NMCRIS Activity # 130323

Archaeological Monitoring at LA 930 along the Foundation of St. Francis Auditorium, in the West Sculpture Garden of the New Mexico Museum of Art, Santa Fe, New Mexico

Jessica A. Badner and Richard H. Montoya

Office of Archaeological Studies

Museum of New Mexico

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2014

NMCRIS No. 130323

Museum of New Mexico
Office of Archaeological Studies

Archaeological Monitoring at LA 930 along the Foundation of St. Francis Auditorium, in the West Sculpture Garden of the New Mexico Museum of Art, Santa Fe, New Mexico

By Jessica A. Badner and Richard H. Montoya

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Report Submitted to:
City of Santa Fe Archaeological Review Committee October 2014

Archaeology Notes 469
Santa Fe 2014 New Mexico

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.: 130323	2a. Lead (Sponsoring) Agency: Department of Cultural Affairs	2b. Other Permitting Agency(ies): State of New Mexico HPD	3. Lead Agency Report No.:

4. Title of Report: Archaeological Monitoring at LA 930 Along the Foundation of St. Francis Auditorium in the West Sculpture Gallery of the New Mexico Museum of Art

Author(s) Jessica A. Badner and Richard H. Montoya

5. Type of Report ☐ **Negative** ☒ **Positive**

6. Investigation Type

☐ Research Design ☐ Survey/Inventory ☐ Test Excavation ☐ Excavation ☐ Collections/Non-Field Study
☐ Overview/Lit Review ☒ Monitoring ☐ Ethnographic study ☐ Site specific visit ☐ Other

7. Description of Undertaking (what does the project entail?):

The purpose of the project was to monitor a hand excavated trench for the placement of a subterranean structural support along the exterior side of the west wall of the New Mexico Museum of Art at 107 West Palace Avenue in downtown Santa Fe. The trench was shovel excavated and was 4 feet (1.22 m) in width by 56 feet (17 m) in length by 5.5 feet (1.7 m) in depth. This monitoring effort took place from September 30 through October 2, 2013.

8. Dates of Investigation: September 30, 2013 – October 2, 2013.

9. Report Date: October 1, 2014.

10. Performing Agency/Consultant: Office of Archaeological Studies
Principal Investigator: Jessica A. Badner
Field Supervisor: Donald Tatum
Field Personnel Names: Donald Tatum, Isaiah Coan

11. Performing Agency/Consultant Report No.: AN 469

12. Applicable Cultural Resource Permit No(s): State Permit NM-13-027-M

13. Client/Customer (project proponent): DCA – Fine Arts Museum
Contact: Dominc Martinez
Address: 107 West Palace Ave.
Santa Fe, NM 87501
Phone: (505) 476-5103

15. Land Ownership Status *(Must be indicated on project map):*

Land Owner	Acres Surveyed	Acres in APE
Stae of NM - Department of Cultural Affairs	**.0069 (monitored)**	
TOTALS		

16 Records Search(es):

Date(s) of ARMS File Review 11/19/13.	**Name of Reviewer(s)** D. Tatum	
Date(s) of NR/SR File Review 11/19/13.	**Name of Reviewer(s)** D. Tatum	
Date(s) of Other Agency File Review	**Name of Reviewer(s)**	**Agency**

17. Survey Data:

a. Source Graphics ☐ **NAD 27** ☒ **NAD 83**

☒ **USGS 7.5' (1:24,000) topo map** ☐ **Other topo map, Scale:**

☒ **GPS Unit Accuracy** ☐ **<1.0m** ☒ **1-10m** ☐ **10-100m** ☐ **>100m**

b. USGS 7.5' Topographic Map Name **USGS Quad Code**

Santa Fe, NM USGS 7.5'	35105-F8-TF-024

c. County(ies): Santa Fe Co.

17. Survey Data (continued):

d. Nearest City or Town: Within Santa Fe city limits

e. Legal Description:

Township (N/S)	Range (E/W)	Section	¼ ¼ ¼
Unplatted			
			, , .
			, , .
			, , .
			, , .

Projected legal description? Yes , No [] Unplatted X]

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.):

18. Survey Field Methods:

Intensity: 100% coverage ☐ <100% coverage

Configuration: ☐ block survey units ☐ linear survey units (l x w): ☐ other survey units (specify):

Scope: ☐ non-selective (all sites recorded) ☐ selective/thematic (selected sites recorded)

Coverage Method: ☐ systematic pedestrian coverage ☐ other method (describe)

Survey Interval (m): **Crew Size:** **Fieldwork Dates: 10/2/13.**

Survey Person Hours: **Recording Person Hours:** **Total Hours:**

Additional Narrative:

19. Environmental Setting (NRCS soil designation) Landscaped area with gravel.

20. **a. Percent Ground Visibility: 80% b. Condition of Survey Area (grazed, bladed, undisturbed, etc.):** Most of the ground was covered by landscape gravels.

21. CULTURAL RESOURCE FINDINGS ☒ **Yes, See Page 3** ☐ **No, Discuss Why:**

22. Required Attachments (check all appropriate boxes):

- ☒ **USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn**
- ☒ **Copy of NMCRIS Mapserver Map Check**
- ☐ **LA Site Forms - new sites (*with sketch map & topographic map*)**
- ☒ **LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)**
- ☐ **Historic Cultural Property Inventory Forms**
- ☐ **List and Description of isolates, if applicable**
- ☐ **List and Description of Collections, if applicable**

23. Other Attachments:

- ☒ **Photographs and Log**
- ☐ **Other Attachments**

***(Describe)*:**

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist:

Signature Joshua Badner **Date** 9/3/0214 **Title (if not PI):**

25. Reviewing Agency:
Reviewer's Name/Date

Accepted ( ) Rejected ( )

Tribal Consultation (if applicable): ☐ **Yes** ☐ **No**

26. SHPO
Reviewer's Name/Date:

HPD Log #:
SHPO File Location:
Date sent to ARMS:

CULTURAL RESOURCE FINDINGS
[fill in appropriate section(s)]

1. NMCRIS Activity No.: 130323	**2. Lead (Sponsoring) Agency:** Department of Cultural Affairs	**3. Lead Agency Report No.:**

SURVEY RESULTS:

Sites discovered and registered: 0
Sites discovered and NOT registered: 0
Previously recorded sites revisited (*site update form required*): **0**
Previously recorded sites not relocated *(site update form required):* 0
TOTAL SITES VISITED: 0
Total isolates recorded: 0 Non-selective isolate recording? ☐
Total structures recorded (*new and previously recorded, including acequias*):

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

SURVEY LA NUMBER LOG

Sites Discovered:

LA No.	**Field/Agency No.**	**Eligible? (Y/N, applicable criteria)**

Previously recorded revisited sites:

LA No.	**Field/Agency No.**	**Eligible? (Y/N, applicable criteria)**

MONITORING LA NUMBER LOG *(site form required)*

Sites Discovered (*site form required*) **:** **Previously recorded sites *(Site update form required):***

LA No.	**Field/Agency No.**	**LA No.**	**Field/Agency No.**

Areas outside known nearby site boundaries monitored? Yes ☒, No ☐ If no explain why:

TESTING & EXCAVATION LA NUMBER LOG (*site form required)*

Tested LA number(s)	**Excavated LA number(s)**

Administrative Summary

At the request of Dominic Martinez of the New Mexico Museum of Art, the Office of Archaeological Studies (OAS), Department of Cultural Affairs, Santa Fe, undertook a monitoring project from September 30 to October 2, 2013, pursuant to structural repair efforts conducted by Paul Davis Restoration, Inc., for the placement of a subterranean structural support along the exterior of the west wall of the New Mexico Museum of Art, 107 West Palace Avenue, in downtown Santa Fe, New Mexico (Fig. 1). OAS was asked to monitor the activity because the trench needed to address the structural repair which was located in the Historic Downtown Archaeological Review District of the City of Santa Fe and within an archaeological site, LA 930. The trench, which measured 15 m by 45 cm by 1.6 m, ran along the foundation of the Museum of Art's St. Francis Auditorium, extending into its West Sculpture Garden.

Archaeological monitoring of the trench excavation resulted in the recovery of historic artifacts dispersed throughout four cultural strata that dated from the late nineteenth century to the early twentieth century. Excavation also resulted in the identification of a single subterranean brick feature.

Since the City of Santa Fe is a subdivision of the State of New Mexico, NMAC 4.10.17 Standards for Monitoring apply to the project. This project also complies with the provisions set forth in Section 106 of the National Historic Preservation Act (36 CFR 800), Executive Order 11593 (1972), the National Environmental Policy Act of 1969 (91 Stat. 852), and the State Cultural Properties Act of 1969 (as amended). In addition, the scope and objectives of the project conform to the guidelines contained in Section 18-6-5 (NMSA 1978) of the Cultural Properties Act (4.10.16.13 NMAC-N, January 1, 2006).

NMCRIS No. 130323
MNM Project No. 41.985
New Mexico General Archaeological Investigation Permit No. NM-13-027-M

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Introduction

At the request of Dominic Martinez of the New Mexico Museum of Art, the Office of Archaeological Studies (OAS), Department of Cultural Affairs, Santa Fe, undertook a monitoring project from September 30 to October 2, 2013. The undertaking was to monitor a hand-excavated trench dug for the purpose of installing a subterranean structural support along the exterior side of the west wall of the New Mexico Museum of Art's St. Francis Auditorium. The undertaking, which extended into the museum's West Sculpture Garden, was located within the Historic Downtown Archaeological Review District of Santa Fe, New Mexico(Figs. 1, 2). The purpose of this study as established by a Monitoring Plan submitted to and approved by the City of Santa Fe Archaeological Review Committee (May 31, 2103) and Historic Preservation Division was to determine if significant buried cultural deposits were present within the proposed areas of excavation and to determine the nature and extent of such resources. This project is the seventh in a series of separate undertakings conducted at LA 930 on the property of Museum of Art since its construction in 1917.

Excavations included a shovel excavation of one trench (Fig. 3) excavation of a trench 15 m by 45 cm by 1.6 m. Archaeological monitoring resulted in the location of historic artifacts dispersed throughout the trench that dated from the late nineteenth century to the early twentieth century.

OAS personnel were Donald Tatum and Isaiah Coan. Dr. Robert Dello-Russo was the principal investigator during the project's field phase. Thereafter, the project was administered by Dr. Eric Blinman and Jessica A. Badner.

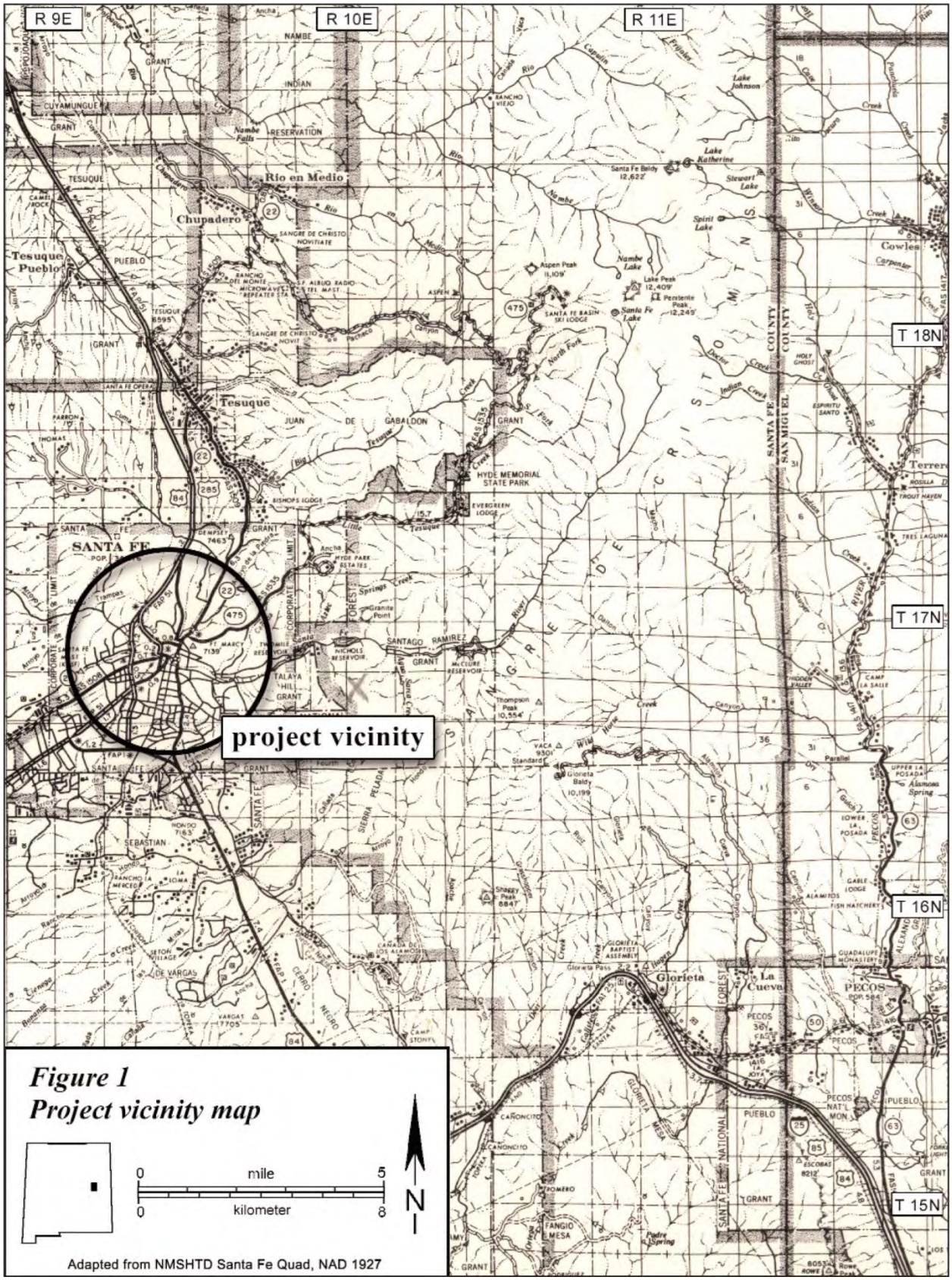
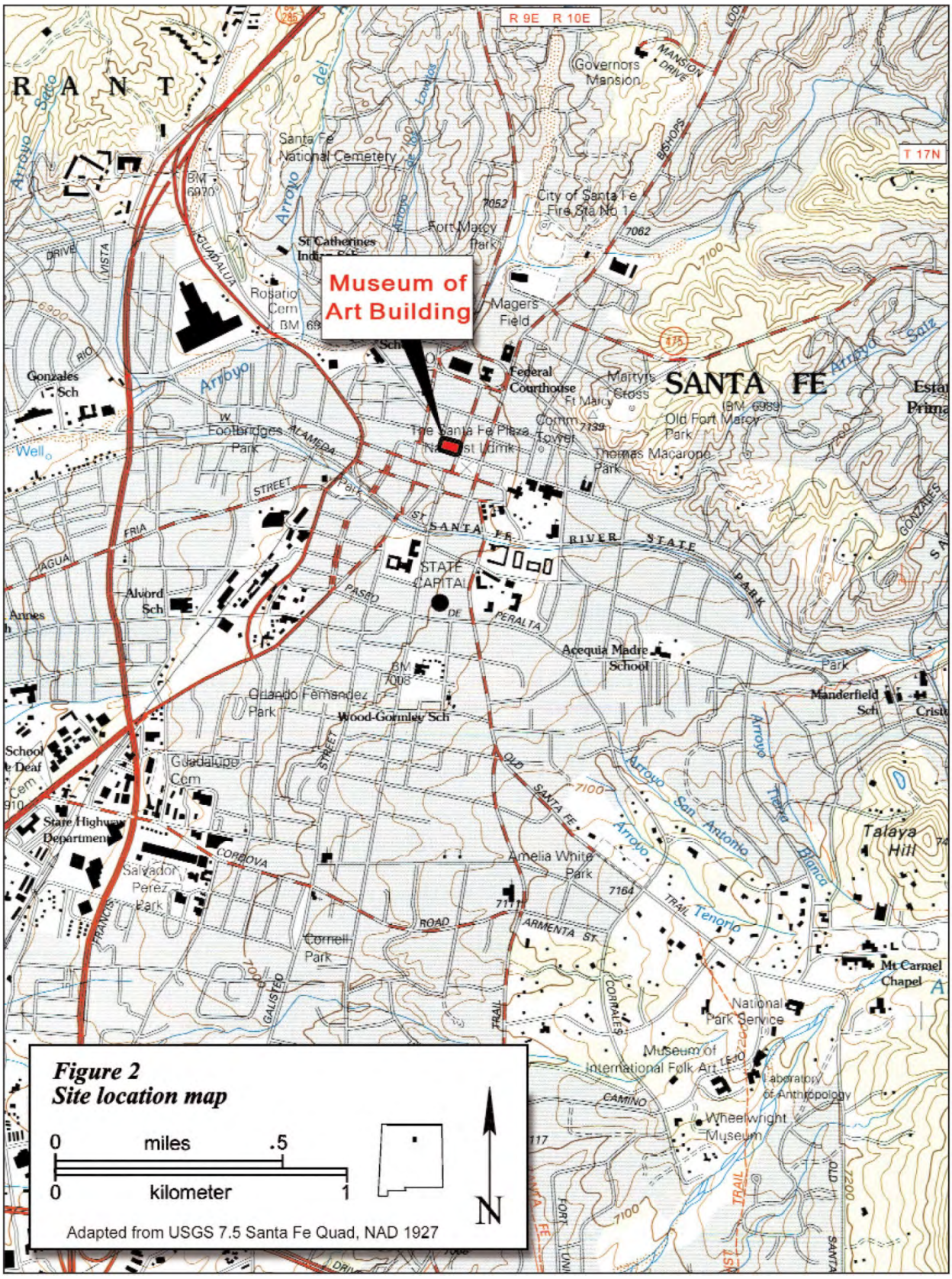


Figure 1
Project vicinity map

Adapted from NMSHTD Santa Fe Quad, NAD 1927


Museum of Art Building
R 9E R 10E
T 17N
SANTA FE
Governors Mansion
Santa Fe National Cemetery
City of Santa Fe Fire Sta No 1
Fort Marcy Park
St Catherines Indian School
Rosario Cem
Magers Field
Federal Courthouse
Martyrs Cross
Old Fort Marcy Park
Thomas Macaroon Park
The Santa Fe Plaza
Corrim Tower
Gonzales Sch
W Footbridges Park
STATE CAPITAL
Alvord Sch
Acequia Madre School
Manderfield Sch
Orlando Fernandez Park
Wood-Gormley Sch
Guadalupe Cem
State Highway Department
Salvador Perez Park
Cornell Park
Amelia White Park
Talaya Hill
Mt Carmel Chapel
National Park Service
Museum of International Folk Art
Laboratory of Anthropology
Wheelwright Museum
Arroyo Tenorio
Arroyo San Antonio
Arroyo Tierra Blanca
Arroyo Seco
Arroyo de los Pinos
Arroyo Saiz
Figure 2
Site location map
0 miles .5
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Adapted from USGS 7.5 Santa Fe Quad, NAD 1927

Figure 3. Site map

Environmental Setting

Physical Environment

Santa Fe's environment is well documented and discussed at length in numerous excavation reports for large-scale archaeological projects in the downtown area within a half-mile of LA 930, which includes the current project area. The following section is adapted from Badner et al. (2014) and Lakatos (2008). For greater detail the reader is referred to these comprehensive sources.

The project area is within a structural subdivision of the Southern Rocky Mountain physiographic zone (Folks 1975:110). The basin is bounded on the west by the Jemez Mountains and on the east by the Sangre de Cristo Mountains. Local topography alternates among nearly level plains, rolling terraces, and steep, rocky slopes. The main tributary drainage is the Santa Fe River. Other major tributary drainages include Arroyo de la Piedra, Arroyo Ranchito, and Arroyo Barranca, among others. These tributaries have wide, level floodplains, while smaller tributary arroyos have cut deeply into the alluvial plain. Much of the riparian zone adjacent to the Santa Fe River has deposited rich soils that are ideal for agriculture.

The city of Santa Fe is situated on the dissected piedmont plain of the western flank of the Sangre de Cristo Mountains. The ancient alluvial fan is made up of Tertiary and Quaternary sediments of the Santa Fe Group deposited by the Santa Fe River, which passes only 0.4 km to the north of the railyard as it flows westward to the Rio Grande. The river originates 12,408 ft above sea level in the Sangre de Cristo Mountains at Santa Fe Lake, where it flows down steep slopes, approaching 40 percent grade. Beyond the mountains, the river's grade moderates as it flows over rolling hills and drainages, flattening to about 5 percent upon reaching the Caja del Rio; the river reaches it's confluence with the Rio Grande at 5,220 ft (Plewa 2009:13). The Santa Fe River is 46 miles in length and drains an area of 257 square miles.

The river basin's geology is documented by Spiegel and Baldwin (1963:66–67) as a series of four alluvial terraces, the lowest of which is less than 5 ft above its bed. The river's "lower terrace" is mapped downstream of the Agua Fria area. Its "middle terrace," which is elevated 20–30 ft above the river, is generally found on the river's south side. The river's north side is mapped as Quaternary alluvium. The river's highest terrace is described as the river's upper reach in the mountains east of Santa Fe. The downtown historic district north of the Santa Fe River is built on late Holocene alluvium that comprises 1 to 2 m of brown, silty fine sand overlying coarse gravel (Hall 2009).

Santa Fe has a semi-arid climate. Latitude and altitude are the two basic determinants of temperature; however, altitude is the more powerful variable in New Mexico (Tuan et al. 1973). In general, mean temperatures decline faster with increased elevation than with increased latitude. Cold air drainage is a common and well-known feature of New Mexico valleys (Tuan et al. 1973). Narrow valleys create their own temperature regimes by channeling air flow: the usual patterns are warm up-valley winds during the day and cool down-valley winds at night. In contrast, shifts in temperature over broad valley floors are influenced by the local relief (Tuan et al. 1973).

The Santa Fe weather station is at an elevation of 2,195 m. The mean annual temperature reported by the station is 48.6–49.3 degrees Celsius (Gabin and Lesperance 1977). The climatological data further indicate that the study area conforms to the general temperature regime of New Mexico; that is, hot summers and relatively cool winters.

The average frost-free period (growing season) at Santa Fe is 164 days. The earliest and latest recorded frosts respectively are September 12 (in 1898) and May 31 (in 1877) (Reynolds 1956:251). Although a frost-free season of 130 days is sufficiently long to allow the growing of most indigenous varieties of maize through dry farming

(Schoenwetter and Dittert 1968; Hack 1942), the unpredictability of late spring and early fall frosts creates agricultural risk.

Precipitation for Santa Fe can fluctuate widely. A maximum of 630 mm of precipitation was recorded in Santa Fe in 1855, compared to a minimum of 128 mm in 1917 (Reynolds 1956). The amount of precipitation is even more variable for any given month in successive years. Late summer is the wettest season in the annual cycle of the Santa Fe area, whereas June is one of the driest months. Precipitation records from Santa Fe indicate that more than 45 percent of the mean annual precipitation falls between July and September (Gabin and Lesperance 1977). Although October is drier than September, it is nevertheless, the fourth wettest month of the annual cycle. Significant precipitation (7.6 percent of the annual total) also falls in Santa Fe during this month. Late summer and fall moisture is derived from the Gulf of Mexico, when air masses from this region push inland to bring the economically important monsoons (Tuan et al. 1973:20). Summer rains tend to be violent and localized. This saturates the ground surface in the beginning of a storm, resulting in the loss of much of the moisture through runoff.

Flora

Local flora and fauna are typical of Upper Sonoran grasslands. The piñon-juniper grasslands, which support a variety of plant and animal species, are the most common habitat. The characteristic vegetation includes piñon, juniper, prickly pear, cholla, yucca, and several species of muhly and grama grass (Pilz 1984). The piñon-juniper community thins as it descends from the Sangre de Cristo foothills and grades into shortgrass plains containing scattered juniper midway between the foothills and the Santa Fe River (Kelley 1979:12). The open, grass-covered valleys contain grama grass, muhly, Indian ricegrass, galleta grass, soapweed yucca, one-seed juniper, Colorado piñon, occasional Gambel's oak, and small stands of mountain mahogany. Arroyo bottoms contain various shrubs such as four-wing saltbush, Apache plume, rabbitbrush, big sagebrush, and wolfberry. The Riparian/Wetlands habitat is found only along the perennial streams, such as the Rio Pojoaque and Rio Tesuque. Modern vegetation includes willow, cottonwood, salt cedar, rushes, and sedges (Pilz 1984). In the wider valley bottoms, ditch irrigation is practiced, including in the area of the present study area.

Fauna

Fauna found within the project area includes coyote, badger, porcupine, blacktailed jackrabbit, desert cottontail, spotted ground squirrel, prairie dogs, and many species of birds. Mule deer and black bear are known to occur, but in low numbers (Pilz 1984). Use of the area by elk and black and grizzly bears may have been more common prior to the turn of the century (Carroll 1984:2). Plains animals, such as buffalo and pronghorn antelope, may have also been present or within a few days access. Domesticates primarily comprise chicken, cow, pig, horse and sheep/goat.

Cultural Overview

As with Santa Fe's environmental setting, its history is discussed at length in numerous excavation reports for large-scale archaeological projects in the downtown area within a half-mile of LA 930, which includes the current project area. The "Prehistoric Period" and "Historic Period" sections that follow are adapted from Lakatos (2008) and Lentz (2011). The final culture-history section, "Brief Cultural-Historical Context," is an adapted excerpt from Post (2013) that has been modified to reflect the current project location and used with the permission of the author; it was originally written for a monitoring plan for excavations along Sheridan Avenue located less than 30 m from the current project area. For greater detail the reader is referred to these comprehensive sources.

Prehistoric Period

In order to describe the pre-Hispanic occupation sequences in the Santa Fe area, researchers customarily use the temporal framework described for the northern Rio Grande by Wendorf and Reed (1955) and refined by Dickson (1979). The core of this framework, based largely on changes in settlement patterns, architecture, and artifacts defines a series of cultural temporal periods that describe an increase of population size and aggregation in the northern Rio Grande valley. These periods are defined as Early Developmental (AD 500 to 900), Middle Developmental (AD 800 to 1000), Late Developmental (AD 1000 to 1200), Coalition (AD 1200 to 1350), and Classic (AD 1350 or 1425 to 1600).

Wendorf and Reed (1955) did not describe the presence of hunter-gatherer populations in the sequence because these early populations had not yet been widely documented by archaeologists in the northern Rio Grande valley. Within the last 20 years archaeological investigations in Santa Fe's northern and western foothills as well as in the Rio Rancho area, have since documented clear evidence of Archaic hunter-gatherer populations (Post 2012). Ranging from approximately 5300 BC to AD 500 this long-term and intensive series of habitations are the earliest known occupations of the Santa Fe area. To date, Archaic habitations have not been recorded in the downtown Santa Fe area (Post 2013:6).

Evidence of an early, more sedentary population is provided by the results of archaeomagnetic dating performed on oxidized pits excavated at the Pueblo de Santa Fe (LA 1051), which is located one block to the north of LA 930, at the site of the Santa Fe Convention Center and District Courthouse. The dates returned range from AD 400 to AD 700. These fire pits, associated with cultigens, were morphologically and temporally similar to those excavated at LA 6171, which is located near Cochiti Pueblo at the confluence of the Santa Fe River and the Rio Grande below La Bajada Hill. Similarity of the features recorded at LA 1051 with the pits excavated near Cochiti, in part, suggests seasonal movement of early farmers northward from the Jemez River and the Rio Grande to the Santa Fe area (Post 2012, cited in Post 2013).

Excavations of Developmental-period occupations in the city of Santa Fe indicate habitations are small single or extended family settlements consisting of pit structures, jacal structures, and "puddled adobe hamlets" (Post 2013:6). Coalition-period occupations in the Santa Fe area were often diverse, with documented architecture indicating a sporadic shift from pit structures and small hamlets to large adobe villages. Settlement patterns suggest an oscillation between seasonal and permanent habitations until AD 1200 to AD 1300, when large pueblo villages, including LA 1051, were established. Pit structures were still in use by AD 1200, both at LA 1051 (Pueblo de Santa Fe, located beneath the Santa Fe Civic Center; Lentz 2011) and at LA 143460 (beneath the Federal Courthouse; Scheick 2005). Scheick suggests that the Coalition-period habitation at LA 1051 was dispersed and sprawling, predominantly situated on good farmland and in areas protected from intermittent flooding in the Santa Fe River and Arroyo Mascaras (Scheick 2007, cited in Post 2013). Both Developmental and Coalition

components were excavated at LA 1051 and deep Coalition deposits were recorded by Post and Snow (1982) at LA 930.

Classic-period florescence of Ancestral Puebloan culture is marked in Santa Fe's immediate northern downtown area by the rise, expansion, and collapse of Pueblo de Santa Fe (LA 1051). Regionally, villages established during this time period grew in size to 500 to 1000 rooms, which were arranged in linear blocks up to four stories in height. This cycle brought about intensified land use in what is now downtown Santa Fe, and areas that were not swamp or prone to Santa Fe River flooding were likely cultivated (Post 2013). As with Arroyo Hondo, Pueblo de Santa Fe likely experienced an occupation hiatus from 1350 to 1370, and reconstruction was followed by eventual abandonment by AD 420 (Lentz 2011; Shapiro 2008). Support for the area's use for seasonal subsistence activities and periodic low-intensity use is provided by lack of features or structures that postdate AD 1420 and widely distributed but low frequency Biscuit B and glaze-ware pottery (Post 2010; 2013).

Historic Period

The first European contact with northern Rio Grande valley populations occurred in the late winter or early spring of 1541, when a foraging party of Coronado's men set up camp near San Juan Pueblo. With the goals of missionization, territorial expansion, and the acquisition of mineral wealth (i.e., gold and silver), the colonizing expedition of Don Juan de Oñate arrived at Ohkay Owingeh (San Juan Pueblo) on July 11, 1598, and proclaimed it the capital of the province. During the winter of 1600 to 1601, the Spaniards moved across the river to a partly abandoned 400-room pueblo, which they renamed San Gabriel de los Caballeros (Ellis 1989). The first Catholic mission church, called San Miguel, was built at the southern end of the village (Stubbs and Ellis 1955; Ellis 1989). Soon, New Mexico was divided into seven missionary districts. A Spanish magistrate was appointed for each pueblo, and all the pueblos were subsumed under Oñate's leadership (Spicer 1962:156; Ellis 1989; Lentz and Goodman 1992).

The Spanish colony at San Gabriel did not survive the first decade of the seventeenth century. Oñate returned to Mexico in disgrace and in 1610 the capital was moved from San Gabriel to the current site of Santa Fe by Oñate's successor, Don Pedro de Peralta (Ellis 1989; Snow 1999; Lentz and Goodman 1992).

In 1609, Oñate's successor, Pedro de Peralta, received orders from the Viceroy of New Spain to relocate the capital of New Mexico to a location along the Santa Fe River near the foothills of the Sangre de Cristo Mountains. This may have been an administrative formality. The family papers of Juan Martínez de Montoya, a capitan who opposed Oñate, record an earlier settlement in Santa Fe established in 1605 (Simmons 1991, cited in Post 2013). The settlement is variously described as a garrison, plaza, or cluster of houses. Although historians debate the settlement's purpose (D. H. Snow 2011), children were born in Santa Fe before 1609, indicating the settlement population was not limited to soldiers (Post 2013).

Peralta's mandate dictated that the new town be planned according to the Reales Ordenanzas of 1573: a compilation of royal laws issued by King Philip II of Spain containing precise guidelines on how a Spanish colonial town should be laid out in the New World. Though Peralta may not have scrupulously adhered to these specifications, the founding of La Villa Real de Santa Fe included the construction of irrigation ditches (*acequias),* fields, and domestic and administrative buildings. The small plaza-focused, fortified town had at its center the *Casas Reales,* a constellation of six districts comprising government offices, a military post, and governor's quarters, whose final configuration is known today as the Palace of the Governors. East of the Plaza, facing west, stood Our Lady of the Assumption, a solid adobe church. South of the Plaza, across the river, was the Barrio de Analco, which comprised the residences of the Mexican Indians who had accompanied Oñate's colonizing mission, as well as the houses of other Indians of mixed tribal derivation (*genízaros*). Serving this community's spiritual needs was the Chapel of San Miguel (Stubbs and Ellis 1955; Hordes 1990; Snow 1999).

In the seventeenth century, Santa Fe probably resembled a typical Mexican town on the northern frontier of the vast Spanish empire. Despite its isolation, the town was provisioned once or twice a year with merchandise hauled 1600 miles along the Camino Real from Mexico City. What could not be obtained from Spanish sources was grown or built. Farming and ranching were the main industries, and pueblo craftsmen were recruited to build churches and residences, supply vegetables, meat and fuel wood, and provide local imitations of European ceramics for storage and dinner ware. Thus, until 1680, Santa Fe grew at a fairly steady pace (cf. Noble 2008:vii; Lentz 2011). However, throughout the 1600s and as late as 1715, the town and surrounding settlements were frequently attacked by marauding native groups. During this period, settlers built defensive towers *(torreones*) and guard posts (e.g., La Garita, in northeastern Santa Fe), and sought refuge in fortified communities, such as Agua Fria, La Cienega, and Chimayo (Lentz 2011:31).

From "Brief Cultural-Historical Context" by Stephen S. Post

In August 1680, Pueblo Indians and their allies revolted against Spanish rule of their people and occupation of their traditional lands. The revolt responded to 80 years of economic subjugation and social and religious oppression of native peoples. As Spanish settlers struggled to survive, government officials and their allies coerced labor and co-opted goods from Pueblo villagers for their personal gain, and the missionization effort suppressed traditional religious practices, and displaced people from their villages and homes. The Spanish settlers that survived the initial uprising collected at the *casas reales* in Santa Fe. Led by Governor Otermín, the survivors and military personnel fled to the south through Isleta and, finally to El Paso del Norte. The mission priests were killed either at their mission or at other missions to whom sympathetic leaders had sent them (Bannon 1979:83–84; Kessell 1979:323). Descriptions of the pueblo village that incorporated and expanded on the casas reales are derived from Don Diego de Vargas's account, when he and his military force and the returning and new settlers arrived in Santa Fe in December 1693. In his account, he describes a casas reales that was converted to a Tano-style pueblo with two plazas and kivas, believed by some to be large enough to house 1,500 Indians. Don Diego de Vargas described the pueblo complex, in 1703 (Twitchell 1914) "as having 'two Squares and its dwellings three stories high and many of four.'"

Archaeological evidence of the Pueblo Revolt and the period immediately following is limited to the Palace of the Governors and possibly the Plaza. In 1910, Jesse Nusbaum excavated within the Palace in advance of the restoration and remodeling project. He exposed room foundations and six human burials that were interpreted by Edgar Lee Hewett and Nusbaum as evidence of the ancestral village of Ogapogeh. It is widely accepted now that Nusbaum's finds were from the Pueblo Revolt occupation of the Palace. Unfortunately his reporting is thin and specifics are not available. From 1974 to 1975, C. T. Snow's excavations uncovered foundations to four rooms, adobe floors, pueblo-style hearths, storage pits, and human burials. Based on the feature and burial superpositioning above and within seventeenth-century Spanish Colonial foundations and floors, she surmised that they dated to the Pueblo Revolt occupation of the Palace. Other probable Pueblo Revolt pit features were identified during the excavations that preceded the construction of the New Mexico History Museum (LA 111322 [Post n.d.]). Lentz's excavations in advance of the Plaza Stage construction encountered a surface and artifacts that included numerous Pueblo-style projectile points and pottery that were interpreted as dating to the Pueblo Revolt (2004). This is the only context outside the Palace of the Governors that might be attributable to the Pueblo Revolt. Excavations at the west side of the New Mexico Museum of Art along Sheridan Avenue did not yield features, artifacts, or deposits that can be attributed to the Pueblo Revolt (Post 2013).

With the return of the Spanish settlers, government, and religion to Santa Fe in 1693, claims to lands of former residents and their descendants were re-established, new residents were granted land within the villa to settle and work, and relations with Native Americans were encouraged to be less oppressive and more equitable (Kessell 2008). Houses were rebuilt, the town layout and plan were expanded, street locations were specified, if not always

honored, and acequias, gardens, and fields dug and planted. During the eighteenth century, Santa Fe became a full-fledged city supported by a full complement of trades, agricultural activities, and economic industries that interacted with the expanded settlements along the Rio Grande and its outlying communities (Bustamante 2008; Frank 2000). Santa Fe grew outward in all directions from the Plaza and on both sides of the Santa Fe River.

While documents are important for identifying and understanding real estate transactions, personal interactions, and town characteristics during the eighteenth-century, the 1766 Urrutia map is the primary source by which archaeologists and historians can potentially extrapolate and interpret Santa Fe's growth and development (Figure 4). His map shows a central core, location of the churches and chapel, and how the town had grown into neighborhoods defined by the side of the river they were on. For example, Barrio de Analco is shown sprawling along the south side of the river. On the north side of the river is the center of town consisting of the Plaza, parroquia, and Palace of the Governors and military barracks and stables surrounded by some small to very large houses and placitas that housed some of Santa Fe's wealthiest citizens (D. H. Snow, cited in Lentz and Barbour 2011). For this study, focus is on the area west of the Plaza and the Palace of the Governors.

The Urrutia map shows a large placita-centered house immediately west of the Palace of the Governors, where the New Mexico Museum of Art is located today (Figure 4). The location has been designated LA 930 based on a number of small-scale archaeological investigations of the property over the years (Post and Snow 1982; Post and Snow 1982; Hannaford 1994, 2005; Martinez 2009). Excavation and monitoring have encountered inconclusive architectural evidence of the eighteenth-century building and mixed and a small amount of discrete deposits from this time. The Urrutia map shows the current project area as cultivated.

Until the 1780s, the military barracks, stables, and facilities were located behind the Palace of the Governors. They were in need of constant repair, maintenance, and modernizing. Presidio soldiers typically lived at houses scattered throughout the town and were difficult to muster for emergencies. In order to draw the soldiers back to the Palace and presidio, construction of a new presidio was proposed and built in part, with funds supplied by the soldiers (Moorhead 1975; Schaafsma 1982). Expansion of the presidio required that the Spanish government purchase the land and four houses within the presidio's planned limits. This of course included the large residence previously described, as well as a large residence located at LA 1051, which is a long block to the north of the Palace of the Governors and due north of the project area on Sheridan Avenue. A map presented by Marc Simmons as a 1791 depiction of the new presidio in Santa Fe shows barracks lining the entire perimeter of the grounds (1990). To date, there has been no on-the-ground archaeological confirmation of the accuracy of this map. Instead, archaeology and later descriptions of the presidio describe a long and hard-to-maintain wall bounding the presidio on the east and west sides. Schaafsma's (1982) excavation for the First Interstate Building may have uncovered a remnant foundation of this wall along the west side of Washington Avenue. No evidence of the wall has been found along Grant Avenue, which was the west limit of the presidio. If the 1791 map can be taken as a partially true representation of the presidio layout, it shows the project area as open space.

Throughout the end of Spanish rule and during the 25 years of Mexican administration of Santa Fe and the surrounding region, the presidio remained a major, but dilapidated, fixture of the downtown core (Levine 2008). The barracks are briefly mentioned in early nineteenth-century documents. Zebulon Pike, a military scout, who was captured and returned by the Spanish, mentions the wall in 1807 (Pike 1960). When the U.S. Army of the West arrived in 1846, General Stephen Kearny and his troops commandeered and occupied the Palace of the Governors and presidio. Apparently, they modified the barracks and grounds to better suit their purposes, as indicated by a concentration of dendrochronological dates from the year 1846 (Post n.d.) that were recovered from a burned pit during the New Mexico History Museum excavations. There is also architectural evidence that Kearny and his troops modified the buildings behind the Palace of Governors where cobble foundations were dismantled, others were subdivided, and floors in some rooms were lined with layers of cobbles (Post n.d.). While other modifications undoubtedly were carried out by the U.S. Army, archaeological evidence of those actions is unknown in other parts of the presidio.

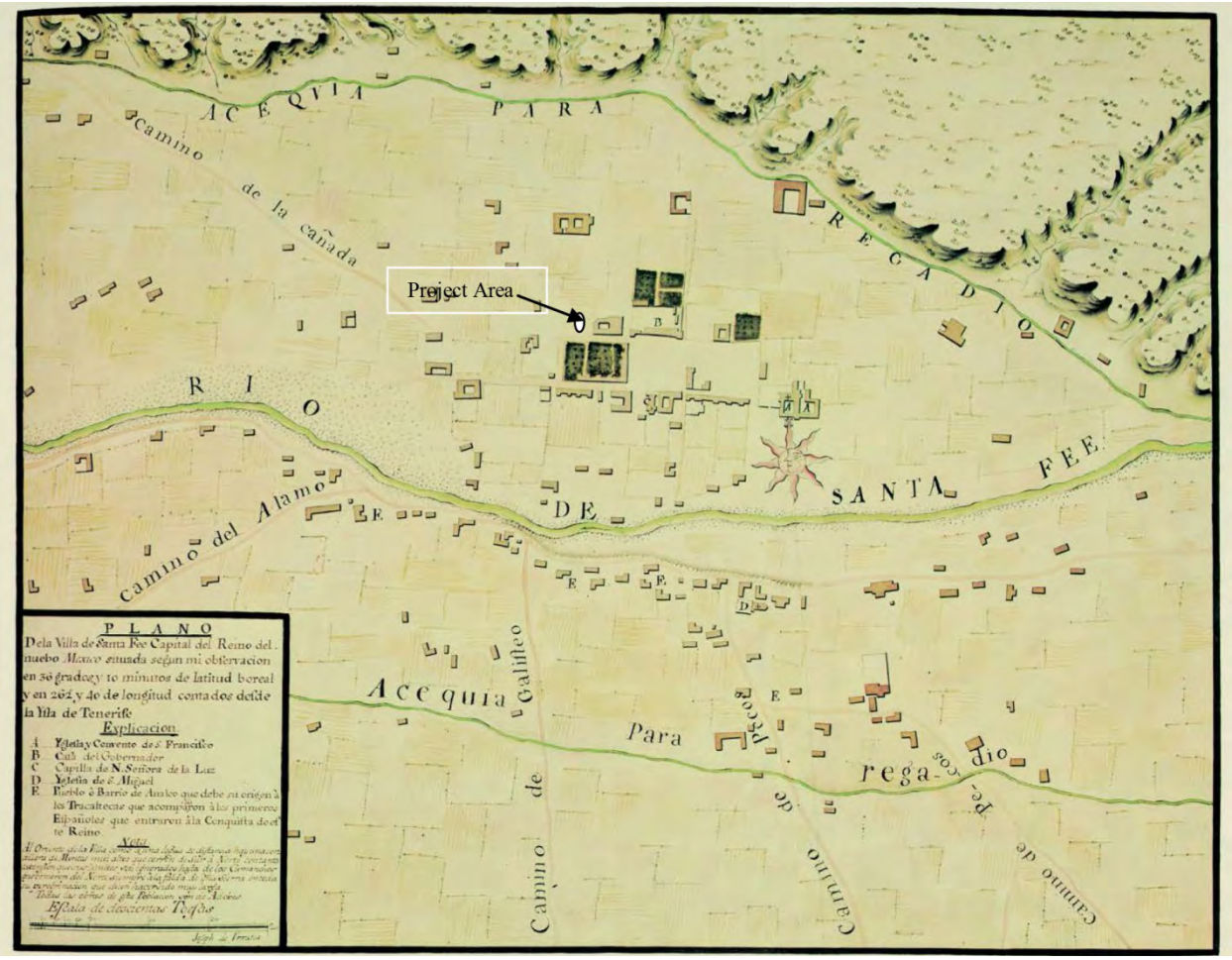

Figure 4. Map of Santa Fe, 1766, by José de Urrutia (Jesse Nusbaum Collection, courtesy Palace of the Governors Photo Archives, NMHM/DCA, neg. no. 015048).

Most germane to this study are the additions to, or renovations and demolition of, the presidio buildings used by the military between 1866 and 1875, as the military installation's status and name changed from Fort Marcy to the Post at Santa Fe (Barbour 2011). Major renovations and a new layout were implemented after 1866 when Lincoln Avenue was constructed down the center of Fort Marcy, creating a path from the Plaza to the planned capitol building at the north end of the military reservation. (The new capitol building construction started in 1852, but was not completed until 1889; by which time a capitol had been built at a different location. The 1889 capitol building was repurposed as the Federal Courthouse.) In building Lincoln Avenue (Washington Avenue was completed at this time, as well), the western 70 ft of rooms of the Palace of the Governors were demolished. At the same time, the Palace's courtyard was enclosed by adobe rooms, storehouses, and water closets (Shishkin 1972). In 1870, the former presidio headquarters, located west of the Palace (current site of the New Mexico Museum of Art), were demolished and construction began on the New Mexico District Headquarters Building. The presidio building is shown on Lieutenant Gilmer's 1846–1847 Plan of Santa Fe, New Mexico (Figure 5). This new building housed the quartermaster's offices and storerooms at its west end along Sheridan Avenue.

Other improvements and changes to the reservation leading up to its designation as the Post at Santa Fe in 1875 included the construction of a new hospital and the addition of peaked roofs, wood trim, and porches to many of the buildings, and the construction of a new hospital on the site of the modern-day Santa Fe Community Convention Center (Sze and Spears 1988:46; Barbour 2011:414). Over a 20-year period from 1875 to 1895, the function and role of the different buildings changed along with the size and mission of the post. Figure 6 shows the layout of the post in 1901, five years after the War Department began the process of decommissioning it and selling the real estate at auction. This map is a momentary record of buildings and their function at the end of the post's time in Santa Fe.

Important to the current project is the configuration of the post's houses and open-space in the area between Palace Avenue and Building 11 ("Barracks") to the north. Sheridan Avenue is shown as a "Lane" or alley dividing two rows of officer's houses that fronted on Lincoln and Grant Avenues. On the northwest corner of the intersection of the "Lane" and Palace Avenue, a small rectangular building identified as a "Bakery" is present. Apparently, the Bakery served as a kindergarten until 1907 (Barbour 2011:417). To the east, Building 19 ("Barrack"), constructed of adobe, is in the near vicinity of the project area.

With the exit of the military, the business and civic leaders of Santa Fe scrambled to repurpose the area north of the Plaza from military to public and commercial use. Evidence of this is seen in the rapid construction of new buildings into the early 1920s. In 1908, The Palace of the Governors was given by the New Mexico Territorial Legislature to the Museum of New Mexico as its first museum. Renovation and redesign followed between 1909 and 1913. The museum opened and heralded the nascent Spanish Pueblo Revival architectural style promoted by many of the city's cultural and civic leaders. In 1915, construction began on what was then known as the Fine Arts Museum, the site of the Post at Santa Fe District Headquarters, which had been converted to barracks by the early 1890s. Other important buildings built at this time were the Elks Club and Theater, north of the Palace of the Governors on the east side of Lincoln Avenue in 1912 (Wilson 1997), and the Women's Board of Trade/Public Library, north of the Palace of Governors on Washington Avenue was built in 1908. The city of Santa Fe acquired the current location of city hall and the Santa Fe Community Center, which was used until recently as a high school. Through time, many other buildings and businesses filled the land between the Palace of the Governors and the Federal Oval to the north. It might be said that these repurposed lands become one of the testing and battle grounds for the new architectural styles and image favored by city leaders (Wilson 1997).

For the period from 1902 to 1935, the Sanborn Insurance maps are a ready and useful guide to changes in land use in downtown Santa Fe. A review of the map sheets showing Sheridan Avenue is important for understanding changes within the current project area. The 1902 map (Figure 7) shows the kindergarten building and the "Lane" which was dotted with outbuildings or carriage houses associated with the former officer's quarters on Grant and Lincoln Avenues. The west side of the building located at the corner of Lincoln Avenue and Palace Avenue is

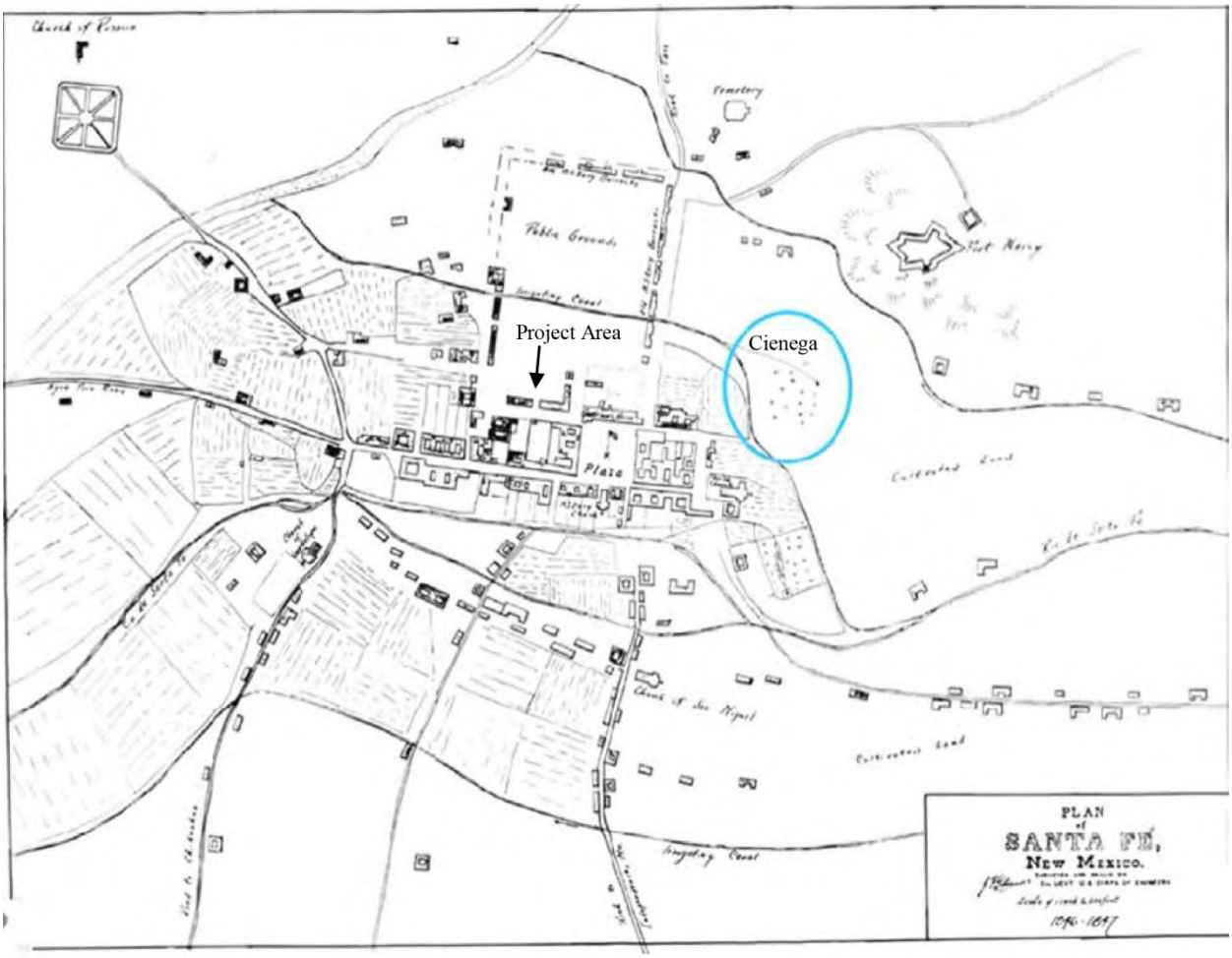

Figure 5. Plan of Santa Fe, 1846–1847, by Lt. Jeremy Gilmer (original publisher: U.S. Army Corp of Engineers; courtesy Map Collection, Fray Angélico Chávez History Library, NMHM, Santa Fe).

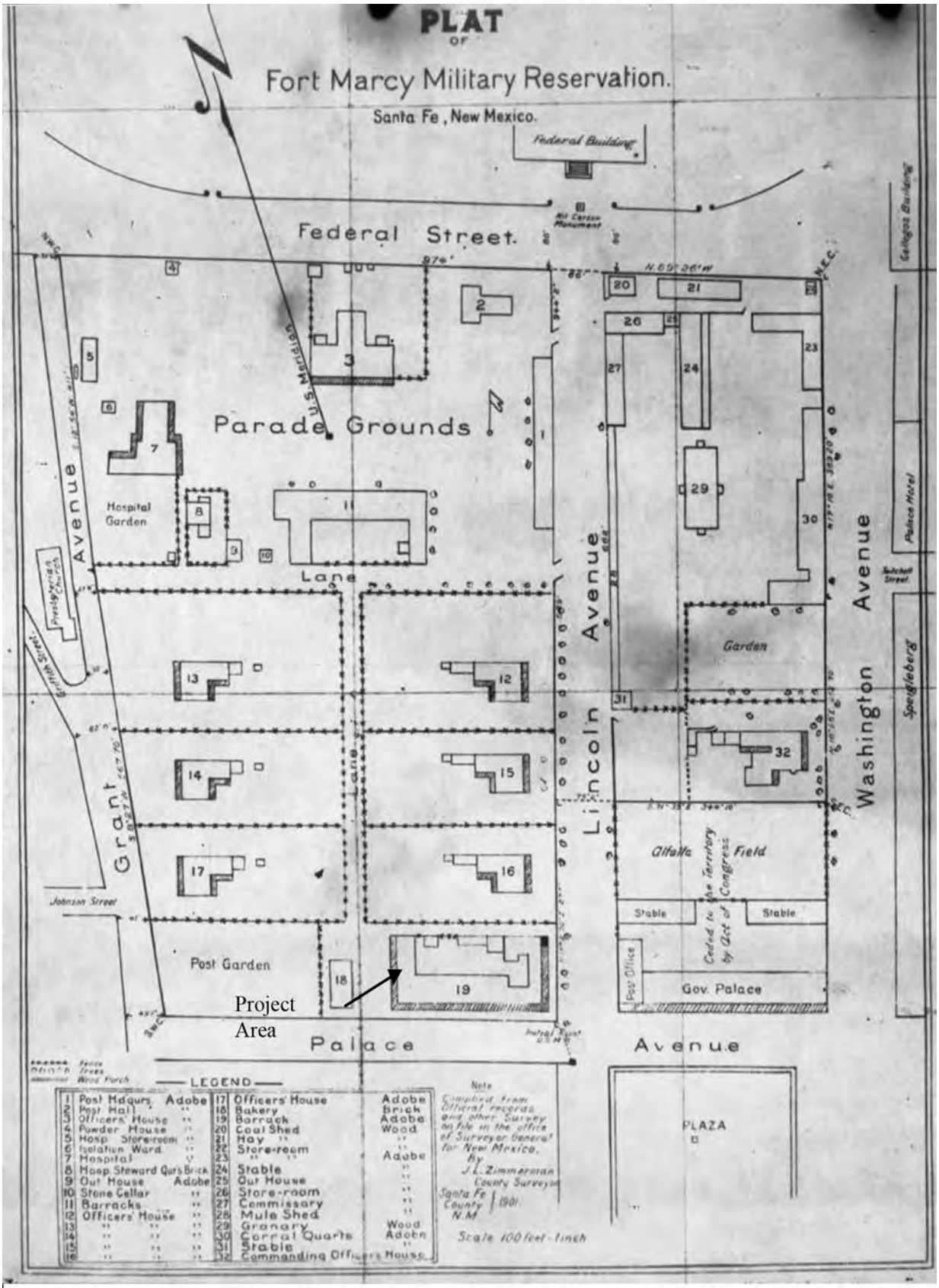

Figure 6. Plat of Fort Marcy Military Reservation, 1901(courtesy S.Post 2013).

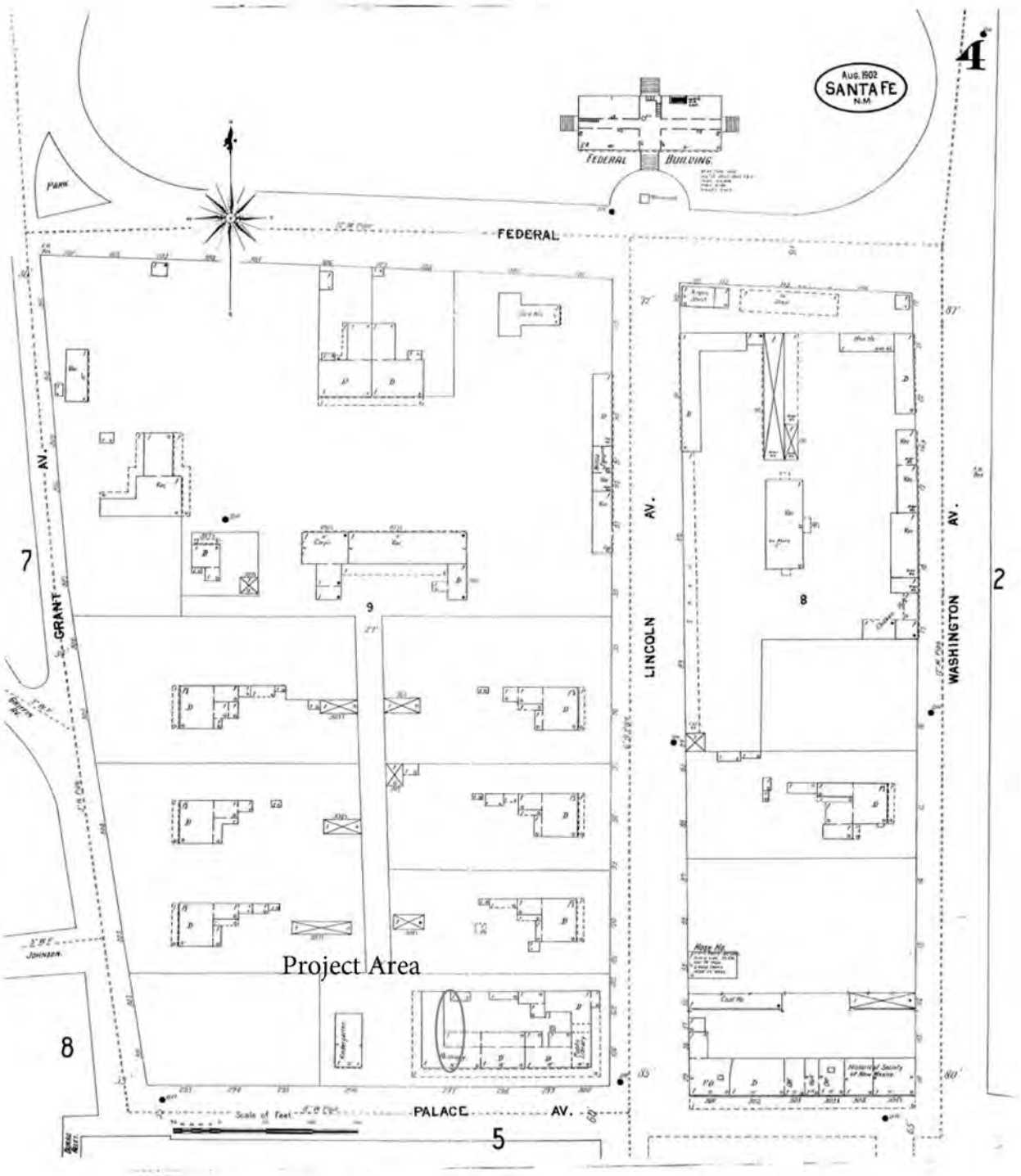

Figure 7. 1902 Sanborn Insurance Map (courtesy S.Post 2013).

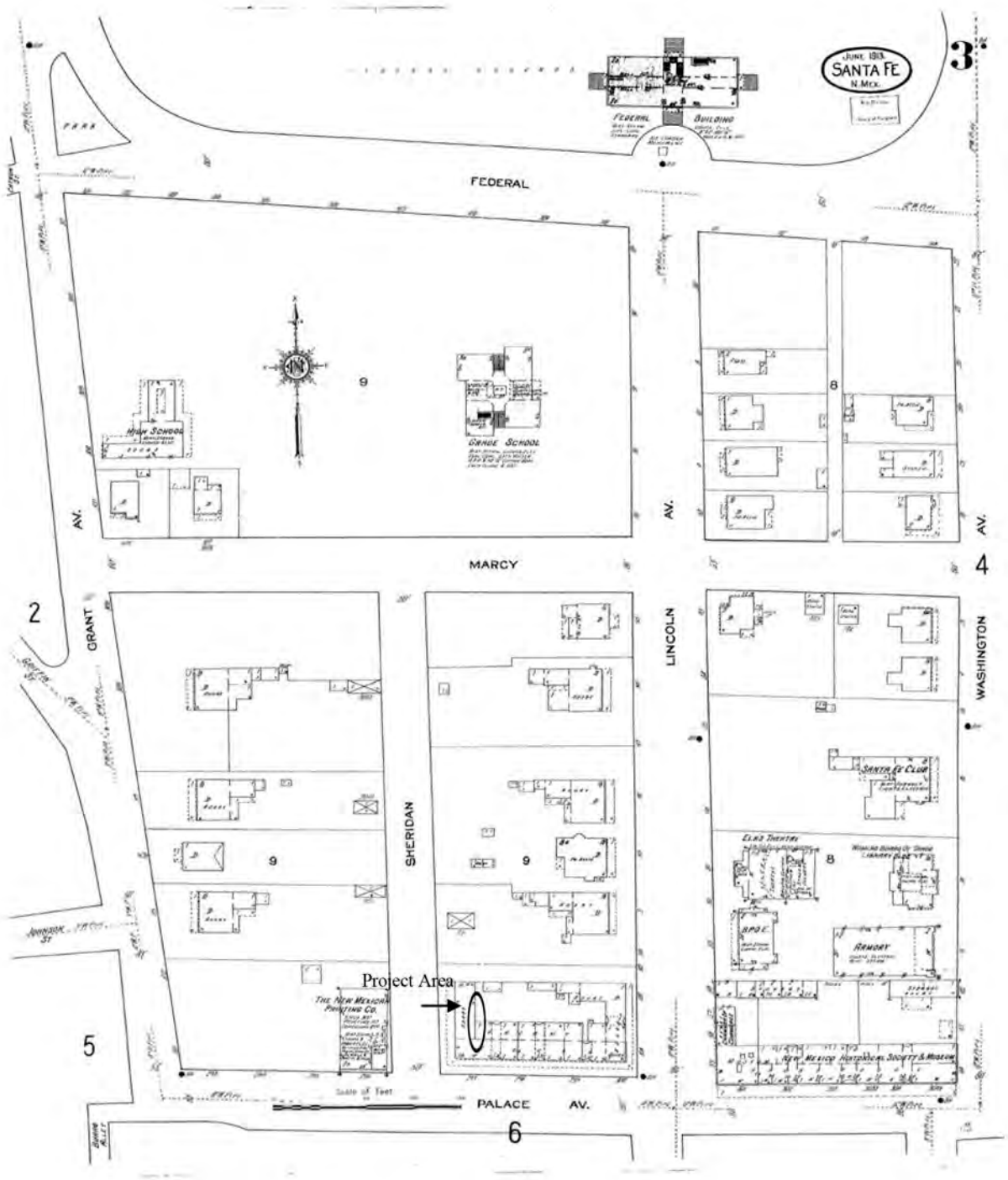

Figure 8. 1913 Sanborn Insurance Map(courtesy S.Post 2013).

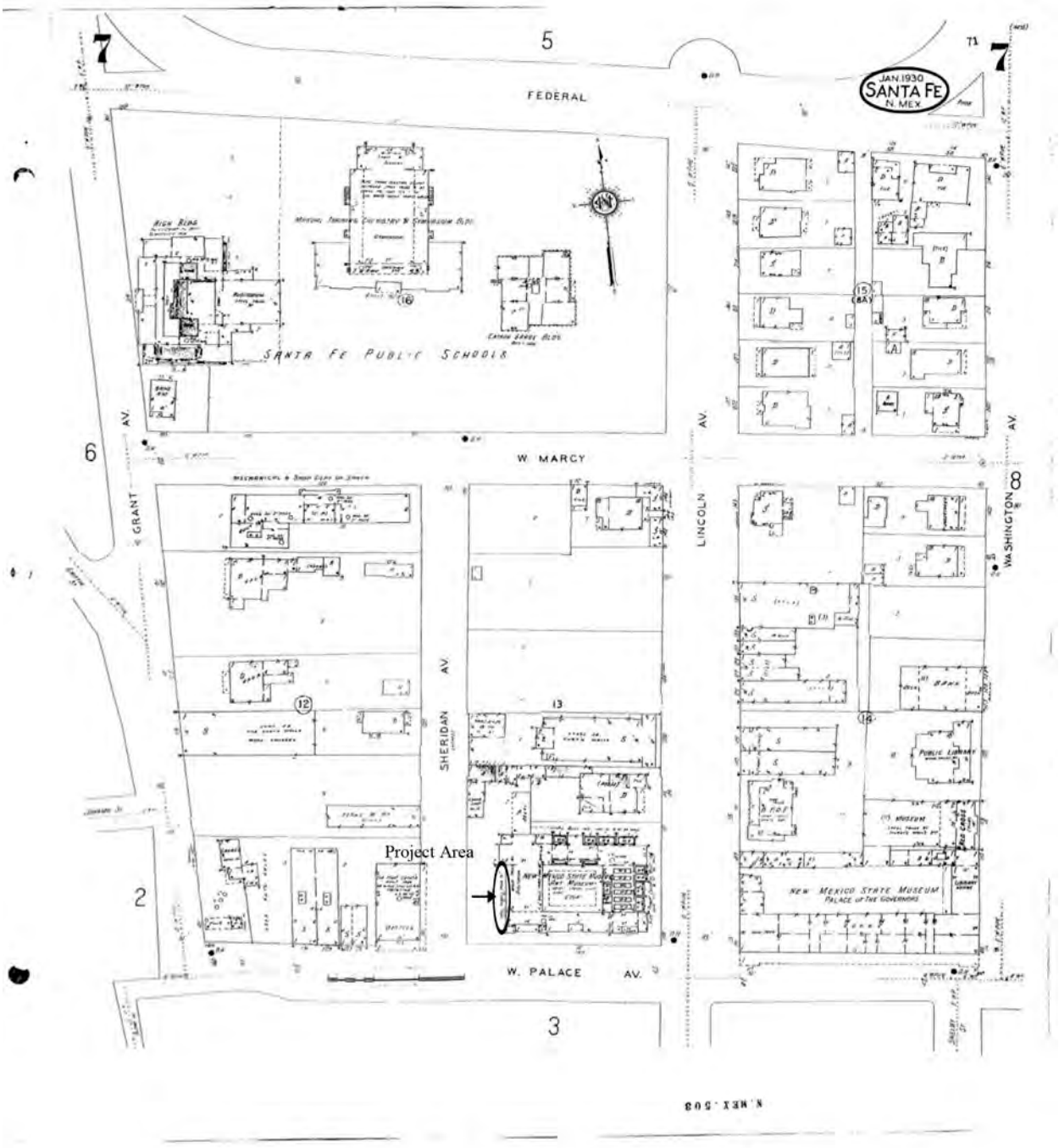

Figure 9. 1930+1948 Sanborn Insurance Map(courtesy S.Post 2013).

marked “Armory.” In 1908, the kindergarten was replaced by a steam laundry and the carriage house/outbuilding immediately to the north is not shown. By 1913, the Santa Fe New Mexican Publishing Corporation had constructed a building on the site of the kindergarten/steam laundry and the unpaved lane was named Sheridan Avenue (Figure 8). This configuration remained essentially unchanged until 1948 (Figure 9), when a rectangular wood frame building is shown north of the printing house and the “New Mexico State Museum” was constructed on the site of the former “Armory.”

Previously Recorded Resources

The New Mexico Museum of Art project location is in the proximity of several previously documented cultural resources listed in Table 1. A list and map of properties within 500 m of the monitoring area is provided in Appendix B (Fig. B1; Table B1). These cultural resources range from prehistoric to historic sites. Current monitoring activity was located within the bounds of LA 930 the excavation history of which is summarized below.

Past Archaeological Investigations at the Museum of Art LA 930

Guadalupe A. Martinez
(adapted from Martinez 2009)

Since its construction in 1917, archaeological deposits and features have been periodically reported at the New Mexico Museum of Art (known as the Museum of Fine Arts from 1962–2007), and formerly Fort Marcy Officers Quarters and Ogapoge Pueblo (LA 930). One archaeological survey (Seifert 1979), one modern excavation (Post and Snow 1982), and four monitoring projects (Hannaford 1994, 2005; Martinez 1994, 2009) have been conducted in and around the museum. Jesse Nusbaum briefly reported on archaeological deposits observed during the initial stages of construction.

Between 1915 and 1917, Jesse Nusbaum began and completed demolition and removal of the dilapidated Fort Marcy officer's quarters, which occupied the site of the planned state art museum. Cultural deposits were encountered to 3 m below street level along the south side of the building. The deposits were not documented in a formal report and are only mentioned by Nusbaum in a progress report to Edgar Lee Hewett.

In 1979 and 1980, the Museum of New Mexico's Research Section (now the Office of Archaeological Studies) conducted survey and excavations in advance of the West Sculpture Gallery Addition construction and expansion of main gallery space off the northwest corner of the museum (Seifert 1979; Post and Snow 1982). Excavation in the West Sculpture Gallery (Fig. 10) identified masonry and lime mortar foundations from the Fort Marcy quartermaster's offices, an eighteenth-century occupation level, and a possible seventeenth-century foundation remnant. These latter features occurred at 1.15 to 1.25 m below the modern ground surface. The quartermaster's office foundation retained a portion of the interior plaster colored with blue calcimine. The demolition fill contained abundant red brick, glass shards, wood fragments, and clods of lime plaster. The upper Spanish Colonial component was associated with Powhoge and Ogapoge Polychrome pottery types. The lower component deposit had Tewa Polychrome and Puebla Polychrome majolica, suggesting a seventeenth-century occupation. These deposits, below the planned construction depth, were not investigated further, and the excavation was backfilled.

Excavation to the west of the museum building encountered disturbed cultural deposits to 1.20 m below the modern ground surface. Below the 1.20 m depth, excavation revealed a homogeneous sandy loam containing animal bone and seventeenth- and eighteenth-century pottery types. These types reflect long-term Spanish Colonial residential use of the museum property. In 1990 and 1991, OAS staff monitored storm drain and drainage pipe installations across Lincoln Avenue between the Palace of the Governors and the Museum of Art and around the Hewett House (Martinez 1994). Trench profiles contained evidence of Territorial and Spanish Colonial architecture and artifacts from both periods. In the process of nonsystematic artifact collection, 425 pieces of Pueblo and Euroamerican pottery, 518 animal bones (primarily domestic cow and sheep/goat), and 64 miscellaneous artifacts (including mica sheets, a strike-a-light flint, and a charred corncob) were recovered. Clearly, the trenches cut through a midden deposit that appeared homogeneous but that contained considerable deposits of seventeenth-century refuse. Also exposed were the remains of a disarticulated foundation constructed of river cobbles at a depth of 85 to 100 cm below the street level of Lincoln Avenue.

Table 1. Previously recorded archaeological sites and historic properties in the vicinity of the project area (NMCRIS)		
Site Number	*Site Type & General Temporal Affiliation*	*NRHP/SRCP Eligibility*
SR 18/ LA 4451/ LA 113222	Palace of the Governors NHL	National and State Register listed SR 18
SR 58	Filipe Delgado House (124 West Palace Avenue)	State Register listed SR 58
SR 355	AM Bergere House (135 Grant Avenue)	State Register listed SR 355
SR 379	Ft. Marcy officers' residence (116 Lincoln Avenue/ Edgar Lee Hewett house)	SR 379
LA 609	Fort Marcy in vicinity of the Fine Arts Museum	Not listed; no formal determination
LA 930	Prehistoric/ Pueblo (Ogapoge)	See also SRCP 379;
		NRHP 73001152; SRCP 244
LA 1051	Prehistoric Pueblo (Ogapoge) and El Presidio de Santa Fe	NRHP 73001152; SRCP 244
LA 4451	Palace of the Governors	National and State Register listed; SRCP 17
LA 35100	Presidio site; First Interstate Bank underground parking lot	NRHP 73001152; SRCP 244
LA 46174	Big Jo Site: Spanish Colonial Period residence	Undetermined
LA 71605	Spanish Contact/Spanish Colonial 1539-1680; Anglo 1846-1912	Undetermined
LA 80000	Santa Fe Plaza National Historic Landmark	National and State Register listed; SRCP 27
LA 109088	Hispanic, U.S. Territorial – U.S. Statehood; diagnostic artifacts	Undetermined
LA 114232 (LA 4450 Locality 29)	Lensic Theater	Undetermined
LA 114247	Coalition to Classic Period Artifact Scatter	Undetermined
LA 155456	Undescribed historic site	Undetermined

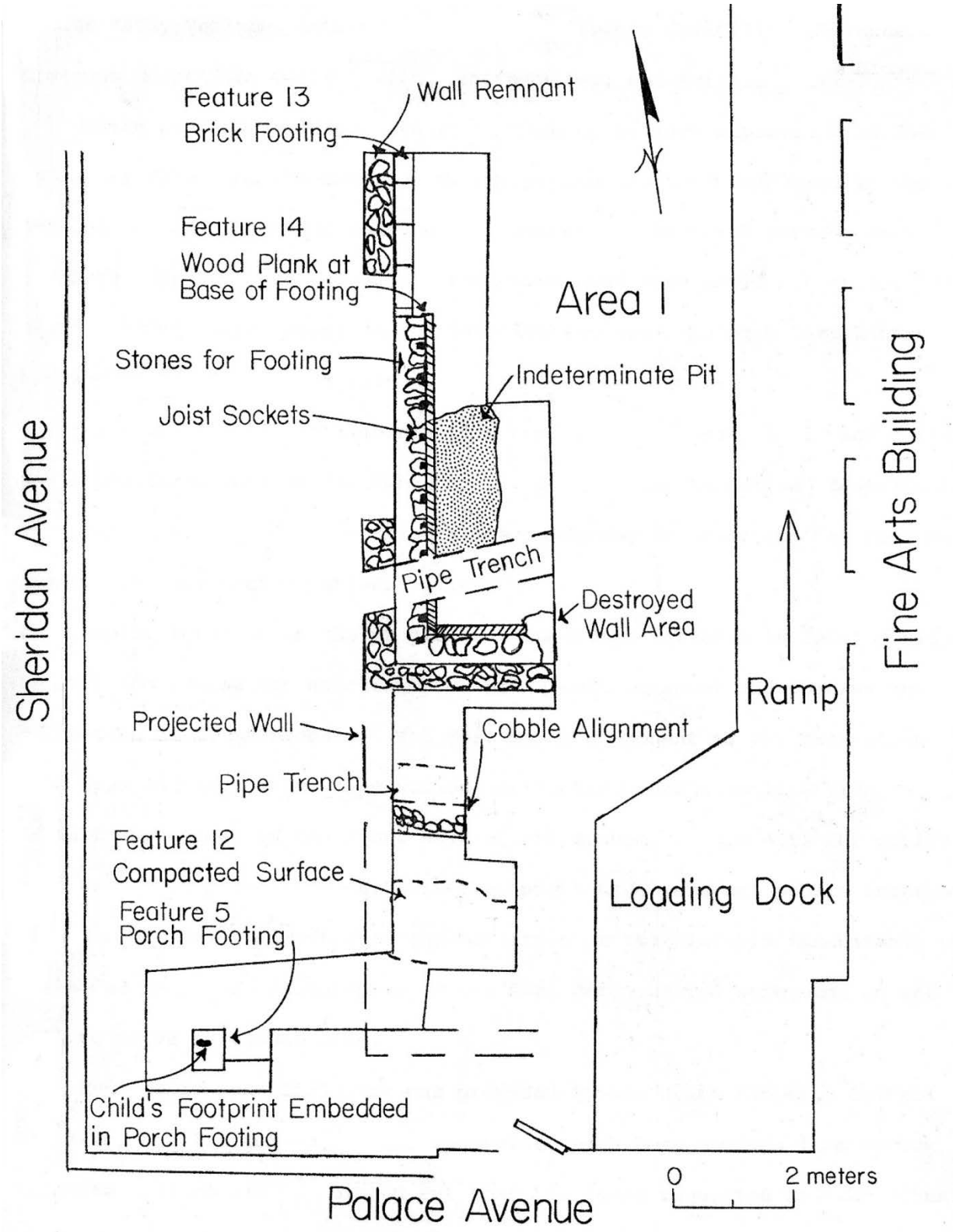

Figure 10. Excavations in the museum's West Sculpture Garden conducted in 1980 (Post and Snow 1982).

In 1994, Chuck Hannaford (1994) of OAS monitored a trench cut outside the northeast corner of the Museum of Art to expose the basement wall for needed repairs. Cultural deposits of temporally mixed artifacts were encountered to a depth of 1.15 m. No structural remains or features were observed. In 2005, OAS monitored drainage lines on the south and east sides of the museum building. At depths ranging from 0.70 to 1.20 m below the modern ground surface, archaeologists examined and documented Spanish Colonial foundations, surfaces, and artifact-laden deposits. These features and deposits were interpreted as associated with the middle eighteenth-century building shown on the 1766–1768 Urrutia map (Hannaford 2005:27). Territorial-period deposits and features were encountered on both sides of the building, as well. Cobble foundations from the Fort Marcy Headquarters were encountered from 10 to 80 cm below the modern ground surface.

In 2006, OAS returned to the west side of the museum building—now designated the West Sculpture Garden—to monitor remodeling efforts in advance of sculpture installation. Guadalupe Martinez monitored a series of hand excavations for sculpture base foundations, pipe and utility trenches, window-well improvements, and tree removal. Work exposed three features (Fig. 11), two of which were limestone block foundation segments associated with the quartermaster's office and recorded by Post and Snow in 1980 (Martinez 2009; Post and Snow 1982). The third feature was a limestone block.

The results of these seven projects indicate that intact cultural deposits and building foundation remnants are present in areas that were not completely disturbed by museum construction and modification. Upper deposits have the greatest potential for disturbed cultural deposits lacking in integrity and data potential. Within the upper 0.70 m of deposit, Fort Marcy artifacts, building debris, and foundations might be encountered. Below 0.70 m, Spanish Colonial deposits and features may be encountered, but it is more likely that they are best preserved below a depth of 0.90 m, which is lower than excavation depths planned for the sculpture gallery renovations.

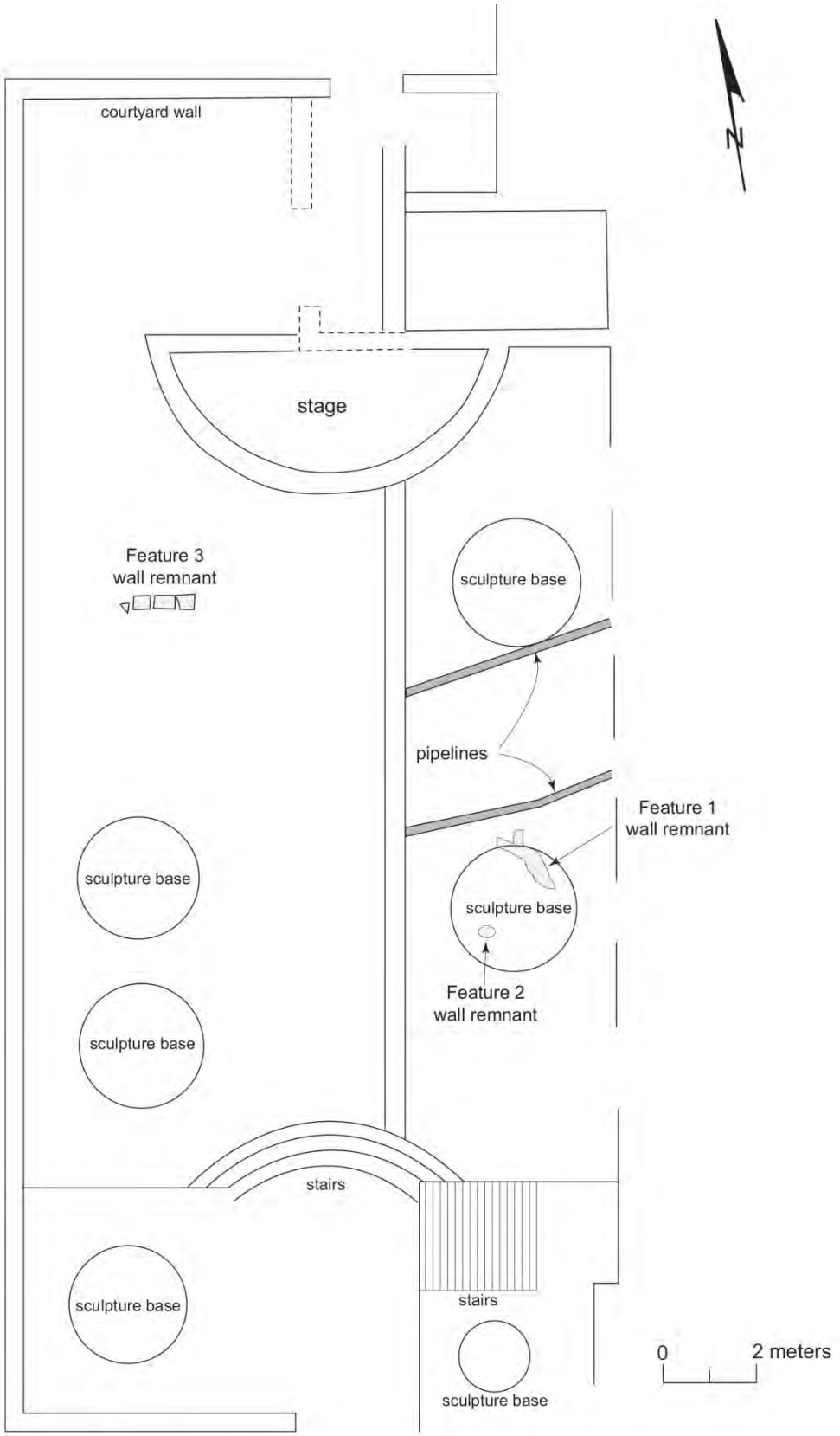

Figure 11. West Gallery monitoring conducted in 2006 (Martinez 2009).

Archaeological Monitoring, Excavation, and Analysis

Methods

From September 30 through October 2, 2013, OAS archaeologists monitored a single hand-excavated trench dug by Paul Davis Restoration, Inc., personnel in the New Mexico Museum of Art's West Sculpture Garden, immediately adjacent to the west wall of the St. Francis Auditorium, at the west end of the museum building. Monitoring was conducted in conformance with standard OAS monitoring methodology, which is guided by regulations approved by the New Mexico Historic Preservation Division (HPD) and the City of Santa Fe Archaeological Review Committee (ARC). The work included hand-scraping sections of the excavated trench walls to examine and document stratigraphy and subsurface deposits. Trench walls were faced along the length of the excavation and a stratigraphic profile was drawn to scale. This profile documented exposed intact cultural strata along the west profile face. Sediments were described using a Munsell color chart and standard geomorphological descriptions. Soil descriptions also included notes on artifact variety and frequency, temporal associations of described strata, and evidence of disturbance. A feature was recorded in the trench profile. The trench location was plotted using a Trimble Geo XH GPS unit with sub-meter accuracy. The excavation area is also shown on maps generated during past excavations (see Figs. 10 and 11).

Scattered cultural materials were present in trench walls and their locations were documented in profile. Diagnostic artifacts were opportunistically collected from fill, then recorded and catalogued. Because the excavated trench was narrow and flush along the west side of the St. Francis Auditorium foundation, work space was restricted and it was difficult to take photographs that clearly depicted stratigraphy and features.

Laboratory analysis of recovered artifacts and samples, along with interpretation and recommendations, followed the completion of fieldwork. All artifacts recovered during the investigation were catalogued, processed, and prepared for permanent curation at the Archaeological Research Collections Unit of the Museum of Indian Arts and Culture in Santa Fe.

Monitoring Results

Excavations preparatory to structural repairs of St. Francis Auditorium's west wall included monitoring the excavation of a trench 15 m by 45 cm by 1.6 m (Figs. 3 and 12). The trench was adjacent to the St. Francis Auditorium and its east face exposed the buildings foundations. The building's foundation was intact in the 11 southernmost meters of the trench; the foundation was constructed of coursed brick covered in a layer of 2 cm thick plaster (Fig. 13). Brick was only exposed at the foundation's northern terminus, adjacent to an area that had later been removed. The original foundation was constructed in a footing trench that appears to have been lined with an admixture of lime or plaster and soil. Figure 14 shows the intact footing exposed at the monitoring trench's southern terminus. The northernmost 4 m of the building foundation was obliterated and was supported by a concrete pier reinforced with rebar Figure 15. This disturbed foundation segment corresponded with a 4 m long pit filled with homogeneous redeposited fill that is documented in the west trench profile.

The trench's west face exhibited a profile with five main strata; they are detailed below and illustrated in Figure 16. A collapsed red-brick area (Feature 1) located within the trench was a possible utility tunnel.

Strata

Stratum 1. The uppermost stratum was a very dark brown (10 YR 2/2) sandy loam, with a platy, sub-angular blocky structure and sparse inclusions of fragmentary brick. The deposit had a minimum thickness of 40 cm and a

Figure 12. Monitoring trench, current project, along the museum's St. Francis Auditorium, view south.

Figure 13. Monitoring trench, current project, St. Francis Auditorium's foundation, view east

Figure 14. St. Francis Auditorium foundation detail, monitoring trench, south profile.

Figure 15. St. Francis Auditorium foundation detail, concrete and rebar, view north.

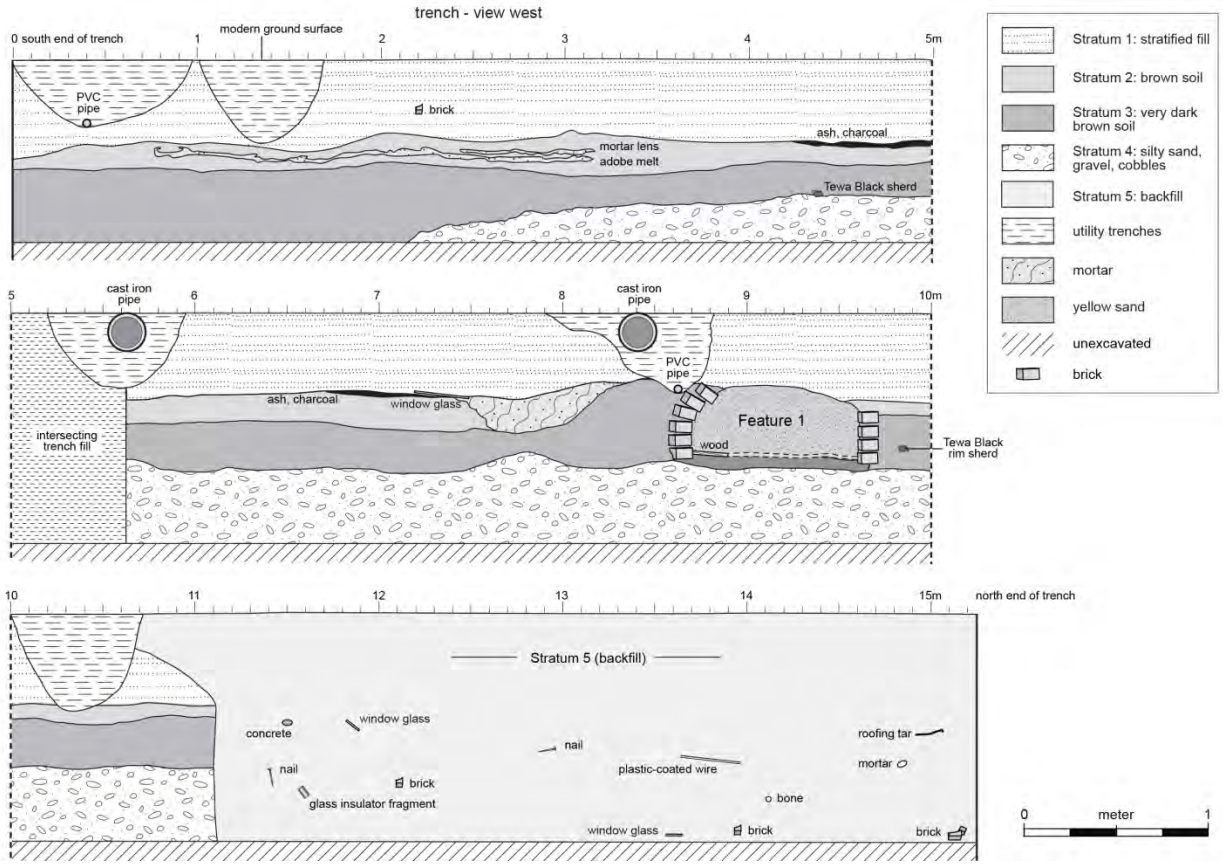

Figure 16. Monitoring trench, west profile.

maximum thickness of 53 cm. It was also truncated by four separate utility trenches. This deposit may be deflated by modern construction and remodeling activities and may have been brought in during or after museum construction in 1917 or may be, in part, related to demolition of the Fort Marcy quartermasters' quarters.

Stratum 2. Located beneath Stratum 1, Stratum 2 soil was a brown (7.5 YR) silty, clay loam and was from 10 to 20 cm thick. The deposit exhibited an adobe/mortar lens that was 10 cm thick and 3.2 m long. There were also two ash-charcoal lenses and a thicker mortar lens that was a light brownish-gray (10 YR 6/2). Mortar was 25 cm thick and 90 cm long and a minimum thickness of 10 cm and a maximum thickness of 20 cm. The mortar and adobe lenses in this stratum are likely related to museum construction and may also be associated with the demolition of the Fort Marcy quartermasters' quarters between 1915 and 1917.

Stratum 3. This stratum was below Stratum 2 and was a very dark grayish-brown (10 YR 3/2) sandy loam with a single Tewa black ceramic sherd recovered from the north end of the trench. Feature 1 was excavated into this stratum. If Feature 1 was constructed as part of the Fort Marcy military reservation, this stratum may exhibit compressed and possibly churned cultural deposits ranging from Spanish Colonial to Territorial-era components. This deposit was from 30 to 50 cm thick.

Stratum 4 was not present in the southernmost 2 m of the trench. Stratum 4 consisted of an alluvial deposit of unsorted sand, gravel, and cobbles, but was unusually dark in color as compared to most other alluvial deposits recorded in the downtown area. The stratum was 10 YR 3/2 very dark grayish-brown to 7.5 YR 4/4 brown. This color suggests the presence of decomposing organic matter, similar to cienega deposits recorded to the north and east in the downtown Santa Fe area. The deposit was from 30 to 50 cm thick and was culturally sterile. This stratum was the deepest deposit and continued below the trench.

Stratum 5 was presumably an admixture of Strata 1 through 4 and is likely associated with destruction of the building's original foundation. Fill was dark brown (7.5 YR 3/2) sandy loam with fragments of construction debris, including nails, brick, and window glass scattered thought the deposit.

Features

Feature 1, a brick structure exposed in cross section by the trench, may have been a utility tunnel. The utility tunnel was located 9 m from the south end of the trench. Within the trench exposure the feature was 1 m wide by 0.4 m high (Figs. 16 and 17). The tunnel's length and orientation remain unknown. Feature fill was pale brown (10 YR 6/3) silty loam and the feature's base may have been wood-lined. An almost 10 cm thick layer of dark soil was located at the feature's base but archaeologists could not determine if the dark color was the result of burning or rotting organic material. The utility tunnel walls were constructed of four to five courses of brick with a possible arch at the top. It is unclear if the arch connected both sides of the vertical supports; the uppermost bricks that would have completed the vault are missing.

Lack of artifact content associated directly with Feature 1 makes it difficult to arrive at a conclusive date for the feature's construction and use. Even so, historic records indicate that buildings constructed by the U.S. Army began utilizing brick facades after 1875. Although there were no locally available bricks from the New Mexico Penitentiary brick works until 1886 (Barbour 2011:88; Sze n.d.; Winters 2013), maps of previous excavations suggest that the tunnel may be associated with the Fort Marcy quartermasters' quarters. If the tunnel is associated with Fort Marcy military reservation, it would date to 1846 at the very earliest (which is unlikely) to approximately 1896, when the War Department began to decommission the post (Post 2013:10). Conversely, the feature could be associated with museum facilities installed during the building's early construction that have since been abandoned and forgotten.

Figure 17. Feature 1, east profile.

Euroamerican Artifact Analysis

Susan M. Moga

The artifact types recovered from monitoring included a variety of Euroamerican artifacts (n = 37). Only one field specimen number (FS 1) was assigned to all the artifacts types retrieved from the monitoring trench. Artifacts were not specifically collected from designated stratigraphic layers.

The collected Euroamerican artifacts came from five separate categories (Table 2). These categories and the artifact types include: 1) Domestic items (n = 11) with fragments from White-ware and Ironstone dinnerware and a broken base of a crockery storage vessel; 2) A portion of a small rubber ball was placed in the Entertainment & Leisure category (n = 1); 3) Construction and Maintenance (n = 19) had the highest frequency of artifacts with nails, plaster, bolts, a metal strap, an industrial mixing blade, window glass, and electrical hardware. Most of these items were probably associated with renovations at the Museum of Art throughout the decades; 4) One piece of slag was categorized under Economy & Production (n = 1), but it just may have been a piece of metal that was tossed into the furnace and melted; and 5) Fragments from colored glass bottles were recorded under the Unidentifiable Category (n = 5), since there were not enough diagnostic attributes to assign them to a specific function. For example, green glass could be mineral water, wine, medicine, a decorative vessel, or a pickle jar; amber glass may have been beer, bitters, liquor, wine, whiskey, a flask, or a Clorox bottle. Side seams were visible on the green and amber glass bottle fragments indicating machine made bottles which began production in 1904. Clear glass without bubbles became available in 1930; decorative objects, culinary, medicine, baby bottles, toiletry, water, whiskey, liquor, and numerous other items were manufactured from this glass.

Purple bottles arrived in New Mexico via merchants trading along the Santa Fe Trail and later, by 1880, in mass quantities via the railroad. Many of the purple bottles were originally colorless, but the manganese dioxide used in the production process turned purple when exposed to sunlight for extended periods. White milk-glass items were present in the United States by the 1870s and are collector's items today. During the Depression-era, however, milk glass was very inexpensive; it was an affordable product produced for the public. The milk-glass fragment from the assemblage has a rough interior in one section, and appears to be a poor reproduction of a more expensive piece. It is difficult to determine whether this fragment is part of the base or rim; it was recorded, therefore, as a neutral body fragment.

The Euroamerican artifacts (FS 1) retrieved from the monitoring trench likely date to the late nineteenth to early twentieth century. Most of the construction-related artifacts were probably associated with construction or remodeling episodes at the Museum of Art and may have been excavated and reburied in the immediate vicinity. The remaining artifacts may have come from a domestic trash scatter and may also have been redeposited.

Table 2. Euroamerican artifacts recovered from monitoring

Category	FS#	Lot #	Type	Count	Fragment	Material	Technique	Color	Dates	Comments
Domestic Items										
	1	1	Crockery	2	Base	Ceramic	Wheel thrown	Brown	1800+	Storage vessel
	1	2	Soup plate	3	Rim, body, base	Ceramic, Ironstone	Molded	White	1840-1930	1/4" thick
	1	3	Cup	1	Rim, body	Ceramic, Whiteware	Molded	White	1830-present	Thin walls
	1	4	Plate	1	Rim, body	Ceramic/White ware	Molded	White	1830-present	Scalloped rim with embossed floral design
	1	5	Bowl	1	Body	Ceramic, Ironstone	Molded	White	1840-1930	1/4" thick wall
	1	6	Vessel, Indeter.	1	Body	Ceramic, Whiteware	Molded	White	1830-present	Crackle glaze w/potlidding
	1	7	Vessel, Indeter.	1	Body	Ceramic, Whiteware	Molded	White	1830-present	Gold leaf linear design
	1	8	Vessel, Indeter.	1	Rim, body		Molded	White	1830-present	Indeterminate hand painted design in red and yellow paint on rim and body
Entertainment & Leisure										
	1	10	Ball	1	Body	Rubber	Molded	Tan	Modern	Rubber became very hard from exposure
Construction & Maintenance										
	1	11	Plaster	4	Body	Gypsum	Mixed	White	Unknown	Modern construction activities
	1	12	Window glazing	5	Body	Glass	Sheet machined	Light Green	1888+	Patinated
	1	13	Insulator	1	Body	Porcelain	Molded	White	Modern	"G.E.C 60123" embossed on base with four mounted screw perforations
	1	14	Mixing blade attach-ment	1	Nearly intact	Metal	Molded	Gray	Unknown	Industrial cement or plaster mixer blade
	1	15	Barbed wire	1	Section	Metal	Drawn	Brown	1867-present	2-strand/encrusted
	1	16	Metal band	1	Section	Metal	Sheet machined	Brown	Unknown	Encrusted
	1	17	Carriage bolts	2	Intact	Metal	Molded	Brown	1818-present	4 1/2 " length, encrusted
	1	18	Round nail	2	Intact	Metal	Extruded	Brown	1890-present	2 1/2" & 4 1/4" length, encrusted
	1	19	Masonary nails	1	Intact	Metal	Extruded	Brown		3 1/4" length, encrusted
	1	20	Electrical cap switch	1	Fragment	Zinc	Assembled	Gray	Indeterminate	Unknown function, encrusted
Economy & Production										
	1	21	Slag	1	Fragment	Metal	Melted	Gray	Indeterminate	A smelting or furnance by product
Unidentifiable										
	1	22	Bottle	1	Body	Glass	Automatic Bottle	Green	1904+	Side seam present
	1	23	Bottle	1	Body	Glass	Automatic Bottle	Amber	1904+	Side seam present
	1	24	Bottle	1	Body	Glass	Molder	Clear	1930+	
	1	25	Bottle	1	Base	Glass	Molded	Purple	1880-1915	Embossed "4" on base
	1	26	Vessel, Decorative	1	Body	Milkglass	Molded	White	1870+	
TOTAL				**37**						

Native Ceramic Analysis

C. Dean Wilson

A total of 86 native sherds were recovered during the monitoring of a hand-excavated trench just outside the New Mexico Museum of Art. A total of six of the sherds recovered (5.8 percent of the total sherds) represent prehistoric types. These include one Kwahe'e Black-on-white, four Santa Fe Black-on-white, and one Glaze-on-red Undifferentiated sherds (Table 3), and thus comprise types that could be potentially associated with Late Development, Coalition, or Classic periods.

The remaining 80 sherds represent types indicative of an occupation dating to the nineteenth century. Pottery associated with this occupation includes 37 sherds (46.3 percent of all historic sherds) assigned to a single micaceous type, 21 sherds (26.7 percent of the historic sherds) assigned to four plain ware types, and 22 sherds (27.5 percent of the historic sherds) assigned to five Tewa polychrome types. This combination of pottery seems to reflect everyday use that may be associated with a Hispanic component dating to sometime during the nineteenth century. A component dating after AD 1800 seems to be indicated by the common occurrence of polished micaceous utility ware, the occurrence of polished gray and black ware as the dominant plain ware, and Tewa polychromes sherds that all appear to have derived from Powhoge Polychrome. A component dating to before AD 1880, the beginning of the Railroad period, may be indicated by large frequencies of utility wares, including micaceous jars with creosote, which were often used for cooking; after the railroad came, cooking vessels were replaced by metal pots.

The presence of plain ware and polychrome bowls, which also served a household function, further supports a pre-railroad occupation, as after this time polychrome bowls were produced predominately for the tourist trade. Other evidence is the absence of types known to have been exclusively produced after AD 1880. Still, the presence of a relatively high frequency of relatively thick polychrome jar sherds could indicate that some of this pottery may date to the late nineteenth century. The utilitarian nature of these assemblages also seems to indicate an Hispanic household not yet well-connected to the larger American system that supplied manufactured pottery, metal, and glass for domestic use; the items in the excavated assemblage indicate instead acquisition through trade with surrounding Tewa Pueblo groups or even production by Hispanic potters who sometimes manufactured Pueblo-like utility wares.

Table 3. Distribution of ceramic types

		Count	Col %
Prehistoric white ware			
	Kwahe'e Black-o-white	1	1.2
	Santa Fe Black-on-white	4	4.7
Prehistoric glaze ware			
	Glaze-on-red Undifferentiated	1	1.2
Historic micaceous			
	Polished Interior with Mica Slip	37	43
Historic plain ware			
	Tewa Buff Undifferentiated	4	4.7
	Tewa Polished Gray	4	4.7
	Tewa Polished Red	5	5.8
	Tewa Unpolished Black	8	9.3
Historic Tewa Polychrome			
	Tewa Polychrome Painted Undifferentiated (Two Slips)	3	3.5
	Black-on -cream (Undifferentiated)	16	18.6
	Powhoge Polychrome	1	1.2
	Historic White Cream Slipped Unpainted	1	1.2
	Historic Unpainted Red and Cream Slipped	1	1.2
Table Total		**86**	**100**

Fauna Analysis

Nancy J. Akins

A single bag of fauna from the 2013 trench excavation was analyzed. This was FS 1 from the trench grid 394 (9783.23) N 41 (5000.43) E and was collected from the surface down to 1.3 m in depth.

All of the bone is probably from domestic animals, mainly sheep or goat (48.4 percent) or cattle (21.0 percent), plus a single chicken bone (1.6 percent) (Table 4). The rest are indeterminate pieces that are probably from sheep, goat, or cattle. Most are small fragments of elements with 62.9 percent of the assemblage comprising less than 10 percent of an element. Cattle specimens tend to be more fragmented (53.8 percent are < 10 percent of the element; 46.2 percent are from 10 to 50 percent of the element) than sheep or goat (46.7 percent are < 10 percent, 36.7 percent are from 10–50 percent, and 16.7 percent are 50–75 percent of the element). The only complete bone is a chicken radius.

Weathering and butchering practices contributed to the fragmentation. Over half are checked (54.8 percent) and many are root-etched (16.1 percent). Both commercial and hand-butchering practices were observed (Table 5). Cattle have more saw cuts but the only steak or chop cut was on a sheep or goat bone.

Both the animals represented and the butchering practices suggest a late nineteenth- or early twentieth-century deposit. While the sample is small, the relative amounts of cattle and sheep or goat is most consistent with nineteenth-century Hispanic deposits from the South Capitol area (33.3 percent cattle and 66.7 percent sheep or goat). In those deposits, the amount of cattle in the assemblages increased in the twentieth-century deposits and comprised 49.4 percent of the assemblage attributed to Hispanics and 51.5 percent of those attributed to Anglos.

Table 4. Fauna recovered from monitoring	

	Immature		Juvenile		Mature		**Total**	
	N=	%	N=	%	N=	%	N=	%
Small ungulate			4	80	1	20	5	100
Large ungulate			2	28.6	5	71.4	7	100
Medium to large ungulate	1	16.7			5	83.3	6	100
Cattle			9	69.2	4	30.8	13	100
Sheep or goat	3	10	21	70	6	20	30	100
Chicken					1	100	1	100
Total	4	6.5	36	58.1	22	35.5	62	100

Table 5. Faunal Processing

Fauna

Taxon	Element	Processing	Location	Second processing	Location	Total
Small ungulate	Long bone	None	.	None	.	3
		Spiral break	Midshaft	None	.	1
	Flat bone	None	.	None	.	1
Large ungulate	Long bone	None	.	None	.	5
	Flat bone	None	.	None	.	2
Medium to large ungulate	Long bone	None	.	None	.	1
		Defleshing	Midshaft	None	.	1
	Cranium	None	.	None	.	4
Cattle	Mandible	None	.	None	.	1
	Rib	None	.	None	.	3
		Sawn	Proximal	Chops	Proximal shaft	1
			Midshaft	Defleshing	Midshaft	1
		Impact	Proximal shaft	Defleshing	Interior	1
		Defleshing	Midshaft	None	.	1
	Scapula	Sawn	Split horizontal	Sawn	Diagonal	1
	Humerus	Impact	Distal shaft	None	.	1
	Metacarpal	Chops	Posterior	Defleshing	Proximal shaft	1
		Defleshing	Midshaft	None	.	1
	First phalanx	None	.	None	.	1
Sheep or goat	Cranium	None	.	None	.	1
	Mandible	None	.	None	.	4
	Cervical vertebra	None	.	None	.	2
	Lumbar vertebra	None	.	None	.	1
	Rib	None	.	None	.	7
		Substantial cut	Proximal shaft	None	.	1
		Defleshing	Interior	None	.	1
	Scapula	None	.	None	.	1
	Innominate	None	.	None	.	1
	Humerus	None	.	None	.	1
	Radius	Defleshing	Midshaft	None	.	1
	Metacarpal	Defleshing	Distal shaft	None	.	1
	Femur	None	.	None	.	3
		Sawn	Proximal shaft	Chops	Distal shaft	1
		Spiral break	Midshaft	None	.	1
		Steak or chop	Proximal shaft	None	.	1
	Tibia	None	.	None	.	1
	Calcaneous	None	.	None	.	1
Chicken	Radius	None	.	None	.	1
Total						**62**

Summary and Recommendations

Summary

Archaeological monitoring resulted in exposure of four cultural strata and one subterranean feature along the west face of a trench adjacent to the west foundation of the New Mexico Museum of Art's St. Francis Auditorium. Stratigraphic deposits indicated natural alluvium below a sandy loam, which may represent a compressed or churned cultural deposit possibly containing Spanish Colonial to Territorial-period artifact content. Overlaying strata contained adobe and mortar lenses, which suggest U.S. Army barracks demolition and museum construction. The uppermost fill was churned and impacted by modern construction and remodeling activities. At the auditorium's northern extent, construction or remodeling—possibly associated with foundation work or utility installation—has obliterated stratified deposits. The single feature identified in the trench profile was a brick structure that resembled a vaulted, subterranean utility tunnel. The tunnel's age is unknown, although it could be associated with U.S. military occupation or with subsequent Museum of Art systems facilities installed in 1917.

Artifacts observed throughout the trench excavations were opportunistically collected and analyzed. Although the assemblage is from mixed strata some basic inferences can be made from the various assemblages. All artifact classes appear to date to the late nineteenth to early twentieth century. Most of the Euroamerican "Construction and Maintenance"-related artifacts were probably associated with construction and remodeling episodes at the Museum of Art. The remaining Euroamerican artifacts may have come from a domestic trash scatter that predates museum construction. The utilitarian nature of the native ceramic assemblage seems to indicate a Hispanic household that still, in part, relied on local goods rather than purchasing newly available Euroamerican goods made accessible by the Santa Fe Trail or the Railroad. Presence of Euroamerican ceramics and carriage bolts may seem to contradict this finding, but the assemblage is small and limited in variety. Fauna recovered from the trench also suggests a similar time period and economic status. The animals represented (cow and sheep/goat), along with the butchering practices, suggest a late nineteenth- or early twentieth-century deposit. The relative amounts of cattle and sheep or goat are most consistent with nineteenth-century Hispanic deposits from the South Capitol area and suggest that the population they derived from were of working- to middle-class economic status.

The native ceramic and faunal assemblages—comprising predominantly local utility ware and significant percentages of sheep or goat—are particularly intriguing (and somewhat ironic) because of the neighborhood context. In 1887, Filipe B. Delgado, a prominent Santa Fe Trail trader, purchased property across the street, on Lincoln Avenue. Delgado was a prominent and wealthy citizen with a large family and ancestral ties to New Mexico (SR58; NMCRIS). During the Santa Fe Trail–era, his family would have had unusually good access to exotic goods from both Mexico and the United States. The lot his house still sits on today, across the street from the Museum of Art, was previously the site of the picket line for cavalry horses and wagon trains at the end of the Santa Fe Trail.

Results of artifact analysis seem to contradict expectations for refuse contributed by Santa Fe's privileged citizens, specifically that from officers' quarters located along Grant and Lincoln Avenues. Artifact assemblages could, however, be in some way associated with the soldiers' barracks that were originally located on the site of the current Museum of Art. If so, soldiers garrisoned in the area may have been paid poorly enough to have limited access to manufactured goods. This seems strange after the arrival of the railroad, though native goods may have been discarded relatively quickly, in favor of imports, leading to an assemblage with a disproportionate amount of local native utility ware. Another explanation could be that artifacts come from redeposit, and that the assemblage derives from soil that could have been brought in from elsewhere to level the ground in advance of Museum of Art construction.

Recommendations

Archaeological monitoring was concluded by Office of Archaeological Studies on October 2, 2013. This activity

exhausted the archaeological potential of any cultural deposits directly impacted by construction and OAS recommended that the contractor continue with structural repairs to the building as planned.

The narrow trench excavated in this area has documented archaeological deposits directly adjacent to the St. Francis Auditorium. However, the Museum of Art is located on a previously recorded archaeological site, LA 930, which is listed on both the State Register of Cultural Properties and the *National Register of Historic Places* (SRCP 379; NRHP 73001152; SRCP 244). Various monitoring and testing projects conducted during and since the museum's construction have demonstrated the presence of diverse archaeological deposits encountered at often unpredictable depths, as well as small islands of potentially intact and rare Pueblo Revolt–era remnants. This variability is largely a result of the properties' recent history of construction and remodeling as well as activities at Fort Marcy. Potential for previously unexcavated resources and the site's protected status argue for archaeological monitoring or excavation of any future subterranean disturbance deeper than 30 cm. Any work conducted for maintenance or improvements should be undertaken with the awareness that cultural resources may be encountered.

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