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**TESTING OF THE SAN JOSE ACEQUAI,
SAN ANTONIO MISSIONS NATIONAL PARK,
BEXAR COUNTY, TEXAS**

Anne A. Fox and I. Wayne Cox

**Center for Archaeological Research
The University of Texas at San Antonio
Archaeological Survey Report, No. 207
1991**

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SAN ANTONIO MISSIONS NATIONAL HISTORICAL PARK,
BEXAR COUNTY, TEXAS**

Anne A. Fox and I. Wayne Cox

Texas Antiquities Committee Permit No. 1007

**Center for Archaeological Research
The University of Texas at San Antonio®
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ABSTRACT

The purpose of this project was to locate and identify the acequia madre, or main irrigation ditch, where it ran between the east wall of Mission San José and San Jose Drive and to trace out the location of another ditch, part of which was found during road construction in the area in 1981. After confirmation of the location of the main ditch through deed and archival research, a backhoe was used to precisely locate the ditch on the site. The second ditch was relocated and its course followed to the north boundary of the park property in this area. The secondary ditch appears to be a lateral which once took off from the main ditch somewhere north of Pyron Road and rejoined it some distance to the south, in order to irrigate the fields outside the east wall.

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INTRODUCTION

In April 1991, the Center for Archaeological Research (CAR), The University of Texas at San Antonio, conducted test trenching in an area east of the outer wall of Mission San José y San Miguel de Aguayo in San Antonio, Texas. Mission San José is located approximately 6 km south of downtown San Antonio (Fig. 1). The work was done under contract with Cox/Croslin & Associates, Inc., Austin, Texas, in order to obtain information needed to locate and design a new visitor's center for the San Antonio Missions National Historical Park.

Mission San José has been designated a State Archeological Landmark and a National Historic Site. It is one of four missions included within the San Antonio Missions National Historical Park. As a registered archaeological site, it bears the number 41 BX 3. In compliance with the Texas Antiquities Code, these excavations have been granted Texas Antiquities Committee Permit No. 1007.

The work was accomplished in three working days by a crew of three archaeologists and one volunteer, aided by a backhoe. Jack Eaton, acting director of the CAR, and Anne Fox served as

principal investigators. Fox directed the field work, assisted by I. Wayne Cox and Herbert G. Uecker. Historical and archival research was conducted by Cox. Uecker drafted Figures 3, 5, and 6.

In 1981, archaeologists from the State Department of Highways and Public Transportation (SDHPT; Henderson and Clark 1984) recorded evidence of a ditch running across Napier Avenue just west of the intersection with San Jose Drive during road relocation work in the area. The ditch was identified from its contents as being of Spanish colonial origin, and it was speculated that it might be the original acequia madre or main ditch for the mission. Since a continuation of the line of this ditch appeared to cross the area planned for use with the new visitor center, it was necessary to map and positively identify this feature.

PREVIOUS INVESTIGATIONS

Numerous archaeological investigations have been conducted within and around the walls of Mission San José. These include monitoring of sprinkler trenches by Schuetz (1970) in 1968; test excavations in the vicinity of the north wall in 1969 and 1970 (Fox 1970); testing in the vicinity of the southwest corner by Texas Parks and Wildlife archaeologists in 1974 and 1976 (Roberson and Medlin 1976); testing to examine moisture problems throughout the compound in 1974 and 1975 (Clark 1978); testing in the vicinity of the west wall of the granary in 1979 (Clark and Prewitt 1979); the previously mentioned work by the SDHPT; and testing in the vicinity of the convento by James Ivey (n.d.). In addition, sewer line relocation work along the line of the madre ditch north of the mission was monitored by Cox (1988) in 1986.

HISTORICAL BACKGROUND

On May 1, 1718, Fray Antonio de San Buenaventura Olivares established the Mission San Antonio de Valero (The Alamo) in the San Antonio River valley for the Franciscan College of Santa Cruz de Querétaro. Four days later, the presidio of San Antonio de Bexar was founded by Martín de Alarcón. In November of the following year, Fray Antonio Margil de Jesus, of the college of Nuestra Señora de Guadalupe de Zacatecas, arrived at the new settlement driven from east Texas by the intrusion of the French upon Mission San Miguel de Linares de los Adaes (Webb 1952 Vol II:541, 546, 559; Habig 1968:25).

Figure 1. *Location of the Study Area.*

Fr. Margil, while awaiting the arrival of the Marquis de Aguayo and his army to repel the French, encountered three groups of Indians who desired a mission but were unfriendly with those at Mission San Antonio de Valero. He appealed to the Marquis, governor of Coahuila and Texas, for permission to establish a second mission for the College of Zacatecas (Margil 1719:2-9). The Marquis immediately authorized Captain Valdéz, commander of the presidio, to proceed with the founding of a mission in the name and title of his saint, San José y San Miguel de Aguayo (Aguayo 1720:14-18). On March 13, 1720, Captain Juan Valdéz (1720:28-42) complied with the decree by establishing the mission on a site with a "... slight elevation ... a little more than three leagues ... down the river where the irrigation ditch is to be."

The location for the first site of the mission is not clearly identified but there is good reason to believe that it was at the location now occupied by Mission Nuestra Señora de la Purísima Concepción de Acuña. The map drawn by Aguayo clearly placed the mission on the east bank of the San Antonio River near the confluence with San Pedro Creek (Fig. 2). Also, there is the location of the Pajalache, or Concepción, acequia, generally accepted as one of the oldest acequias, with a date of 1729 for its construction, apparently based on court records as early as 1858. This would mean that it was constructed at least three years prior to the establishment of Mission Concepción on the site (Corner 1890:43). Further, archaeological investigations on the site have produced ceramic evidence of occupation prior to 1730 (Scurlock and Fox 1977:56).

Prior to 1729, Mission San José was relocated to the west bank of the river, and construction of a new acequia would have begun (Rivera 1730:47; Habig 1968:32). The reason for the relocation is not given, but it may have been an attempt to appease Fr. Olivares (1720:19-26) of Mission San Antonio de Valero, who officially protested prior to the founding of the Zacatecan mission that it was too close to his mission and in violation of the Law of the Indies. The second location is also unknown, but it was reportedly marked by ruins northeast of the present site between Mission Road and the river (Hoermann 1932:27; Hartson 1935). This location is somewhat supported by the evidence of an "acequia media" between the San José acequia madre (or main ditch) and the San Antonio River, rising from an old bow of the river prior to rechannelization (DR Vol. 22:242; Cox 1988).

The later location of the acequia madre, or main ditch, of San José was probably dictated by

the relocation of the mission to its third, and present, site in approximately 1740 (Habig 1968:45). The acequia rose from a dam on the San Antonio River below its confluence with San Pedro Creek and generally followed the path of Mission Road on the east side, skirted to the east of the mission compound and returned to the river just to the north of the Espada Dam. The presence of the completed acequia and its dam was reported in 1755 (Marmolejo 1755:116). In 1768, Fray Solís (1768:145) described the acequia as having "a copious and abundant amount of water that it affords a small river." Fray Morfi (1777:211), in 1777, notes a "beautiful irrigation ditch" which watered about a league square [4428.4 acres] and is all fenced. ... By 1794, some portions of the fields and acequias had been abandoned since there were fewer Indians in residence, but it was noted that it would require only cleaning the acequias to place the fields back into cultivation (Pedrajo 1794:137). This must refer to some of the system of laterals to the madre ditch, since the main channel was still in operation.

In 1794, the mission was partially secularized. The lands were distributed to the residents, and a pueblo was established (Muñoz 1794:92-109). The acequia continued to function for their use, and they shared the responsibility of the upkeep of the acequia. Mexico gained independence from Spain in 1821. In 1823, the Mexican government ordered complete secularization of the Texas missions, and final distribution of the lands of San José took place. A list of residents in December 1823 indicated that, in the division of land, one portion was held by "Escalera" (General Land Office 1823). In December of the following year, José María Escalera was granted three portions of the San José lands by the Mexican government (DR Vol. C1:202, 222, 226). The first of these portions was described as being bounded on the west by the road to Espada, on the south by lands belonging to Juan Martín de Veramendi, on the east by the acequia, and on the north by rented lands (DR Vol. C1:202). This is the land addressed by this report.

The date of the arrival of the Escalera family to San Antonio is not known, but in 1787, José María de Jesús Escalera married María Ildefonsa Perez, granddaughter of one of the Canary Islanders (Chabot 1937:179). His son, also José María de Jesús, born in 1809, was a Ward Commissioner for the Third Ward (*ibid.*:150; DR Vol. E1:52-53). This is the individual granted the San José lands. The land passed directly to his son, José María, born in 1829, and was held by him until his death (USDI-OC 1880; Probate Records #6022).

Figure 2. The Study Area in the 1720s. Map made by the Marquis de Aguayo in the late 1720s. Original is in the Archiva General y Publica de la Nacion, Mexico, D.F.

The dam supplying water for the acequia experienced several episodes of destruction by flooding of the river, the last being in 1860, causing the acequia to be abandoned (Hartson 1935). In 1894, the acequia was reopened under the Texas Water Act of 1889 by the landowners. However, the dam was relocated farther south on the river near the river bridge on Mission Road, and the upper portion altered to rejoin the old acequia. At that time it was described as being "four feet deep and 12 feet wide and the carrying capacity thereof shall be 100 cubic feet per second" (*Water Board Records* Vol. 1, August 10, 1894:4; Brook 1904).

The will of José María Escalera, filed in August 1911, divided his property into seven equal shares among his children: Juan N. Escalera, Jesusita Escalera de Perez, Angelita Escalera de Huizar, Josefita Escalera de Perez, Martina Escalera de Huizar, Luz Escalera de Perez, and Miguel Escalera. The property in question was described as having a front of 42 varas (116.63 feet) on the east side of San José Plaza "... running east between parallel lines to the old ditch of the Mission San José. ..." He further stated that it was "... the lot and house in which I now reside" (*Probate Records* #6022). The plat of the division of the property clearly shows the metes and bounds along the old acequia line and can easily be reestablished (*DR Plat Book* 368:14). Another survey, this one of the property to the east of the acequia, made in 1919, agrees and calls the property to the fence in the middle of the "old ditch" (*DR Plat Book* 368:241). These two sources match almost exactly the property ownership map when the mission was acquired in 1941 by the State Parks Board (Bexar County Highway Department 1941).

METHODOLOGY

Previous experience in locating acequias in and around San Antonio led the archaeologists to spend several days tracing land ownership in the area at the county courthouse. A map made in 1941 for the Bexar County Highway Department when the State of Texas was acquiring the site shows the line of the acequia madre as the eastern boundary of lots that extended from the mission compound toward the east. The accuracy of this line was confirmed by research in the deed records, and a history was compiled of ownership to 1911. The centerline of the acequia was staked out on the ground, measuring from the reconstructed east wall of the mission. A backhoe was used to trench across this line, producing a profile of the ditch. After the

location of the main ditch had been confirmed, the backhoe was moved to the continuation of the line of the SDHPT ditch, north of Napier Avenue (Fig. 3). A series of backhoe trenches across this ditch followed it north to the fence line of a private property owner which blocked further investigation.

A transit was used to record elevations and map the locations of the test trenches. A primary base line was laid out parallel to the grid established by the SDHPT crew in 1981. Profiles were drawn of a representative sample of the trenches, and artifacts recovered were collected in bags marked with their provenience. All field measurements were recorded in feet and inches, in accordance with the base maps used for location of the acequia. Photographs were taken of all trenches. The artifacts were processed according to CTA standards, and all field notes, photographs, and artifacts are curated at the CAR laboratory.

GEOLOGY AND SOILS

The mission is located on a relatively high, level terrace above the floodplain of the San Antonio River. The soil is a component of the Patrick series of the Venus-Frio-Trinity association (Taylor, Hailey, and Richmond 1966:sheet 63, page 6). These soils are dark brown in color. The substratum consists of lime-cemented or lime-coated gravel, which may be bedded with caliche. Patrick soils are considered to be low in fertility and not particularly suitable for cropland (Taylor, Hailey, and Richmond 1966:61).

INVESTIGATIONS

Two backhoe trenches were excavated across the line of the acequia madre or main ditch. Trench 1 (Fig. 3) was located approximately on a line with the south wall of the mission. It was dug to a maximum depth of 38 inches (96.5 cm) through very dark gray (11YR3/1) clay loam, dark reddish gray (5YR4/2) clay loam, and into white (10YR8/2) caliche gravels at ca. 30 inches (76 cm) beneath the surface. The outline of the bottom center of the ditch was visible cut into the caliche, but it was difficult to discern the width of the ditch in profile. This may be due to periodic flooding and washing out of walls in post-mission times when the ditch was no longer carefully tended.

Artifacts recovered were in the top two feet of fill and included the following: five whiteware cup sherds, 20th century (Fig. 4,c); six glass container

Figure 3. Test Excavations.

Figure 4. *Artifacts.* a,b, *Goliad* ware, Test Trench 3; c, whiteware cup, Test Trench 1; d, stoneware bowl, Test Trench 3; e, fluted glass vase, Test Trench 1; f, spark plug, Test Trench 3; g, goblet, Test Trench 3.

sherds, brown, green, and clear, beer and soda; one ribbed white glass vase sherd (Fig. 4,e); one animal bone fragment, probably cow; one tin can top; one golf club head; one molded black plastic fragment; and one mirror glass fragment. These all appear to be related to post-1900 occupation in this area.

Trench 2 was located ca. 70 feet (21.3 m) north of Trench 1. The outline of the ditch was clearly visible in the profile of the trench (Fig. 5). The same soil strata were encountered as in Trench 1. At this point, the ditch appeared to be about 10 feet (3 m) wide and 20 inches (51 cm) deep, measured from the present surface.

Trench 3 was located parallel to and 30 feet (9.1 m) north of the exploratory trench excavated by the SDHPT as Test Trench 9 (Henderson and Clark 1984:Fig. 3). The profile of the trench indicated a ditch approximately five feet (1.5 m) wide. The bottom of the ditch was found to rest on the caliche subsoil at about 32 inches (81 cm) below the present surface. This corresponds well with the findings of the SDHPT archaeologists (Henderson and Clark 1984:Fig. 9), allowing for the higher elevation of the soil surface in the area to the north of the street. The CAR crew recorded the elevation of the bottom of the ditch at Trench 3 to be 583.2 feet (ca. 177 m) MSL.

The stratification within the trench was similar to that found in Trenches 1 and 2, with the addition of a layer of humus-stained loam at the surface that was not clearly visible in the two previous trenches (Fig. 6). The same irregular outline of the ditch was visible where it was cut into the caliche gravel subsoil as was observed by the SDHPT crew (Henderson and Clark 1984:Figs. 11 and 12). In addition, the very bottom of the ditch yielded a sherd of Indian-made *Goliad* ware and a few bone fragments, similar to the artifacts found farther south in the ditch in 1984 (Henderson and Clark 1984:Fig. 11). The only other artifacts found were in the first stratum: one stoneware bowl sherd, blue-spattered design (Fig. 4,d); three pale green glass goblet sherds (Fig. 4,g); three clear glass bottle sherds; one spark plug "CHAMPION H-10" (Fig. 4,f); and one window glass fragment.

Here, again, these are post-1900 in date. Trench 3 was an exploratory trench, and as such was extended well beyond the area of the ditch, both in search of the ditch and in order to confirm that the anomaly was indeed a man-made ditch rather than an accident of the local geological formations. No other similar disturbances were found in the entire length of the trench, and it was apparent that the ditch found in 1981 was the only such disturbance crossing the immediate area.

Figure 5. Profile of North Wall of Test Trench 2.

PLAN OF FLOOR AT 30 INCHES DEPTH

Figure 6. Profile of North Wall of Test Trench 3.

During excavation of Trench 3, a lense of soil containing numerous fragments of white caliche gravels and occasional small pieces of bone was found to overlie the center of the trench. When Trench 4 was begun ca. 30 feet to the north, the same lense was found. This trench was also dug to the level of the bottom of the ditch to confirm the findings in Trench 3. In the upper stratum, late artifacts were found: one galvanized wire nail and one clear glass fragment. Within the fill on the bottom of the ditch were two sherds of *Goliad* ware (Fig. 4,a,b), a large bovine bone, and a small fragment of glass.

Trenches 5-11 were excavated across the line of the ditch, which was easily recognized because the lense of caliche gravels in each case lay above the ditch, or perhaps in what was once the top of it. The centerline of the ditch was then plotted on the site map.

ARTIFACT DISCUSSION

The artifacts recovered near the surface in several of the trenches reflect the 1930s occupation of this area, after it was divided into individual lots by the heirs of the Escalera family in the early 1900s. An aerial photograph taken in 1935 (copy on file at the CAR) shows a number of small frame houses facing on San Jose Drive and onto the old Mission Road as it emerged from the southeast gate of the mission. Some of these, and perhaps some other later ones, were still present when the senior author worked at the mission in the early 1970s. Therefore, the post-1900s artifacts could represent any of these later occupants of the area in question. The *Goliad* ware sherds found in the bottom of the secondary ditch correspond well with those found by the SDHPT archaeologists in 1981.

CONCLUSIONS

Comparison of the profiles of Test Trenches 1 and 2 with those recorded by CAR archaeologists on acequias elsewhere in the San Antonio area (Valdez and Eaton 1979:Fig. 5; Frkuska 1981:Figs. 8-10; Cox 1988:Fig. 2) confirm that this is the acequia madre, even without the evidence from the deed records and early plat maps. The second, smaller ditch appears to be a lateral or branch of the main ditch, probably intended to irrigate the field between the main ditch and the east wall of the mission. The artifacts found in the bottom of this feature, both in 1981 and during this project, can be securely dated to the mission

period, but give no clue as to exactly when during this time the ditch was open. It probably went out of use and was allowed to silt up at some time during the active life of the mission. Perhaps, the fact, as mentioned previously, that this type of soil is not particularly good for cultivation had something to do with its abandonment.

RECOMMENDATIONS

The acequia madre was of sufficient importance to the history of the mission that its location should be properly marked in any planned landscaping of this area. While the existence of the lateral ditch is of interest as part of the irrigation system, it is not of major importance. We do recommend that any planned development over the ditch avoid excavating deeper than one foot below the present surface, staying within Stratum II as shown in Figure 6. Any parking lot construction might better be raised above the surface, for preservation as well as for better drainage in this type of soil.

Archival research done for this project suggests that it will be necessary to do considerable additional research in maps and deed records, as well as oral history interviews with descendants of earlier landowners, before it will be possible to reconstruct the history of the southeast corner. Such a reconstruction will be necessary in order to determine what cultural resources will be encountered by construction of the new visitor's center, and therefore the extent of archaeological investigation that will be needed there.

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