Archaeological Assessment of Three Locations on the San Antonio River, San Antonio, Bexar County, Texas

by
Barbara A. Meissner

Texas Antiquities Committee Permit No. 5622

Prepared for:
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San Antonio, Texas 78283

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Technical Report, No. 23

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SAAN-2010-SCI-0001
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Management Summary

In May 2010, staff archaeologists from the Center for Archaeological Research (CAR) of the University of Texas at San Antonio (UTSA) conducted an assessment of three areas along the San Antonio River between Theo Avenue and Mission Road. This work was completed under Antiquities Permit No. 5622 and National Park Service Permit No. SAAN-2010-SCI-0001, under the oversight of the U.S. Army Corps of Engineers, the Texas Historical Commission, and the City of San Antonio. The Principal Investigator was Dr. Steve A. Tomka and the Project Archaeologist was Barbara A. Meissner.

The three areas consisted of 1) the possible location of a remnant of the San José Dam, constructed in the mid-eighteenth century; 2) a location near the Poor Family Cemetery (41BX264) where concrete curb-like elements, reminiscent of a kind of grave decoration common in the later nineteenth and early twentieth centuries, had been observed; and 3) a location south of Concepción Park where prehistoric artifacts and a limestone rock alignment had been observed.

Three backhoe trenches (BHTs) were excavated into the west bank of the San Antonio River to define the nature of the stone concentrations discovered during grading in the approximate location of the San José Dam. No evidence of a remnant of the San José Dam was encountered. The sediments consisted of fill and riprap placed on the bank during the rechannelization of the river to prevent erosion.

Two BHTs were excavated in the vicinity of the fragments of concrete curbing noted on SARA-owned right-of-way. The trenches revealed a stratigraphy dominated by fill from surface to 3.0 m below surface, the terminal depth of the trenches. No evidence was found indicating that the Poor Family Cemetery extended into the SARA right-of-way.

Two BHTs were dug in the area where prehistoric surface deposits were noted on the east bank of the San Antonio River, south of Concepción Park. The trenches revealed that the artifacts recovered and burned rock observed on the ground surface have been recently brought in and do not represent an *in situ* prehistoric site. The limestone rocks noted nearby appear to be part of the layer of rock riprap placed on the slope of the bank to retard erosion during flood events.

As no evidence of significant prehistoric and/or historic deposits was found during these investigations, the CAR recommends that the grading along these three locations of the San Antonio River proceed as originally planned. However, due to the possibility that a remnant of the San José Dam is buried under the fill observed during this project, we recommend that an archaeological monitor be present during the remaining grading in the area. In addition, as the exact location of the boundaries of the Poor Family

Cemetery is not known, we recommend that an archaeological monitor be present during grading in this area as well. As the prehistoric artifacts constitute a secondary deposit and the limestone rocks on the east bank of the river are riprap, we do not recommend additional archaeological investigations or monitoring on the east bank of the San Antonio River associated with these two deposits.

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Acknowledgements

This project was successfully completed by excellent coordination between several governmental agencies including the United States Army Corps of Engineers (Miss Nancy Parrish), the Texas Historical Commission (Mr. Mark Denton), City of San Antonio Historic Preservation Office (Ms. Kay Hindes), and the San Antonio River Authority (Mr. Russell A. Persyn). Kay Hindes, San Antonio City Archeologist, acted as a liaison between several concerned citizens and the San Antonio River Authority and provided the initial assessment of the three areas examined during this project. Her assistance is gratefully acknowledged.

Richard Garay, Director of Coahuiltecan Research Associates, shared with us several maps from his extensive collection and also shared old photographs and his memories of living near the project area. His endless interest in the history of San Antonio is appreciated.

Field work was completed by Nathan DiVito, Kristi M. Ulrich, and Barbara A. Meissner, who served as the Project Archaeologist. The Principal Investigator was Dr. Steve A. Tomka, Director of CAR. Maps and other graphics were created by Bruce Moses and Richard Young. Our excellent office staff, Sherri Suñaz and Patti Sanchez, helped make it all work. Thanks to everyone.

Chapter 1: Introduction

In April 2010, the Center for Archaeological Research (CAR) of the University of Texas at San Antonio contracted with the San Antonio River Authority (SARA) to assess the possibility that construction associated with the San Antonio River Improvement Project (SARIP) would damage significant historic and/or prehistoric cultural deposits located between the Mission Road Bridge and the confluence of San Pedro Creek and the San Antonio River. The project was completed under Antiquities Permit No. 5622, issued by the Texas Historical Commission (THC) to Dr. Steve A. Tomka, Principal Investigator. National Park Service Permit No. SAAN-2010-SCI-0001 also was issued on the project because a portion of the project limits fall within the boundaries of the San Antonio Missions Historical Park. The project began when THC contacted Kay Hindes, City Archaeologist for the City of San Antonio Office of Historic Preservation. Mark Denton, THC, and Ms. Hindes had been contacted by several citizens living in the area who were concerned that the construction taking place along the San Antonio River was damaging historic features or deposits. After a visit to the site, she informed SARA and THC representatives that three areas would possibly need to be assessed by professional archaeologists after consultation with the THC. The assessment of these three areas was undertaken by CAR in May 2010 and the results are summarized in this report.

The San Antonio River is considered a navigable waterway, and thus, any modification that impacts it is considered a federally assisted undertaking under the oversight of the U.S. Army Corps of Engineers (USACE), Fort Worth District, and subject to Section 106 of the National Historic Preservation Act of 1966. The State Historic Preservation Office is one of the key consulting parties in any Section 106 action and the Texas Historical Commission is the agency that issues the necessary permits to conduct the appropriate mandated archaeological investigations. In addition to the SHPO, because the project occurs within its limits, the City of San Antonio's Office of Historic Preservation (COSAOHP) is also a consulting party and the project falls under the jurisdiction of the City of San Antonio Unified Development Code, Chapter 35.

The three areas investigated during this project are located along the San Antonio River between Theo Avenue and Mission Road, south of downtown San Antonio, Texas (Figure 1-1). The construction underway along the river is part of the San Antonio River Improvements Project (SARIP)—a flood control, amenities, ecosystem restoration, and recreational improvement project by Bexar County, the City of San Antonio, the U.S. Army Corps of Engineers (USACE), San Antonio River Authority, and the San Antonio River Foundation (San Antonio River Authority 2009).

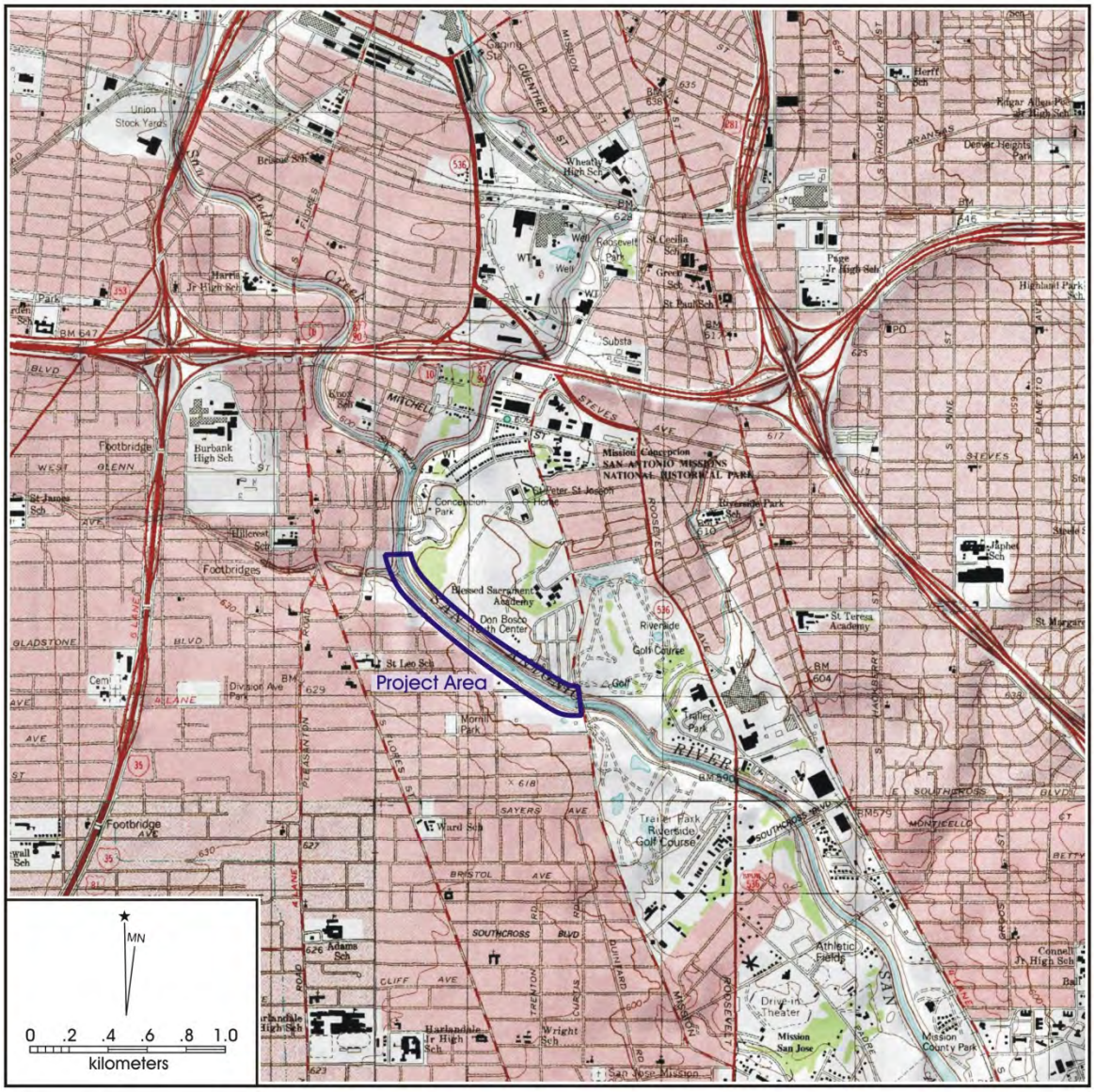

Figure 1-1. *Map of the project area on the San Antonio East, Texas (2998-133) and Southton, Texas (2998-132) 7.5 Minute Series Quadrangle maps.*

The citizens of San Antonio are intensely aware of the historic value of their city and public awareness of the importance of historic preservation is high. As a result, any large construction project within the city, especially near the downtown area, becomes a focus of interest. The participation of concerned citizens is an important part of efforts to preserve places of historic significance in San Antonio and the San Antonio River Authority is eager to ensure that such resources are not impacted by the construction.

Project Background

This project consisted of detailed examination of three areas along the San Antonio River between Theo Avenue and Mission Road (Figure 1-1). In all three cases, concerns had been raised that the SARIP would damage or destroy important historic or prehistoric sites. In this chapter we examine each of the "areas of concern," summarize the reason that archaeological assessment of each was considered necessary, and provide brief backgrounds on previous archeological investigations in the vicinity of these areas. The areas of concern are shown in Figure 1-2.

Figure 1-2. *Aerial photograph of project area showing the location of three areas investigated.*

Area 1: Potential Site of the San José Dam

During preliminary construction along the west bank of the river between Thelka Avenue and Lorraine Avenue (see Figure 1-2), a number of large limestone rocks were uncovered (Figure 1-3).

Figure 1-3. *Possible area of San José Dam: a) overview of the area, showing large limestone rocks, facing southwest; b) close-up of limestone rocks that have been trimmed.*

Some of these rocks appeared to be stacked (Figure 1-3a) and some were clearly trimmed (Figure 1-3b). As this area was near the known location of the Colonial Period San José Dam, constructed to divert water into the San José Acequia (Figure 1-4), there was concern that the construction had uncovered a remnant of the dam.

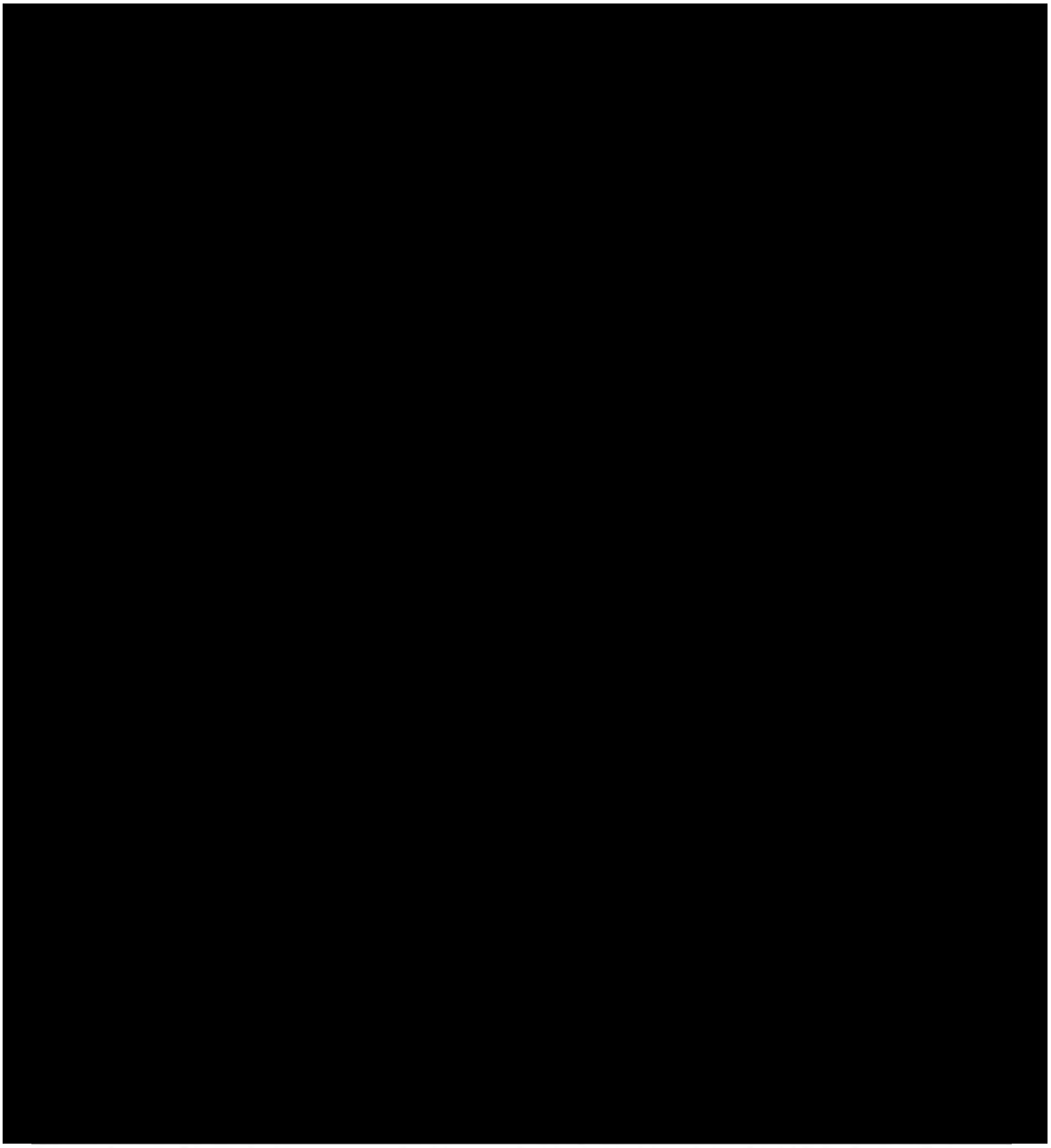

Figure 1-4. *a) Detail of a measured drawing made by Harvey Smith in the 1930s showing his interpretation of the location of the San José Dam and Acequia; b) City of San Antonio Water Department map showing the location of the San José Acequia in 1933; c) overlay showing the San Antonio River prior to channalization, the location of the San José Acequia, and the likely location of the San José Dam.*

The San José Dam (Figure 1-4) was constructed sometime between 1724 and 1727, shortly after Mission San José y San Miguel de Aguayo, was moved to its second location on the west bank of the San Antonio River (Habig 1968:86). The site of this location is not known, though it is believed to have been no more than a quarter-mile from the current location (Habig 1968:86) where the mission was moved about a year later (Ivey et al. 1990:107). Since the mission would need irrigation for its fields, it is likely that the new acequia was begun immediately.

The San José Dam was a weir or low-head dam. Spanish weir-dams in San Antonio were piles of undressed limestone rock built across the river in a location where the banks were relatively high (see Cox et al. 1999), creating a pool behind the dam that raised the water level so that water could be diverted into the mouth of an acequia. Though much more substantial, the San José Dam was probably somewhat like the Espada Dam, located about 5.5 km (3.3 miles) further downstream. Espada Dam is the only Colonial-period dam on the San Antonio River still in use for its original purpose. Figure 1-5 shows how the Espada Dam, by raising the water level of a remnant of the original unchannelized San Antonio River, feeds water into the Espada acequia, which is still used as it has been for more than 250 years, to bring irrigation water to fields near Mission Espada.

Figure 1-5. *Aerial view of Espada Dam and the beginning of the Espada Acequia, a design very similar to the San José Dam.*

The San José Dam was a larger structure than the Espada Dam because at the location chosen, the river bank was high enough to force the river water over the obstruction of the dam only on the west bank. As a result, a "wing" was required to artificially raise the east bank of the river. A description of the dam (Hartson 1935) printed in an article in the San Antonio Express on September 1, 1935 stated:

> A wing dam was made at the present intersection of Loraine (sic) Street and the river by rolling the tufa stone into place along the north bank of the river which was much lower than the south side, which has a 25 foot embankment where no wall was necessary. This dam was almost 100 feet wide at the lower end and with walls about five feet thick as the base across the river. This base or foundation of buried tufa stone can be plainly outlined for 400 feet up stream on the north side (Hartson 1935).

The 1935 newspaper article also mentions that the dam had been damaged and repaired on several occasions and that some of these repairs had included new rock mortared into position. This is exactly what can be seen at the remnants of the Upper Labor Dam, which was rediscovered in 1995, after heavy rains exposed a portion of the dam (Cox et al. 1999). In that project, the dam was cleared enough to identify two construction episodes, with nineteenth century cut and mortared limestone blocks sitting above the original uncut piled limestone of the Colonial structure (Cox et al. 1999:13).

It is interesting to note that Hartson (1935) believed that at some point, probably during a flood event, a portion of the "wing" of the dam on the east side of the river failed, encouraging the river to create a new channel that looped to the north, effectively splitting the river and creating an island. Over time the original course silted up and the new bend in the river became the main course, while the original course dried up except during floods (Hartson 1935). It is unknown if Hartson was correct about this, though maps of the area do clearly show an abandoned section of the river channel running south from where the San José Dam was located (Figure 1-4).

It was believed that the majority, if not all, of the San José Dam had been destroyed during the rechannelization of the San Antonio River in the 1960s and 70s, as there was no longer any evidence of the dam visible in the location shown on many historic maps. However, the possibility that there was a remnant of the dam in the bank of the river in an area slated to be significantly impacted by the SARIP was a matter of concern. No archaeological investigations had occurred in the past in the vicinity of this location, and therefore, no information existed as to whether any portion of the dam may still exist within the rechannelized bank of the river.

Area 2: Potential Site of the Poor Family Cemetery (41BX264)

Plats of the area just west of the Mission Road Bridge over the San Antonio River show a small family cemetery, the Poor Family Cemetery (41BX264) located on the south bank of the river on Lot 17 of NCB 7772 (Figure 1-6).

Records indicate that this land was originally part of Mission San José y San Miguel de Aguayo and in 1839 was granted to R.T. Higgenbotham as his headright (Texas General Land Office (GLO) 1839). In 1853, the land was purchased by Ira S. Poor (Bexar County Deed Records (BCDR) J2:368), who added it to land south of the acequia that he had purchased in 1848 (BCDR U1:64-65). The family continued to own the property through several generations. According to the San Antonio Genealogical and Historic Society (2010), a small family cemetery was established by 1853.

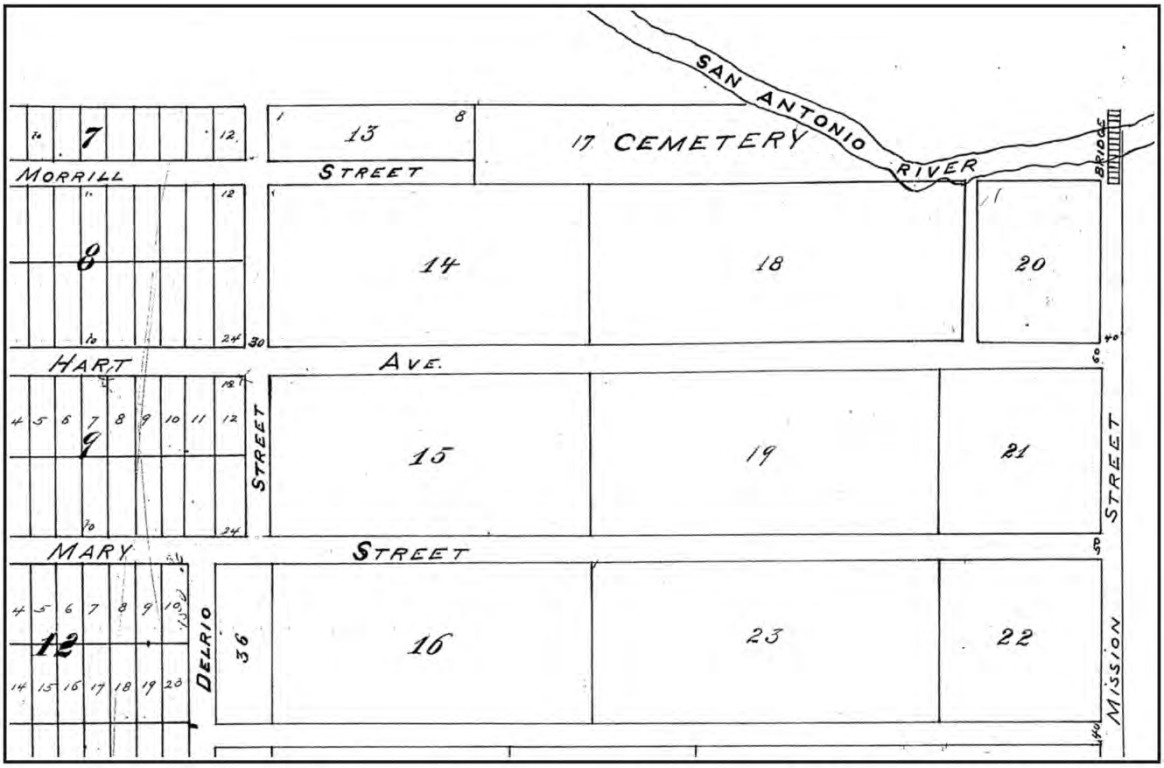

Figure 1-6. *Map of original course of the river near Mission Road Bridge and 1912 plat of the "Sunny South" subdivision (BCDR 105:61).*

This cemetery was rediscovered during the 1974 Mission Parkway survey (Scurlock et al. 1976) which was undertaken as part of the planning process on what became the Mission Trails Statewide Transportation Enhancement Project (see Cargill et al. 2004; Meissner et al. 2007). At that time,

Scurlock et al. (1976:158) noted that a descendent of the Poor family, Adele Poor Harding, still owned the land. Informants (including Ms. Harding) told archaeologists that the cemetery dated after the Civil War and that no interments were known to have occurred after the 1920s. The informants were aware that during the 1930s a number of burials were removed to the Confederate Cemetery, but they felt that there were still some burials remaining in the cemetery. At the time of the survey (1974), a single illegible grave marker was still extant (Scurlock et al. 1976:158).

In 2000, as part of Package 3 of the Mission Trails Statewide Transportation Enhancement Project, a 100 percent pedestrian survey of the area between the houses on Hart Street and the river bank was completed (Meissner et al. 2007:51-53). It failed to find any remaining evidence of the cemetery other than some old fencing wire that had been grown over extensively by the trees to which it had been attached. No headstones or anything else that might indicate the presence of the cemetery could be located (Meissner et al. 2007:53).

In April 2010, City Archaeologist Kay Hindes was notified by a concerned citizen that a group of concrete curb-like pieces were present on the rechannelized river bank, near the presumed location of the Poor Family Cemetery. These “curbs” appeared to be out of place, apparently disturbed when the area was mechanically cleared of vegetation (Figure 1-7a); however, the characteristics of the concrete, and the overall shape of the curbing (Figure 1-7b) suggested that these may not have been street curbs and were reminiscent of the concrete curbs sometimes placed around grave sites in the 1920–1940s, usually to hold marble or limestone chips as part of a decoration of the gravesite (K. Hindes, personal communication 2010). The location of the Poor Family Cemetery nearby made the finding of these curbs a matter of concern, even though maps indicated that this area was at or very near the original river course that had been filled in during the river rechannelization project (Figure 1-6).

Figure 1-7. *Concrete "curbs" found near Poor Family Cemetery: a) "curbs" as they were facing south. (Note: red paint on ground on left side of photograph indicates location of Trench 3); b) "curbs" after they had been moved aside before trenching began.*

Area 3: Potential Prehistoric Site

In April 2010, while visiting the area where preliminary grading of the rechannelized riverbank between Mission Road and Theo Avenue was underway, City Archaeologist Kay Hindes noted an area south of Concepción Park (see Figure 1-2) where she observed a few prehistoric artifacts and fragments of burned rocks, in what appeared to be an organically enriched sediment that had been graded to build a temporary construction road along the river (Figure 1-8).

Figure 1-8. *Location where burned rock and chert artifacts were noted on the disturbed surface in Area 3. Facing south-southeast.*

In addition, she observed an apparent alignment of large limestone rocks (Figure 1-9). Only the tops of the rocks were exposed by the grading of the bank to create a passable road surface for heavy construction equipment.

Figure 1-9. *Possible rock alignment on east bank of San Antonio River in Area 3, as originally seen, facing southeast.*

Backhoe trenches (BHTs) excavated in 2000 by CAR not far from this location had uncovered only fill in the vicinity (Meissner et al. 2007:55,58). Geo-Marine Inc. also conducted investigations in the vicinity during their Phase I survey associated with the SARIP. Three Geoprobe cores were excavated in the area and two of them identified disturbed deposits consisting of mud, gravel, and dense historic trash to depths ranging from 3.6 to 6.4 m below surface. Geoprobe 3, located just south of the prehistoric deposits, encountered construction fill to a depth of 1.2 m and mud, sand, and gravel reaching 5.3 m below surface.

It was the only locality that was identified as potentially containing undisturbed deposits in the survey area (Peter et al. 2006). Given the possibility that intact stratigraphy and deposits may exist in the area, there was concern that the artifacts noted on the surface may represent an intact hitherto un-document

prehistoric site. Subsequent to the identification of the prehistoric materials, the area was fenced off to avoid further disturbance until archaeologists could determine if the artifacts and limestone rocks were *in situ* or had been brought there as part of the filling of the riverbank during rechannelization.

In addition, Hindes was contacted by a citizen who gave a brief personal history of fishing at a ford located just below the confluence of the San Antonio River and San Pedro Creek, which he called *Paso de Cucharas*,. The informant had been told by older relatives that the ford was used by those traveling from Coahuila to Mission Concepción (S. Escobedo, personal communication, 2010). CAR checked with available maps and other historic records of the area and determined that the only map showing a crossing in that location was the map drawn by Andrew J. Houston (Houston 1938) of the Battle of Concepción (October 28, 1835), showing that General Cós' troops crossed the river at that location on their way to the mission the day before the battle (see discussion of battle and map in Meissner et al. 2007:15-18). Current evidence suggests that the ford was not a major or well-known river-crossing n the past. It was destroyed during the river rechannelization.

Following this project background, in Chapter 2 we detail the methods used during the assessment of these localities. Chapter 3 describes the results of the investigations, and finally, Chapter 4 provides a discussion, a summary, and recommendations from our assessment.

Chapter 2: Field and Laboratory Methods

Field Methods

The purpose of this project was to determine if continued construction in the areas of concern listed in Chapter 1 would result in damage to significant historic and/or prehistoric cultural deposits or accidental disturbance of burials. On April 27, 2010, Steve A. Tomka, Director of CAR, Kay Hindes, San Antonio City Archeologist, Mark Denton of the THC, Nancy Parrish of the USACE, and Russell Persyn of SARA met on the site to examine the three localities and define a course of action for the assessment of each. Given the scale of investigation, the primary method agreed upon was the excavation of BHTs rather than the hand-excavation of 1×1 meter units, so that large exposures of sediments could be examined.

Throughout the project, CAR staff worked closely with representatives of SARA and Zachry Corporation, the construction company doing the work along the river, coordinating the archaeological investigations with the needs of the ongoing construction. In particular, planned trenches that would cut through temporary roads in use by the construction crews were excavated in periods when the trenching of these roads did not interfere with materials delivery to the construction site.

During the digging of each BHT, CAR archaeologists remained in a position that allowed them to see into the trench and examine deposits being excavated and stop the machinery for a closer examination if needed. At least one profile drawing was made of each trench, with as many as four profile segments of longer trenches, depending on the length of the trench. In addition, photographs were taken of each trench. Once the trenches were examined, profiled, and photographed, they were backfilled with the same sediments.

Area 1

To determine if the large limestone rocks in Area 1were part of the San José Dam, three BHTs—one near the line of limestone rocks seen in Figure 1-3, one southeast of that area, and one northwest of the area—were excavated. The purpose of the two trenches on each side of the possible dam area was to determine if there was any difference in the sediments (in particular how much of the current river bank was fill) near the area where the dam was known to have been located. The additional trenches would also help determine if the large limestone rocks seen were part of a layer of “riprap” continued up and downstream of the possible dam site.

BHTs 1 and 2, dug near the possible location of the San José Dam, were approximately 1.2 m (4 ft.) in depth at any given location along the trenches. BHT 5 was short (3.5 m) and cut into a steep hillside. BHT

1 was dug with a small excavator with a 1.5-foot (0.46 m) bucket (Figure 2-1a), while the remainder of the trenches were dug with a track excavator with a 3-foot (0.9 m) bucket (Figure 2-1b). As the ground was heavily sloped in some parts of these trenches, the bottom of the trenches was also sloped.

Figure 2-1. *Digging trenches: a) Trench 1, near possible remnant of San José Dam, facing east; b) Trench 2, showing slope of trench bottom, water running into lower part of the trench. Facing northeast.*

Area 2

In order to be absolutely sure that planned construction in Area 2, which would involve extensive grading of the riverbank, did not inadvertently disturb an extant burial from the Poor Family Cemetery, two BHTs (with a possibility of more if it was deemed necessary) were proposed to examine the sediments below the location of the curb-like cement pieces.

BHTs 3 and 4 were dug to 1.8 m (6 feet), though the southern-most third of BHT 4 was dug to a depth of 3.1 m (10 ft.), after appropriate benches were excavated on each side so that the trench could be entered while meeting Occupational Safety and Health Administration (OSHA) safety regulations.

Area 3

Two BHTs were excavated to allow the Project Archaeologist to examine the sediments. BHTs 6 and 7 were excavated to depths of 1.4 m and 1.2 m, respectively. Prior to the excavation of BHTs 6 and 7, the archaeologists performed a very intense examination of the ground surface, collecting two chert artifacts (see Chapter 4). The possible alignment of limestone rock seen in the same area as the chert artifacts was cleared with hand tools and an attempt to locate all such rocks in the area was made. Photographs were taken frequently in the process of this work, and some shallow excavation was done to determine if the limestone rocks were stacked or if they were a single layer.

Laboratory Methods

Very few artifacts were recovered during the project; however, these cultural materials as well as all documents generated during the project, including digital photographs, were returned to the CAR lab and processed in accordance with the Texas Historic Commission requirements for State-Held-in-Trust collections. Artifacts were washed in tap water, allowed to dry, and then stored in 4-mil zip-locking archival-quality plastic bags. Acid-free paper labels were placed in each bag, displaying provenience information and a corresponding lot number. After analysis artifacts were separated by artifact 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 on acid-free paper. Any field forms that were soiled during use were placed in archival quality page protectors. A copy of this report in Adobe Acrobat® format and all digital material pertaining to the project, including all photographs, were burned onto a CD and permanently curated with the artifacts, field notes, and other documents at the Center for Archaeological Research.

Chapter 3: Results

Three areas along the banks of the San Antonio River were examined to determine if significant cultural deposits and/or features may be present that would be impacted by planned construction (see Chapter 2). A total of seven BHTs were excavated during the project, three associated with Area 1, and two each in Areas 2 and 3.

Area 1

Three BHTs were dug in association with Area 1, a location where initial grading activities had uncovered a number of large limestone rocks. At least some of these rocks appeared to be stacked (see Figure 1-3a) and a few appeared to have been trimmed into rectangular shapes (Figure 1-3b). There was concern that these rocks may have indicated the presence of a remnant of the Colonial Period San José Dam.

The river bank at Area 1 had already been modified to a limited extent by the construction of two dirt roads: one near the top of the river embankment and a second not far above the level of the river. The latter sometimes climbed higher on the embankment, as can be seen in Figure 3-1. Some cases involved three dirt roads.

Figure 3-1. *Area 1, seen from across the river, after Trenches 1 and 2 had been backfilled. Note the two levels of construction roads. The San Antonio River, not visible in this photograph, runs just below the line of concrete and limestone crossing the middle of the picture. Facing south-southeast.*

Backhoe Trench 1

BHT 1 was dug about 2 m north of, and parallel to, the line of limestone rocks uncovered during grading of the river bank. It began at the edge of the upper construction road and was dug to the edge of the plastic fencing seen in Figure 2-1, just above the lower construction road (see also Figure 3-1a). Figure 3-2 shows the upper segment of the south wall of BHT 1.

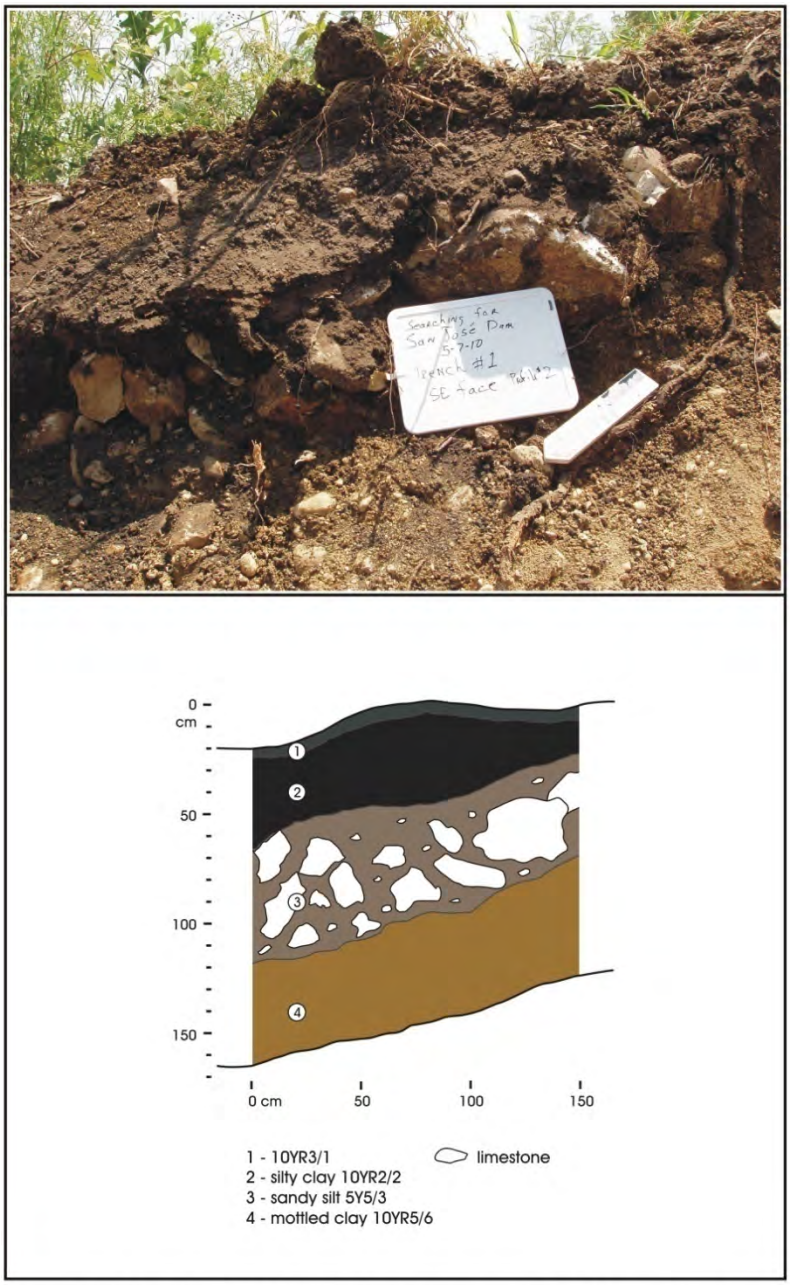

Figure 3-2. *South wall of Trench 1: a) photograph, and b) profile of upper part of trench.*

This is the area where a layer that appeared to be "riprap" was seen in the profile. These large limestone

rocks are within a layer of sandy silt that includes roughly 30 percent smaller limestone rocks (most ca. 3–10 cm), which extend up the slope nearly to the edge of the current bank. The layer of rocks continues down along the slope where it becomes thinner and disappears until the toe slope of the bank where the rocks re-emerge to line the lower bench of the bank near the active channel.

Backhoe Trench 2

BHT 2 was dug 27.5 m southeast (downstream) of BHT 1. It was dug in two segments, beginning from the lower edge of the upper road and extending to within 8 m of the river channel, cutting across the lower road (see Figure 3-1). The next day, BHT 2 was extended southwest to the edge of the right-of-way. Four profiles of the north wall of BHT 2 were drawn, three of which are presented in Figure 3-3, representing both ends and a middle section of the trench.

The entire length of BHT 2 consisted of fill. A thick layer of clay fill is present in a trench excavated for the asbestos-cement sewer line, seen in the segment of BHT 2 lying under the upper construction road (Figure 3-3a). As was the case with BHT 1, the lower part of BHT 2 began to fill with water as it was cut (see Figure 2-1b and Figure 3-3c).

Although there was some variation in the nature of the sediments seen in BHTs 1 and 2, both trenches showed that approximately one-third down the slope from the upper construction road there was a layer of large rock and occasional large chunks of concrete placed on the slope. This was clearly seen during excavation of the trenches and in the profiles.

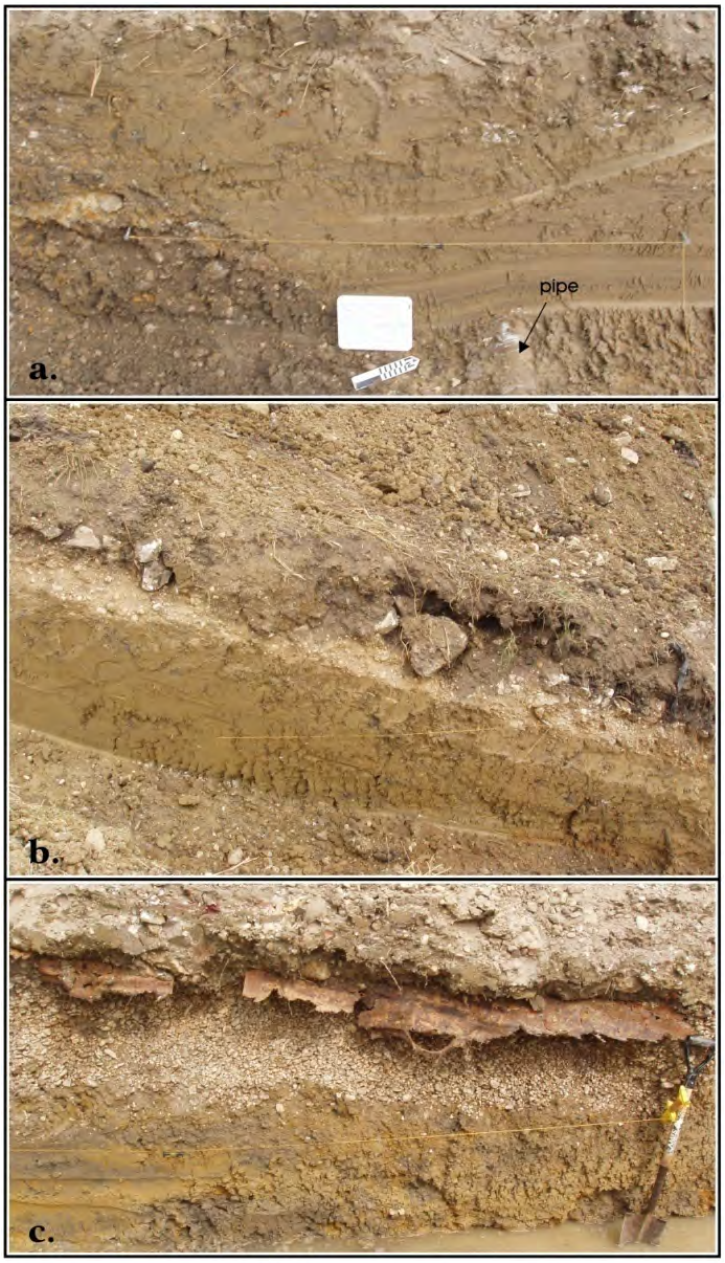

Figure 3-3. *The north wall of Trench 2: a) west end of trench, under upper road; b) middle section with large rocks; c) trench under lower road.*

Backhoe Trench 5

BHT 5 was dug in order to determine if the slope of the river bank above the upper construction road was also fill. The trench was only 3.5 m long. The entire profile was fill material. Figure 3-4 is a photograph of a portion of the south wall of BHT 5, showing multiple layers of fill, large concrete slabs, and a pocket of gravel.

Figure 3-4. *South wall of Trench 5 in Area 1. Note disturbed deposits.*

Area 2

To explore for potential remnants of the Poor Family Cemetery in the area where the curb-like concrete elements were found on surface, two BHTs were excavated to allow the archaeologists the opportunity to examine the sediments.

Backhoe Trench 3

BHT 3 was dug immediately adjacent to one area where the concrete curbs had been seen (Figure 1-7a). The southern part of BHT 3 was dug to a depth of 1.8 m (6 ft.). Figure 3-5 shows a photograph of this part of the trench. All sediments were either clays not seen in natural soils in the area, mixtures of gravels in sandy clay loams, or caliche, all typical fill materials. This part of the trench was backfilled and the northern half was dug the next day.

Figure 3-5. *East wall of the south half of Trench 3, showing layers of fill to1.8 m below surface.*

Figure 3-6 shows the profile of the east wall of BHT 3, exhibiting the various layers of fill. The sandy clay loam in the bottom layers of the northern part of the trench may be natural sediments, the result of over-bank flooding near the old river channel.

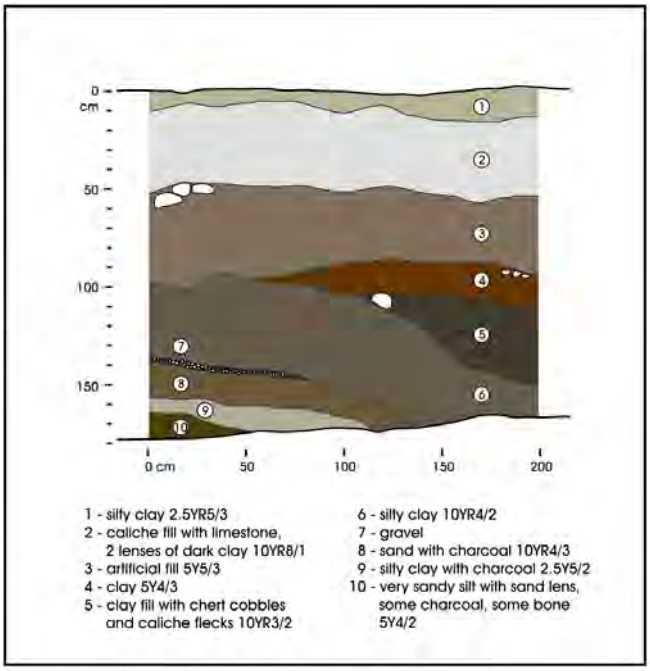

Figure 3-6. *Profile of the east wall of Trench 3.*

These layers contained scatters of charcoal as well as sparse artifacts, all of which appeared to be modern or historic, dating back to no later than the last quarter of the nineteenth century. Each was isolated, unrelated to the others. A piece of copper wire, two pieces of barbed wire and the distal end of the femur of a cow or bison, along with other bone fragments, were recovered from the lowest two levels of BHT 3. One piece of the barbed wire is identifiable as a variation of Patent #176,120, April 11, 1876 (Devil's Rope Museum 2007). The other was too rusted to be identified. The copper wire is a pulled wire; therefore, it almost certainly arrived in San Antonio after trains began to bring manufactured goods into San Antonio in the late 1870s. These artifacts were located in the walls of the trench ranging in depths from 138 to 170 cm. Figure 3-7 shows the slope of the sandy clay loams that may be natural sediments with the layers of fill seen in Figure 3-6 above them. These materials do not seem to be part of a trash midden since they are sparse and lack concentration.

Figure 3-7. *East wall of Trench 3. White line marks sloping sediments with layers of fill above them.*

Backhoe Trench 4

BHT 4 was dug approximately 6 m west of BHT 3, originally to a depth of 1.9 m. In BHT 4, only the northern-most part of the trench showed any sign of the sandy clay loam seen in parts of BHT 3 that may have been natural sediments (Figure 3-8). The remainder of BHT 4 contained the same kinds of fill seen in BHT 3.

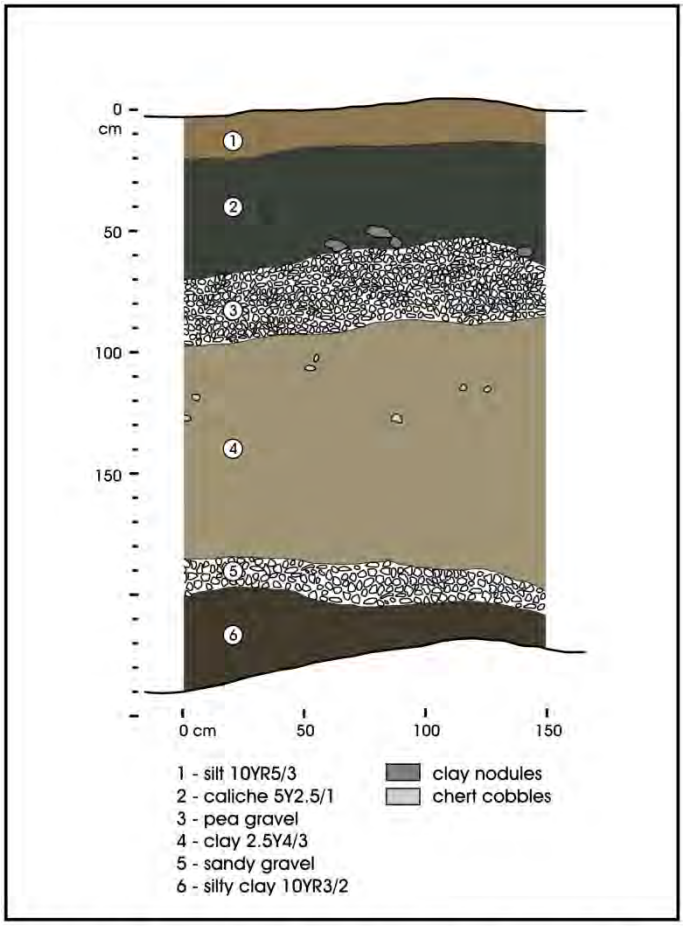

Figure 3-8. *East wall of Trench 4, showing layers of fill (Zones 1-4) above natural deposits.*

To verify that this part of the riverbank was part of the old river course that had been filled during rechannelization, the southern third of BHT 4 was dug to 3.1 m (10 ft). The layers of fill continued to that depth, and contained the remains of several tree trunks (Figure 3-9).

Figure 3-9. *The west wall of Trench 4, showing several tree trunks buried in the fill at a depth of 3.8 m.*

A layer of limestone gravel at 3 mbs contained a number of modern artifacts, including bits of rusted metal and bottle glass. Two fragments of glass bottles were collected. The trench was ended at this point and backfilled. One dark amber bottle base recovered from BHT 4 has a "I-in-an-oval" makers' mark (Figure 3-10), indicating it was made by the Owens-Illinois Glass Company sometime after 1954 (Witten 2010).

Figure 3-10. *Bottle bottom found in Trench 4 at 3 m below ground surface in a gravel lens.*

The notation “Duraglas” in script on the bottle bottom indicates it was manufactured no later than the late 1950s (Lindsey 2010). The factory code indicates it was made in the Waco, Texas plant (Lockhart 2004). The other piece of bottle glass was clear. The shape of the bottle and the measurements embossed up the side indicate it was intended for medicine of some variety, but no other information is available.

Area 3

BHTs 6 and 7 were dug to determine whether the chert artifacts, burned rock, and what appeared to be organically enriched sediment seen on the surface of Area 3 were part of a previously unknown prehistoric site. Before the trenches were dug, CAR staff carefully examined the ground surface in Area 3. The area had been graded, though it did not appear that the current ground level was more than 10 to15 cm lower than the ground level before the area was scraped. Only two prehistoric artifacts were seen and recovered, both close to the area where BHT 6 was later dug. One was a retouched flake (Figure 3-11a) and the other a biface (Figure 3-11b). The latter showed a heavy patina over the majority of the flake scars except two removals that were caused by mechanical means (i.e., post-depositions).

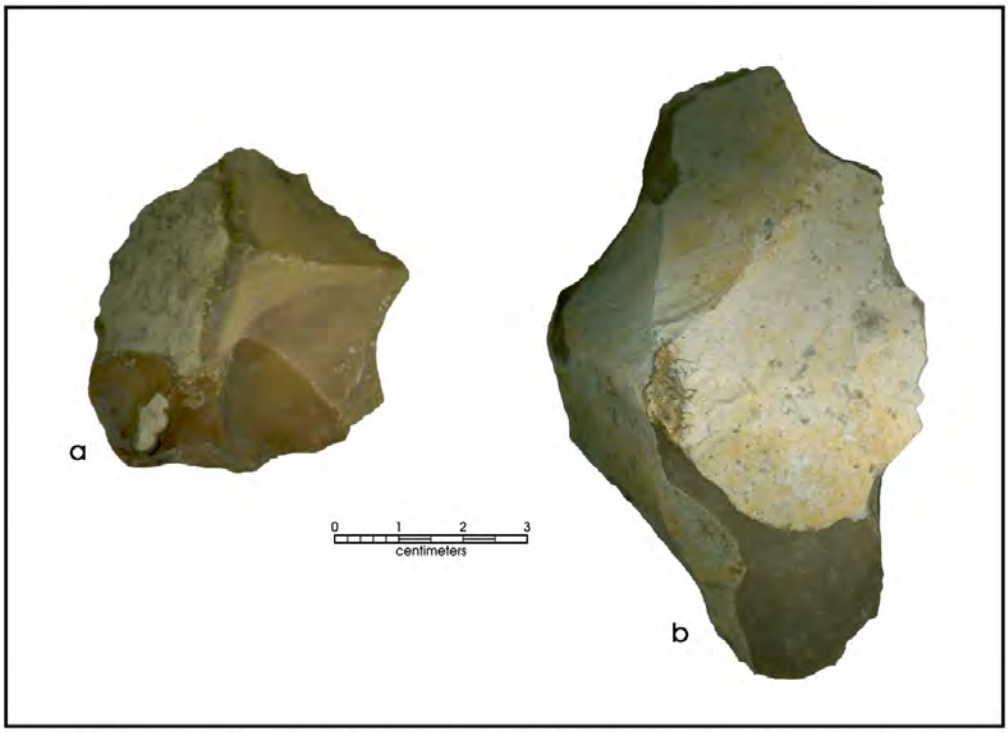

Figure 3-11. *Two prehistoric artifacts from the ground surface in Area 3: a) retouched flake; b) biface. Note heavy patina and fresh scars on biface.*

In addition to the prehistoric artifacts, a number of large (ca. 20–30 cm) limestone rocks were seen in the area (Figure 1-9). It was considered possible that these represented remnants of a previously unknown

historic structure. The stones were cleared with hand tools enough to show that they were not stacked but instead formed a single layer (Figure 3-12a). Furthermore, it appeared that they were only roughly aligned along the edge of the rechannelized river embankment (Figure 3-12b).

Figure 3-12. *The limestone rocks in Area 3: a) single layer of rocks; b) view of cleared rocks, showing they are only roughly aligned.*

We did not determine how far up the bank of the river these rocks extended. However, examination of the detailed schematic sheet of the original channel improvement project shows that riprap was to be placed along the upper part of the new river embankment (Figure 3-13) at this location. The limestone shown in Figure 3-13 appears to be part of that riprap.

Figure 3-13. *Detail plan for Area 3, from original plans for rechannelization of the river. Note reference to riprap along embankment walls (U.S. Armp Corps of Engineers, Ft. Worth District, San Antonio River Channel Improvements Detail Plan, Sheet 27.2, 1957).*

Backhoe Trench 6

BHT 6 was 8.6 m long and 1.4 m deep. The uppermost layer of silty clay loam in which the prehistoric artifacts and burned rock had been observed on the surface was found to vary in thickness from about 3 cm to 20 cm, and overlay a series of layers of gravel, and other fill (Figure 3-14).

Figure 3-14. *South wall of Trench 6 in Area 3. Note gray clay layer at bottom of trench.*

Backhoe Trench 7

BHT 7 was placed approximately 6 m north of BHT 6 and was 9.2 m long and 1.45 m deep. Figure 3-15 shows a profile drawing of a portion of the north wall of the trench. Note that though BHTs 6 and 7 are quite close together, the profiles are somewhat different. The layer of silty clay loam that contained the artifacts found on the surface near BHT 6 is beneath a layer of reddish clay fill in BHT 7.

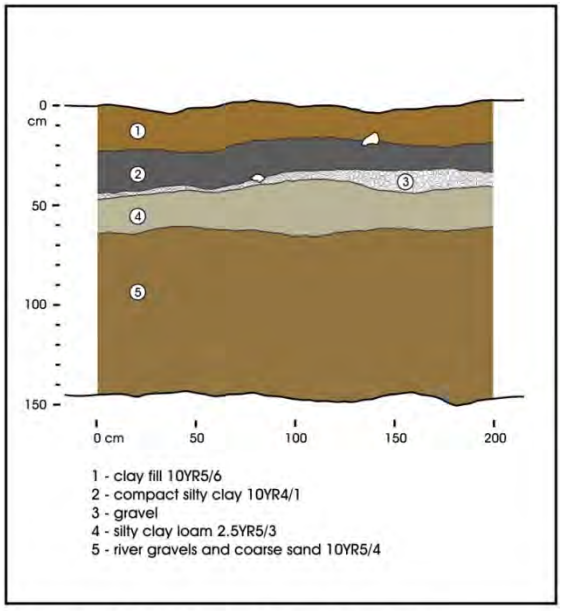

Figure 3-15. *North wall of Trench 7 in Area 3.*

The association of the two lithic tools and few fragments of burned rock with the clay loam present on the surface is a strong indication of the fact that these artifacts were likely introduced to the location. However, this did not explain the presence of a layer of matrix that appeared to be organically enriched in the area. It is this dark gray deposit that is seen at the base of BHT 6 in Figure 3-14 and would suggest that there was an archaeological deposit in the area. However, no artifacts were noted upon careful examination of the gray layer in the bottom of either trench. Later examination of other graded portions of the river bank allowed us to identify several patches of dark gray deposits (Figure 3-16).

Figure 3-16. *Patches of dark clay soils exposed along west bank of river just south of Lorraine Street. These are natural deposits and contain no cultural materials.*

Examination of a sample of these patches showed that they are rich in clay and it is the dark clay that gives them the organically enriched appearance. None of the patches examined contained cultural materials and they tended to be distributed along the upper portion of the river bank. These observations helped us realize that the dark gray deposit near the prehistoric surface artifacts did not represent an organically enriched midden deposit but rather a clay lens that was exposed on surface by the recent grading. In combination with the clear association of the prehistoric artifacts with materials brought in as road fill, we are able to establish that the cultural materials are in a secondary context and do not represent and *in situ* site.

Chapter 4: Discussion, Summary and Recommendations

Discussion

Area 1

The inspection of several historic maps (Figure 1-4) depicting the route of the San José Acequia and the location of the San José Dam suggested that the dam would have been at the location where initial grading of the river bank exposed large limestone rocks. The stacked nature and shaped appearance of some of the rocks (Figure 1-3) suggested that they could be part of the lost San José Dam.

The three trenches excavated to examine the sediments in this area have demonstrated that the entire river bank in this area has been constructed by shaping fill into the steeply sloped embankment. The upper and lower portions of the embankment are protected from erosion during flood events by a layer of large limestone and concrete riprap. No evidence of any remaining portion of the San José Dam was observed.

Area 2

Available maps (Figure 1-6) and other information, including the work done by Scurlock et al. (1976), personal communication by Richard Garay, and historic photographs, indicated that the Poor Family Cemetery was located on Lot 17 of NCB 7772 in the vicinity of Area 2. The presence of the concrete "curbs" and the fact that the precise location of the cemetery plots is not known, made examination of the sediments in Area 2 necessary to ensure that no burials were disturbed by the impending SARIP construction work. Both BHTs 3 and 4 exposed sediments that were largely fill, though small areas in the northern part of the trenches near the bottom of the 180 cm profiles may be natural, flood-deposits. The southern part of BHT 4, dug to 3.1 m showed none of these sandy silt sediments, and contained modern artifacts at the bottom of the trench (Figures 3-9 and 3-10-11), indicating that the maps used to create Figures 1-4 and 1-6were probably accurate and Area 2 lies where the original course of the river ran before rechannelization, and is not, therefore part of the Poor Family Cemetery.

Area 3

Though it was known that two BHTs excavated by CAR in 2000 had been located somewhere near Area 3 (see map Meissner et al. 2007:55), it was not realized how close the 2000 trenches were to the 2010 trenches until maps were being drafted for this report. BHTs E and L, excavated in 2000, bracketed BHTs 6 and 7 dug during this project (Figure 4-1).

Figure 4-1. *Locations of Trenches 6 and 7 as well as BHTs E and L immediately south of Concepción Park.*

Not surprisingly, descriptions of the profiles from BHTs E and L (Meissner et al. 2007:58) are very similar to the profiles shown in Figure 3-14 and 3-15. It should be noted that BHTs E and L were 1.7 m and 3.5 m deep respectively and that the mix of gravel and sandy clay seen in the lower part of the profiles of both BHTs 6 and 7 continued to the bottom of the older trenches.

It is clear, therefore, that the silty clay loam sediment in which the prehistoric artifacts and burned rock were seen was a layer of fill brought to Area 3 from another location. They do not represent an intact archaeological site. Furthermore, the apparent organically enriched deposit was a clay layer that was devoid of artifact and was exposed by the grading of the bank.

The large limestone rocks near BHT 6 were cleared and proved to be a single layer thick, extending at least 10 m along the river bank in only a rough alignment. These stones appear to be part of the riprap placed on the slope below Area 3 to prevent erosion during flood events.

Summary and Recommendations

In May 2010, staff archaeologists from the Center for Archaeological Research conducted intense investigations consisting of the excavation of seven BHTs in three areas along the San Antonio River between Theo Avenue and Mission Road. The three areas were:

Area 1: The possible location of a remnant of the San José Dam, constructed in the mid-eighteenth century;

Area 2: A location near the Poor Family Cemetery (41BX264) where concrete curb-like pieces reminiscent of a kind of grave decoration common in the later nineteenth and early twentieth centuries had been observed; and

Area 3: A location south of Concepción Park where prehistoric artifacts, as well as a possible limestone rock alignment, had been observed on the disturbed ground surface.

Three BHTs were dug in Area 1. No evidence of a remnant of the San José Dam was encountered. All sediment in the three trenches was fill. The large limestone rocks observed in Area 1 were determined to be placed during the rechannelization to prevent erosion of the lower banks during flood events.

Two BHTs were dug in Area 2. Though some sediments near the bottom of the northern part of both trenches may have been the result of overbank flooding of the river before rechannelization, the remainder of the profiles was fill material to the depth of the trench, 3.1 m. No evidence that the Poor Family Cemetery extended into the SARA right-of-way was observed.

Two BHTs were dug in Area 3. The two chert artifacts recovered from the ground surface were associated with a layer of sandy clay loam that overlay several meters of fill material and do not represent an *in situ* prehistoric site. The rock alignment noted nearby was determined to be the top of the layer of rock riprap placed on the slope below Area 3 to retard erosion during flood events.

Each of the three areas was carefully examined by staff archaeologists of the Center for Archaeological Research. No evidence that continued construction of the SARIP would impact significant cultural resources was observed in either of the three areas examined. Therefore, we recommend that the grading of the San Antonio River banks in these three areas proceed as originally planned. However, due to the possibility that a remnant of the San José Dam is buried under the fill observed during this project, we recommend that an archaeological monitor be present during the grading in Area 1 in the Lorraine Avenue vicinity. In addition, as the exact location of any remaining burials in the Poor Family Cemetery is not known, we recommend that an archaeological monitor also be present during grading in Area 2. As the artifacts in Area 3 were brought to the site in the fill used to shape the river bank during the rechannelization project and no undisturbed sediments were observed in the area, we do not recommend additional archaeological investigations in Area 3.

References

Bexar County Deed Records (BCDR)
https://gov.propertyinfo.com/TX-Bexar/Default.aspx. Accessed September 2010.

Cargill, D.A., B.A. Meissner, A.A. Fox and I.W. Cox
2004 *San Antonio Mission Trails Statewide Transportation Enhancement Project, Volume I, Construction Package 1: Archaeological Investigations at Mission San Francisco de la Espada (41BX4), City of San Antonio, Bexar County, Texas*. Archaeological Survey Report No. 308. Center for Archaeological Research, The University of Texas at San Antonio.

Cox, I.W., E.D. Johnson and C.B. Bousman
1999 *Excavations for the Upper Labor Dam Site, Brackenridge Park, San Antonio, Bexar County, Texas*. Archaeological Survey Report No. 268. Center for Archaeological Research, The University of Texas at San Antonio.

Devil's Rope Museum
2007 Barbed Wire Collecting Guide. Devil's Rope Museum. http://www.barbwiremuseum.com/bwidentification.htm. Accessed September 2010.

Habig, M.A.
1968 *The Alamo Chain of Missions; a History of San Antonio's Five Old Missions*. Franciscan Herald Press, Chicago.

Hartson, J.E.
1935 Forgotten Mission Waterways Determined San José Location. *San Antonio Express*, September 1.

Houston, A.J.
1938 *Texas Independence*. Anson Jones Press, Houston.

Ivey, J.E., M. Thurber and S. Escobedo
1990 "*Of Various Magnificence*", *The Architectural History of the San Antonio Missions in the Colonial Period and the Nineteenth Century*. Southwest Cultural Resources Center Professional Papers No. 11, National Park Service, Santa Fe.

Lindsey, B.A.
2010 Bottle Glossary. Historic Glass Bottle Identification & Information Website. http://www.sha.org/bottle/glossary.htm. Accessed September.

Lockhart, B.
2004 The Dating Game: The Owens-Illinois Glass Company. In *Bottles and Extras, Federation of Historic Bottle Collectors*. Vol. Summer.

Meissner, B.A., I.W. Cox, J.D. Weston and B.K. Moses
2007 *San Antonio Mission Trails Statewide Transportation Enhancement Project, Volume II: Construction Packages 2 and 3, Archeological Testing and Monitoring Construction of the Mission Trails Hike and Bike Trails, City of San Antonio, Bexar County, Texas.* Archaeological

Survey Report No. 374. Center for Archaeological Research, The University of Texas at San Antonio.

Peter, D.E., D.D. Kuehn, S.N. Allday, A.L. Tine, S.M. Hunt, and M.D. Freeman
2006 *Archeological Assessment of the Potential Impact of the San Antonio River Improvement Project-Mission Reach-on Historic Properties*. Geo-Marine Incorporated. Austin.

San Antonio Genealogical and Historic Society
2010 Bexar County Cemeteries. http://www.rootsweb.ancestry.com/~txsaghs2/Pages/Links-Cemetery-Bexar-N-Z.htm. Accessed September.

San Antonio River Authority
2009 San Antonio River Improvement Project Fact Sheet. San Antonio River Authority.

Scurlock, D., J.A. Benavides and J.W.Clark. Jr.
1976 *An Archeological and Historical Survey of the Proposed Mission Parkway, San Antonio, Texas*. Archeological Survey Report No. 17, Texas Historical Commission, Office of the State Archeologist, Austin.

Texas General Land Office (GLO)
1839 Texas General Land Office Land Grant Database. http://www.glo.state.tx.us/archives/landgrant.html. Accessed September 2010.

Witten, D.
2010 Glass Factory Marks on Bottles. http://myinsulators.com/glass-factories/bottlemarks.html. Accessed September.