Archaeological Testing at the Museum of Fine Arts, LA 930, Santa Fe, New Mexico

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Museum of New Mexico ○ Office of Archaeological Studies

Archaeology Notes 361
2005

MUSEUM OF NEW MEXICO

OFFICE OF ARCHAEOLOGICAL STUDIES

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ARCHAEOLOGY NOTES 361

SANTA FE 2005 NEW MEXICO

Administrative Summary

Between October 27 and November 2, 2004, the Office of Archaeological Studies (OAS), Museum of New Mexico, responded to a request from Mac Rodriguez, capital project coordinator; Marsha Bol, director, Museum of Fine Arts (MFA), Department of Cultural Affairs; and Kate Leriche, architect, Spears Architects, to conduct archaeological investigations in advance of the replacement of runoff drainage lines for the Museum of Fine Arts along Palace and Lincoln Avenues, Santa Fe, New Mexico. The hand excavation of four test units and the monitoring of some 23 m of hand-dug drainage trenches on the east and south sides of the Museum of Fine Arts building revealed evidence of intact cultural deposits dating to the Spanish Colonial era and the Fort Marcy occupation of the locale. The cultural deposits verify that intact cultural resources survive outside of the MFA basement excavations. Artifact assemblages included chipped stone material, prehistoric and historic period ceramics, faunal remains, and Euroamerican ceramics. Most of the artifacts were from disturbed contexts. All of the intact cultural resources were preserved in place, and proposed drainage ditches were rerouted along the disturbed foundations of the MFA building to the road by way of previously dug utility trenches.

Excavation Permit No. SE-218
MNM Project No. 41.760 (Fine Arts Testing)
NMCRIS Activity No. 91060

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Introduction

The Office of Archaeological Studies (OAS), Museum of New Mexico, responded to a request from Mac Rodriguez, capital project coordinator; Marsha Bol, director, Museum of Fine Arts (MFA), Department of Cultural Affairs; and Kate Leriche, architect, Spears Architects, to conduct archaeological investigations in advance of the replacement of runoff drainage lines for the MFA along Palace and Lincoln Avenues, Santa Fe, New Mexico (Figs. 1 and 2). The MFA is within the Santa Fe Historic District (SR #260).

The site of the museum and cultural deposits found there are recorded in the New Mexico Cultural Resources Information System (NMCRIS) as LA 930, a site that has variously encompassed the MFA, the Fort Marcy Officer's Quarters or Residence, Ogapoge, and, immediately to the north, the Edgar Lee Hewett House. The drainage replacement is necessary because of the collapse of existing drainage lines and resulting flooding of the museum basement, as documented by Spears Architects in March 2004. The project is on state land administered by the Regents of the Museum of New Mexico.

Fieldwork took place between October 27 and November 2, 2004. It was conducted by Charles A. Hannaford, assisted by Matthew Barbour, Candace Lewis, and Susan Moga. The one-week field phase took twenty person-days to complete. Candace Lewis worked an additional nine days monitoring the project. Timothy D. Maxwell, director of OAS, was the principal investigator. Maps were drafted by Rob Turner, and the report was edited by Tom Ireland. The testing program was conducted under State of New Mexico Archaeological Excavation Permit SE-218.

Before the fieldwork, the *National Register of Historic Places* and *State Register of Cultural Properties* were consulted. No properties listed on, nominated to, or approved for submission to either inventory are within the project boundaries.

This report complies with the provisions of the Historic Preservation Act of 1966, as amended.

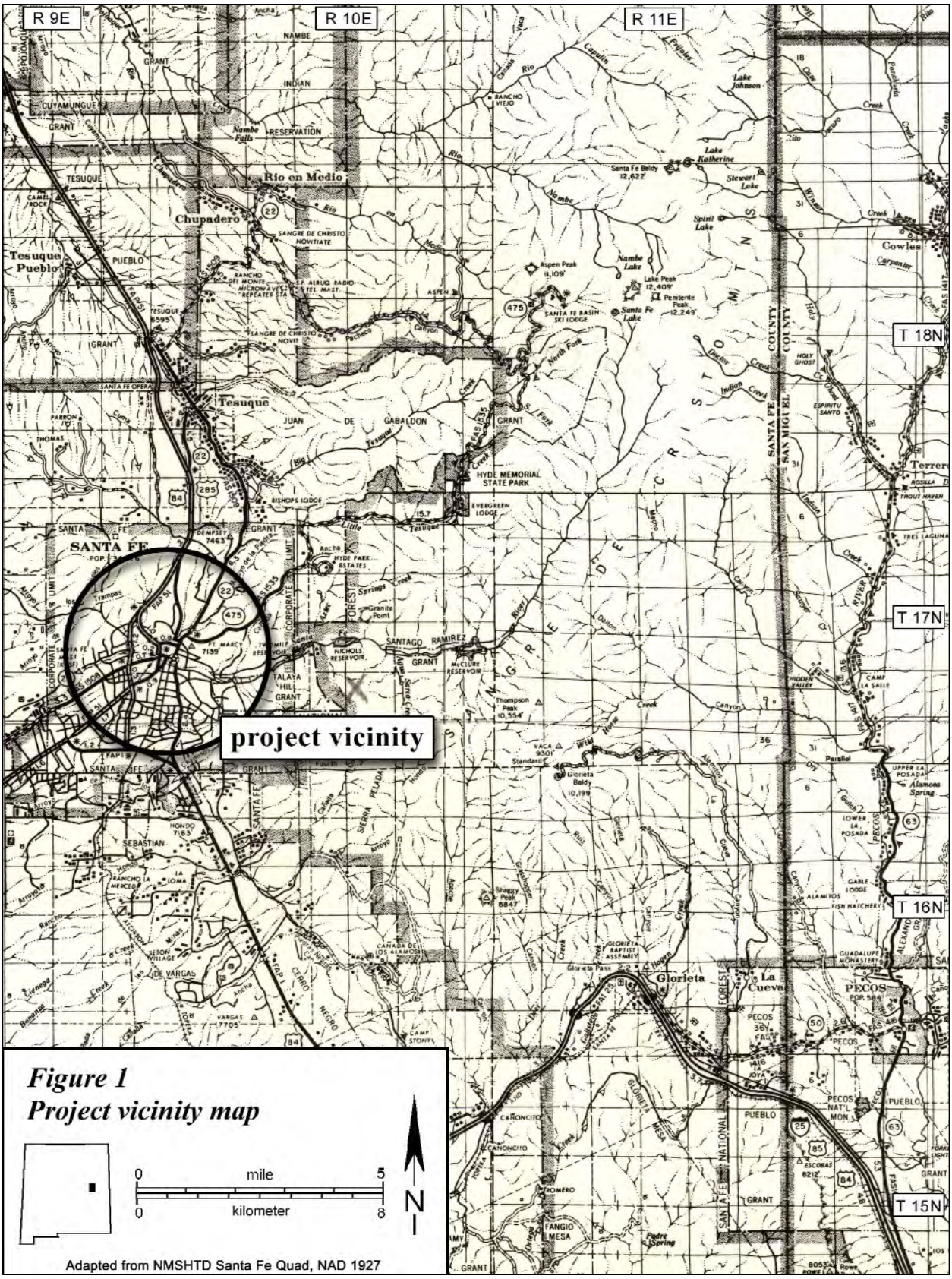

Figure 1
Project vicinity map

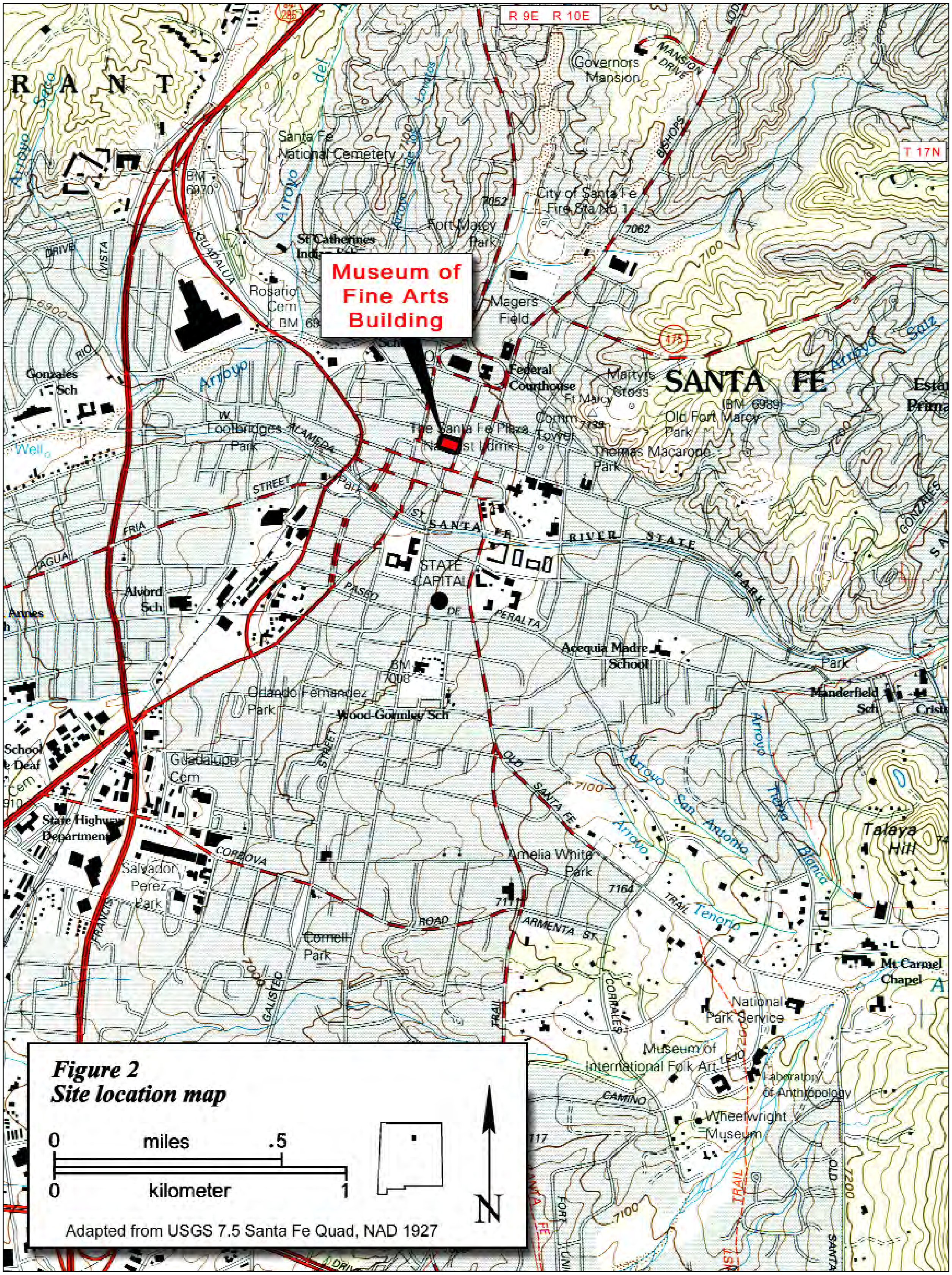

Figure 2
Site location map

Environment

The project area, in downtown Santa Fe, is characterized by modern, urban, introduced vegetation. The immediate vicinity is characterized by asphalt roads, concrete sidewalks, and buildings. Test pits were placed in garden areas between public sidewalks and the MFA. Pertinent environmental information can be found in a report on the excavation of the Santa Fe Plaza Community Stage (Lentz 2004).

Archaeological Context

An account of the construction of the MFA and the excavations that took place in 1979 are available in Seifert (1979), Post and Snow (1982), Martinez (1994), Hannaford (1997), and articles by Peckham and Snow (1982) and Peckham (1982). A brief history of the Palace of the Governors, which is intimately associated with this location, is in Post (2003:1-3), and an expanded history is in Shishkin (1972). Most historical narratives of the Palace of the Governors deal with the years between1610 and 1912. Archaeological and historical correlations based on 120 years of casual and systematic investigations are summarized in Snow (1974) and Seifert (1979). The MFA is directly across Lincoln Avenue from recent OAS excavations at the Palace of the Governors (Post 2002, 2003, n.d.a). The following discussion focuses on the work that has occurred at the MFA, especially in the areas to be affected by this project.

The MFA has been the site of extensive activity in the past. Pueblo occupation of the downtown Santa Fe area extends back to at least 1000 A.D., and pottery dating to the 1300s and 1400s has been recovered in many places in and around the plaza. This area was also occupied throughout the history of Spanish settlement in Santa Fe, that is, before and after the Pueblo Revolt of 1680. The MFA property was once the site of the Santa Fe Presidio, which was converted to the headquarters of Fort Marcy after the arrival of the Americans in 1648. The headquarters were razed in 1915, and the museum was built in 1917. Additions were made to the museum in about 1979. Its maintenance and that of its utilities has been on-going. In spite of all this earth moving, undisturbed deposits do remain (Peckham and Snow 1982; Seifert 1979; Martinez 1994; Hannaford 1997; Post 2003). Excavations at the Palace of the Governors indicated that the likelihood of undisturbed deposits increases greatly below about 60 cm (Post n.d.b).

Two projects have taken place in the immediate vicinity of the east entrance to the building (no systematic observations are available for the south side of the building). Work under Lincoln Avenue (Martinez 1994) revealed a dense trash deposit and cobble foundation remnants (Fig. 3). Work along sewer lines in 1964 encountered several foundations, wall remnants, and an irrigation ditch. The subsurface of Lincoln Avenue is now listed in the NMCRIS files as LA 114210 (formerly LA 4450 #52). LA 114210 was the number used by Martinez (1994) during monitoring.

The MFA property itself is considered part of LA 930. Adjacent to the MFA foundation, the OAS documented almost entirely disturbed fill, probably resulting from construction of the building and demolition of the Fort Marcy headquarters (Hannaford 1997). At the east edge of the 1.95 by 1.95 m excavation, directly adjacent to our second proposed test unit, intact trash deposits of unknown extent were recorded. These deposits could connect with the deposits observed under Lincoln Avenue (Fig. 3).

Intact cultural deposits and features from all historic periods except the Pueblo Revolt were encountered in LA 111322. More than 195,000 artifacts were recovered, and 46 archaeological features were documented in 53 sq m of excavation. Stratified Spanish Colonial period cobble foundations were found below the existing 1867-

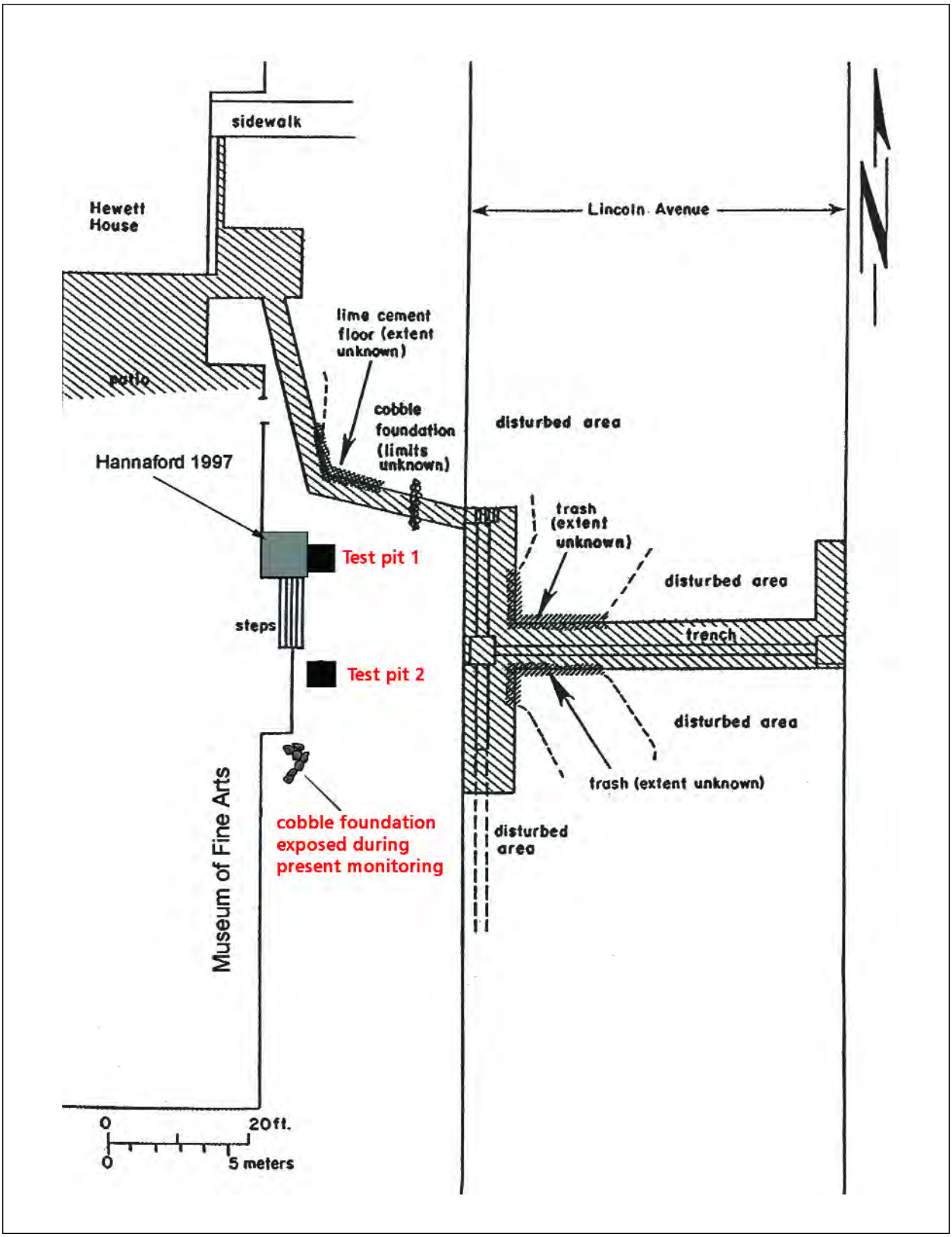

Figure 3. Location of prior excavations.

69 building foundation, indicating the high level of artifact recovery possible. Phase 2 excavations for what will be the New Mexico History Museum contained more than 600,000 artifacts spanning 900 years of occupation. Also uncovered were 112 architectural features and facilities, and discrete deposits from the post-1609 historic period.. During the late Spanish Colonial period, the area underwent rapid changes. There is evidence of irrigation, cemetery use, and eventually the construction of four buildings in addition to Structure 1, which was identified during Phase 1 excavations.

Results of Testing

The testing program followed field methods specified in the permit application. All excavation was by hand, using standard archaeological hand tools. Hand excavations were conducted in 10-20 cm arbitrary levels to the depth of the drainage line, not to exceed 1.2 m. All fill was screened through 1/4-inch mesh. The testing program focused on assessing the nature and integrity of the subsurface fill and the potential of the deposits to yield important archaeological information.

Excavation Units

The majority of the drainage-line replacement was within disturbed deposits of the existing drainage-line trench. The grade of the excavation stayed at or above that of the existing drainage trench. Exceptions were made at the south and east entrances of the museum, where stairway construction required a new alignment for the replacement drain line. Archaeological investigations were limited to the areas of these new alignments. Subsurface investigations consisted of the excavation of three and a half excavation units. Three complete units measured 1 by 1 m, and one half unit measured 0.6 cm by 1 m.

Test Pit 1

Test Pit 1 was at the north corner of the east porch steps and immediately adjacent to the sidewalk (Fig. 4). Hannaford's (1997) 1.95 by 1.95 m excavation unit is immediately west of Test Pit 1. This location was selected to determine if intact deposits existed east of the MFA basement excavation. The upper 70 cm of fill had been disturbed by the previous placement of various utility lines (Figs. 5, 6, and 7). The entire north 60 cm of the test pit to a depth of 1.2 m had been transected by an east-west waterline. Computer cables transect the center of the test pit to a depth of 50 cm. Two PVC water pipes related to garden irrigation and two additional computer cables run along the east side of the pit at a depth of 80 cm. A possible black electric wire was exposed in the south profile at a depth of 30 cm, and an old iron pipe of unknown function extended along the east edge of the pit.

Test Pit 1 was a classic example of a heavily urbanized environment. The upper fill had been mixed and altered by the placement of numerous utility lines. This disturbed upper fill consisted of a fine dark sandy-clay loam with mixed artifact content ranging from Spanish Colonial period sherds to recent glass and styrofoam "peanuts."

Considering the abundance of utility lines characterizing the heavily built environment at this location, it was amazing to find an intact segment of cultural fill containing two possible prepared adobe floors or use-surfaces in the south 40 cm of the test pit. This small intact cultural remnant was not excavated. The waterline to the north had previously cut through the cultural fill and provided a cramped profile for examining the cultural unit (Fig. 4). An initial layer of compact sandy clay about 25 cm thick was encountered in the southwest corner of the test pit about 70 cm below the surface. This apparent adobe wall melt rested on Floor 1 and was characterized by a thin 1 to 2 cm thick layer of prepared adobe with a slightly dark cultural stain.

The prepared floor or use-surface was exposed across the entire south wall of the test pit. Floor 1 rested on a light-colored layer of sandy clay with less cultural staining and seemingly of eolian origin. This layer was followed by about an 8 cm thick dark charcoal lens, which rested directly on Floor 2.

Floor 2 consisted of a 1 to 2 cm thick layer of prepared adobe similar in appearance to Floor 1 and also exposed across the entire south wall of the test pit. Floor 2 rested on about a 12 cm thick layer of light-colored eolian sandy clay, which was positioned over another roughly 8 cm thick dark charcoal lens. The deepest level was a coarse sandy clay with less charcoal staining, but still containing charcoal flecks. This possibly alluvial layer extended to at least 1.2 m below the surface. It is not known how deep the cultural material extended because the excavation ended 1.2 m below the surface.

Test Pit 1 revealed that the upper fill to a

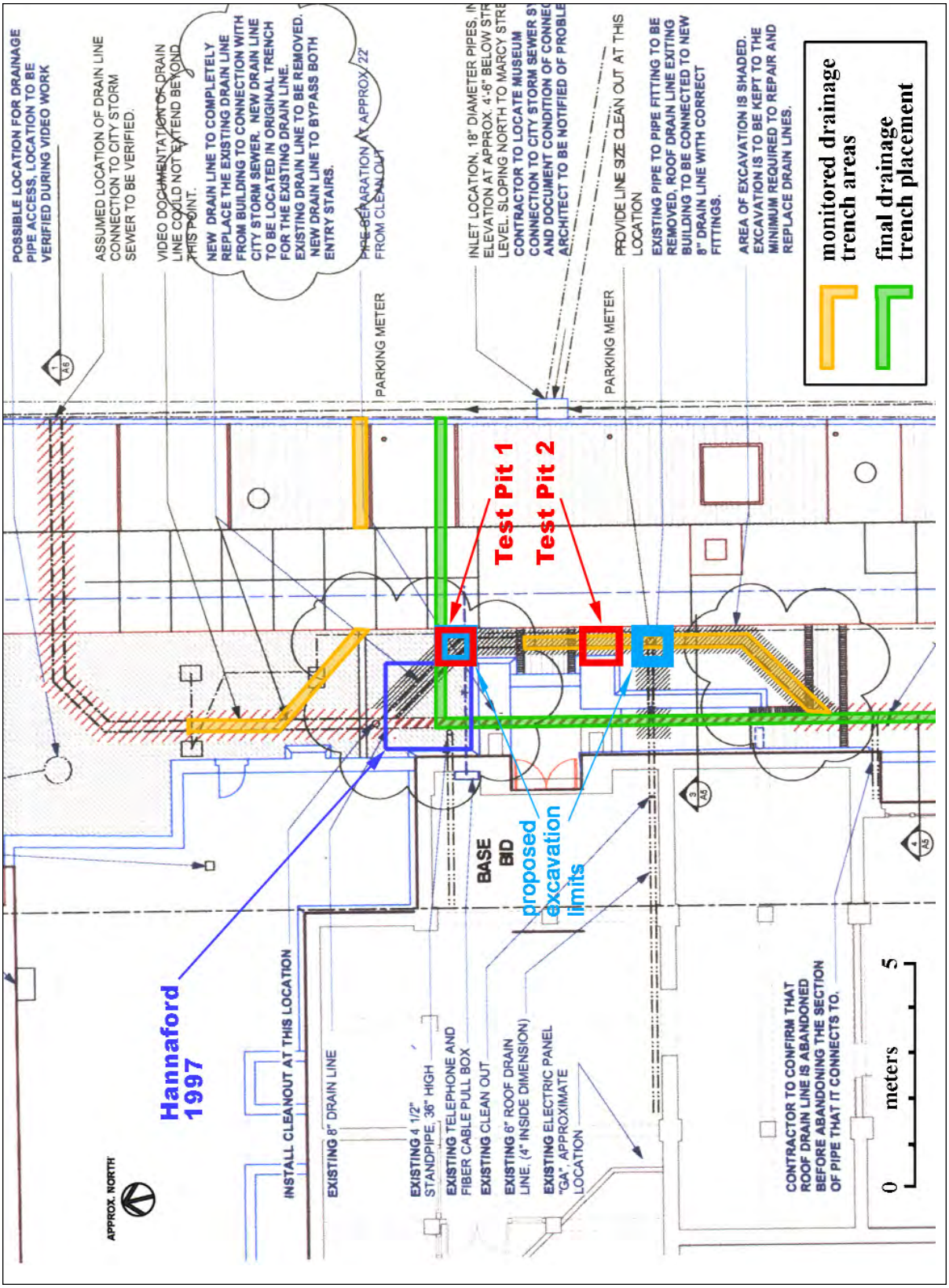

Figure 4. Proposed drainage pipe replacement east of the Museum of Fine Arts.

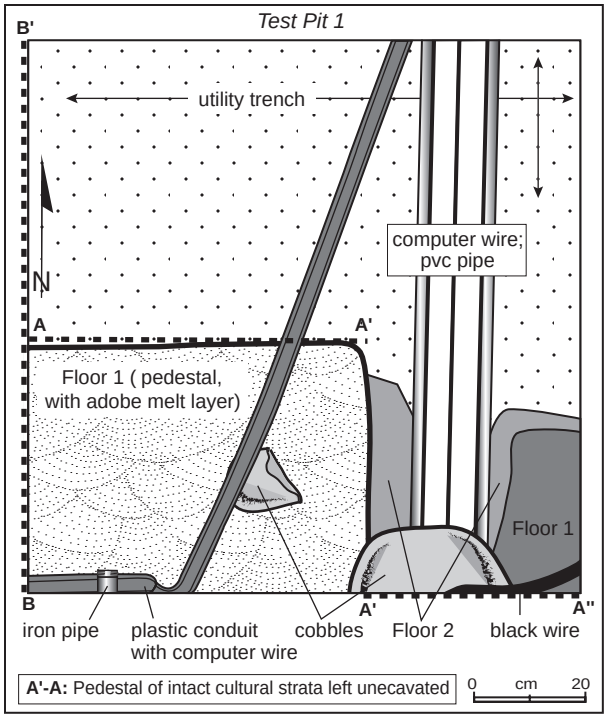

Figure 5. Plan of Test Pit 1.

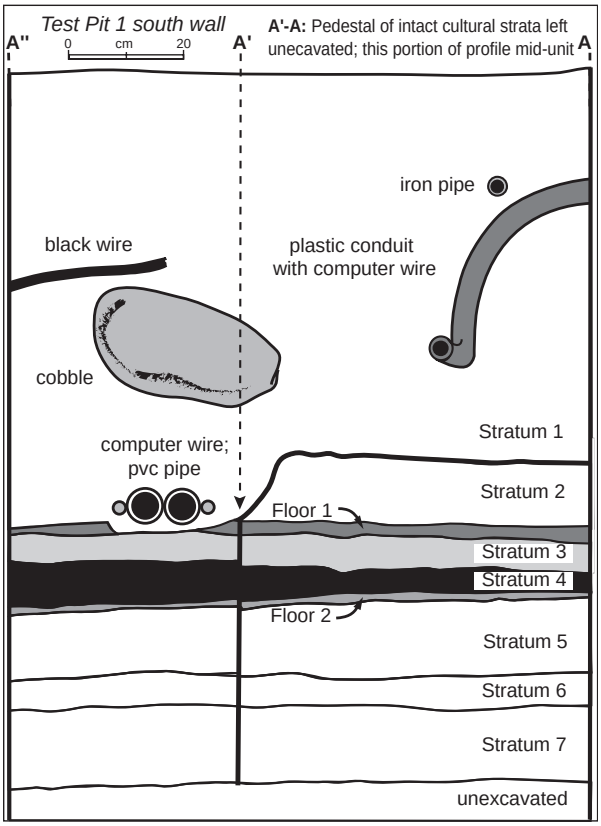

Figure 6. Profile of south wall of Test Pit 1.

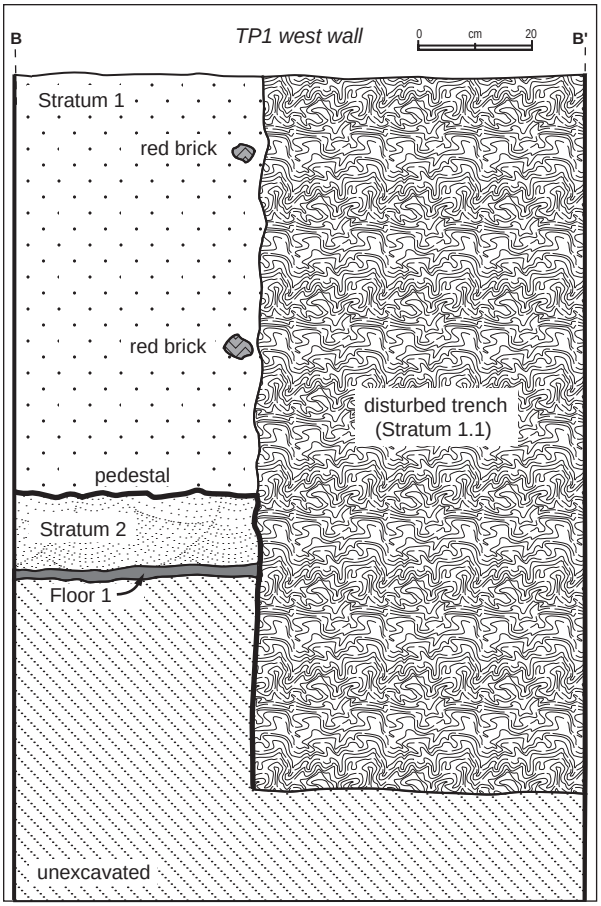

Figure 7. Profile of west wall of Test Pit 1.

depth of about 70 cm below the surface consisted of mixed deposits. However, intact cultural deposits were encountered in a 40 cm segment along the south side of the trench. The intact cultural material extended from about 70 cm to a depth of at least 1.2 m. The profile revealed two prepared floors or use-surfaces and two dark charcoal lenses. The two floors indicated an intact architectural unit of unknown size extending to the south and west. Material immediately east and north would have been destroyed by previous utility placements. No walls associated with the floors were encountered in the test pit, although adobe wall melt covered Floor 1. Floor 2 was covered with a charcoal lens, and an eolian deposit suggested that the room was abandoned before the construction of Floor 1.

The adobe wall melt and floors, combined with the small associated assemblage of sherds and animal bone, indicate an architectural feature dating to the Spanish Colonial era. The intact architecture and associated refuse are likely to yield additional information important to the understanding of Santa Fe's Spanish Colonial era. This intact cultural material was preserved in place, and all drainage replacement was confined to the north 60 cm of the test pit, which had already been disturbed during placement of the large water line extending west to the street.

Test Pit 2

Test Pit 2 was placed at the south corner of the east porch steps and immediately adjacent to the sidewalk (Fig. 4). Test Pit 1 was about 3 m to the north. This location was chosen to determine whether intact deposits were present in a landscaped garden east of the MFA basement excavation. The initial 10 cm of fill was landscape disturbance characterized by potting soil and mulch. This was followed by a massive layer of jumbled wall fall extending to a depth of 80 cm (Figs. 8 and 9). The jumbled wall consisted mainly of large unshaped river cobbles averaging about 20 by 20 by 10 cm. Almost the entire eastern half of the wall had been previously disturbed by a north-south utility trench. The utility trench was 55 cm wide and had been dug to a depth of about 80 cm. The utility trench contained an electric line for the garden lamps and the same waterlines encountered in Test Pit 1. Cobbles from the eastern half of the wall had been removed during the digging of the trench and apparently thrown in randomly as the trench was filled. The disturbed soil matrix surrounding the cobbles was a loose sandy loam with mixed artifact content including Spanish Colonial period sherds and animal bone, Territorial period white wares and glass, and abundant recent glass and plastic.

The western half of the wall was still intact and showed that the cobble wall had originally stood at least four courses (80 cm) tall. The base of the wall consisted of a massive lime-mortar footing about 15 cm thick. Double-wide cobbles set in the footing show that the original wall had been about 60 cm wide. A small 35 by 20 cm excavation unit, laboriously picked through the very hard lime mortar footing, encountered about 15 cm of dark gray sandy loam with charcoal staining. The cultural affiliation and depth of the fill below the lime mortar footing was not deter-

Figure 8. Cobble wall, Test Pit 2.

mined, but is probably affiliated with the Spanish Colonial period. Subsurface excavation was ended at this point.

Test Pit 2 uncovered a segment of the lime mortar footing and cobble foundation stub associated with the headquarters of the Fort Marcy Military Reservation. The foundation segment exposed in Test Pit 2 is a portion of a north-south wall and would have been part of the east wall of the Headquarters Building. Maps show that a building stood here from the beginning of the Territorial period in 1846. The upper walls had been constructed of adobe bricks, which rested on the cobble foundation stub. The north profile of the test pit revealed a small 10 cm space of melted adobe and adobe fragments outside the west edge of the cobble wall. This adobe probably originated from the final raising of the upper adobe wall. Several adobe lenses were also noted in the profile of a smaller 5 cm space outside the east side of the wall. The source of this adobe was less clear because of the small exposure, but it may include upper wall debris and earlier Spanish Colonial era deposits. The Territorial period foundation may have been dug into earlier Spanish Colonial era deposits that survive under and east of the exposed wall segment.

Test Pit 2 revealed intact cultural deposits east of the MFA basement excavation. A segment of the cobble and lime mortar foundation associated with the Fort Marcy Headquarters Building along with potential Spanish Colonial era deposits both beneath and to the east of the foundation are likely to yield additional information important to the history of Santa Fe's Spanish Colonial era and the Fort Marcy era. These intact cultural deposits were preserved in place, and the proposed drainage replacement was rerouted along the foundation of the MFA west of Test Pit 2.

Test Pit 3

Test Pit 3 was placed at the west corner of the south entrance steps and immediately adjacent to the sidewalk (Fig. 10). This location was chosen to determine if intact deposits were present south of the MFA basement excavation. Test Pit 3 was

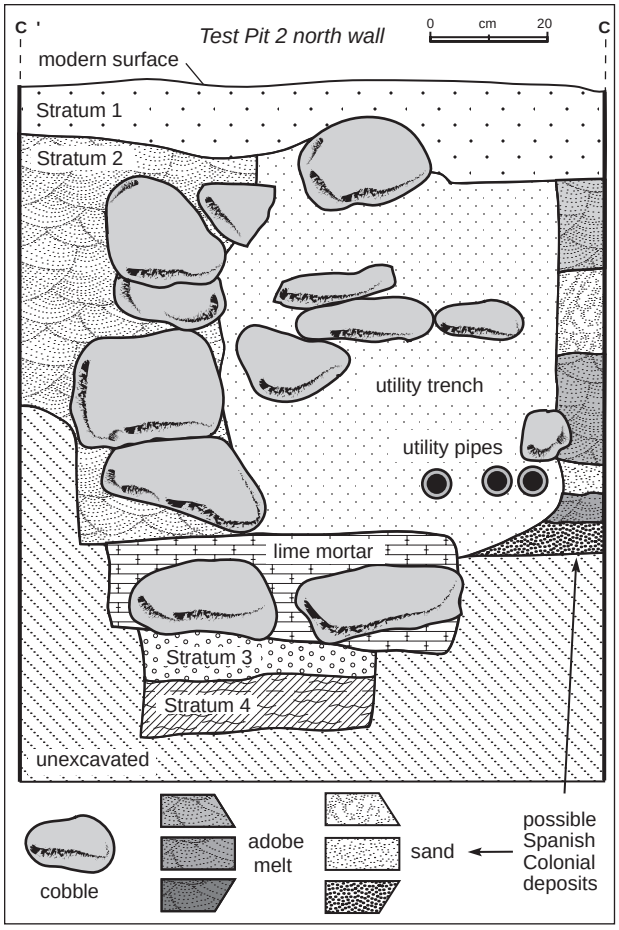

Figure 9. Profile of north wall of Test Pit 2.

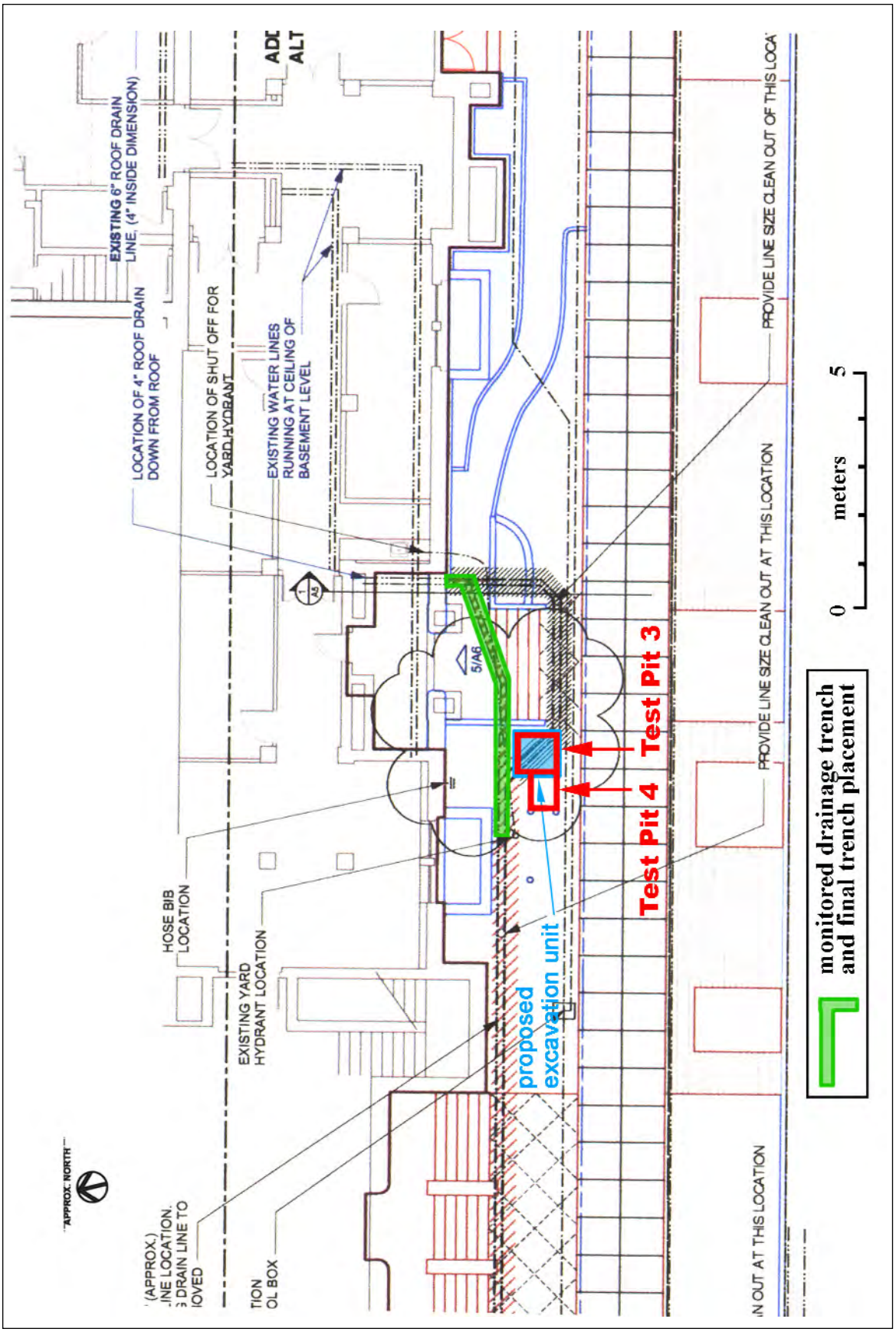

Figure 10. Proposed drainage pipe replacement south of the Museum of Fine Arts.

placed in a landscaped garden associated with the MFA building. The initial 35 cm of fill was landscape disturbance characterized by mulch, potting soil, and wet sandy clay. However, adobe walls were encountered along the south and west sides of the test pit at a depth of 35 cm (Fig. 11). The south wall was two adobe bricks wide. The bricks were orientated east-west and surrounded by a light tan mortar. The one complete adobe brick was rectangular and measured 60 cm long by 25 cm wide. This east-west wall was originally about 60 cm wide. The south 15 cm of the wall against the south side of the test pit had been removed during installation of a utility line.

A second adobe wall was against the west wall of the test pit. This wall was only one adobe brick wide, and the bricks trended north-south. The wall was 25 cm wide and was apparently an interior dividing wall, while the thicker south wall was a major exterior wall in which two thicknesses added insulation. A 1 cm layer of white lime plaster was on both the east and west faces of this wall and on the interior surface of the south wall (Fig. 12). The junction of the walls formed the interior corner of a room extending beyond the exposed walls in the test pit to the north and east.

The thickness of the adobe bricks and the number of adobe courses was not ascertained because the adobe was wet. However, both adobe walls rested on cobble foundations at a depth of 70 cm. The remaining adobe wall stubs were therefore about 35 cm tall. The layer of white plaster extended to the base of the adobe walls. The floor of the room was probably at the juncture of the adobe and cobbles, but no evidence of the floor was encountered in the exposed 70 cm by 30 cm corner. Both cobble foundations were two courses tall, and the lowest cobbles rested at a depth of 82 cm. The south cobble foundation was 60 cm wide and constructed of unshaped river cobbles averaging about 20 by 10 by 5 cm. The cobble foundation wall was roughly four cobbles wide, but cobbles were randomly placed in the foundation trench and cemented with a light tan mortar. The cobble foundation of the narrower north-south wall was 25 cm wide. The two courses were constructed primarily of double-wide 20 by 10 cm cobbles, but also randomly interspersed with larger single 25 by 25 cm cobbles and smaller triple-wide cobbles. The cobbles were set in a similar light tan mortar.

All of the fill to the base of the cobble foundations at a depth of 92 cm is considered mixed and disturbed by both the original dismantlement of the building and the subsequent construction of the Museum of Fine Arts. The soil matrix was a wet brown sandy clay with mixed artifact content ranging from prehistoric sherds and lithics, Spanish Colonial era sherds and animal bone, Territorial era white wares and glass, and abundant recent glass and plastic. The brown sandy clay below the cobble foundations below the surface was considered intact and undisturbed from a depth of 92 cm to 1.2 m. No recent material was found in these lower levels. Gravel content increased in this lowest fill, which was probably associated with the Spanish Colonial era. Excavation ended at 1.2 m below the surface. An auger test shows that this layer continued down at least another 20 cm, but gravel content prevented further penetration.

Test Pit 3 revealed cobble foundations and adobe wall stubs associated with the headquarters building of the Fort Marcy Military Reservation. The wall segments include a portion of the primary south wall of the headquarters building and an interior dividing wall forming the corner of a room in the northeast corner of the test pit. Potential Spanish Colonial era deposits are beneath the foundations from a depth of 92 cm to at least 1.2 m. The structural remains and lower deposits are likely to yield additional information important to the understanding of both Santa Fe's Spanish Colonial era and the Fort Marcy era. These cultural deposits were preserved in place, and the proposed drainage replacement was rerouted along the disturbed foundation of the MFA north of Test Pit 3.

Test Pit 4

Test Pit 4 was placed adjacent to the west edge of Test Pit 3 (Fig. 12). This location was chosen to determine if the south wall exposed in Test Pit 3 extended west into the test pit.

Only the south 60 cm of the test pit was excavated. The top of the adobe wall was exposed below the garden disturbance at a depth of 25 cm. Almost 50 cm of the wall had been transected by the same utility line exposed along the south side of Test Pit 3. Additional plastic irrigation lines

Figure 11. Adobe walls and room corner, Test Pit 3.

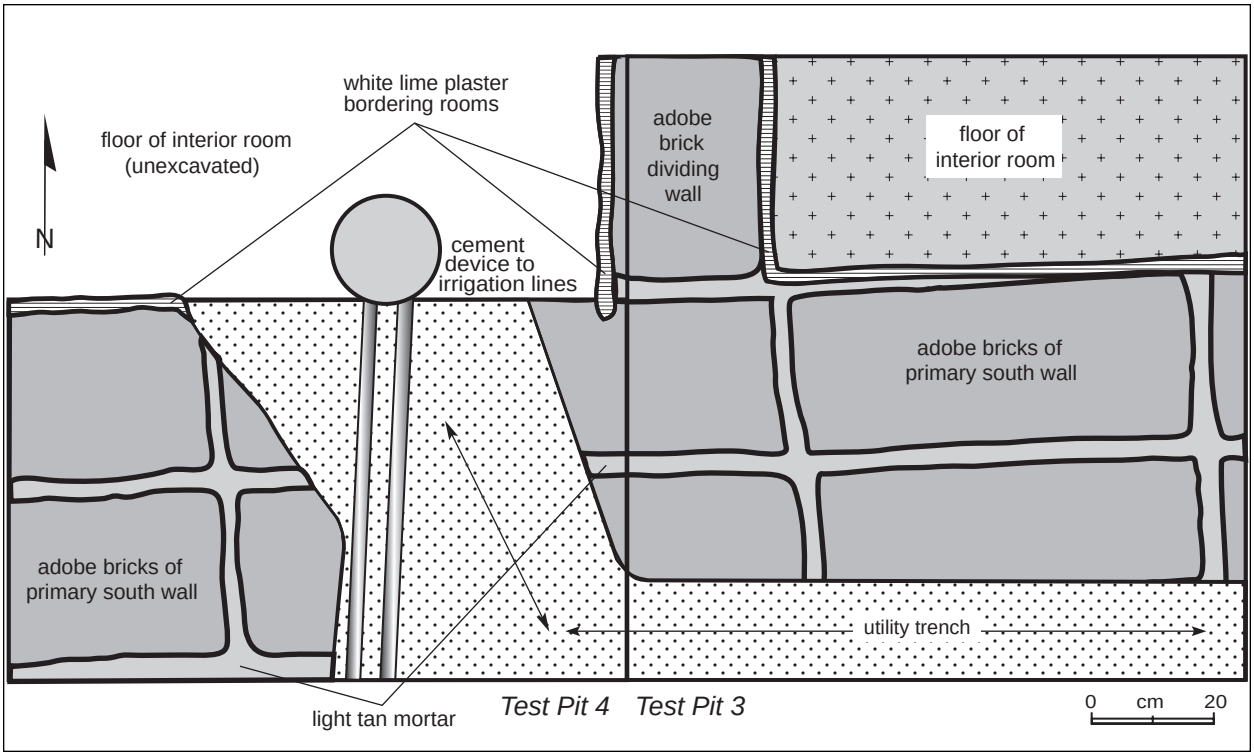

Figure 12. Plan of adobe walls and room interior corners, Test Pits 3 and 4.

also cut through the wall. A 1 cm layer of white lime plaster coated the interior north surface of the adobe wall. Test Pit 4 confirmed that the south wall extended across the test pit and continued to the west. Also, the corner of a second room was north of the wall and west of the dividing wall exposed in Test Pit 3 (Fig. 12). The small exposed segment of the second room measured about 95 by 30 cm, and the room extended to the north and west. Excavation was ended with the discovery of the south wall and the second room. All of the artifacts recovered from the disturbed garden fill and wet sandy clay are considered of mixed provenience. Test Pit 4 confirmed the presence of a second room associated with the Fort Marcy Headquarters Building. These intact cultural deposits were preserved in place, and the proposed drainage replacement was rerouted along the disturbed foundation of the MFA to the north.

Monitoring

After excavation of the test pits, 23 m of drainage trenches were monitored as they were hand-excavated by the construction crew. The trenches were about 50 cm wide and ranged from 90 cm to 1.4 m deep. Animal bone and ceramic artifacts noted during the monitoring were all from disturbed contexts, and these artifacts were not collected.

The monitoring encountered one possible cobble-wall segment 1 m south of the wheelchair ramp and 2 m south of Test Pit 2 (Fig. 4). Cobbles were exposed at a depth of 60 to 90 cm. The exposed wall segment was constructed of river cobbles averaging about 10 by 10 cm and set in a dark brown mud mortar containing charcoal inclusions. It was constructed of two to three courses, although the cobbles were rather jumbled. It extended east-west across the trench, and other cobbles were exposed in the east profile for about 1 m. A possible room corner was suggested but not verified because of the small and cramped trench exposure. The segment is apparently part of a cobble foundation, but its cultural affiliation was not determined. The wall is at a diagonal to the nearby Fort Marcy Headquarters Building foundation exposed in Test Pit 2. The two walls are not apparently related. The diagonal orientation and mud-mortar construction suggest an earlier cultural affiliation, most likely the Spanish Colonial era.

The cobble-foundation segment was preserved in place after exposure. The proposed final drainage replacement was ultimately rerouted along the foundation of the MFA building, and the wall was avoided. The drainage trench was extended to the street on the east side by way of a previously dug utility trench.

Material Culture

The testing program recovered prehistoric chipped stone and ceramic artifacts, bones, and Euroamerican ceramics. The majority of the artifacts were recovered from mixed and redeposited contexts with no surviving integrity. The various artifact categories were thoroughly mixed with each other and with recent glass, metal, plastic, and building materials. The recent material types were not collected. The artifacts are important in terms of representing the range of artifacts types present in the site area, but their disturbed context and the scarcity of intact deposits hinder interpretation.

Chipped Stone Artifacts

The chipped stone artifact assemblage consisted of 38 items (Table 1). The assemblage is composed of five material types, of which red Madera chert is the most common. In general, the assemblage is composed of locally available cherts. One piece of intrusive obsidian originated in the Jemez Mountains. The entire assemblage is composed of unutilized debitage derived from core-reduction activities. The various material types are represented by similar reduction strategies characterized by small secondary flakes with single platforms and an absence of cortex. The absence of cores, angular debris, and cortex indicates that the various materials were initially processed off-site. No formal tools or utilized flakes were recovered. A single white chert flake was recovered from possible Spanish Colonial age deposits in Test Pit 2, and four flakes, including the obsidian flake, were recovered from the lower undisturbed Spanish Colonial deposits in Test Pit 3. The majority of the chipped stone artifacts (n = 21) were recovered from Test Pit 3 in disturbed contexts associated with the Fort Marcy era architecture.

Ceramic Artifacts

A total of 1,023 ceramic sherds were recovered during the testing program. The sherds date to the prehistoric and historic periods, but most of them were recovered from mixed contexts.

The prehistoric period is represented by gray ware, white ware, and glaze ware sherds (Tables 2a-2d). Santa Fe Black-on-white and smeared

Table 1. Chipped stone artifacts

Artifact Type	Test Pit 1 (D)	Test Pit 2 (D)	Test Pit 2 (U)	Test Pit 3 (D)	Test Pit 3 (U)	Test Pit 4 (D)
Red chert						
Flake	4	-	-	5	2	1
Angular debris	-	-	-	1	-	-
Gray chert						
Flake	1	2	-	8	-	-
Brown chert						
Flake	-	-	-	7	1	-
White chert						
Flake	1	1	1	-	-	2
Jemez obsidian						
Flake	-	-	-	-	1	-
Total	6	3	1	21	4	3

D = disturbed
U = undisturbed

Table 2a. Ceramic artifacts by provenience, Test Pit 1

	Disturbed Fill		Undisturbed Fill	
	Count	Column %	Count	Column %
Prehistoric gray ware				
Plain gray unknown	4	1.9%	-	-
Plain gray body	-	-	-	-
Indented corrugated	-	-	-	-
Smeared indented corrugated	-	-	-	-
Total	4	1.9%	-	-
Prehistoric white ware				
Unpainted undifferentiated white	7	3.3%	2	3.6%
Mineral paint undifferentiated	-	-	-	-
Santa Fe Black-on-white	2	0.9%	-	-
Wiyo Black-on-white	1	0.5%	-	-
Biscuit A Abiquiu Black-on-white	-	-	-	-
Tularosa Black-on-white	-	-	-	-
Chupadero Black-on-white	-	-	-	-
Total	10	4.7%	2	3.6%
Prehistoric glaze ware				
Red-on-glaze body probable A	-	-	-	-
Agua Fria Glaze-on-red	-	-	-	-
Total	-	-	-	-
Polished or slipped from glaze or historic plain				
Polished buff	42	19.8%	11	20.0%
Polished slipped red	35	16.5%	14	25.5%
Total	77	36.3%	25	45.5%
Historic micaceous utility				
Highly micaceous				
Smudged interior with mica exterior	32	15.1%	11	20.0%
Polished interior with mica slip exterior	3	1.4%	-	-
Unpolished mica slip	1	0.5%	-	-
Total	36	17.0%	11	20.0%
Historic plain utility				
Tewa polished gray	38	17.9%	10	18.2%
Historic polished black	17	8.0%	4	7.3%
Total	55	25.9%	14	25.5%
Historic polychrome				
Ogapoge Polychrome	1	0.5%	-	-
Polychrome undifferentiated (two slips)	-	-	-	-
Black-on-cream undifferentiated	12	5.7%	2	3.6%
Powhoge Polychrome	5	2.4%	-	-
Historic cream-slipped unpainted	2	0.9%	1	1.8%
Zia Polychrome with Zuni design	-	-	-	-
Acoma-Zuni polychrome indeterminate	-	-	-	-
Total	20	9.4%	3	5.5%
Historic or indeterminate glaze ware				
Glaze red unpainted	1	0.5%	-	-
Glaze yellow unpainted	-	-	-	-
Glaze polychrome undifferentiated	1	0.5%	-	-
Glaze-on-red undifferentiated	4	1.9%	-	-
Glaze-on-yellow undifferentiated	4	1.9%	-	-
San Lazaro Glaze Polychrome	-	-	-	-
Puaray Glaze-on-yellow	-	-	-	-
Kotyiti Glaze-on-yellow	-	-	-	-
Total	10	4.7%	-	-
Total	212	100.0%	55	100.0%

Table 2b. Ceramic artifacts by provenience, Test Pit 2

	Disturbed Fill		Undisturbed Fill	
	Count	Column %	Count	Column %
Prehistoric gray ware				
Plain gray unknown	3	1.7%	-	-
Plain gray body	22	12.8%	3	9.7%
Indented corrugated				
Smeared indented corrugated	7	4.1%	4	12.9%
Total	32	18.6%	7	22.6%
Prehistoric white ware				
Unpainted undifferentiated white	2	1.2%	-	-
Mineral paint undifferentiated	-	-	1	3.2%
Santa Fe Black-on-white	7	4.1%	-	-
Wiyo Black-on-white	-	-	-	-
Biscuit A Abiquiu Black-on-white	-	-	-	-
Tularosa Black-on-white	-	-	-	-
Chupadero Black-on-white	-	-	-	-
Total	9	5.2%	1	3.2%
Prehistoric glaze ware				
Red-on-glaze body probable A	-	-	-	-
Agua Fria Glaze-on-red	2	1.2%	-	-
Total	2	1.2%	-	-
Polished or slipped from glaze or historic plain				
Polished buff	13	7.6%	4	12.9%
Polished slipped red	27	15.7%	-	-
Total	40	23.3%	4	12.9%
Historic micaceous utility				
Highly micaceous	2	1.2%	-	-
Smudged interior with mica exterior	28	16.3%	12	38.7%
Polished interior with mica slip exterior				
Unpolished mica slip				
Total	30	17.4%	12	38.7%
Historic plain utility				
Tewa polished gray	28	16.3%	1	3.2%
Historic polished black	9	5.2%	5	16.1%
Total	37	21.5%	6	19.4%
Historic polychrome				
Ogapoge Polychrome	-	-	-	-
Polychrome undifferentiated (two slips)	2	1.2%	-	-
Black-on-cream undifferentiated	9	5.2%	1	3.2%
Powhoge Polychrome	2	1.2%	-	-
Historic cream-slipped unpainted	3	1.7%	-	-
Zia Polychrome with Zuni design	-	-	-	-
Acoma-Zuni polychrome indeterminate	3	1.7%	-	-
Total	19	11.0%	1	3.2%
Historic or indeterminate glaze ware				
Glaze red unpainted	-	-	-	-
Glaze yellow unpainted	-	-	-	-
Glaze polychrome undifferentiated	-	-	-	-
Glaze-on-red undifferentiated	-	-	-	-
Glaze-on-yellow undifferentiated	2	1.2%	-	-
San Lazaro Glaze Polychrome	-	-	-	-
Puaray Glaze-on-yellow	-	-	-	-
Kotyiti Glaze-on-yellow	1	0.6%	-	-
Total	3	1.7%	-	-
Total	172	100.0%	31	100.0%

Table 2c. Ceramic artifacts by provenience, Test Pit 3

	Disturbed Fill		Undisturbed Fill	
	Count	Column %	Count	Column %
Prehistoric gray ware				
Plain gray unknown	6	1.4%	-	-
Plain gray body	49	11.2%	2	5.7%
Indented corrugated	1	0.2%	-	-
Smeared indented corrugated	136	31.1%	1	2.9%
Total	192	43.8%	3	8.6%
Prehistoric white ware				
Unpainted undifferentiated white	27	6.2%	-	-
Mineral paint undifferentiated	-	-	-	-
Santa Fe Black-on-white	47	10.7%	-	-
Wiyo Black-on-white	4	0.9%	-	-
Biscuit A Abiquiu Black-on-white	6	1.4%	-	-
Tularosa Black-on-white	1	0.2%	-	-
Chupadero Black-on-white	1	0.2%	-	-
Total	86	19.6%	-	-
Prehistoric glaze ware				
Red-on-glaze body probable A	3	0.7%	-	-
Agua Fria Glaze-on-red	2	0.5%	-	-
Total	5	1.1%	-	-
Polished or slipped from glaze or historic plain				
Polished buff	26	5.9%	7	20.0%
Polished slipped red	56	12.8%	11	31.4%
Total	82	18.7%	18	51.4%
Historic micaceous utility				
Highly micaceous	-	-	-	-
Smudged interior with mica exterior	27	6.2%	2	5.7%
Polished interior with mica slip exterior	-	-	-	-
Unpolished mica slip	-	-	-	-
Total	27	6.2%	2	5.7%
Historic plain utility				
Tewa polished gray	-	-	8	22.9%
Historic polished black	9	2.1%	1	2.9%
Total	9	2.1%	9	25.7%
Historic polychrome				
Ogapoge Polychrome				
Polychrome undifferentiated (two slips)	7	1.6%	-	-
Black-on-cream undifferentiated	6	1.4%	3	8.6%
Powhoge Polychrome	4	0.9%	-	-
Historic cream-slipped unpainted	11	2.5%	-	-
Zia Polychrome with Zuni design	1	0.2%	-	-
Acoma-Zuni polychrome indeterminate	-	-	-	-
Total	29	6.6%	3	8.6%
Historic or indeterminate glaze ware				
Glaze red unpainted				
Glaze yellow unpainted	3	0.7%	-	-
Glaze polychrome undifferentiated	-	-	-	-
Glaze-on-red undifferentiated	1	0.2%	-	-
Glaze-on-yellow undifferentiated	1	0.2%	-	-
San Lazaro Glaze Polychrome	1	0.2%	-	-
Puaray Glaze-on-yellow	1	0.2%	-	-
Kotyiti Glaze-on-yellow	1	0.2%	-	-
Total	8	1.8%	-	-
Total	438	100.0%	35	100.0%

Table 2d. Ceramic artifacts by provenience, Test Pit 4

	Disturbed Fill		Undisturbed Fill	
	Count	Column %	Count	Column %
Prehistoric gray ware				
Plain gray unknown	-	-	9	0.9%
Plain gray body	23	28.8%	103	10.1%
Indented corrugated	-	-	1	0.1%
Smeared indented corrugated	26	32.5%	174	17.0%
Total	49	61.3%	287	28.1%
Prehistoric white ware				
Unpainted undifferentiated white	12	15.0%	50	4.9%
Mineral paint undifferentiated	-	-	1	0.1%
Santa Fe Black-on-white	5	6.3%	61	6.0%
Wiyo Black-on-white	-	-	5	0.5%
Biscuit A Abiquiu Black-on-white	1	1.3%	7	0.7%
Tularosa Black-on-white	-	-	1	0.1%
Chupadero Black-on-white	-	-	1	0.1%
Total	18	22.5%	126	12.3%
Prehistoric glaze ware				
Red-on-glaze body probable A	1	1.3%	4	0.4%
Agua Fria Glaze-on-red	-	-	4	0.4%
Total	1	1.3%	8	0.8%
Polished or slipped from glaze or historic plain				
Polished buff	5	6.3%	108	10.6%
Polished slipped red	4	5.0%	147	14.4%
Total	9	11.3%	255	24.9%
Historic micaceous utility				
Highly micaceous	-	-	2	0.2%
Smudged interior with mica exterior	-	-	112	10.9%
Polished interior with mica slip exterior	-	-	3	0.3%
Unpolished mica slip	-	-	1	0.1%
Total	-	-	118	11.5%
Historic plain utility	-	-	-	-
Tewa polished gray	-	-	85	8.3%
Historic polished black	1	1.3%	46	4.5%
Total	1	1.3%	131	12.8%
Historic polychrome				
Ogapoge Polychrome	-	-	1	0.1%
Polychrome undifferentiated (two slips)	-	-	9	0.9%
Black-on-cream undifferentiated	-	-	33	3.2%
Powhoge Polychrome	-	-	11	1.1%
Historic cream-slipped unpainted	-	-	17	1.7%
Zia Polychrome with Zuni design	-	-	1	0.1%
Acoma-Zuni polychrome indeterminate	-	-	3	0.3%
Total	-	-	75	7.3%
Historic or indeterminate glaze ware	-	-		
Glaze red unpainted	-	-	1	0.1%
Glaze yellow unpainted	-	-	3	0.3%
Glaze polychrome undifferentiated	-	-	1	0.1%
Glaze-on-red undifferentiated	-	-	5	0.5%
Glaze-on-yellow undifferentiated	2	2.5%	9	0.9%
San Lazaro Glaze Polychrome	-	-	1	0.1%
Puaray Glaze-on-yellow	-	-	1	0.1%
Kotyiti Glaze-on-yellow	-	-	2	0.2%
Total	2	2.5%	23	2.2%
Total	80	100.0%	1023	100.0%

indented corrugated are the most common types, indicating a ceramic assemblage associated mainly with the Coalition period. Glaze ware ceramics, commonly found with later Classic period deposits, are less common. The prehistoric assemblage represents sherds redeposited in fill on the site from nearby Coalition period pueblos. Only two prehistoric sherds were recovered in Test Pit 1 from Spanish Colonial era deposits. Similarly, eight prehistoric sherds were recovered from nearby Test Pit 2 from probable Spanish Colonial era deposits. The majority of prehistoric sherds from all time periods (n = 283) were recovered from disturbed contexts in Test Pit 3. However, only three gray ware sherds were recovered from the lower undisturbed fill. The reason for the greater number of prehistoric sherds in Test Pit 3 is unknown.

The historic period accounted for the bulk of the recovered sherds (Tables 2a-2d). The various wares and types overlap the general Spanish Colonial occupation and tend to be from the later end of the occupation and extending into the Territorial period (1780-1850). Tewa Polychrome, indicative of early Spanish Colonial occupation, is noticeably absent. Powhoge Polychrome, commonly found in late occupations, is also not represented. Sherds from intact Spanish Colonial deposits were recovered from Test Pit 1 (n = 53), Test Pit 2 (n = 23), and Test Pit 3 (n = 32). The three test pits show a similar range of wares and types. Utility wares, defined by combining red wares, micaceous wares, and historic period plain wares, account for the highest portion (n = 101) of the historic period sherds from intact deposits. Historic period decorated sherds (n = 7) were minimally represented in the intact Spanish Colonial era deposits. Test Pit 3 again accounts for the widest range of historic period sherd types and frequencies. However, most of these sherds (like the prehistoric sherds) were recovered from the upper fill, associated with the Fort Marcy architecture, and were apparently introduced into the fill during the dismantlement of the Headquarters Building and the construction of the MFA. Still, it is unclear why Test Pit 3 exhibits a wider range of sherd types and in greater numbers than Test Pits 1 and 2, on the east side of the project area.

Animal Bone

A total of 813 pieces of animal bone were recovered during the testing program (Table 3). Almost all of the bones are smaller fragments, and only a minority of larger pieces have over 50 percent of the skeletal element. The bulk of the faunal remains were recovered from mixed deposits, but similar distribution trends are indicated in mixed and intact deposits. Sheep or goat bone along with that of small ungulates (sheep to small pig size) accounts for most of the bone in the intact deposits. However, the lower intact deposits in Test Pit 3 have a higher number (n = 29) of large ungulate remains (cow, horse, elk size). Almost the entire faunal assemblage can be related to the use of domestic animals. There is little evidence of hunting in the local environment. The dated sherds indicate that the intact deposits are associated with the general Spanish Colonial era occupation of Santa Fe, when sheep and cattle were important economic animals.

Euroamerican Ceramics

A total of 32 Euroamerican ceramics were collected during the testing program (Table 4). Puebla Blue-on-white majolica (n = 11) was the most common. Small numbers of this type were found in each of the undisturbed contexts in the test pits and aid in associating the deposits with the Spanish Colonial era. One fragment of Puebla Polychrome with a slightly earlier Spanish Colonial date was recovered from the lower intact deposits of Test Pit 3. Most of the white wares were introduced during the Territorial period and are from disturbed contexts or intrusive into earlier Spanish Colonial era deposits.

Table 3. Animal bone

Taxon	Test Pit 1 (D)	Test Pit 1 (U)	Test Pit 2 (D)	Test Pit 2 (U)	Test Pit 3 (D)	Test Pit 3 (U)	Test Pit 4 (D)
Small to medium mammal (rabbit, dog to sheep size)	-	1	-	-	4	-	-
Cynomys gunnisoni (Gunnison's prairie dog)	-	-	-	-	1	-	-
Canis familiaris (dog)	2	-	-	-	-	-	-
Small ungulate (sheep to small pig size)	121	48	61	21	138	3	11
Large ungulate (cow, horse, elk size)	36	15	13	1	68	29	3
Bos taurus (cow)	8	4	5	6	18	3	3
Ovis/Capra (domestic sheep or goat)	51	36	17	8	45	5	17
Medium to large bird (quail, chicken, turkey size)	3	-	2	1	1	-	1
Gallus gallus (domestic chicken)	-	-	-	-	3	-	-
Totals	221	104	98	37	278	40	35

D = disturbed
U = undisturbed

Table 4. Euroamerican ceramics

Type	Test Pit 1 (D)	Test Pit 1 (U)	Test Pit 2 (D)	Test Pit 2 (U)	Test Pit 3 (D)	Test Pit 3 (U)	Test Pit 4 (D)	Total
Jackfield-type ware (1740-1790)	-	-	-	-	1	-	-	1
Majolica								
Aranama (1750-1800)	1	-	-	-	-	-	-	1
Puebla Blue-on-white (1675-1850)	1	3	1	3	2	1	-	11
Puebla Polychrome (1650-1725)	1	-	-	-	-	1	1	3
Undecorated (1598-present)	-	1	2	-	-	-	-	3
Porcelain: Bisque (1750-present)	1	-	-	-	-	-	-	1
Stoneware								
Albany Slip (1598-present)	1	-	-	-	-	-	-	1
White Salt Glaze (1720-1770)	-	-	2	-	-	-	1	3
Unrefined earthenware	1	-	-	-	-	-	-	1
White ware								
Hand painted (1830-present)	-	-	-	-	1	-	-	1
Transfer ware (1830-present)	1	-	1	-	-	-	-	2
Undecorated (1830-present)	3	-	1	-	-	-	-	4
Total	10	4	7	3	4	2	2	32

D = disturbed
U = undisturbed

Interpretation and Conclusions

The excavation of four test pits and the monitoring of 23 m of hand-dug drainage trenches on the east and south sides of the MFA building revealed evidence of intact cultural deposits relating to the Spanish Colonial and Fort Marcy occupations at that locale. The cultural deposits verify that intact cultural resources survive outside of the MFA basement excavations.

Spanish Colonial Era

Cultural deposits with apparent Spanish Colonial affiliations were found on the east and south sides of the MFA building.

Test Pit 1 revealed segments of two prepared floors or use-surfaces and two dark charcoal lenses. The intact cultural material extended from about 70 cm to a depth of at least 1.2 m. The two floors revealed the presence of an intact architectural unit of unknown size extending to the south and west.

Test Pit 2 encountered cultural deposits with probable Spanish Colonial affiliation cut by a Fort Marcy period wall. Cultural deposits in the east profile extended from a depth of 40 cm to the end of excavation at 80 cm below the surface. Additional cultural deposits of unknown depth are below the Fort Marcy period wall at a depth of 1.2 m. The extent of the Test Pit 2 material is unknown, but it could extend toward the east and south. A cobble wall segment noted during the monitoring is about 2 m to the southwest. This may be a remnant of a room corner with possible Spanish Colonial era affiliation. The wall remnant was encountered from 60 to 90 cm below the surface within the depths of Spanish Colonial era deposits found in Test Pits 1 and 2.

Test Pit 3 had intact cultural deposits with apparent Spanish Colonial affiliation below Fort Marcy period architecture at a depth of 92 cm to the end of excavation at 1.2 m below the surface. The depth or the spatial extent of this material was not determined, but deposits were noted throughout the bottom of the 1 by 1 m test pit and apparently extend in all directions.

The limited artifact assemblages recovered from the various deposits exposed on the east and south sides of the MFA building are suggestive of a late Spanish Colonial occupation from around 1780 to 1850. The source of the architectural and artifactual deposits exposed in the small test units is unknown. However, Joseph d'Urrutia's 1768 map of downtown Santa Fe shows a building with an interior courtyard or plaza at this locale (Fig. 13), probably the Plaza de Armas, associated with the Spanish presidio.

The architectural remnants and artifact deposits exposed during the testing may relate to this building. These remains, consisting of adobe floors and a cobble wall, were exposed on the east side of the MFA building. Martinez (1994) exposed a similar cobble wall with probable Spanish Colonial era affiliation about 10 m northeast of the cobble wall discovered during the monitoring (see Fig. 4). The wall runs north-south and extends from a depth of 60 cm to about 1.2 m below the surface. All of these resources may relate to the Plaza de Armas, depicted on the 1768 map. If so, they represent Spanish Colonial era resources that survived the construction of the Fort Marcy period Headquarters Building and the MFA building.

Territorial Period

Cultural deposits associated with the Territorial period Fort Marcy occupation of Santa Fe were found on the east and south sides of the MFA building. Test Pit 2, on the east side of the MFA building, revealed a segment of the lime mortar footing and cobble foundation stub associated with the Headquarters Building of the Fort Marcy Military Reservation. The east-west wall is parallel to the existing sidewalk and the west wall of the MFA building. The wall extends about 1 m north of Test Pit 2, but the southern extent of the wall was not determined. Cobble wall material extended from a depth of 10 cm to about 80 cm below the surface. Test Pits 3 and 4, on the south side of the MFA building, revealed additional architectural material associated with the Headquarters Building of the Fort Marcy

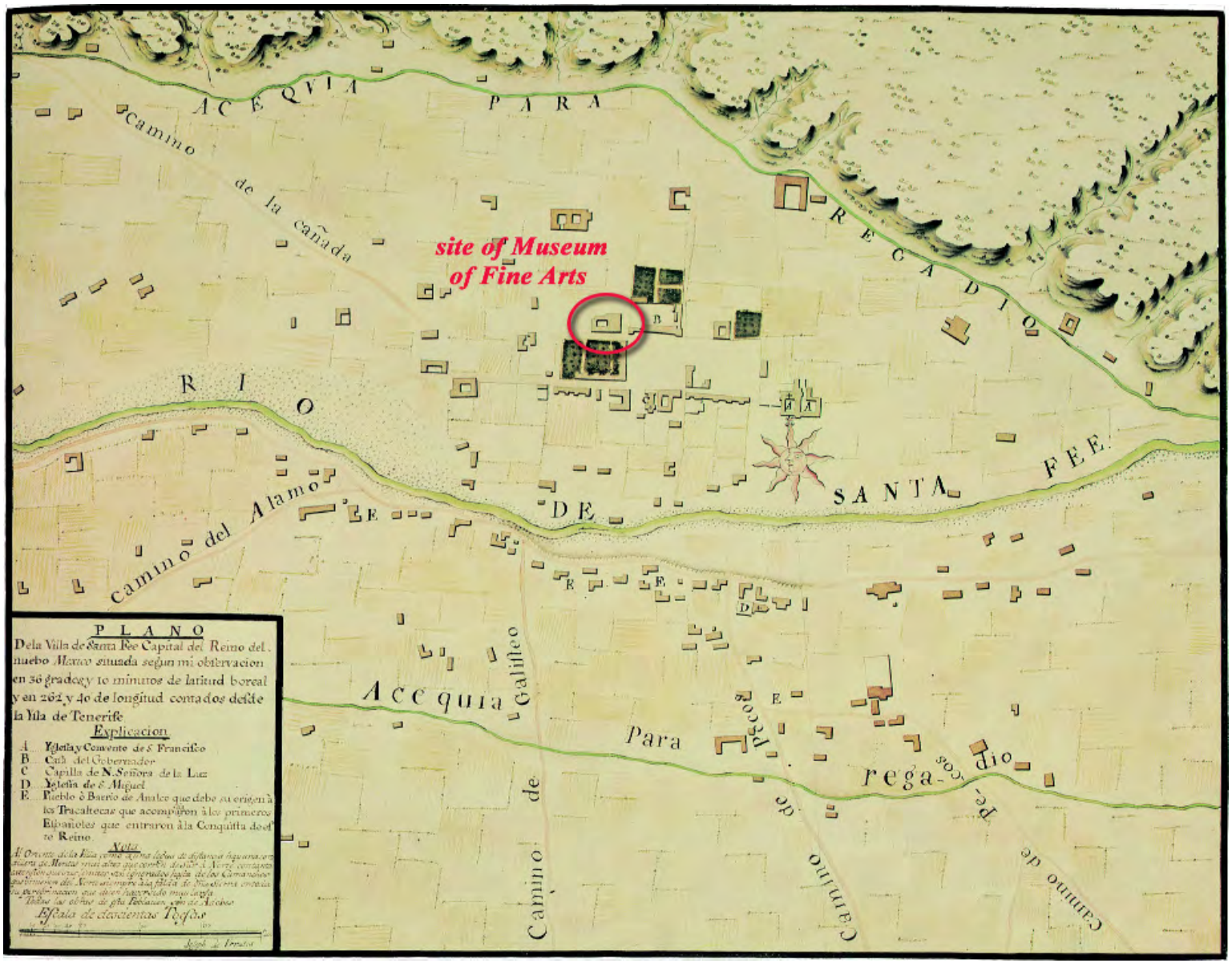

Figure 13. Detail of Joseph d'Urrutia's map of Santa Fe.

Military Reservation. The test pits uncovered a segment of an east-west exterior wall and the interior corners of two rooms with white mortar plaster walls. The exterior wall is parallel to the sidewalk and the south wall of the MFA building. The thick exterior wall extends an unknown distance east and west of the two test pits, and portions of the interior rooms are probably preserved in the garden for two to three meters north. The architectural wall remnants extended from 35 to 92 cm below the surface.

In 1846 the American forces found the presidio in a state of deterioration, but a building is depicted at the project location on Gilmer's 1846 plan map of Santa Fe (Fig. 14). The original Plaza de Armas building had been transformed into an L-shaped building by this time. The Headquarters Building of the Fort Marcy Military Reservation was ultimately erected at this location; it is shown on the 1883 Sanborn map (Fig. 15). It is not known if any of the older foundations were incorporated into the Fort Marcy construction. The building served as a headquarters building and barracks into the 1890s. An 1880s photograph from the northwest corner of the plaza shows the Headquarters Building with portals on both the east and south sides (Fig. 16). An 1890s photograph from approximately the same spot shows the building, now labeled "barracks," in a state of deterioration (Fig. 17). The portals have been removed, and the exterior plaster has weathered, exposing the adobe wall construction. The cobble foundation stubs are visible on both the east and south sides of the building. Test Pits 1 and 2 would be near the door on the east side, and Test Pits 3 and 4 near the covered door on the south side. The structure advanced into a state of decay until the building was razed in 1915 and the MFA building was constructed in 1917 (Fig. 18). Although the project area has been greatly transformed by the evolving cityscape of downtown Santa Fe, the testing program verified that intact archaeological remnants from both the Spanish Colonial era and the Fort Marcy Military Reservation survive under the surrounding sidewalks and gardens of the MFA building.

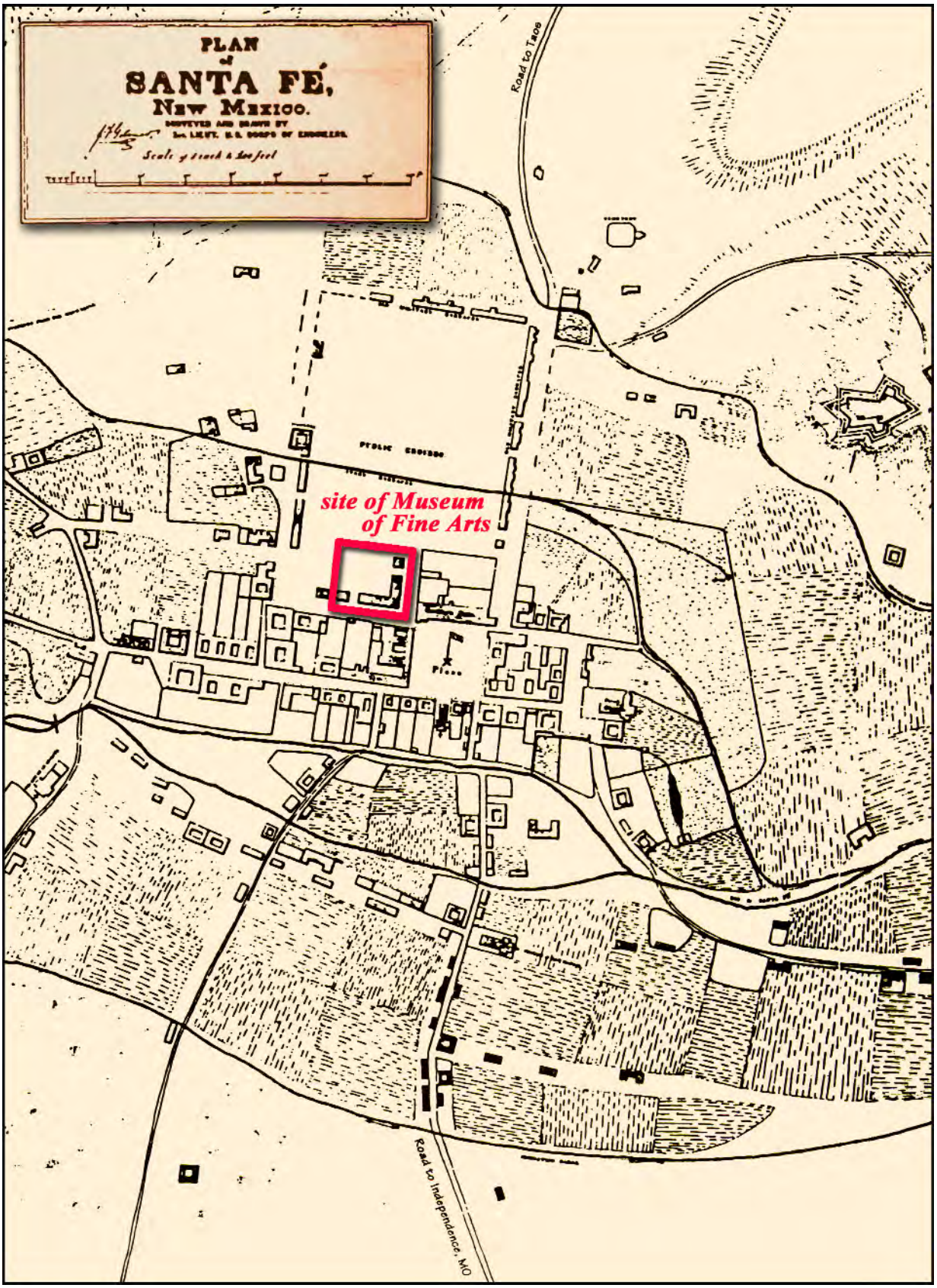

Figure 14. Gilmer's 1846 map of Santa Fe.

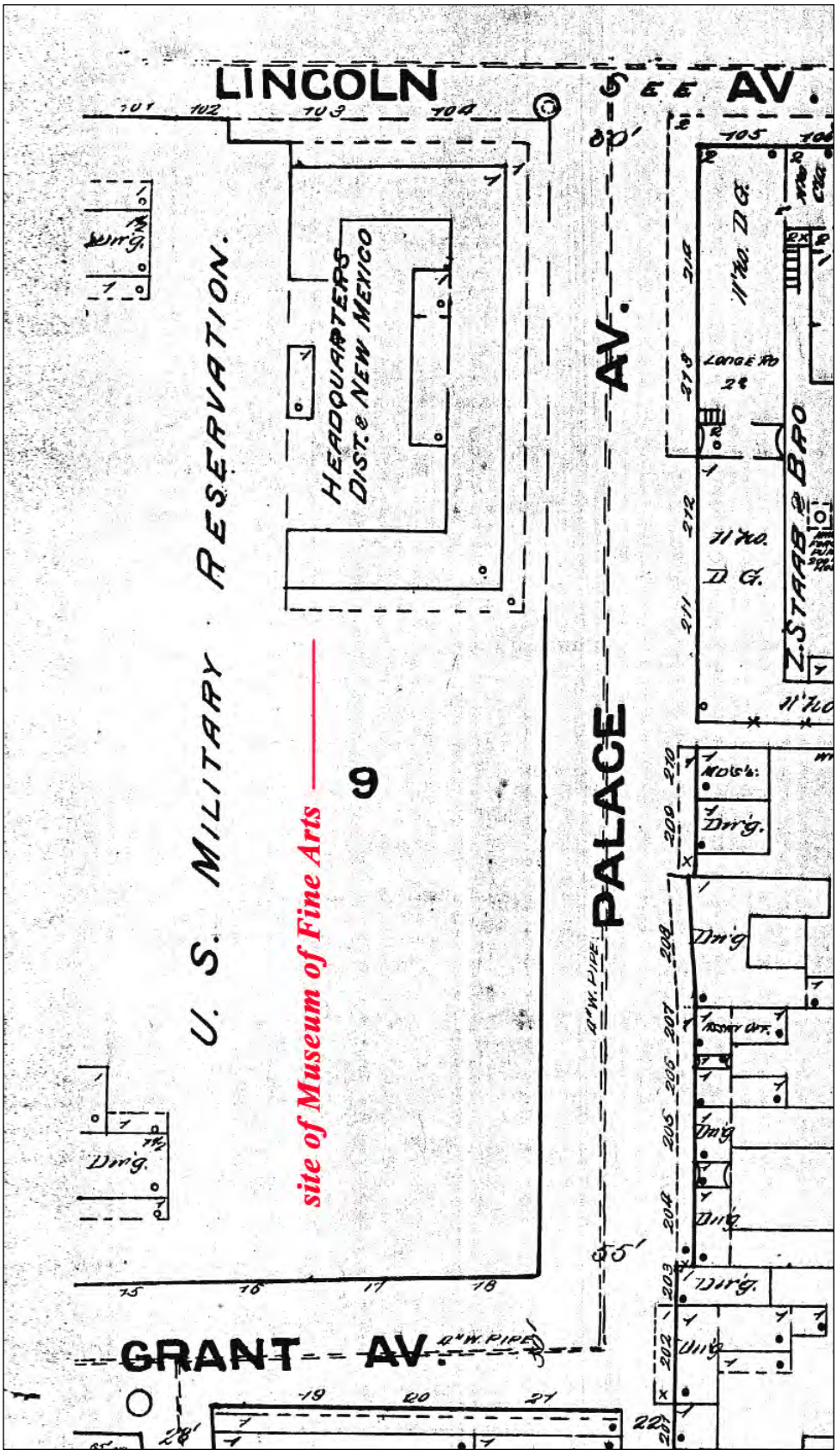

Figure 15. Sanborn map (1883) showing Headquarters Building.

Figure 16. Headquarters Building (1880s).

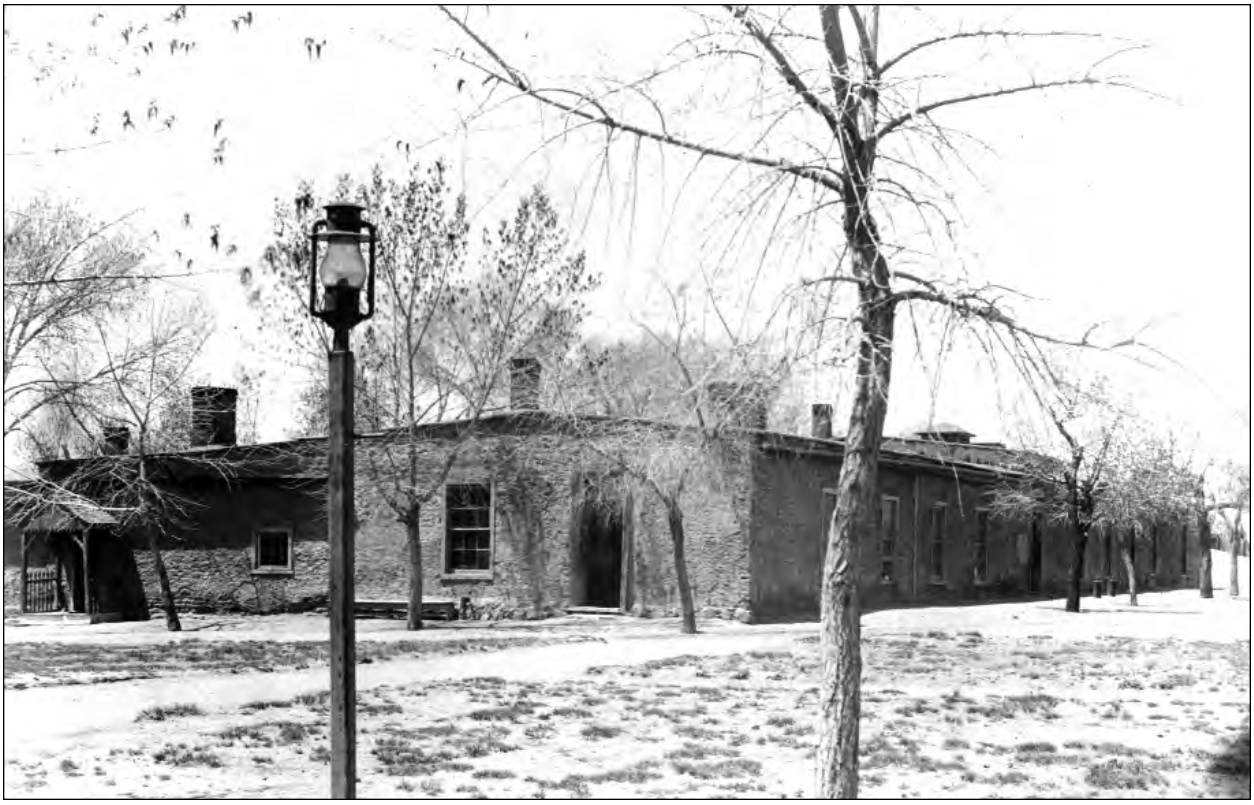

Figure 17. Barracks, facing paradeground (1890s). Courtesy, War Department, US National Archives.

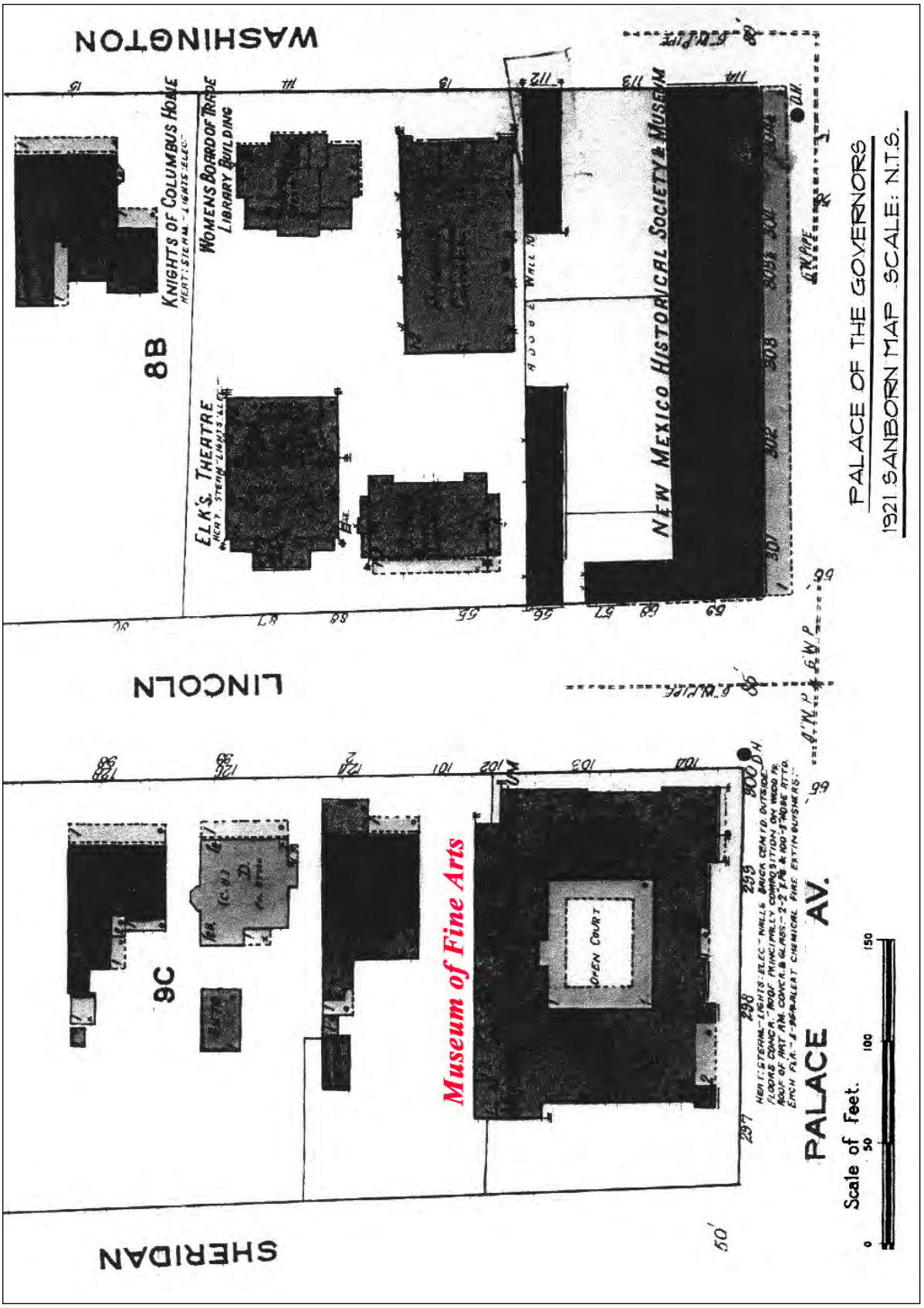

Figure 18. Sanborn map (1921) showing Museum of Fine Arts.

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