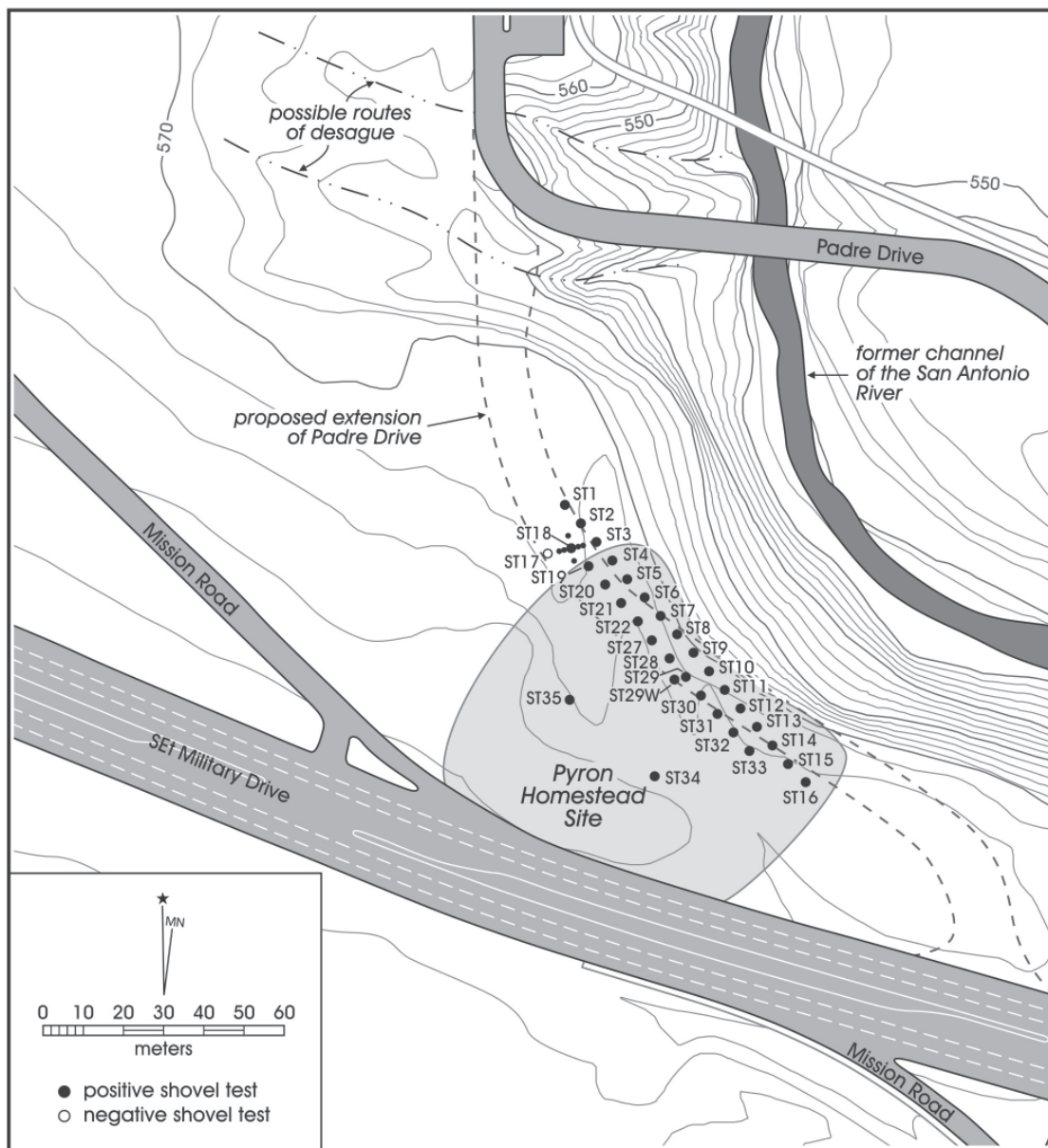


Figure 4-7. Map of Pyron Homestead, showing route of the new section of Padre Drive and the location of shovel tests.

green glass, modern plastics, and crown caps (see Table A-1 for list of dateable artifacts). It is clear that, at least in the area and to the depths tested, virtually all remnants of the long history of the Pyron Homestead have been removed.

The Brown Site (41BX241)

The original record of the Brown Site describes a well and foundations related to an empty house (Scurlock et al. 1976). In 2002, CAR staff archaeologists could find no remaining evidence of the site. The last vestiges of the well and the

foundations are no longer above ground; the nearby empty house used as a reference point is also gone. The area is now neatly trimmed grass with several pecan trees to the north side and brush near to the old San Antonio River channel (Figure 4-9). To the south, landscaping to drain the area to a concrete-lined ditch leading into the old river channel has impacted the site. Nevertheless, eight shovel tests were dug to 60 cmbs (Figure 4-10). Only five of them were positive, producing 13 artifacts. A list of these artifacts is in Appendix Table A-4. A piece of undecorated whiteware was the only ceramic recovered. Six pieces of glass were recovered,

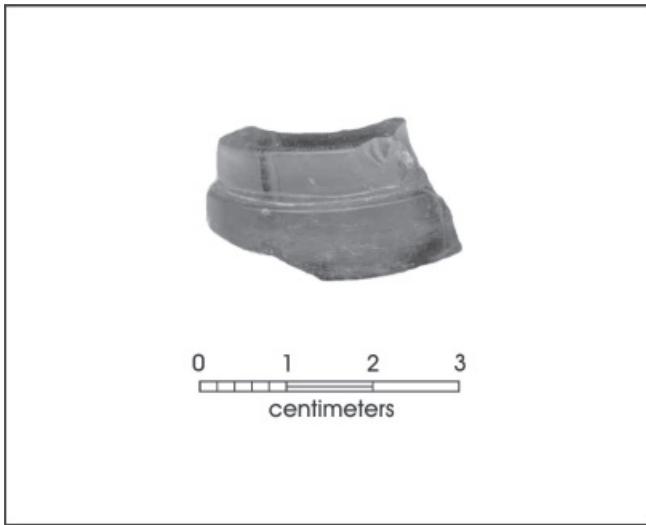


Figure 4-8. *Nineteenth century bottle lip fragment from the Pyron Homestead.*

including the rim of a machine-made milk bottle, made in the twentieth century (Munsey 1970:33).

The results of the shovel tests and lack of any surface remnants of previously recorded historic structures suggest that this site has been seriously impacted by construction and other activities, leaving very little evidence of previous habitation.

Padre Park

A new section of the Scenic “wet” route of the hike and bike trail was planned to run from E. White, along the rechanneled river to Padre Park, where it would join a previously built sidewalk, scheduled for widening (Figure 1-4). This part of the planned route of the trail would run parallel with a surviving portion of the old river channel from the new river channel westward to Padre Drive (Figure 1-5, 4-11). In this area, 39 shovel tests were excavated (Figure 4-11). A list of artifacts recovered is in the Appendix in Table A-5. Shovel test units were 60 cm deep. A powered auger was used in randomly selected units to test down to 90 cmbs, however, no artifacts were located below 60 cmbs.

Shovel Tests 1 through 5 and 33 through 35 were placed at 10-m intervals on either side of a hill cut where the new hike and bike

trail will widen the current sidewalk (Figures 1-5 and 4-11). Of the eight shovel tests in this area, only four had a positive artifact recovery. The artifacts consisted of asphalt, concrete, brick fragments, glass, metal fragments, tile and plastic (Table A-5). Shovel Test 1, Shovel Test 2, and Shovel Test 36 had gravel-clay fill material in the first 10 to 20 cm, apparently related to the machine-dug drainage ditch proceeding from a culvert at Padre Drive passing north of the sidewalk then crossing it to reach the old river channel (Figure 4-11). The engineering of this ditch involved considerable landscaping, especially near Shovel Test 6 and north of Shovel Test 8. This includes an approximately 6 m tall concrete pillar on top of a manufactured rise near Shovel Test 6. This structure is likely associated with a water or sewer system. Since there was heavy soil disturbance in this area, Shovel Tests 6, 7, and 8 were placed widely apart.

Shovel Test 8 contained a biface fragment with a thick patina, partially covered with a heavy encrustation (Figure 4-12[a]). It is the medial fragment of an untypable dart point recovered from 40-50 cmbs. In that same level were animal bone fragments, a fragment of oyster shell, a piece of olive colored glass that may be of nineteenth century origin, and two fragments of an undecorated whiteware bowl. The latter cannot be dated with any confidence more specifically than after 1820. The next level (50-60 cmbs) contained a rim sherd of semi-porcelain decorated in the Band and Line style (Figure 4-12[b]). As mentioned above, this style became popular, mostly for hotel, restaurant, and institutional use, in



Figure 4-9. *Shovel testing on the Brown Site, east of the intersection of Padre Drive and Napier Avenue.*

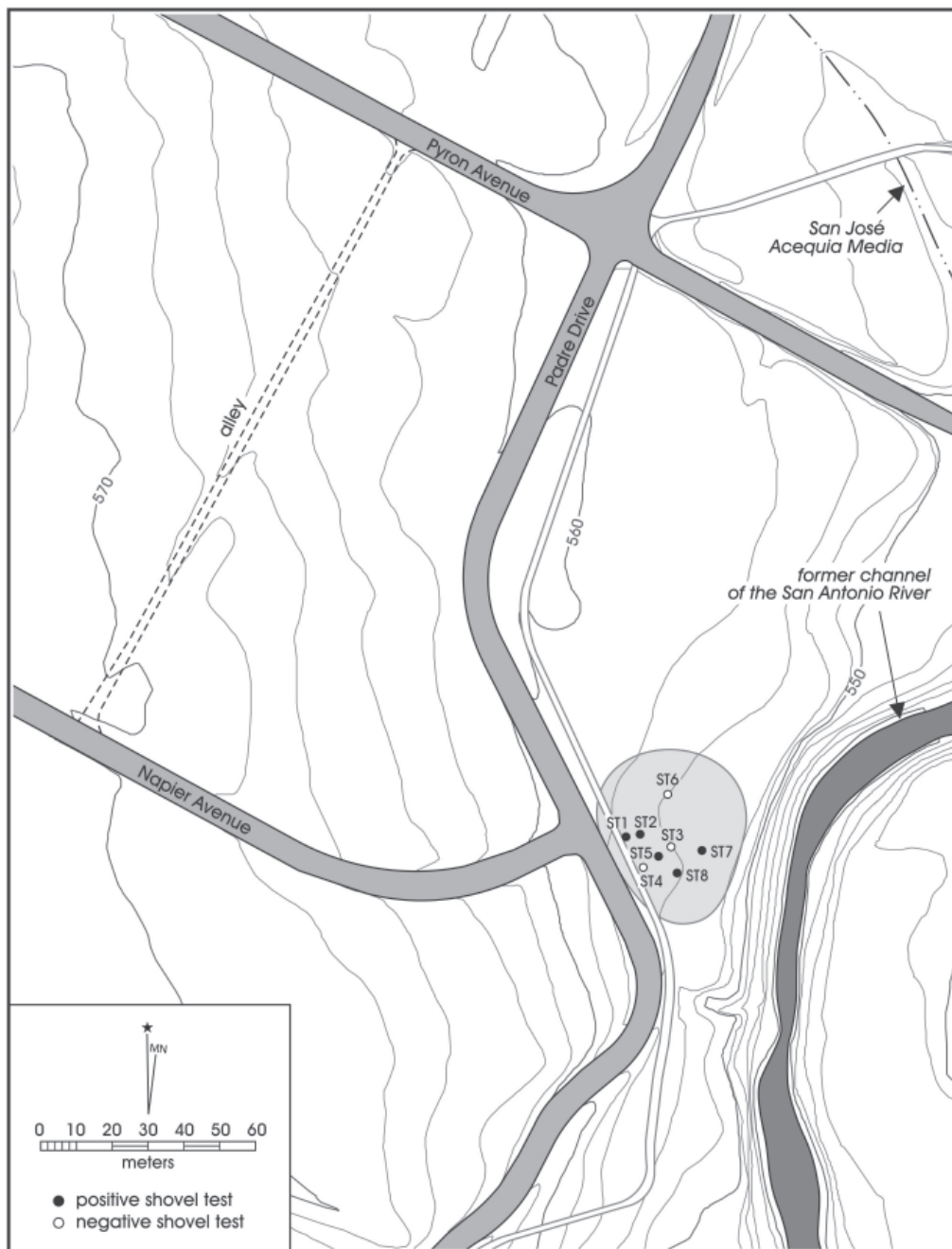


Figure 4-10. Map of Brown Site (41BX241) showing location of shovel tests.

the last quarter of the nineteenth century until roughly 1960 (Miller 2000:92). The use of this decoration is usually on heavy whiteware. This semi-porcelain fragment was a more expensive and elegant version of the standard hotel ware. It is similar in color pattern (two black lines separated by a thinner orange line) to the piece of Band and Line decorated semi-porcelain found in the San José shovel tests but this sherd has a thinner body and the colors are much brighter.

The presence of mid-nineteenth to mid-twentieth century ceramics in Shovel Test 8 in association with an untypable Archaic dart point suggested the sediments were mixed and might, in fact, be fill. Nevertheless, to ensure that there was no intact prehistoric deposit near Shovel Test 8, three outlier shovel tests were placed 5 m to the south, east, and west. No shovel test was placed to the north of Shovel Test 8, as it would have been outside the survey area. The surrounding

shovel tests contained a mix of plastic, animal bone, oyster shell, glass and ceramics. The latter included a piece of Band and Line decorated semi-porcelain, found in Shovel Test 8 W, Level 6, that is an exact match in color, pattern, and thickness to the piece found in Level 6 of Shovel Test 8 (Figure 4-12[b] and [c]).

Shovel Tests 9 to 12 were placed at 10-m intervals to examine the future location of a culvert that will pass under the trail (Figure 4-11). Window glass, bottle glass, and a plastic fragment were recovered, all but one from the upper 20 cm (see Table A-5). These shovel tests were excavated to 60 cmbs.

Shovel Tests 13 to 27 were placed in an area where the existing hike and bike trail turned north to run a short distance along the river. Plans for trail modification and extension follow the old river longer and curve around to meet the rechannelized river, removing the old sidewalk and impacting a new area (Figure 4-11). Shovel Tests 13 through 27 were set out in 5 transects, each 5 m apart, with shovel tests at 10-m intervals. Of these 15 shovel tests, only 6 were positive. Two tests, Shovel Tests 14 and 15 had only a single oyster shell each. Shovel Test 26 was the only test in this area that had more than 4 artifacts. A sherd of Yellow ware, probably of nineteenth century origin, was recovered from Level 1 along with a wire nail and a sherd

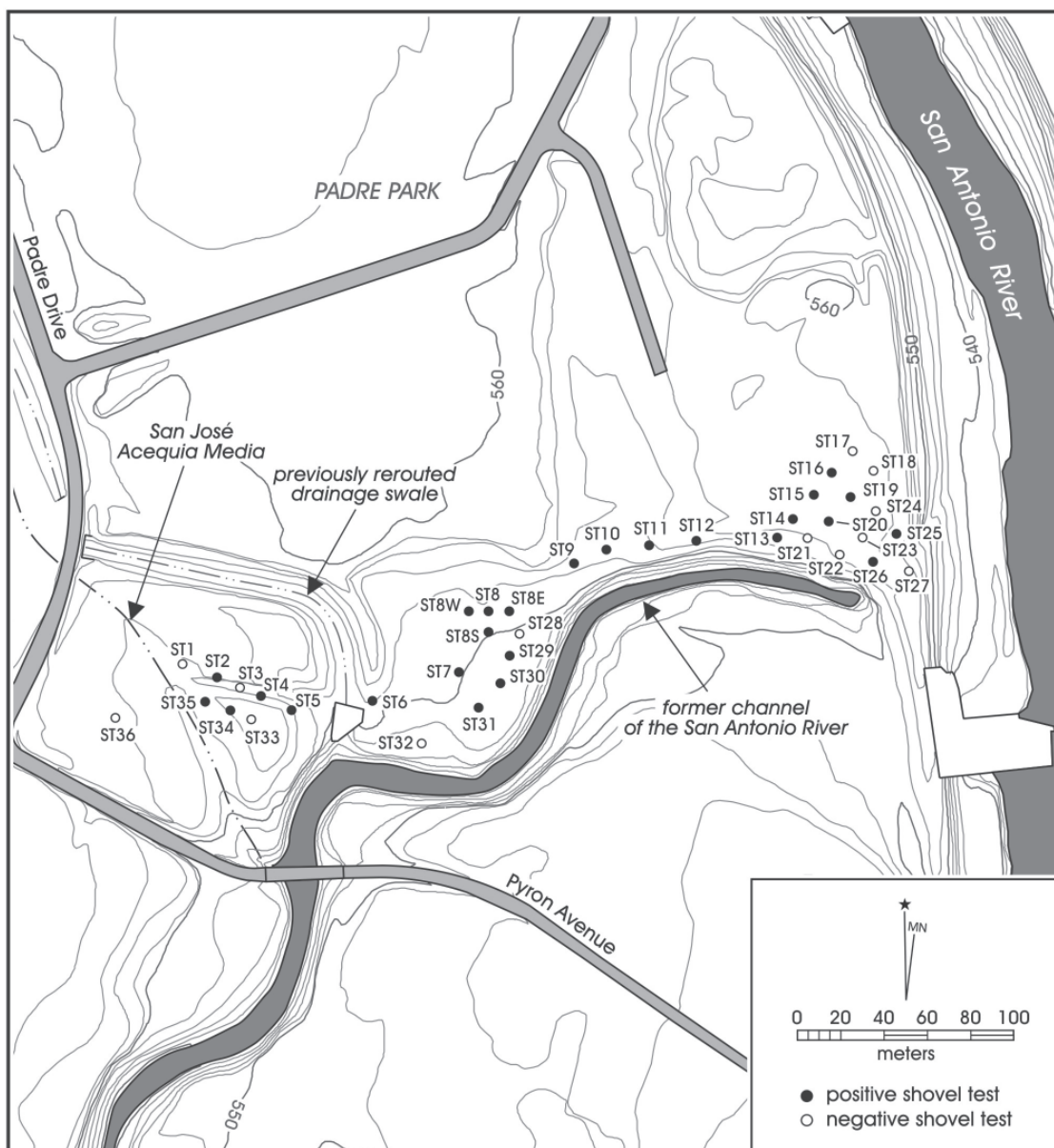


Figure 4-11. Location of shovel tests in the Padre Park survey area.

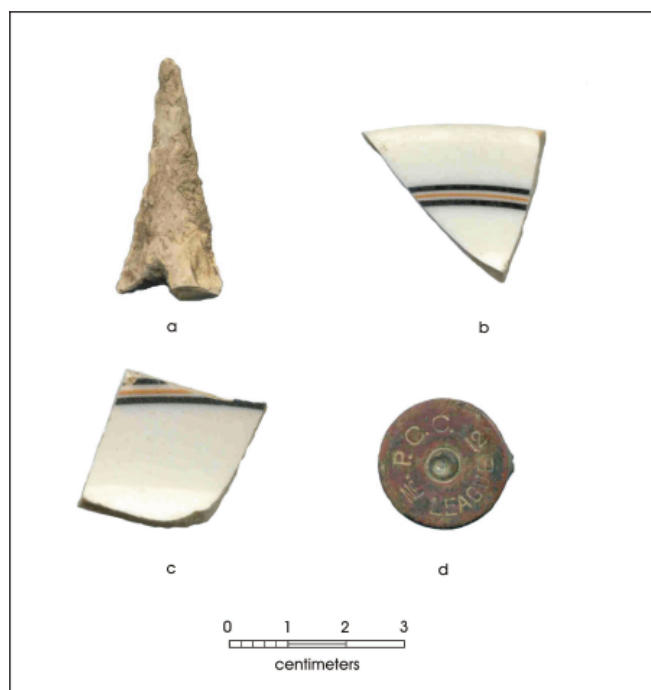


Figure 4-12. Selected artifacts from the Padre Park shovel tests: (a) Medial biface fragment; (b-c) Band and Line decorated semi-porcelain from Shovel Test 8 and Shovel Test 8W; (d) 12 ga. shotgun casing.

of undecorated whiteware. Two sherds of a modern style of stoneware and a wire nail were found in Level 2.

Shovel Tests 28 through 32 were placed at 10-m intervals on the opposite side of the sidewalk from Shovel Tests 7 and 8 to continue the search for a possible undisturbed prehistoric component. Shovel Tests 28 and 32 were sterile. Artifacts recovered from Shovel Tests 29 and 30 included glass fragments, oyster shell, and undecorated semi-porcelain and whiteware. In Shovel Test 29, the brass of a 12-ga. shotgun casing was recovered (Figure 4-12[d]). The head mark on this shell is “P. C. C./No. 12/League”. This casing was made by the Peter’s Cartridge Company, in Kings Mill, Ohio, not far from Cincinnati. The company was incorporated in 1887 and made ammunition for shotguns and rifles. Peter’s “League” Brand was advertised as “a capital shell for all ordinary purposes, strong and a sure killer” (Farrar 2006). In 1934, after the Depression and the lack of military contracts destroyed profitability, Peter’s was sold to Remington, who continued to use some of the Peter’s brand names until the 1960s. However, “League” is not one of these, so this casing must date between 1887 and 1934 (Farrar 2006).

One amber glass fragment has a few letters embossed on it: “...E-USE”. This bottle fragment can be dated to between

1935 and 1966, the period during which bottles containing alcoholic beverages were required by law to be embossed with “Federal Law Forbids Sale or Re-Use of This Bottle” (Busch 1987). Another glass fragment has a keystone makers’ mark on it, indicating that it was made by the Knox Glass Company between 1924 and 1951 (Toulouse 1971:293).

While the testing showed that a few prehistoric and historic artifacts are scattered over the area, there was no evidence of intact cultural deposits to a depth of 60 cm anywhere along the planned route of the new hike and bike trail.

Monitoring

Two activities were intensively monitored. The first was construction of the new hike and bike trail on the grounds of Mission San José. Though the shovel testing had strongly indicated that the upper 40 cm of sediments in the areas tested were highly disturbed, monitoring occurred because of the potential for uncovering human remains (Figure 4-13). This proved to be especially prudent since the actual route of the new hike and bike trail south of the mission was not where it had been staked during testing in 2002. Only when maps for this report were being created, did CAR realize that the new trail segment on the south side of the mission had been placed between 18 and 22 m south of the line that had been shovel tested. As can be seen in Figure 4-4, the placement of the shovel tests matched the trail west of the mission. The final trail route passed much closer to the shallow trench and postholes originally located by Henderson and Clark (1984). Attempts by Hard et al. (1995) to locate a southern extension of this trench were not successful (see Chapter 2). However, while some non-diagnostic artifacts were seen in the sediments (Figure 4-14), no evidence of these features was observed during the monitoring.

The second part of the monitoring project took place along Roosevelt Avenue near Mission San José and along Mission Road from Roosevelt to Southcross, where improvements to drainage and utility lines beneath the street and repaving of the surface were included as part of the Mission Trails project (Figure 1-4). This monitoring was considered necessary because of the potential impact to sections of the San José Acequia that was believed to have crossed Mission Road and Roosevelt Avenue at several locations (see Cox 2005:28). The monitoring occurred intermittently between March 2004 and January 2005, depending on construction activities.

During this part of the monitoring project, there were occasional lapses in communications between the construction companies, the city agencies, and CAR. These lapses were



Figure 4-13. Area monitored during construction of the hike and bike trail.

overcome as better and systematic communication was established between the participating parties. Nonetheless, during the early phase of monitoring, the excavations of some very large holes were only partially monitored.

One such excavation was in the middle of E. White, just north of its intersection with Mission Road (Figure 4-15). The purpose of the pit was to allow boring of a large hole under Mission Road where a storm drain was to be placed. CAR was not notified of this excavation until it had already begun. When CAR personnel arrived at the site, the pit was partially completed. CAR staff monitored the remainder of the digging and drew a profile of the north wall. This profile showed disturbed sediments to approximately 155 cm below the road surface above undisturbed sediments typical of the Venus soil series (Figure 4-16). The soil in this area is identified by Taylor et al. (1991) as Venus clay loam, 3 to 5 percent slopes, which occur as side slopes along creeks or between terraces. The surface sediments are more loamy than other Venus clays, and overlie many feet of loams, sandy clay loams, and clay loams with a bed of gravel sometimes seen below a meter (Taylor et al. 1991:32). No cultural deposits were identified.

CAR staff also monitored excavation of trenches for new utility lines along the west side of Roosevelt Avenue (Figure 4-17) from E. Bonner to Mission Road and then northwest

along both sides of Mission Road to Southcross. Sediments along Roosevelt were generally disturbed from about 0.5 to 1 m below ground surface. All showed a profile very similar to that seen in the large pit on E. White (Figure 4-15), except

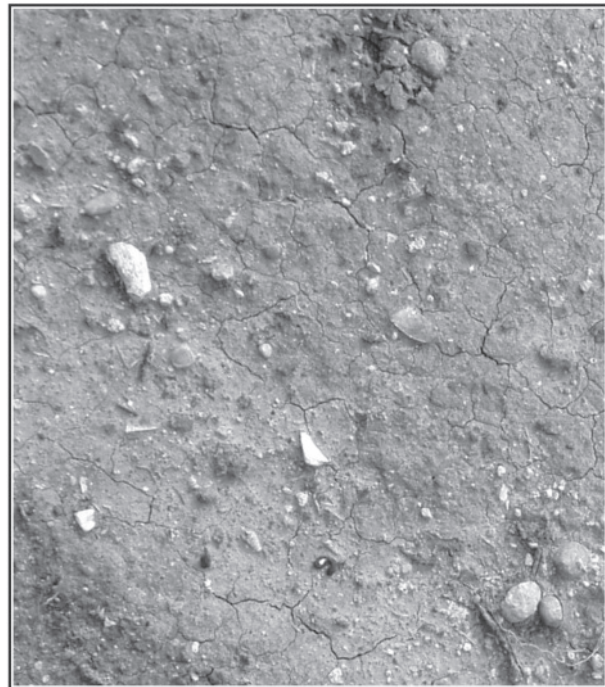


Figure 4-14. Non-diagnostic artifacts in sediments observed while monitoring at Mission San José.



Figure 4-15. Deep pit dug in E. White Avenue west of Mission Road at the time archaeologists arrived at the site.

where previous disturbances from old utility trenches were noted. No cultural deposits were noted and no artifacts were collected.

Sediments along Mission Road were generally more disturbed than those along Roosevelt (Figure 4-18). This was due in part to replacement of old utilities within the same trench. The excavation along Mission Road was often hampered by the crossing of old utilities; both active and inactive (Figure 4-19). CAR staff monitored excavation of these trenches and examined the backdirt but found no significant cultural deposits or any evidence of the San José Acequia.

Although the San José Acequia probably crossed both Roosevelt Avenue and Mission Road somewhere within the boundaries of the Package 2 project area, no evidence of this was seen in any of the trenches dug during this part of the project. Previous disturbances, particularly by utility trenches, have apparently destroyed evidence of the *acequia* near each of these roads.

Package 3

Pedestrian Survey

As mentioned in the methods section, a new section of hike and bike trail along the southern bank of the river from the Mission Road bridge to the Theo Road Bridge was crossing through a private cemetery on the south bank of the river not far from the Mission Road bridge. These plans were later amended, but prior to this, CAR staff archaeologists examined the area within which the Poor Family Cemetery was known to be located (Figure 4-20).

During the archaeological survey of the Mission Parkway construction undertaken by the Office of the State Archaeologist in the mid-1970s, a descendent of the Poor family, Adele Poor Harding, still owned the land (Scurlock et al. 1976:158). Informants (including Ms. Harding) told archaeologists that the cemetery dated after the Civil War and no burials were known after the 1920s. During the

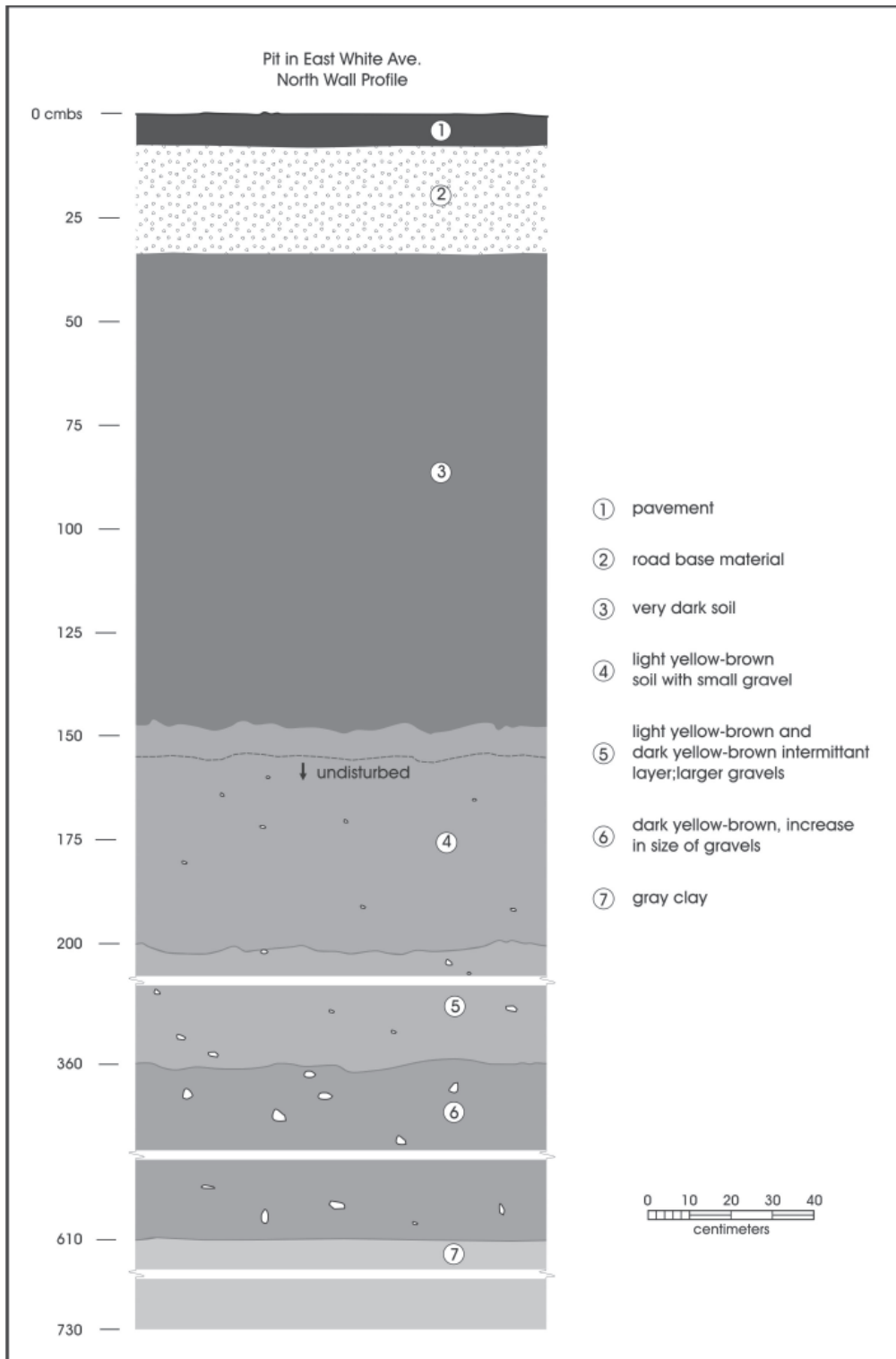


Figure 4-16. Profile of north wall of large pit in E. White Avenue just north of Mission Road.



Figure 4-17. Monitoring utility placement on Roosevelt Avenue, looking northeast, with west wall of Mission San José in background.

1930s, a number of burials were removed to the Confederate Cemetery, but the informants felt there were still some burials in the cemetery. At that time, a single, illegible grave marker was still extant (Scurlock et al. 1976:158). The cemetery was

located just east of a drainage ditch that is likely to be the remains of the head of the San José Acequia (see maps in Cox 2005:28 and Scurlock et al. 1976:69).



Figure 4-18. Backhoe digging below Mission Road, showing degree of previous disturbance in trench.

In October 2000, a 100 percent pedestrian survey of the area between the houses on Hart Street and the river embankment, from the drainage ditch to Mission Road failed to find any remaining evidence of the cemetery, other than some old fencing wire that had been grown over by trees. No headstones or anything else that might indicate the presence of the cemetery could be located. Due to subsequent changes to the Mission Trails plans, no trail is currently planned in the area of the cemetery.

Backhoe Trenching

On October 31, 2000, CAR dug three backhoe trenches along Mission Road just north of the San Antonio River (Figure 3-10). The area examined, along the edge of the Riverside Municipal Golf Course, was the proposed site for placing deep utility lines as part of the Mission Trails project. The purpose of the backhoe trenches was to determine the degree to which the area



Figure 4-19. Working around old utility lines in a trench on Mission Road near E. White Avenue.

had been disturbed by channeling of the river in the past. The planners were concerned about proximity of Mission Nuestra Señora de la Purísima Concepción as well as the possibility of prehistoric cultural remains along the bank of the river (Meissner 2002).

In addition, as mentioned in Chapter 3, Package III originally was to have included construction of a new section of Scenic hike and bike trail along the river from the Mission Road Bridge to Concepción Park and some drainage improvements along the bluff above this trail, south of the park. These plans were eventually changed and that section of trail was not constructed. However, before those changes were made, CAR dug ten backhoe trenches placed to test the areas where new drainage construction had been planned (Figure 3-11). The first three trenches were dug along the edge of the Riverside Municipal Golf Course, just north of the Mission Street Bridge (Figure 3-10), testing the proposed course of a storm sewer water outfall pipe.

Trench A

Trench A, the northernmost of the three trenches, cut across a golf cart trail (Figure 4-20). The trench was 3.8 m long and approximately 1 m wide. The upper 10 cm of the profile was gravel that formed the roadbed for the cart trail underlain by 70 cm of sandy clay with 80-90 percent gravel. At 90 cmbs, the top of a 9-in. cast iron pipe crosses the trench at a right angle, parallel to Mission Road. Undisturbed natural river terrace sediments appeared 140 cmbs (Figure 4-22). No artifacts were observed in Trench A.

Trench B

Trench B was located about 15 m south of Trench A, on a slope up to the eighteenth tee of the golf course, cutting across the marked route of the proposed utility line (Figure 4-20). The trench was 3.4 m long and 3.8 m deep.

The upper 35 cm was dark topsoil with about 30 percent pea-sized gravel. Dark top soil with little or no gravel continued to about 85 cmbs. Below that were layers of broken limestone gravel with varying amounts of medium brown, sandy clay.

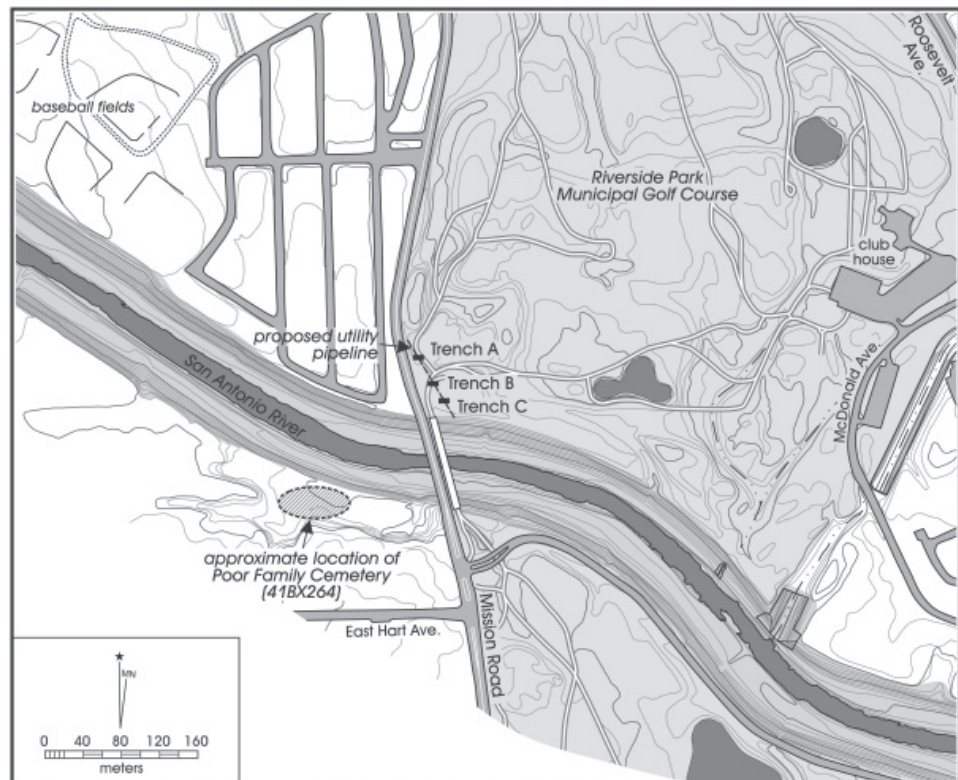


Figure 4-20. Location of Backhoe Trenches A-C and Poor Family Cemetery survey area.

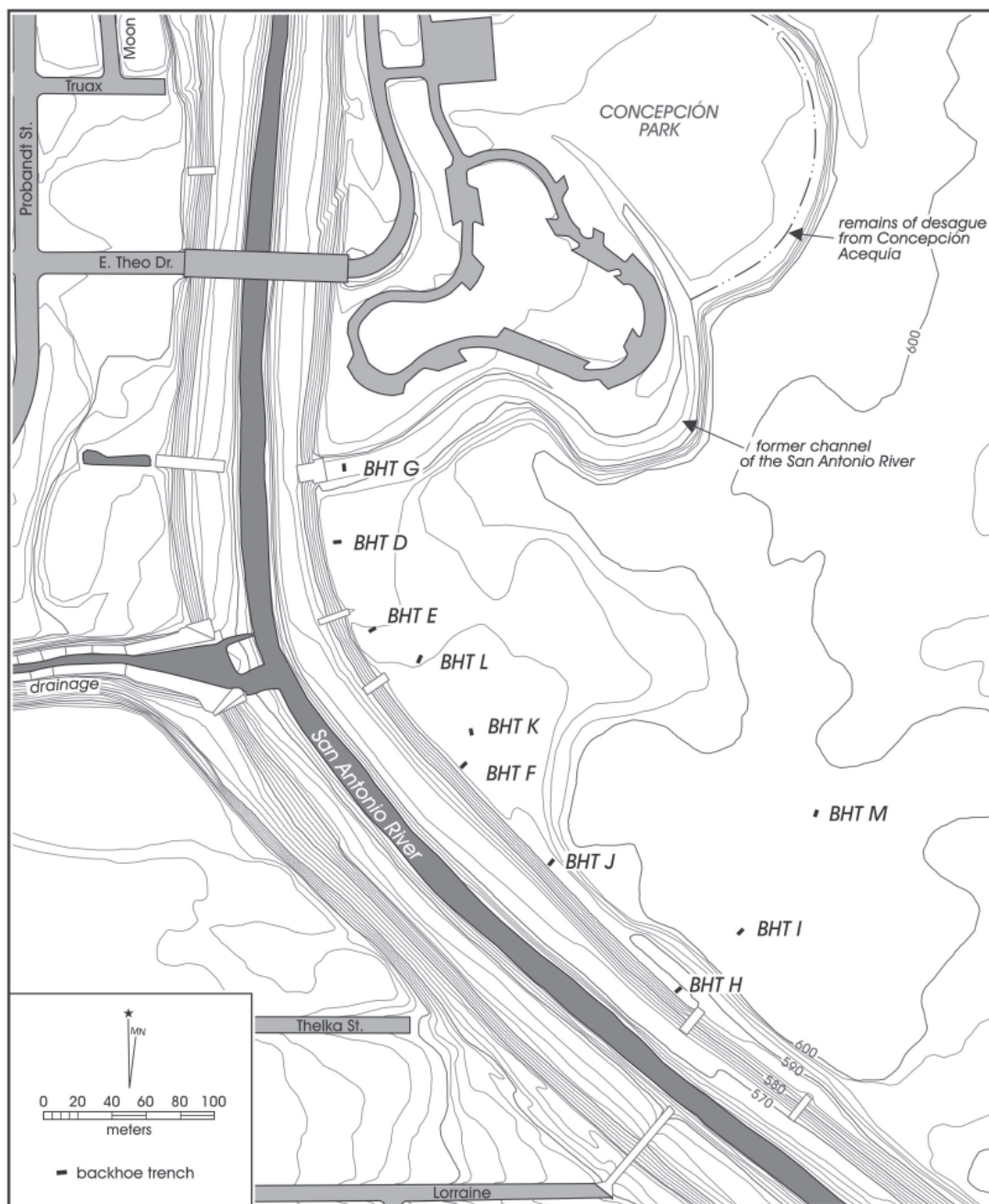


Figure 4-21. Locations of Trenches D through M near Concepción Park.

At 240 cmbs, there was a 30 cm layer of sand. More gravel with sandy clay was found from 270 to 380 cmbs. The entire profile appeared to be fill (Figure 4-23).

Trench C

Trench C was located about 6 m north of the fence that protects golfers from the steep drop to the river (Figure 4-24) above the eighteenth tee. The trench was 3.4 m long and 3.8

m deep. The upper meter of the profile was layers of topsoil with varying amounts of gravel (Figure 4-25). Beneath this was a 30 cm layer of yellow-brown clay with thin lenses of black clay, underlain by about 60 cm of dark brown, dense clay with about 70 percent gravel. A layer of clay loam containing modern debris began at about 190 cmbs. The items noted in the backdirt included numerous pieces of decaying cedar, rusted wire, a metal bottle opener, and pieces of clear, modern, glass. At 260 cmbs lay a fragment of 2-x-4-in. plank. At 320 cmbs was a layer of decomposed wood planks. This

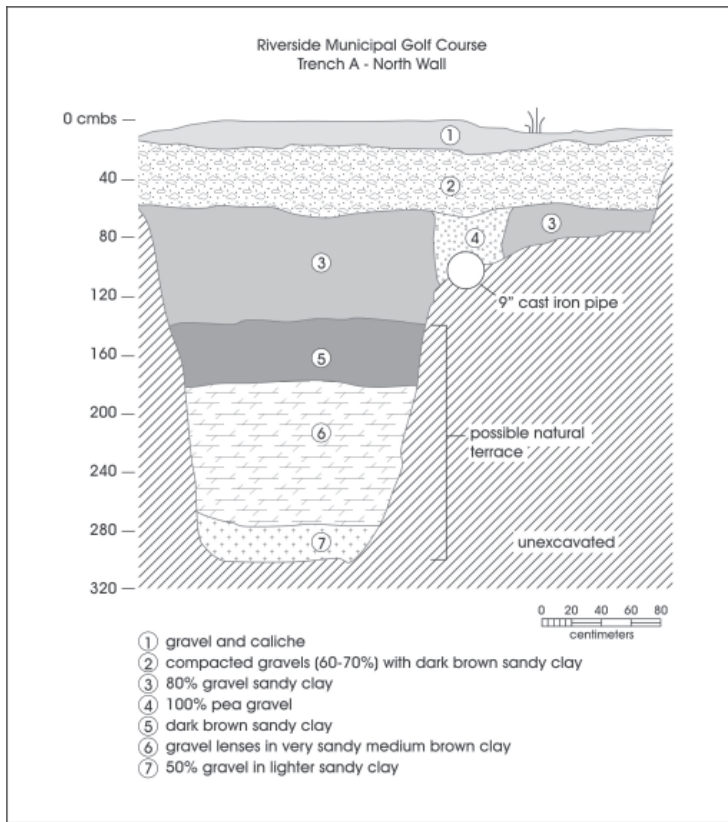


Figure 4-22. Profile of the north wall of Trench A.

layer of wood planks appeared to be part of the miscellaneous debris that was included in the fill. A layer of dark clay loam that appeared to be undisturbed natural sediment was encountered at 360 cmbs and continued to the bottom of the trench (Figure 4-25).

Trenches D-M

While testing, CAR received notification that plans had changed for the area between the Mission Road Bridge and Concepción Park. At that time, ten trenches, Trenches D through M, had been dug on the bank of the San Antonio River south of Concepción Park (Figure 4-21). Although the drainage work originally planned will not be done as part of Package 3, we are including the results of these backhoe trenches for the use of future investigations in the area. Table 4-2 lists descriptions of these trenches.

In summary, all of the trenches showed clear evidence that they were dug into fill

dumped in those locations during the rechannelization of the river. Most of the trenches had a thin layer of sandy clay loam over layers of gravel and sandy clay. Trenches I and M contained a great deal of modern building debris. The presence of a number of bricks with the D’Hanis logo on them indicates they were made after 1908, when the company established this logo (Hodge and Victor 1983:77). No intact, undisturbed sediments were identified in these trenches, even in areas that were lightly wooded, suggesting the trees had grown after the rechannelization. After the completion of Trench M, CAR was told that in light of the planned change, no further trenching was needed along this part of the proposed hike and bike trail.

Monitoring

In February 2001, CAR contracted with the San Antonio Public Works department to monitor the Mitchell Road and Probandt Street Utility Project. The section of this project that ran along Mitchell Road, just north of Mission Concepción, from Roosevelt to Probandt Street, was part of the Mission Trails project, while the extension of this utility installation and road-repaving project along Probandt Street was not. Archaeological monitoring of the utility installation was considered necessary to document the presence of the Pajalache Acequia (Figure 4-26), a possible late diversion of the channel (Figure 2-3), possible lateral branches of the San Pedro Acequia, and any other cultural deposits that might be impacted by the project. The results of monitoring the two parts of this project were previously published (Cox 2003).



Figure 4-23. Photograph of the south wall of Trench B, showing layers of modern fill.



Figure 4-24. Digging Trench C on the north bank of the San Antonio River, near the Mission Road Bridge. Looking southeast.

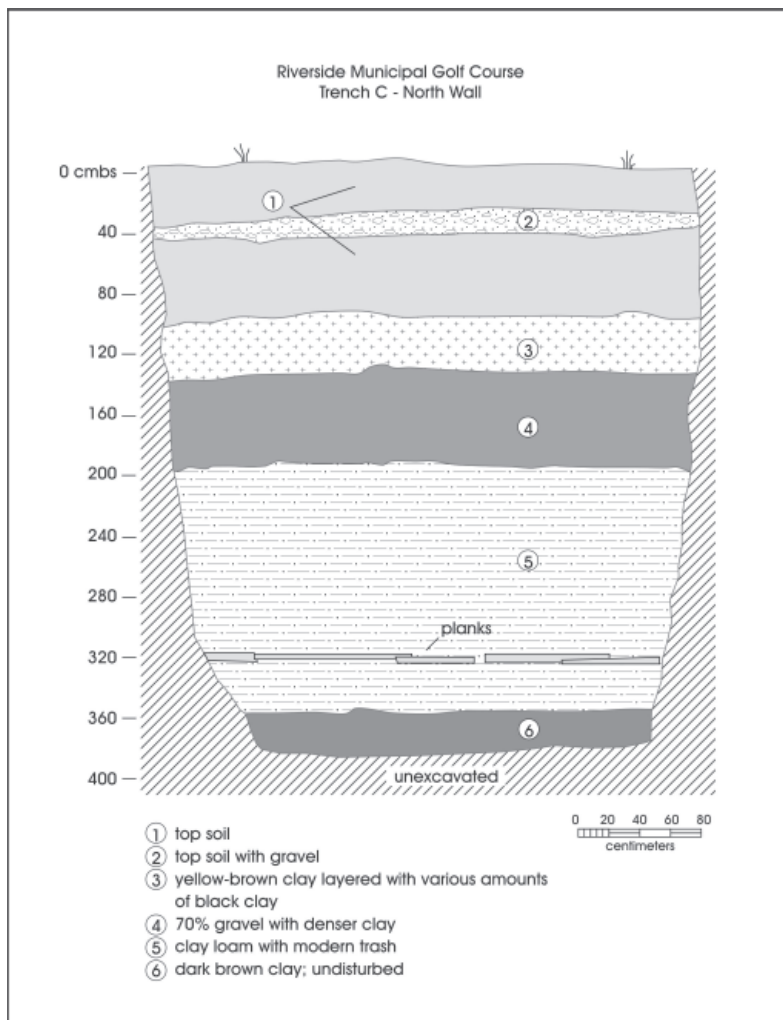


Figure 4-25. Profile of north wall of Trench C.

For this report, the portion of that report involving Mitchell Road will be summarized.

The two major concerns for CAR staff monitoring along Mitchell Road were the exact location where the Concepción/Pajalache Acequia crossed Mitchell Road and the probable presence of a re-routed segment of *acequia* believed to have been made in the late nineteenth century. The historic photograph shown in Figure 2-3 shows an *acequia* running across the compound in front of Concepción church. The piles of fresh dirt nearby suggest either that the *acequia* was newly dug or had just been cleaned out. In either case, it was believed that this *acequia* must have crossed Mitchell Road north of the mission. Other areas of concern were two branches of the San Pedro Acequia that might cross Mitchell Street near the river. This was not considered very likely but was a possibility that had to be considered (Cox 2000). Figure 4-26 is a map of Mission Concepción and vicinity showing the estimated locations of *acequias* and laterals, and the approximate location of the trench shown in Figure 2-3, as well as the locations of *acequia* sections found during monitoring.

Monitoring began on June 22, 2001, at which time a 24-in. water main had already been installed on the south side of Mitchell between Kalteyer Street and Mission Road. Since the trench was already backfilled, no observations could be made; however, a trench for a new storm drain 6 to 8 ft. deep was planned down the middle of Mitchell Street. This trench would allow a search for the remnants of *acequias* crossing the street.

During the second week of monitoring, lead abatement procedures to a depth of 30 in. along the south margin of Mitchell Street were undertaken, allowing another opportunity to check for the presence of an *acequia*, and other historic features, or cultural deposits. Safety restrictions prevented the presence of CAR staff during the actual digging, but the trench was left open at the end of each day, allowing it to be examined closely. At that time there appeared to be some evidence of a trench near the front of the old Seminary building (Figure 4-26), but the shallow depth of the lead abatement trench did not allow positive identification.

Table 4-2. Summary of Backhoe Trenches D through M, including Description of Sediments Observed.

Trench	Length (m)	Depth (m)	Profile Description
D	3.4	3.7	The sediments exposed were 70 cm of light brown sandy clay loam, above a layer of 85-95 percent limestone gravels, ranging in size from ca. 1 cm to ca. 10 cm, in a loose sandy clay matrix. The trench was dug, with difficulty due to constant wall fall, to 370 cm with no change in sediments.
E	3.2	1.7	This profile revealed less than 10 cm of light brown sandy clay loam overlay gravel fill similar to Trench D. The gravel was so loose that this trench was terminated at 170 cmbs because of constant wall falls (Figure 4-16).
F	3.4	2.7	The upper 130 cm were variously colored layers of loose sandy clay fill. Below that was a 5-cm layer of limestone gravel (2-5 cm) in gray sand. Below that was a layer of dense, medium gray, sandy clay with occasional clusters of caliche nodules that extended to the bottom of the trench. The entire profile appeared to be fill.
G	3.3	2.5	This trench was located within what is believed to be a part of the old river channel. The entire profile consisted of various layers of clay and gravel fill.
H	3.2	3.2	This profile showed 70 cm of dark gray brown, sandy clay over gravel similar to Trenches D and E all the way to the bottom of the trench
I	3.1	1.5-1.7	The upper 70 cm of this profile was reddish brown sandy clay loam (Figure 4-17). Below this was gravel fill containing fragments of cut limestone blocks and cast iron pipe fragments. At 120 cmbs began to encounter large blocks of concrete and numerous high fired red bricks with "D'Hanis" logo on them (see discussion in text). Trench was halted soon after this because of extremely large blocks of concrete made digging impossible.
J	3.2	3.5	Sediments exposed in this trench were 75 cm of dark gray brown sandy clay loam, above a dense layer of medium gray sandy clay. Below this to the bottom of the trench was gravel in a sandy clay matrix.
K	2.8	3.0	This trench exposed 20 cm of dark brown sandy clay loam overlaying a layer of reddish, very sandy clay with about 20 percent pea-sized gravel that was 40 cm deep. Below this was a 60 cm layer of very dense medium gray sandy clay, over a layer of gravel that extended to the bottom of the trench.
L	3.0	3.5	This trench was located in an area of young trees. The upper 25 cm was dark brown sandy clay loam. Below this was 35 cm of reddish very sandy clay with about 25 percent pea-sized gravel above 75 cm of dense dark gray sandy clay. From ca. 135 cmbs to the bottom of the trench was gravel in a very sandy matrix.
M	3.2	2.5	The entire profile of this trench was layers of sandy clay containing numerous modern items, most of which appeared to be construction-related. This includes large chunks of broken cement, pieces of modern rebar, linoleum tile fragments, plastic plastic bags, etc. Trench was stopped at 250 cmbs due to a major storm.

In September 2001, the installation of a 12-in. water main was begun near the river. Previous research had indicated the possibility that two lateral branches of the San Pedro Acequia crossed Mitchell Street in this area, but no evidence of these ditches was seen. These laterals were not identified. They may have been so shallow that previous road constriction destroyed them or may not have ever extended to Mitchell Street.

Monitoring of the installation of the storm drain began in April 2002. The drain required the excavation of a trench approximately 1.7 m wide and 2.4 to 3.1 m deep down the middle of Mitchell Street (Figure 4-26). At several places, the trench was widened to allow placement of manhole boxes and for installation of street drains. The profile revealed a road base of 38 cm (15 in) above a layer of Venus clay loam (VcB) that grades into yellow brown clay loams and gravels to the

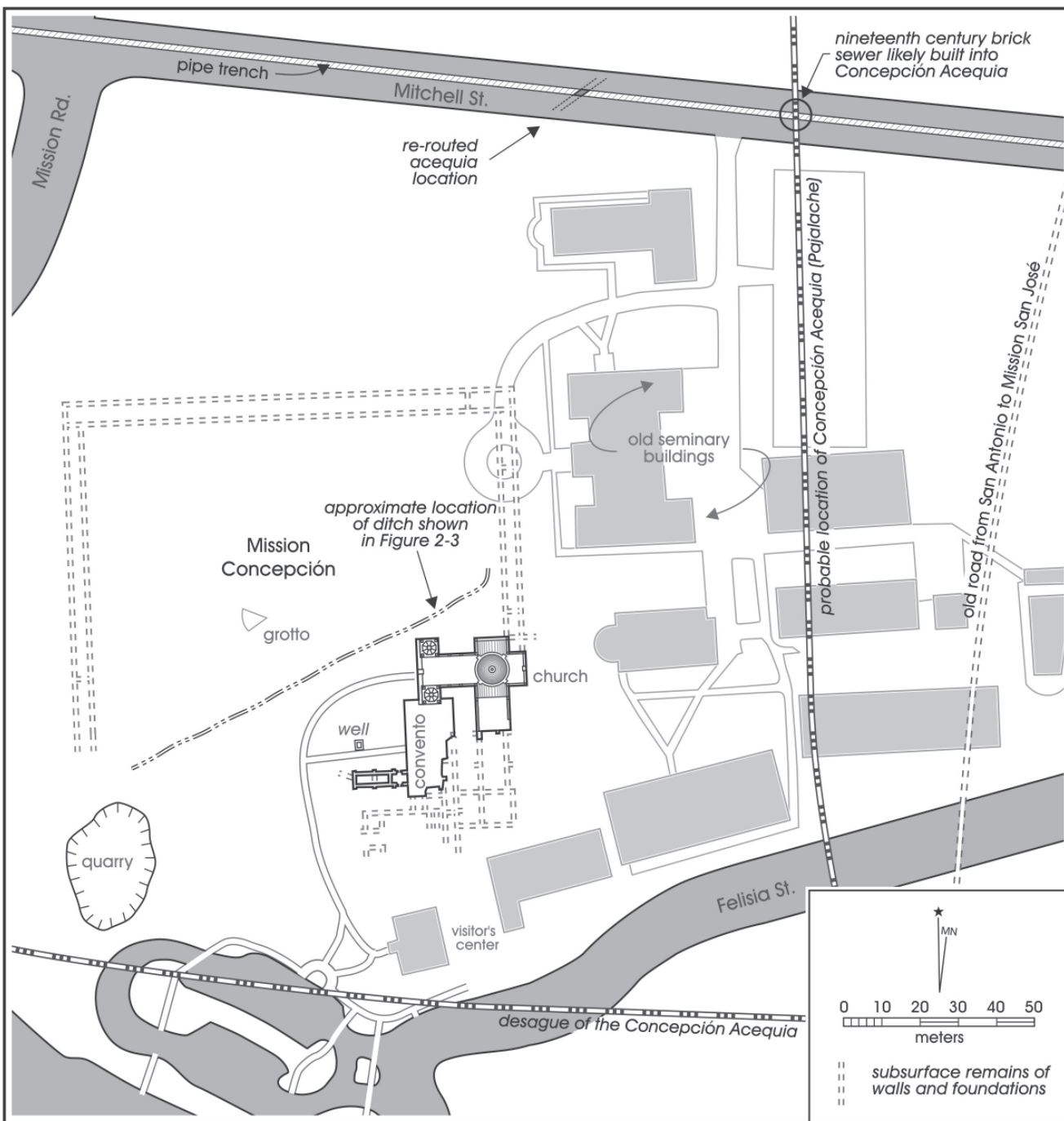


Figure 4-26. Map of Mission Concepción showing probable locations of acequias in the area and the location of the re-routed acequia (ca. 1869-70) identified during the project.

depth of the trench. Although there were frequent disturbances from previous utility installations, these seldom extended to a depth of more than 4 ft. (120 cm) below the road surface. At a point consistent with the suspected *acequia* seen in the lead-abatement trench, a filled trench was observed. This was a hand-dug trench extending to 210 cm below the road surface. The western edge of the *acequia* had been disturbed by later

placement of a gas line and another machine-cut trench that extended below the depth of the storm drain trench (Figure 4-27). The condition of the hand-dug trench suggested that it had not been kept open for long. There was little evidence of weathering or cleaning, as would have been seen if the trench was in operation for a long time.

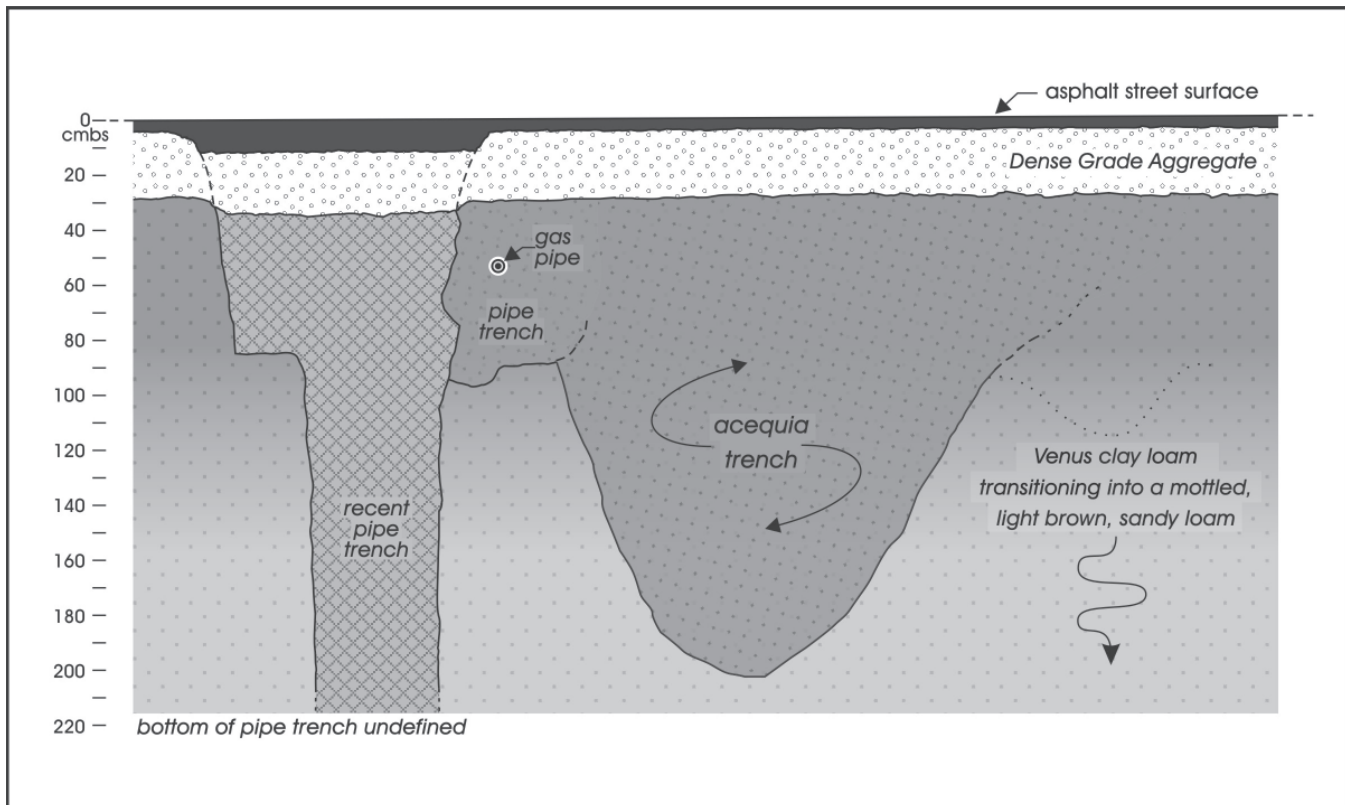


Figure 4-27. Profile of re-routed acequia (ca. 1869-70) located during Mitchell Road monitoring.

When the storm drain trench reached the expected location of the Concepción/Pajalache Acequia, a circular brick sewer pipe 44 in. (1.1 m) in diameter was discovered (Figure 4-28). This pipe, built in place in a hand-dug trench, is almost certainly part of the earliest piped sewage system in San Antonio, constructed between 1895-1897 (see Cox 2003:5-6). The new system was probably placed within the old *acequia*, though it is dug much deeper than the *acequia* would have been, and the digging of this deeper trench would have destroyed evidence of the original Concepción/Pajalache ditch. No other cultural features or deposits were encountered during the Mitchell Street excavations.



Figure 4-28. Nineteenth century brick sewer line, probably built into the old Concepción/Pajalache acequia ca. 1895-1897.

Chapter 5: Summary and Conclusion

Beginning in October 1998, the Center for Archaeological Research provided archival research and archaeological services to the City of San Antonio for the Texas Department of Transportation as part of the Mission Trails Statewide Transportation Enhancement Project. The project goals were to create a hike and bike trail system connecting the five Spanish missions in San Antonio and to improve city streets (Figures 5-1, 5-2).

The archival research, pedestrian survey, shovel testing, backhoe trenching, and monitoring of construction activities associated with Packages 2 and 3 of the Mission Trails Enhancement Project were conducted over five years. During that period, shovel testing took place at Mission San José (41BX3), the Pyron Homestead Site (41BX279), the Brown Site (42BX241), and in Padre Park along the proposed route of the new hike and bike trail. Placement of new utility lines was monitored in areas where it is known that *acequias* once crossed Mission Road and Roosevelt Avenue. No intact Colonial or nineteenth century deposits were encountered in any of these locations. No significant, undisturbed cultural deposits or features were found to warrant further testing. All artifacts recovered during the project and all project-related documentation is curated at CAR.

This volume summarizes the results of archaeological work associated with Packages 2 and 3 from Mitchell Street near Mission Concepción to Padre Drive at SE Military Drive. Both a Direct “dry” route, along existing roads, and a Scenic “wet” route of new hike and bike trails near the San Antonio River was included. In addition, new utility lines were placed under some streets, in particular Roosevelt Avenue, and Mission and Mitchell Roads. This report provides a historic background based on archival research of the project area (Chapter 2) and summarizes the results of the survey and monitoring conducted as part of these two Packages (Chapters 3 and 4).

In addition to monitoring of road and trail construction, nine potentially sensitive areas were surveyed and/or tested:

- The bluff of the rechanneled river south of Concepción Park where ten backhoe trenches were dug to search



Figure 5-1. The new hike and bike trail along Padre Road.



Figure 5-2. The new hike and bike trail at the corner of E. White Avenue and Mission Road.

for undisturbed sediments that might contain evidence of the Battle of Concepción (1835, see Chapter 2);

- The edge of Riverside Municipal Golf Course near the Mission Road Bridge, where three backhoe trenches were dug;

- The area in which the Poor Family Cemetery (41BX264) was previously identified was surveyed to relocate the cemetery;
- The intact portions of the old San Antonio River channel at the beginning of a new section of hike and bike trail near E. White were surveyed to determine if any remnants of the original river bank were extant;
- Outside the south and west walls of Mission San José (41BX3) along the planned route of a new section of the hike and bike trail, where 50 shovel tests were dug to determine if this construction would impact undisturbed Colonial deposits;
- The edge of a bend of the old San Antonio River channel believed to be the location of the *desague* of the San José Acequia Media, where a survey crew mapped a segment of the *acequia* that had not been previously located;
- The area in Padre Park where an old sidewalk would be expanded and a culvert and new trail would be constructed;
- The Brown site (41BX241) where eight shovel tests were dug to determine if there were any intact deposits remaining at this previously recorded historic site; and
- The planned route of a new segment of Padre Road that would cross the Pyron Homestead (41BX279), where 40 shovel tests were dug in order to determine if this construction would impact undisturbed nineteenth century deposits.

The survey near E. White showed that no intact portion of the old San Antonio River channel would be impacted by the new trail construction. The survey of the general location of the Poor Family Cemetery failed to find any extant evidence of the cemetery.

The backhoe trenches along the bluff south of Concepción Park showed that the planned construction would impact only fill material from the rechannelization of the river. The backhoe trenches along the edge of the Riverside Municipal Golf Course also showed mostly fill as well, although Trenches A and C had some previously undisturbed river terrace sediments below 140 cm and 360 cm, respectively.

The only artifact deposits in any of these backhoe trenches were modern.

The shovel testing at Mission San José, the Pyron Homestead, the Brown Site, and in Padre Park failed to find intact cultural deposits. Although in the case of Mission San José a number of Colonial period artifacts were recovered, none appeared to be from undisturbed context. The artifact counts from Area B confirm once more the assertion by Tomka and Fox (1999:47-51) that artifact density in general and Colonial artifact density in particular, is much higher close to the mission walls. The Area B shovel tests (Shovel Tests 24-29) are closest to the wall and have by far the highest artifact count per test. They also have the highest percentage of Colonial period artifacts identified (Table 4-1). These data suggested that the concern about the possibility of impacting intact portions of the gate midden in that area (see Schuetz 1970) was justified, but the tests showed that construction of the hike and bike trail in this area would not impact previously undisturbed Colonial or nineteenth century deposits.

Though shovel testing has shown that the route of the new hike and bike trail lay on previously disturbed sediments at least to a depth of 40 cm, it was determined that the grading of the trail footprint prior to construction should be monitored because of the importance of the mission. Although scattered artifacts were plainly visible in the construction area, they were all in clearly disturbed context, as the shovel testing had shown. It was not realized until recently that either the path staked for CAR on the south side of the mission had been placed mistakenly or plans were subsequently changed, and the new trail was placed roughly 20 m south of the tested track. Nonetheless, the monitoring of the actual grading showed that the sediments along the southern route were as disturbed as those in the shovel-tested route, at least to the depth excavated.

The placement of underground utility lines and repaving of Mitchell Road, Mission Road, and Roosevelt Boulevard was monitored by CAR staff. Utility construction along Mitchell Road uncovered portions of a trench that were probably part of the late nineteenth century rechannelization of a lateral of the Concepción Acequia and a nineteenth century brick sewer line was located in what was probably the Concepción Acequia itself. No significant cultural deposits or features were observed during monitoring of the Mission Road and Roosevelt Avenue construction.

During the historic and archival research for this report considerable evidence was found showing that the previously held belief that the Battle of Concepción took place in or near



Figure 5-3. The new hike and bike trail south of Mission San José.

Concepción Park is incorrect, and that in fact the battle is more likely to have happened in a bend of the river half a mile further north.

The 50 shovel tests excavated at Mission San José during this project made it clear that artifacts from at least 275 years of occupation are well mixed in the upper part of the sediments within the areas investigated. No intact nineteenth century or Colonial deposits were identified. Given what is known about recent disturbances in the area, this is hardly surprising. It is important however, to remember that these shovel tests only reached a maximum of 40 cmbs. The extensive testing completed by CAR in 1997 and 1998 indicated that the upper 30 cm of the deposits near the south and west walls were disturbed (Tomka et al. 1999:43), however in several units undisturbed Colonial deposits were located below this depth. CAR recommends that testing occur to determine whether disturbances have reached below the Colonial ground surface if other developments are planned for this area.

If we have learned nothing else during the past decade, we have learned that our understanding of the architectural history of the missions is not as complete as had been previously believed. We also know that better understanding of the lifeways of the many people who have lived at or near the Missions, as well as other historic sites in San Antonio, awaits

future archival, and archaeological excavations at these sites. Yet, we know that generations of construction, reconstruction, and other disturbances has already resulted in serious damage to large areas. In many places, the archaeological record documenting the story of the prehistoric, Colonial, nineteenth century, and twentieth century populations in San Antonio has already been destroyed. This makes the remaining intact deposits and features all the more important.

In summary, based on the archival background research and the pedestrian survey of the project area three principal conclusions can be drawn and substantiated: (1) no intact archaeological properties or deposits were identified during the survey and monitoring projects described in this report; (2) no deposits found during the project warranted eligibility under NHRP evaluation criterion D; and 3) no new and important information was found that acted as contributing elements to the significance of National Register properties.

The Missions of San Antonio are important parts of the heritage of the City of San Antonio and the state of Texas. This generation is responsible for the stewardship of these places (Figure 5-3), and we must do what we can to preserve that heritage so that they will continue into future generations.

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