Archaeological Investigation of the O'Hara House Site (41BX2445), San Antonio, Bexar County, Texas

by Clinton M.M. McKenzie



REDACTED

Principal Investigator Raymond P. Mauldin

Prepared for:
Douglas Architects
1320 East Houston Street, Suite 102
San Antonio, Texas 78205



Prepared by:
Center for Archaeological Research
The University of Texas at San Antonio
One UTSA Circle
San Antonio, Texas 78249-1644
Archaeological Report, No. 491

© CAR January 2022

Archaeological Investigation of the O'Hara House Site (41BX2445), San Antonio, Bexar County, Texas

by Clinton M.M. McKenzie

REDACTED

Principal Investigator Raymond P. Mauldin



Prepared for:
Douglas Architects
1320 East Houston Street, Suite 102
San Antonio, Texas 78205

Prepared by:
Center for Archaeological Research
The University of Texas at San Antonio
One UTSA Circle
San Antonio, Texas 78249
Archaeological Report, No. 491

Abstract:

In March 2021, the University of Texas at San Antonio (UTSA) Center for Archaeological Research (CAR), in response to a request from Post Oak Preservation Solutions and Douglas Architects, acting on behalf of Lisa Wong, provided archaeological monitoring and related investigations for a restaurant project located at 722 S. St. Mary's Street in San Antonio, Bexar County, Texas. This work was in response to a request from the COSA Office of Historic Preservation (OHP). The project required review under the COSA Unified Development Code (Article 6 35-630 to 35-634). Raymond P. Mauldin served as the Principal Investigator and Clinton M. M. McKenzie as the Project Archaeologist.

The archaeological work consisted of three phases of monitoring. Phase 1 monitored the excavation of sequential foundation trenches to document any features around the perimeter of a remnant portion of the O'Hara House (41BX2445), a caliche block structure on a limestone water table foundation. Phase 2 consisted of monitoring the down cutting of the O'Hara House lot to 5 ft below current grade to observe and document any associated features. Phase 3 consisted of monitoring along the St. Mary's Street side of the property for any traces of the Pajalache, or Concepcion, Acequia (41BX1802). The O'Hara House monitoring documented four features: three limestone wall foundations associated with the larger footprint of the original structure and a single circa 1920 re-used brick patio on the north side of the structure. No significant cultural material or features were encountered in either the Phase 2 or Phase 3 portion of site monitoring. CAR recommends that site 41BX2445 is not eligible for designation as a State Antiquities Landmark (SAL) and that it is not eligible for listing on the National Register of Historic Places (NRHP). No further archaeological investigations for the project area are recommended. All project related materials, including the final report, are permanently stored at the CAR facilities in accession file number 2473.



This page intentionally left blank.

Table of Contents:

Abstract	ii
List of Figures	vi
List of Tables	i
Acknowledgements	
Chapter 1: Introduction	1
Project Description	
Report Organization	
Chapter 2: Project Setting	5
Environmental Setting	
Culture History	
Historic (Late 1600s-ca. 1950)	5
Previous Archaeology	5
Chapter 3: Archival and Historical Review	9
Chapter 4: Field and Laboratory Methods	
Field Methods	
Laboratory Methods	13
Chapter 5: Results of the Field Investigations	
Sequential Foundation Trench Monitoring.	
South Trench	16
West Trench	16
North Trench	16
East Trench	17
Artifacts Recovered from Sequential Trenches	17
Coins	
Ceramics.	
Glass	20
Personal Items	21
Metal Items	23
Monitoring of Down Cutting of Lot 24 and Western Property Line	24
Chapter 6: Summary and Recommendations	
References Cited	



This page intentionally left blank.

List of Figures:

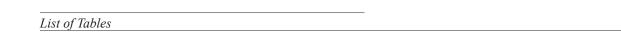
Figure 1-1. Location of the project area on satellite imagery	1
Figure 1-2. The location of the project on an Esri topographic map	3
Figure 2-1. Archaeological sites within 300 m of the subject property REDACTED IMAGE	6
Figure 3-1. New City Block 902 Lot 24 (outlined in red) on the 1850 Plat of the former lands of V. Micheli, François	
Giruad, surveyor, City Engineer's Survey Book 1, page 134, February 14, 1850	10
Figure 3-2. New City Block 902 and the Mitchell property (outlined in red) on the 1891 Koeckert and Walle Bird's Eye	
View Map of San Antonio	11
Figure 3-3. New City Block 902, Lot 24 (outlined in red), as depicted on the 1896 Sanborn Fire Insurance Map. Yellow	
indicates wood construction, while blue represents stone or caliche block construction	11
Figure 5-1. O'Hara House remnant with sequential foundation trenches and features noted	15
Figure 5-2. Feature 1, eastern wall foundation of original O'Hara House where it articulates with the remnant portion	16
Figure 5-3. Feature 4, shallow brick beam with Roman cement veneer perpendicular to O'Hara House south wall, view	
facing north	16
Figure 5-4. Location of Feature 4 (circled in purple) within the project area (in red) depicted on the 1949 Sanborn Fire	
Insurance Map	17
Figure 5-5. Feature 2, remnant of O'Hara House northern wall foundation, view facing east	18
Figure 5-6. Feature 3 walk or patio surface exposed along the north wall of the O'Hara House	
Figure 5-7. Typical field collection of non-diagnostic artifacts. Example is from the South Trench	19
Figure 5-8. 1868 United States Shield Nickel type specimen (top) and recovered specimen (bottom)	21
Figure 5-9. 1921 United States Lincoln Wheat cent, Philadelphia mint type specimen (top) and recovered specimen	
(bottom)	21
Figure 5-10. Diagnostic decorated ceramics from sequential trench excavations. Specimens a and b, flow-blue	
transferware; c, flow-blue transferware with copper luster; d, blue spatterware; and e, English majolica	21
Figure 5-11. Shard of molded milk-glass exhibiting a female profile within a beaded cartouche surrounded by	
garlanding	22
Figure 5-12. Various button types from the sequential trench excavations. Specimen a, painted porcelain; b, undecorated	
white glass; c and d, mother of pearl garment buttons; e, a mother of pearl "dumbbell" style cufflink; f, a four-hole	
machine made bone button; g, a gutta percha vegetal plastic button; and h, a hexagonal faceted black glass button	
Figure 5-13. Examples of two limestone marbles recovered from the sequential foundation trenches	
Figure 5-14. Thirty caliber lead pistol ball	23
Figure 5-15. Two-pound stone facing hammer	
Figure 5-16. Two-bladed pen knife with decorative white metal bolsters	23



This page intentionally left blank.

List of Tables:

Table 2-1. Previously Recorded Sites within 300 m of the Project Area	7
Table 5-1. Artifacts Recovered from Sequential Trench Excavations	20



This page intentionally left blank.

Acknowledgements:

This project was completed with the support of several individuals and agencies. Special thanks to the General Contractor, Fabian Castillo, for his coordination efforts and clear directions. Thank you to Matthew Elverson, with the City of San Antonio, Office of Historic Preservation, for his input during the field project and reviewing the final report. Thanks also to Ann McGlone for providing the initial archival documents on the subject property that were part of the original submission of plans reviewed by COSA-OHP. CAR staff member Jose E. Zapata aided with the fieldwork. Dr. Jessica Nowlin and Peggy Wall provided mapping and imaging support. Dr. Mary Whisenhunt edited the document.



This page intentionally left blank.

Chapter 1: Introduction

On June 7, 10 and 17; July 30; and August 4, 17 and 20; the University of Texas at San Antonio (UTSA) Center for Archaeological Research (CAR) conducted archaeological monitoring of a construction project at 722 S. St. Mary's Street in San Antonio, Bexar County, Texas (Figure 1-1). The archaeological work consisted of monitoring a series of sequential foundation trenches as well as down cutting of the subject property within the project area. This project



Figure 1-1. Location of the project area on satellite imagery.

was a private sector development on a property containing both a designated landmark building (O'Hara House) and adjacent to a recorded archaeological feature (Acequia de Pajalache–41BX1802). As the proposed work might affect the archaeological and historical site they were subject to regulatory review. This work was in response to a request from the City of San Antonio (COSA) Office of Historic Preservation Office and required review under the COSA Unified Development Code (UDC; Article 6 35-630 to 35-634). Clinton M. M. McKenzie was the project archaeologist and Raymond P. Mauldin served as Principal Investigator.

The goal of the monitoring work was to identify and document all prehistoric and/or historic archaeological sites that might be impacted during construction. CAR staff monitored the excavation of a series of three sequential foundation trenches around the O'Hara House with positive results (Phase 1). The positive results necessitated the designation of the site as a recorded trinomial archaeological property (41BX2445). The monitoring of the Phase 2 and Phase 3 portions of the project identified no significant cultural material or archaeological features. CAR recommends that site 41BX2445 is not eligible for designation as a State Antiquities Landmark (SAL) and that it is not eligible for listing on the National Register of Historic Places (NRHP). Construction of the new restaurant should proceed as planned, with no additional archaeology recommended.

Project Description

The project is located in the south-central portion of the Central Business District of downtown San Antonio, Bexar County, Texas. The project is comprised of one lot or parcel containing the O'Hara House as well as the western frontage portions of four lots that parallel the historic alignment of the Acequia de Pajalache along S. St. Mary's Street (Figure 1-2). The restaurant project area encompassed four former residential lots (numbers 23, 24, 25 & 26) within New City Block (NCB) 902. These four lots front east onto South Presa Street at the rear of the property and front west onto S. St. Mary's Street, addressed as 720, 722, 728 and 732 S. St. Mary's. At the time of the archaeological monitoring, three structures remained on the subject property. The remnant portion of the O'Hara House remained in the center of lot 24 at 722 S. St. Mary's. Another historic caliche block structure remained at 732 S. St. Mary's. A wood frame structure fronting onto S. Presa at the rear of Lot 25 remained at 519 S. Presa. The wooden structure at 519 S. Presa was relocated one lot to the south as a part of the redevelopment of the property and occurred in late August 2021. The remainder of the project area was an open and cleared site following the demolition of the former El Mirador Restaurant.

Report Organization

The remainder of this report consists of four additional chapters. Following this introduction, Chapter 2 provides the project setting. The archival and historical review of the site follows in Chapter 3. The field, laboratory, and curation methods for the project are presented in Chapter 4. Chapter 5 discusses the results of the archaeological investigations. Chapter 6 provides a summary of the project activities and recommendations made by CAR.



Figure 1-2. The location of the project on an Esri topographic map.



This page intentionally left blank.

Chapter 2: Project Setting

This chapter presents a brief description of the project area's physical environment, including a brief summary of the climate, soils and vegetation. Following the environmental setting, a discussion on the previous archaeology within 500 meters (0.3 miles) of the project area is presented.

Environmental Setting

The project area is located in central San Antonio, at an elevation of 710 ft above mean sea level (amsl). Climate for the San Antonio region is a moderate, subtropical, and humid with generally cool winters and hot summers (Norwine 1995; Taylor et. al 1991). The average annual temperature for the region varies between 65° to 70°F and the annual precipitation for the region varies between 31 and 38 inches (79 to 97 centimeters; NRCS 2021). The soil series that dominates the project area is Houston Black clay (HtB). This soil series derives from a calcareous clayey alluvium (NRCS 2021).

The nearest source of water to the project is the San Antonio River, 300 m (950 ft) to the west. The San Antonio River watershed system crosses through three major physiographic zones that include the Balcones Escarpment, the Blackland Prairie and the interior Coastal Plain (Potter et al. 1995). The project area is located in a portion of the Blackland Prairie ecological zone (NRCS 2021). This ecological zone is described as temperate grassland. Historically the ecological region was a tallgrass prairie with deciduous woodlands along waterways. Grasses that dominated the tallgrass prairie included big bluestem (Andropogon gerardii), Indiangrass (Sorghastrum nutans), switchgrass (Panicum virgatum), eastern gamagrass (Tripsacum dactyloides) and little bluestem (Schizachyrium scoparium). Trees that are native to the region include live oak (Quercus virginiana) and hackberry (Celtis spp; NRCS 2021).

Culture History

The San Antonio area has been occupied by various cultural groups for well over 10,000 years. Sites dating to the Paleoindian period (13,000-9,000 years before present [BP]) have been recorded along the San Antonio River (Bousman et al. 2004:62). Evidence for prehistoric occupation in the urban core include an Early Archaic component identified at the new Frost Bank Tower (41BX2255) as well as Late Prehistoric burials within the La Villita area (41BX917). Outside of the urban core, numerous significant prehistoric archaeological sites have been identified and investigated in

the headwaters area of both the San Antonio River and San Pedro Springs (Fox 1975:7-8; Houk 2002; Houk and Miller 2001; Mauldin et al. 2015; Stothert 1989; Wigley et al. 2014).

Historic (Late 1600s-ca. 1950)

The historic and archaeological records attest to the presence of several Native American Coahuiltecan groups, as well as of the Apache and Comanche in the area (Collins 2004:123-124). Initial European contact can be traced back to 1528, when Cabeza de Vaca and three companions, survivors of a shipwreck along the Texas Coast, spent several years with multiple Indigenous groups along the coast and coastal plain (see Krieger 2002). Settlement of the area that would become San Antonio began in the early 1700s with the founding of the presidio of San Antonio de Béxar and the Mission San Antonio de Valero in 1718 (Hoffman 1935:48-49; 1938:318). This was followed in 1731 with the founding of the Villa San Fernando de Austria as well as the relocation of three Franciscan missions from Spanish East Texas (Austin 1905:288-293; Habig 1968). These military, religious, and civil settlements struggled against Native American attacks, frontier conditions, and epidemic disease throughout the eighteenth century. Early-nineteenth century events brought further challenges, chief among them Mexico's fight for independence from Spain (1810 to 1821), followed by Texas' fight for independence from Mexico in 1836 (Ramos 2008:90-105). These major events were followed by the United States' annexation of Texas in 1845 and the war with Mexico (1845-1848).

San Antonio's populations increased dramatically during the late 1840s (Valentine 2014:14-20). In 1850, the San Antonio population numbered 3,488 (Texas Almanac 2021). It was during this period of population expansion that the lands within the project area converted from their former agricultural use to platted property lots for residential and commercial development. The arrival of the railroad in 1877 greatly stimulated the city's growth and prosperity (Cox 1997). By 1880, just three decades later, the population had soared to 20,550, and by 1900, the population reached 53,321 (Texas Almanac 2021). While there was a slowing of growth associated with the Great Depression, circa 1929 to 1936, the population within the city had exceeded 400,000 by 1950 (Texas Almanac 2021).

Previous Archaeology

The project area is located some 300 m (975 ft) east of the San Antonio River. For the purposes of this report,

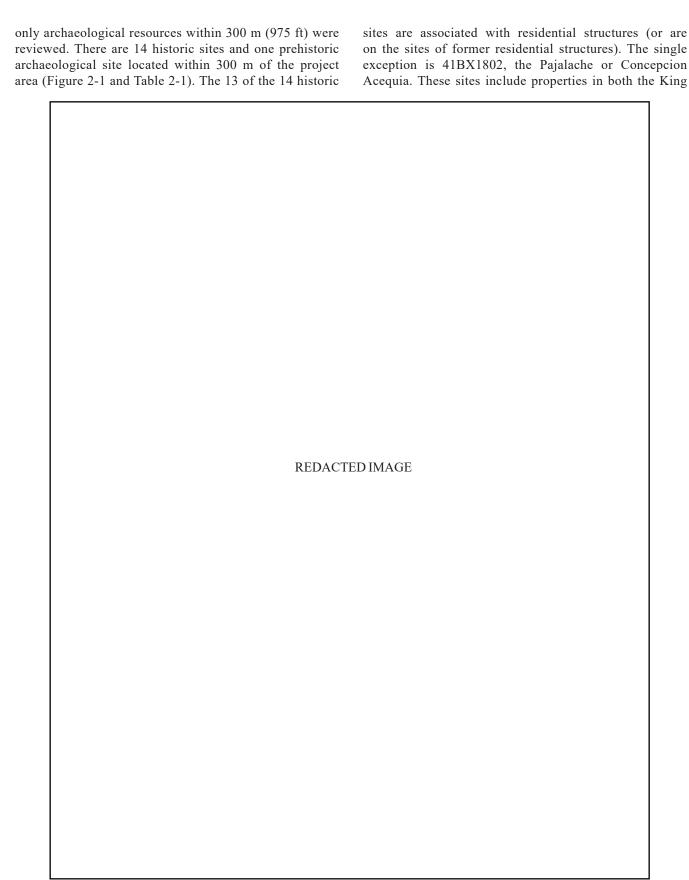


Figure 2-1. Archaeological sites within 300 m of the subject property.

Table 2-1. Previously Recorded Sites within 300 m of the Project Area

Site Number	Period	Name	Description
41BX236	Historic	Historic Home	Former 19th century residential site
41BX326	Historic	Mayer House	Early 20th century brick residence
41BX303	Historic	NCB 901	Block of historic homes-La Villita
41BX586	Historic	Kampmann-Halff House	19th century residence
41BX591	Historic	Pereida House	19th century residence
41BX592	Historic	Koehler House	19th century residence
41BX593	Historic	Espinosa House	19th century residence
41BX982	Historic	Huebaum Home	19th century residence
41BX1977	Prehistoric/Historic	Not named	Deeply buried prehistoric and historic component artifact scatter
41BX1802	Historic	Acequia	The Pajalache/Concepcion Acequia irrigation canal system
41BX2068	Historic	Not named	Historic trash pit near Valero Acequia
41BX2123	Historic	Hemisfair #4	Historic house foundation
41BX2238	Historic	Not named	Limestone foundations and historic features
41BX2360	Historic	Not named	Historic artifact scatter

William, Lavaca and La Villita Historic Districts. The sites recorded in these three districts predominantly date to the same period as the development of the current project area—circa 1850 to the late nineteenth century.

The single prehistoric site, 41BX1977, represents a deeply buried component consisting of burned rock and lithic materials beneath a later historic trash deposit dating to the mid-to-late nineteenth century (THC 2021).



This page intentionally left blank.

Chapter 3: Archival and Historical Review

The project area during the Spanish Colonial, Mexican, and Republic of Texas periods (1720 to 1845) was set aside for agricultural use. The Pajalache Acequia, also referred to as the Acequia Madre de Concepcion or Concepcion Ditch, was the primary irrigation canal for Mission Concepcion which was relocated to San Antonio from Spanish East Texas in 1731. However, it is probable that the original excavation of the acequia pre-dates 1731 and has its origins with Mission San José y San Miguel, which occupied the Concepcion site from 1720 to circa 1722. The irrigation canal started on the San Antonio River at the location of Presa Street where it intersects with the San Antonio River-with the street name "Presa" (or dam, in English) referring to the diversion dam that crossed the river at this location to direct water into the main canal of the system. This canal continued in use and provided irrigation water until it was closed in 1868, following the demolition of the dam, which had become a flood hazard for following the residential development of the 1840s and 1850s.

Following the secularization of Mission Valero in 1793 and the beginning of secularization of Mission Concepcion, circa 1810, the former irrigation lands of the missions were parceled out, first to former mission residents and to neighbors of the mission, and secondarily to new settlers upon petition to the government. New City Block 902, Lot 24, was part of a large parcel of land granted to Vicente Micheli on September 1, 1815. The original grant is missing, but Micheli's ownership and grant date are memorialized in Micheli's subsequent sale of the property to Auguste Bonamy on April 29, 1844 (Bexar County Deed Records [BCDR] B2:264-265). Auguste Bonamy died in the fall of 1847, but placed durable power of attorney with Thomas J. Devine to manage his land assets. Bonamy's son, Vicente Octavio, sold the property containing Lot 24, to James W. Gray, on the same date that his father granted power of attorney to Devine (October 28, 1847, BCDR F2:367-368). During Micheli's and Bonamy's ownership (1815 to 1847) Lot 24 remained undeveloped.

James W. Gray retained title to the property and the subsequent platting of the property by Thomas J. Devine in 1850 appears to have been in the capacity of him acting as the durable power of attorney for the Bonamy Estate (City Engineer's Survey Book 1, Page 134, February 14, 1850; Figure 3-1). Regardless of Devine's ownership interests, Lot 24 continued to be owned by Gray between October 1847 and the platting in February of 1850. Gray retained title to Lot 24 until April 27, 1852, when he sold the property to John W. Campbell (BCDR K1:630).

The 1850s were characterized by explosive population growth and urban expansion. The area of NCB 902 was in the heart of the area of expansion south from the original urban core and the property traded hands five times in the decade from 1850 to 1860. John Campbell sold Lot 24 to W. W. Campbell in 1853; W. W. Campbell sold it to J. D. Holliday in 1857; Holliday sold it to James Rice in 1858; and Rice sold the property to Dr. Ferdinand Herff in October of 1859 (BCDR L2:19-20; BCDR O2:234-235; BCDR H2:63; and BCDR H2:64). Lot 24 remained undeveloped from 1850 to 1860.

Dr. Herff sold Lot 24 to Jeremiah O'Hara on August 10, 1861 (BCDR S2:97-98). The caliche block house was constructed sometime between the fall of 1861 and summer of 1865 by Jeremiah O'Hara. O'Hara bought Lot 24 from Dr. Ferdinand Herff in 1861 for \$175 with no improvements but subsequently sold it to Barney Mitchell, Sr., with the house, for \$750 four years later (September 28, 1865, BCDR T2:44-45).

Barney Mitchell, Sr., and his wife Rosana, owned Lot 24 for the next 37 years, and were the parents of four sons: Bernard (Barney, Jr.) George, James, William, and four daughters: Mary, Margaret, Rosa and Kate (Affidavit of Heirship, March 28, 1902, BCDR 205:557). During the period of their ownership, the property was addressed on Garden Street. Rosa and three of her sons are shown living at the 424 Garden Street address in 1896, with Barney Jr. listed as a bartender at the Washington Theater, James C. as a policeman, and William H. as a workman at the San Antonio Gas Company (Appler 1897). Rosana Mitchell sold the family home of 37 years to Gustave A. Grasbner on March 28, 1902 for \$2,000 (BCDR 205:555-556).

During the period of the Mitchell's ownership, it appears that the property remained residential in use, with the growing Mitchell family expanding the original caliche blockhouse multiple times by further additions in wood. Figure 3-2 is a close-up of NCB 902 from the 1891 Koeckert and Waller Bird's Eye View Map of San Antonio with the Mitchell property, Lot 24, outlined in red.

Figure 3-3 shows the Mitchell home and property as depicted on the 1896 Sanborn Fire Insurance map (Sanborn 1896:31). The 1896 built environment on Lot 24 shows that a wood frame expansion was made to the south side of the original O'Hara L-plan caliche block house and a wooden porch was added across the majority of the west side of the residence, fronting onto Garden Street (now St. Mary's). A wooden carriage shed is shown along the northern property line and a single outhouse or privy is shown along the northern property line towards the rear yard along Presa Street. It is worth noting that the 1896

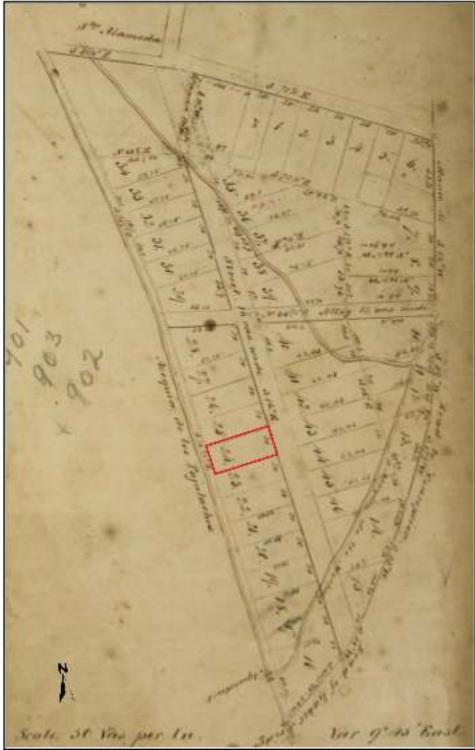


Figure 3-1. New City Block 902 Lot 24 (outlined in red) on the 1850 Plat of the former lands of V. Micheli, François Giruad, surveyor, City Engineer's Survey Book 1, page 134, February 14, 1850.

Sanborn Map also demonstrates that nearly the entirety of NCB 902 remained residential in use at that time, the only exception being a single story brick commercial storefront on the northeast corner of Garden at South Alamo.

A survey of Sanborn Fire Insurance Maps and city directories demonstrate that land use with NCB 902 remained majority residential until circa World War II (Sanborn 1912:V4:348; 1931:V4:348; 1938:V4:348). Lot 24 remained residential until

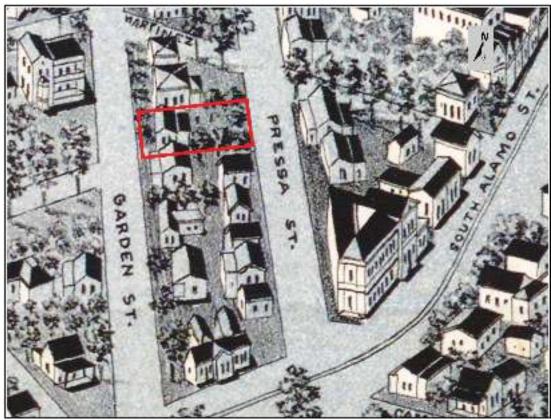


Figure 3-2. New City Block 902 and the Mitchell property (outlined in red) on the 1891 Koeckert and Walle Bird's Eye View Map of San Antonio.

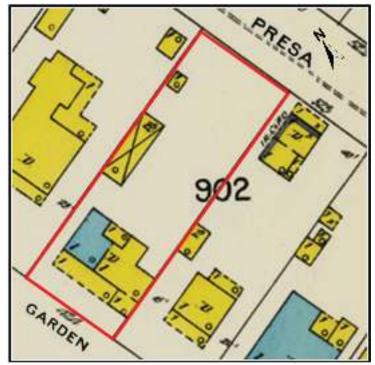


Figure 3-3. New City Block 902, Lot 24 (outlined in red), as depicted on the 1896 Sanborn Fire Insurance Map. Yellow indicates wood construction, while blue represents stone or caliche block construction.

circa 1949 when it was first shown in commercial use as a restaurant with a stucco veneer (Sanborn 1949:V4:438).

A review of available twentieth century Sanborn maps (1904, 1907, 1912, 1922, 1931, 1934, 1938, 1949, 1950, 1956, 1960, 1965, 1967, and 1971) failed to document when the caliche block O'Hara house was reduced in size as these maps suggest that the structure was intact during

that period (e.g., Sanborn 1960:V1A:56A; 1965:V1A:56A; 1971:V1A:56A). It is apparent that the majority of the original O'Hara House (as well as the Mitchell family wooden additions) was demolished between 1971 and 1981 (when it was listed as a landmark property by the City of San Antonio). Note that NCB 902, Lot 24, has remained in commercial use as a restaurant for 75 years and that the current development continues that use.

Chapter 4: Field and Laboratory Methods

Field Methods

The fieldwork for the project consisted of monitoring the excavation of hand-dug sequential foundation trenches around the perimeter of the O'Hara House and monitoring of the removal of circa 5.5 ft of soil from lots 22 to 26 of NCB 902. The excavations extended to a depth of 84 cm (33 in) below surface. All four sequential foundation trenches were excavated parallel to the caliche block O'Hara House. CAR staff used standard forms to record details about each trench. Measured drawings were completed for all features and locations were recorded with a Trimble GPS unit and photo documented.

Laboratory Methods

All field notes, forms, photographs, and drawings were placed in labeled archival folders. Digital photographs were printed on acid-free paper and placed in archival-quality page protectors. All records generated during the project were prepared in accordance with federal regulations 36 CFR Part 79 and Texas Historical Commission requirements for State Held-in-Trust collections. All materials related to the project, including the final report, are permanently stored at the CAR curation facility in accession file number 2473.



Chapter 5: Results of the Field Investigations

On June 7, 10 and 17 CAR staff monitored the excavation of a series of three sequential foundation trenches around the perimeter remnant of the O'Hara House. CAR staff returned to the site on July 30 and on August 4, 17 and 20, to monitor the down cutting of NCB 902 Lot 24 and to monitor the excavation along the western property line for any signs of the Acequia de Pajalache, or Concepcion Ditch. Figure 5-1 depicts the location of the sequential foundation trenches.

Sequential Foundation Trench Monitoring

The remaining portion of the O'Hara House is of caliche block construction footed on a combination of rough ashlar and irregular limestone mortared with a high-lime mortar. The remnant portion of the structure represents the eastern extension of the "L" of the original L-plan of the building. This remnant is 13ft 6 in by 13 ft 6 in (4.1 m by 4.1 m).

While the sequential trenches were excavated in three separate episodes, they are all contiguous with one another and for purposes of reporting, no distinction will be made as to sequential trench designation. Rather, the reporting will use the cardinal direction designation for each side of the structure, i.e. "east," "west," etc. The combined excavations identified four features and encountered incidental cultural material dating from the early 1860s through the early twentieth century. The excavations and features are discussed

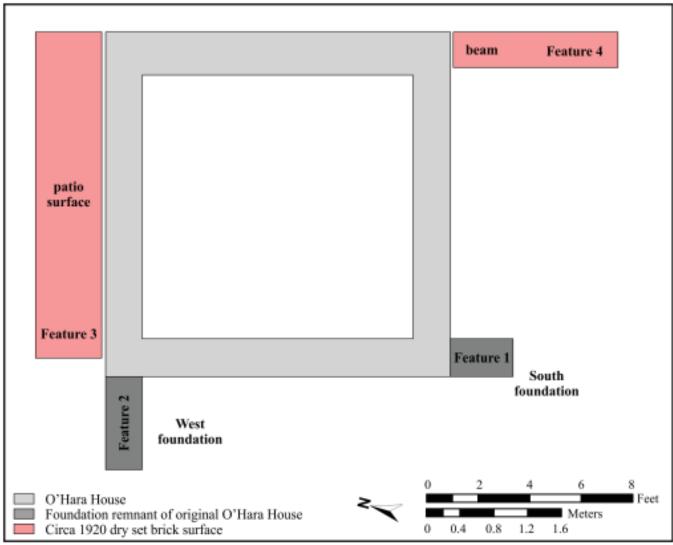


Figure 5-1. O'Hara House remnant with sequential foundation trenches and features noted.

concurrently and the artifacts associated with all of the trenches are discussed collectively following the excavation and feature discussions. All of the trenches were 16 in (40 cm) wide and 33 in (84 cm) in depth. The exposed soil column on all four sides of the structure was uniformly dark black-brown alluvium (Munsell value 10YR 4/2).

South Trench

This east-to-west oriented trench along the south line of the O'Hara House exposed two architectural features, one at each corner. The western corner exposed the alignment of the original limestone foundation of the larger O'Hara House immediately beneath the current ground surface. This foundation alignment was designated as Feature 1 (see Figure 5-2). The foundation was a combination of rough ashlar and irregular limestone with a high-lime mortar, and was 18 in (46 cm) wide and 32 in (81 cm) in depth. The foundation extended south 41 in (1.04 m) where it was truncated by some prior subsurface impact.

Feature 4, the second feature encountered along the south wall, was a shallow red and red-brown brick beam foundation with a Roman cement veneer projecting from the southeast corner of the structure (see Figure 5-3). The bricks were machine made but lacked any maker's imprints. Lateral excavation determined that this beam was only three un-mortared bricks in depth and not a structural beam. The beam aligns with the east wall of the wooden addition made by the Mitchell



Figure 5-2. Feature 1, eastern wall foundation of original O'Hara House where it articulates with the remnant portion.



Figure 5-3. Feature 4, shallow brick beam with Roman cement veneer perpendicular to O'Hara House south wall, view facing north.

family but likely dates to the early to mid-twentieth century and corresponds with a porticoed space adjacent to the patio shown on the 1949 Sanborn Fire Insurance Map depicted in Figure 5-4 (Sanborn 1949:V1A:346).

West Trench

The western trench exposed the western face of Feature 1 as well as exposing the continuation of the original north wall of the O'Hara House. This northern foundation extension was designated Feature 2 (Figure 5-5) and matched the same construction method and dimensions reported for Feature 1 (18" in width and 32" or 43cm by 80cm in depth). Feature 2 extended 57 in (1.45 m) to the west before terminating. Like Feature 1, the northern foundation remnant was impacted at some prior time and is no longer extant along the remainder of its projected alignment.

North Trench

Aside from exposing the north face of Feature 2, a single additional feature was encountered. The feature was a brick walk or patio that ran across the entirety (13.5 ft) or 4.11 m of the north wall and extended to the north beyond

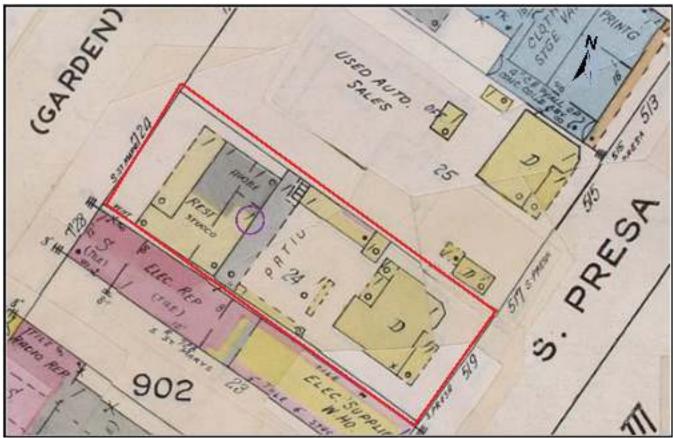


Figure 5-4. Location of Feature 4 (circled in purple) within the project area (in red) depicted on the 1949 Sanborn Fire Insurance Map.

the area of excavation (Figure 5-6). This walk or patio was labeled as Feature 3. The bricks were dry set over a thin sand base and were encountered approximately 4 in (10 cm) below the current surface. A slurry of sand was also atop the feature but this appears to have been base applied at a later, and undetermined, date. A single artifact, a 1921 Lincoln Wheat Cent, was recovered from within the sand base immediately below the bricks. This *terminus* post quem indicates that the earliest date for Feature 3 is 1921. Feature 3 continued to the east and wrapped around the east side of the structure where the arcaded portico and patio are shown on the 1949 Sanborn map (see Figure 5-4). These bricks were predominantly red with a minority of red-brown bricks, all of which lacked any maker's imprints. These bricks matched those that composed Feature 4 so it seems likely that Feature 3 and Feature 4 are contemporaneous and associated with the portico and patio to the rear of the main structures on Lot 24.

East Trench

The eastern trench exposed remnants of Feature 3 as it wrapped around the eastern side of the O'Hara House but prior disturbance had removed the majority of the former patio. Disturbed soils and artifacts postdating 1970 characterized

the excavated matrix. This is potentially indicative of the remodeling of the building during the El Mirador period.

Artifacts Recovered from Sequential Trenches

The artifacts discussed in this section are those associated with the sequential foundation trenches and the O'Hara House. Further, these artifacts were collected as diagnostic temporal examples of the totality of artifacts encountered. The majority of cultural material was photographed and/ or described rather than collected (see Figure 5-7). Nondiagnostic metal, glass, ceramic, and faunal bone were counted and noted in the field forms rather than collected. The majority of non-collected metal items fell into two broad categories-unidentifiable oxidized ferrous metal and square cut nails. Glass was common in the field observations, consisting predominantly of clear, agua and olive green glass lacking any diagnostic characteristics that merited their collection. The most common ceramic type observed in the field were sherds of plain white refined earthenwares, in particular "ironstone" and to a lesser extent Pearlwares. Whitewares lacking diagnostic elements broadly date throughout the entirety of the nineteenth and well into the



Figure 5-5. Feature 2, remnant of O'Hara House northern wall foundation, view facing east.

twentieth century and for that reason were not collected. Faunal bone was quite common with the vast majority of specimens exhibiting saw cut butchery marks indicative of post mid-nineteenth century butchering practices. Further, many of the faunal bones exhibited signs of gnawing, indicating that the bones were likely brought beneath the house by canids for casual dining purposes. As a final note, the artifacts discussed herein are simply representative in nature and were retained for their utility in assigning temporality to the collection as a whole.

The artifacts beneath the floors of the former O'Hara and Mitchell Family residences have three primary depositional origins and at least two depositional constraints. The first origin source relates to the construction of the buildings themselves to include tools and construction related debris such as stone spalls, nails and the like. The second origin is the presence of objects lost or dropped onto the wooden floor that migrate through gaps or cracks into the sub-floor. The third origin is items, particularly faunal bone, which would have been dragged beneath the floor by animals for consumption. The constraints on deposition are driven by the narrowness of access, both through gaps or cracks in the floorboards as well as by access to the understory of the residences. In the first instance, the gaps or cracks in the floorboards restrict the size of the artifacts to those that can pass. This restriction results in preferential deposition



Figure 5-6. Feature 3 walk or patio surface exposed along the north wall of the O'Hara House.



Figure 5-7. Typical field collection of non-diagnostic artifacts. Example is from the South Trench.

of smaller artifacts and accounts for the numerous buttons, toy marbles, coins, and small fragmentary bits of glass and ceramic recovered. Likewise, while faunal bone generally cannot fall through floorboard gaps and cracks, it can be transported beneath the structures via exposed skirting or crawlspace access beneath pier and beam raised floor or access openings in foundation walls or water tables.

Table 5-1 provides a list of the 27 recovered artifacts, their trench provenience, class, type, description and count. The table is organized alphabetically by cardinal direction. A total of 26 of these 27 artifacts were collected from the sequential foundation trenches, and a single artifact, the 1921 Lincoln Wheat Cent, was recovered from the context of Feature 3. As the sequential trench artifacts are all directly associated with the O'Hara House and specifically with the Mitchell family occupation, they are discussed as a collective whole by categories rather than separately by trench. The categories discussed include coins, ceramics, glass, personal items such as buttons and toys, and conclude with metal artifacts.

Coins

Two coins were recovered from the work around the perimeter of the O'Hara House. The first coin encountered was an 1868 United States Shield Nickel found in the spoil from the south trench excavations. Shield nickels were in production from 1866 to 1883. Figure 5-8 provides the obverse and reverse of an 1868 type specimen contrasted with the example recovered. The presence of an 1868 coin is consistent with the period of use and occupation of the O'Hara House by the Mitchell family beginning in 1865 and continuing until 1902.

The second coin recovered (Figure 5-9) is the already discussed 1921 Lincoln Wheat cent recovered in the sand deposit immediately beneath the brick patio (Feature 3). Lincoln Wheat cents have a production range from 1909 to 1958 and those minted in 1921 derived from two sources—the Philadelphia and San Francisco mints. The recovered specimen bears no mint mark, indicating that it was from Philadelphia, as only San Francisco minted coins bore an "S" while the Philadelphia coins exhibit no mint mark. Figure 5-9 provides an image of

Trench	Class	Type	Description	Count
North	Personal	Coins	1921 Lincoln Wheat Cent	1
South	Ceramics	Earthenware	Flow blue transferware	2
South	Ceramics	Earthenware	Lead glazed Palissy ware	1
South	Ceramics	Earthenware	Flow blue with hand painted under-glaze decoration	1
South	Personal	Other Personal Items	Slate pencil fragment	1
South	Personal	Toys	Limestone marble	1
South	Metal	Tools	Iron maul head	1
South	Personal	Jewelry	Painted porcelain bead 1-hole	1
South	Personal	Buttons/Fasteners	Painted porcelain 4-hole	1
South	Personal	Buttons/Fasteners	Mother-of-pearl 4-hole	1
South	Personal	Buttons/Fasteners	Porcelain 4-hole	1
South	Personal	Buttons/Fasteners	Bone 4-hole	1
South	Personal	Buttons/Fasteners	Mother-of-pearl 2-hole	1
South	Personal	Buttons/Fasteners	Gutta-percha 4-hole button	1
South	Metal	Firearm Parts/Bullets	30 caliber pistol ball	1
South	Personal	Jewelry	Mother-of-pearl dumbbell cufflink	1
South	Glass	Container/Vessel	Pressed milk glass-body shard	1
South	Ceramics	Earthenware	Spongeware, blue, rim	1
South	Personal	Buttons/Fasteners	Porcelain, 4-hole button	1
South	Personal	Other personal Items	Slate pencil fragment	1
South	Metal	Other Metal Objects	Tie-down cleat, forged	1
West	Personal	Toys	Limestone marble	1
West	Personal	Buttons/Fasteners	Faceted hexagonal 2/1 hole, black glass button	1
West	Personal	Coins	1868 United States Shield Nickel	1
West	Personal	Pen knife	Two-bladed knife with decorative white metal bolster	2

Table 5-1. Artifacts Recovered from Sequential Trench Excavations

the obverse and reverse of a type specimen contrasted with the same images of the recovered specimen.

Ceramics

Five sherds of temporally diagnostic ceramics were recovered from the sequential trench excavations and are shown in Figure 5-10. Specimens a, b and c are examples of flow blue transferwares that were imported from England specifically for the American market and were popular from 1835 through 1900 and beyond (Williams 1971:i). Both specimens a and b are simple flow blue transfer prints on refined whiteware bodies while specimen c has additional copper luster underglaze decoration.

Specimen d is a refined earthenware rim sherd with blue spatter decoration. The spatter is irregular and found on both the exterior and interior surfaces of the rim. This type of mass produced tableware was imported in tremendous quantities from England with production dates from the 1830s through the 1860s (Robacker 1978:48-50). Specimen e is a sherd of English majolica, which, despite its epithet, is actually a lead glaze rather than a tin enameled ceramic. The term "majolica" was applied to these ceramics as a tradename because of the wide and vibrant variety of color glazes and the term continues in use within collecting circles.

Glass

The collected specimen (Figure 5-11) is shard from a milk glass vase of mid-Victorian style (1850-1870). This was a molded glass vase depicting a profile bust of a woman surrounded within a beaded cartouche (portrait window), surrounded by a garlanding motif. While more common in the mid-century, these types of molded portrait vases continued in production beyond the 1870s so a specific date attribution cannot be made.



Figure 5-8. 1868 United States Shield Nickel type specimen (top) and recovered specimen (bottom).

Personal Items

Buttons

As was noted in the discussion on depositional constraints, there is a sizable collection of buttons recovered from beneath the floors of the residence. Those discussed here



Figure 5-9. 1921 United States Lincoln Wheat cent, Philadelphia mint type specimen (top) and recovered specimen (bottom).

represent a fraction of the buttons encountered in the field and were collected for diagnostic and varietal reasons. Buttons are ubiquitously common from subfloor deposits and those of the mid-nineteenth century and later were usually made from durable and imperishable materials such as glass, porcelain, metal, gutta percha or hard rubber. Eight different types of buttons are depicted in Figure 5-12 (Meissner 1997:119).

Prior to the mid-nineteenth century, buttons, when present, were made of wood, bone, horn, shell and other similar organic based materials. These buttons are also characterized by handmade construction, with each button individually constructed. The majority of these buttons preferentially decay under high acid soil and moisture environments. Ceramic and glass buttons are impervious to decay. However, they did not become common until after machine-made industrial production began circa 1850, persisting until circa 1910 (Albert and Kent 1949:35). Most white buttons are ceramic, though they often can appear to be white glass (Pool 1987:281). Decorative glass buttons in a variety of colors were

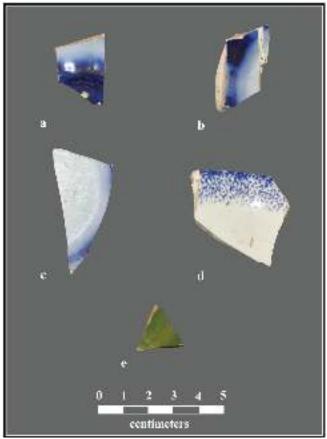


Figure 5-10. Diagnostic decorated ceramics from sequential trench excavations. Specimens a and b, flowblue transferware; c, flow-blue transferware with copper luster; d, blue spatterware; and e, English majolica.

produced but one of the more common colors was black glass, both plain as well as faceted varieties. Black glass buttons were considered a facsimile of the lustrous black mineral jet and popularized by Queen Victoria who wore only black following her husband Prince Albert's death in 1861 until her own passing in 1901 (Whittemore 1992:15). Another common button type during the midto-late nineteenth century are machine made mother of pearl buttons. Both marine and freshwater shell was utilized, with marine shell such as abalone, marked by greater luster and iridescence (Albert and Kent 1949:58). The distinction between earlier handmade and later machine made mother of pearl buttons can be made by observing the uniformity of machine made buttons versus their earlier handmade examples, i.e., perfectly round in form with perfect spacing and regularity of button holes versus slightly irregular shape or form and off-set button holes. The mid-nineteenth century also saw the invention and introduction of vegetal polymers and plastics such as gutta percha and hard rubber (Albert and Kent 1949:66; Hughes and Lester 1991:48). Gutta percha is a natural vegetal plastic polymer derived from the sap of the tree of the same name found on the Indian subcontinent. Discovered in 1842, the material saw wide use in the midto-late nineteenth century for buttons, photograph hard cases, syringes, etc.

Toys

Seven marbles were noted in the field, all of which were of the white limestone variety. The two depicted in Figure



Figure 5-11. Shard of molded milk-glass exhibiting a female profile within a beaded cartouche surrounded by garlanding.

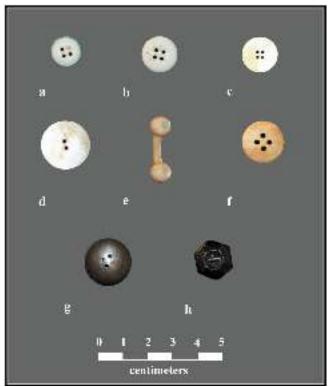


Figure 5-12. Various button types from the sequential trench excavations. Specimen a, painted porcelain; b, undecorated white glass; c and d, mother of pearl garment buttons; e, a mother of pearl "dumbbell" style cufflink; f, a four-hole machine made bone button; g, a gutta percha vegetal plastic button; and h, a hexagonal faceted black glass button.

5-13 are representative of the types of marble present in the deposits. Limestone marbles are often white or off-white but can also be gray to brown or yellow brown depending on the color of the parent stone. Unlike other harder stone marbles such as agate, quartz, or chalcedony, limestone marbles were mass produced using water powered "marble mill" devices to tumble pre-cut blocks of limestone into round spherical shapes (Randall and Webb 1988:20; Zapata 1997:107).



Figure 5-13. Examples of two limestone marbles recovered from the sequential foundation trenches.

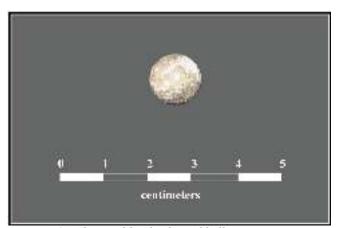


Figure 5-14. Thirty caliber lead pistol ball.

An intact but damaged stone facing hammer was recovered adjacent to the south face of the limestone foundation of the O'Hara House (Figure 5-15). The location suggests that this stone facing hammer was discarded during the construction of the residence in 1861. The purpose of a stone facing hammer, as implied by the name, is to break off rough and superfluous parts of stone. This hammer was likely used to dress the face of the foundation walls, as they were a combination of irregular stone and blocks as well as rough ashlar blocks

Two parts of the same 2.5 in pen knife were recovered from the western trench (Figure 5-16). This example was a two-bladed variety that sported white metal bolsters. These



Figure 5-15. Two-pound stone facing hammer.

Metal Items

Three metal items were recovered that merited collection and description. The first of these is a .30 caliber lead pistol ball (Figure 5-14). This complete lead ball lacked any deformation and was likely unspent, representing a dropped/lost item through the floor above. The diameter of such ball shot is slightly variable, so it is possible that the caliber could be either a .31 or .32 diameter ball. Regardless of the pistol that this ball was intended for, the pistol ball dates to the 1830s at the earliest and such ammunition continued in common use until after the Civil War and beyond into the twentieth century when cartridge ammunition and modern revolvers and automatic pistols became normative. Thirty caliber round shot is still commonly available for muzzle-loading black powder rifles today.

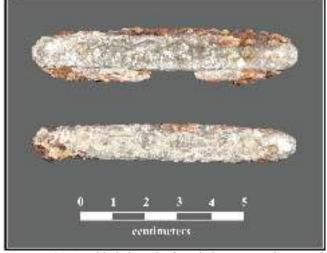


Figure 5-16. Two-bladed pen knife with decorative white metal bolsters.

types of pen knives were ubiquitous in the late nineteenth century and well into the twentieth and readily available through mail order catalogs.

Monitoring of Down Cutting of Lot 24 and Western Property Line

CAR staff monitored the down cutting of Lot 24, the western property line from the south of half of Lot 26, Lot 25, Lot 24,

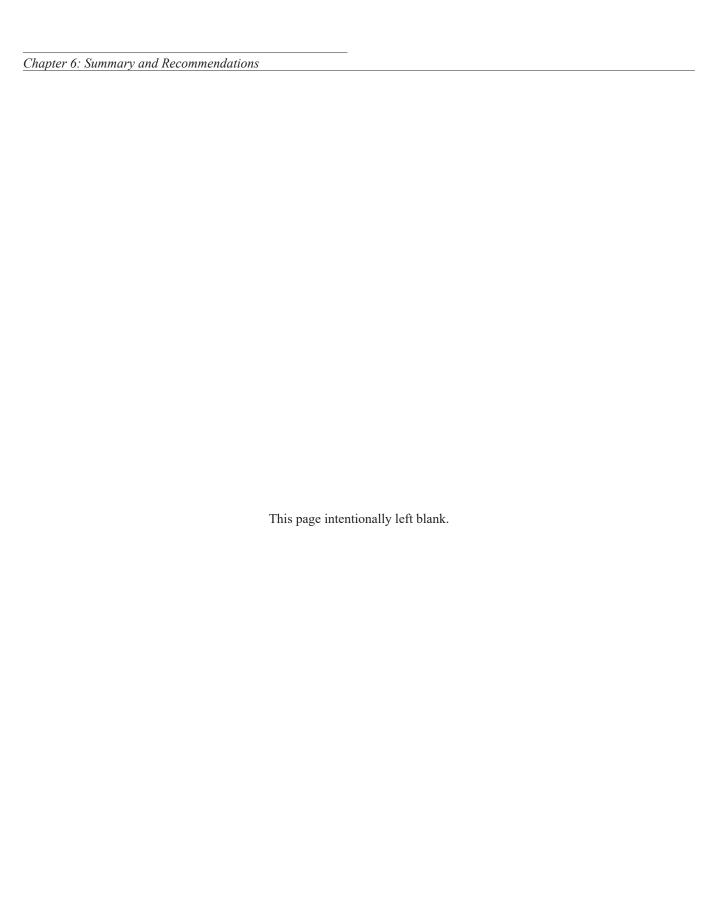
Lot 23 and Lot 22 on July 30, August 4, 17 and 20, 2021. No identifiable archaeological features were encountered and no sign of the Acequia de Pajalache was found along the western property line. Excavations of Lot 24 demonstrated that the majority of the lot outside of the perimeter of the O'Hara House remnant was severely disturbed by the assumed construction activities that took place on the site in the 1970s. Mixed deposits, including artifacts broadly dating from the nineteenth and twentieth century were noted in the field but not collected as they lacked any identifiable context.

Chapter 6: Summary and Recommendations

CAR archaeologists monitored four sequential foundation trenches around the remnant portion of the circa 1861 O'Hara House, a caliche block structure registered as a Historic Landmark of the City of San Antonio. The monitoring results identified four features, including the subsurface remnants of the original O'Hara House limestone foundations (Feature 1 and 2). A dry-laid re-used brick walk or patio that abutted the north side of the house and wrapped around the eastern elevation (Feature 3) was also documented that likely dates to circa 1921. A final feature encountered (Feature 4) was an un-mortared shallow brick beam perpendicular to the south wall of the house remnant that formed the western edge of an arched cloister abutting a patio immediately to the east as shown on the 1949 Sanborn map (Sanborn 1948:V4:348). Collected diagnostic artifacts from the foundation monitoring

were temporally consistent with the use and occupation of the property. Additional monitoring, with negative results, was performed on the original O'Hara–Mitchell property, NCB 902, Lot 24, in an attempt to potentially identify additional archaeological features. Likewise, monitoring for the presence of the Acequia de Pajalache along the western property line from the south half of Lot 26 to the south lot line of Lot 22 also returned negative results. No further archaeological work was performed and no further archaeological work is recommended.

CAR recommends that site 41BX2445 is not eligible for designation as a State Antiquities Landmark (SAL) and that it is not eligible for listing on the National Register of Historic Places (NRHP). Construction of the new restaurant should proceed as planned, with no additional archaeology recommended.



References Cited:

Albert, L.S. and K. Kent

1949 The Complete Button Book. Appeldore, Stamford, Connecticut.

Appler, Jules A.

1897 Jules A. Appler's General Directory and Blue Book of the City of San Antonio 1896-1897, Containing a New and Modern Street Directory of the City, Post Offices, and Money Order Offices in Texas, an Index of different Churches, Societies, Associations, Corporations, and educational Institutes of the City—Also—the Names and Addresses of Residents of the City, Compiled from Oct. 20, to Dec. 1, 1895. Jules A. Appler Compiler and Publisher, San Antonio.

Austin, M.A.

1905 The Municipal Government of San Fernando de Bexar, 1730-1800. The Quarterly of the Texas State Historical Association 8 (4):277-352.

Bexar County Deed Records (BCDR)

Year Month	Day	Instrument.	Grantor	Grantee	Citation
1815 Sep	1	Deed	Spanish Government	Vicente Micheli	B2:264-265
1844 Apr	29	Deed	V. Micheli	Auguste Bonamy	B2:264-265
1847 Oct	28	PoA	A. Bonamy Estate	T. J. Devine	F2:366
1847 Oct	28	Deed	O. V. Bonamy	J. W. Gray	F2:367-368
1852 Apr	27	Deed	J. W. Gray	John W. Campbell	K1:630
1853 Dec	5	Deed	John W. Campbell	W. W. Campbell	L2:19-20
1857 Jul	25	Deed	W. W. Campbell	J. D. Holliday	O2:234-235
1859 Apr	23	Deed	J. D. Holliday	J. Rice	H2:63
1859 Oct	6	Deed	J. Rice	F. Herff	H2:64
1861 Aug	10	Deed	F. Herff	J. O'Hara	S2:97-98
1865 Sep	28	Deed	J. O'Hara	B. Mitchell, Sr.	T2:44-45

Bousman, C.B., B.W. Baker, and A.C. Kerr

2004 Paleoindian Archeology in Texas. In *The Prehistory of Texas*, edited by T.K. Perttula, pp. 15-97. Texas A&M University Press, College Station.

Collins, M.B.

2004 Archeology in Central Texas. In *The Prehistory of Texas*, edited by T. K. Perttula, pp. 101-126. Texas A&M University Press, College Station.

Cox, I.W.

1997 The Growth of San Antonio. In *Archaeology at the Alamodome: Investigations of a San Antonio Neighborhood in Transition. Volume 1, Historical, Architectural, and Oral History Research*, edited by A.A. Fox, M. Renner, and R.J. Hard, pp. 8-44. Archaeological Report No. 236. Center for Archaeological Research, The University of Texas at San Antonio.

Fox, A.A.

1975 An Archaeological Assessment of the Southern Portion of the Olmos Basin, Bexar County, Texas. Archaeological Survey Report No. 9. The Center for Archaeological Research, The University of Texas at San Antonio, San Antonio, Texas.

Habig, M.A.

1968 The Alamo Chain of Missions: A History of San Antonio's Five Old Missions. Franciscan Herald Press, Chicago.

Hoffman, F.L. (translator)

1935 Diary of the Alarcón Expedition into Texas, 1718-1719, by Fray Francisco Celiz. The Quivira Society, Los Angeles.

1938 The Mesquia Diary of Alarcon Expedition into Texas, 1718. The Southwestern Historical Quarterly 41(4).

Houk, B., and Miller, K.A.

2001 The Brackenridge Park Rehabilitation Project Archaeological Survey, San Antonio, Bexar County, Texas. SWCA Cultural Resource Report No. 00-331. SWCA Inc., Austin.

Houk, B.

2002 The Brackenridge Park Rehabilitation Project Data Recovery at 41BX323 and Testing at 41BX1425, San Antonio, Bexar County, Texas. SWCA Cultural Resource Report No. 01-357.

Hughes, E. and M. Lester

1991 The Big Book of Buttons. New Leaf Publishing, Sedgewick, Maine.

Krieger, A.D.

2002 We Came Naked and Barefoot: The Journey of Cabeza De Vaca Across North America. Edited by M.H. Krieger. The University of Austin Press, Austin Texas

Mauldin R., S. Smith, S. Wigley, A. Figueroa, and C. McKenzie

2015 Archaeological Investigations within San Pedro Springs Park (41BX19), San Antonio, Bexar County, Texas. Archaeological Report, No. 443. Center for Archaeological Research, The University of Texas at San Antonio.

Meissner, B. A.

1997 Chapter 5:Making the Man: Clothing Remains from the Alamodome Project, In *Archaeology at the Alamodome: Investigations of a San Antonio Neighborhood in Transition, Volume III Artifact and Special Studies*, edited by A.A. Fox, M. Renner, and R.J. Hard, with contributions by M. Brown, N.de la O., J.P. Dering, A.A. Fox, K. J. Gross, J.M. Hunziker, B.A. Meisnner, F. Meissner, G. Mendez, R. Muñoz, C.L. Tennis, M. Vaughan, and J. . Zapata. Center for Archaeological Research, the University of Texas at San Antonio, Archaeological Survey Report, No. 238.

Natural Resources Conservation Service (NRCS)

2019 Web Soil Survey. United States Department of Agriculture. Electronic document, http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx, accessed August 25, 2021.

Norwine, J.

1995 The Changing Climate of South Texas: Patterns and Trends. In *The Changing Climate of Texas: Predictability and Implications for the Future*, edited by J. Norwine, J.R. Giardino, G.R. North, and J.B. Valdes, pp. 138-155. Texas A&M University, College Station.

Pool, J.C.

1987 Appendix V: Fanthrop Inn: A Study of Nineteenth and Twentieth Century Buttons. Archaeological Excavations at the Fanthrop Inn State Historic Site (41GM79), Grimes County, Texas, Spring and Fall 1982, pp. 277-290. Texas Parks and Wildlife Department, Historic Sites and Restoration Branch, Austin, Texas.

Ramos, R.A.

2008 Beyond the Alamo: Forging Mexican Ethnicity in San Antonio, 1821-1861. University of North Carolina Press, Chapel Hill, NC.

Randall, M.E. and D. Webb

1988 Greenberg's Guide to Marbles, edited by M. A. Davis. Greenberg, Sykesville, Maryland.

Robacker, E. F. and A. F.

1978 Spatterware and Sponge-Hardy Perennials of Ceramics. Hayden and Fandetta, New York, New York.

Sanborn-Perris Map and Publishing Company, Ltd. (Sanborn-Perris)

1896 San Antonio, Texas, Fire Insurance Map, Sheet 31. New York, New York. Digital Sanborn Map, UTSA Special Collections Department.

Sanborn Map and Publishing Company, Ltd. (Sanborn)

- 1904 San Antonio, Texas, Fire Insurance Map, Volume 1, Sheet 20. New York, New York. Digital Sanborn Map, UTSA Special Collections Department.
- 1912 San Antonio, Texas, Fire Insurance Map, Volume 2, Sheet 348. New York, New York. Digital Sanborn Map, UTSA Special Collections Department.
- 1931 San Antonio, Texas, Fire Insurance Map, Volume 4, Sheet 348. New York, New York. Digital Sanborn Map, UTSA Special Collections Department.
- 1938 San Antonio, Texas, Fire Insurance Map, Volume 4, Sheet 348. New York, New York. Digital Sanborn Map, UTSA Special Collections Department.
- 1950 San Antonio, Texas, Fire Insurance Map, Volume 4, Sheet 348. New York, New York. Digital Sanborn Map, UTSA Special Collections Department.
- 1960 San Antonio, Texas, Fire Insurance Map, Volume 4, Sheet 348. New York, New York, San Francisco, Chicago. Digital Sanborn Map, UTSA Special Collections Department.
- 1965 San Antonio, Texas, Fire Insurance Map, Volume 4, Sheet 348. New York, New York, San Francisco, Chicago. Digital Sanborn Map, UTSA Special Collections Department.
- 1971 San Antonio, Texas, Fire Insurance Map, Volume 4, Sheet 348. New York, New York, San Francisco, Chicago. Digital Sanborn Map, UTSA Special Collections Department.

Stothert, K.

1989 *The Archaeology and Early History of the Head of the San Antonio River*. Special Publication No. 5. Southern Texas Archaeological Association, San Antonio. Archaeology Series No. 3.

Taylor, F.B., R.B. Hailey, and D.L. Richmond

1991 Soil Survey of Bexar County, Texas. United States Department of Agriculture, Soil Conservation Service, Washington, D.C.

Texas Almanac

2021 City Population History from 1850–2000. Texas State Historical Association. Electronic document, https://texasalmanac.com, accessed September 2021.

Texas Historical Commission (THC)

2021 Texas Archeological Sites Atlas. Electronic document, https://atlas.thc.state.tx.us/, accessed May 23, 2021.

Valentine, M.

2014 John H. Kampmann, Master Builder: San Antonio's German Influence in the 19th Century. Beaufort Books, New York.

Whittemore, J.

1992 The Book of Buttons. Dorling, Kinserley, New York.

Wigley, S., C.M. Munoz, and C.S. Smith

2014 A Linear Pedestrian Archaeological Survey in Olmos Basin Park, San Antonio, Bexar County, Texas. Archaeological Survey Report, No. 439. Center for Archaeological Research, The University of Texas at San Antonio.

Williams, P.

1971 Flow Blue China An Aid to Identification. Fountainhouse East, Jefferson, Kentucky.

Zapata, J.E.

1997 Chapter 4: Alamodome and Abroad: A Composite Inquiry on Toy Marbles, In *Archaeology at the Alamodome: Investigations of a San Antonio Neighborhood in Transition, Volume III Artifact and Special Studies,* edited by A.A. Fox, M. Renner, and R.J. Hard, with contributions by M. Brown, N.de la O., J.P. Dering, A.A. Fox, K. J. Gross, J.M. Hunziker, B.A. Meisnner, F. Meissner, G. Mendez, R. Muñoz, C.L. Tennis, M. Vaughan, and J. . Zapata. Center for Archaeological Research, the University of Texas at San Antonio, Archaeological Survey Report, No. 238.