# Archaeological Monitoring of the Installation of Seven Light Posts on the Santa Fe Plaza in Downtown Santa Fe, New Mexico

Matthew J. Barbour



Office of Archaeological Studies



Museum of New Mexico

AN 412 2010

# OFFICE OF ARCHAEOLOGICAL STUDIES

# **MUSEUM OF NEW MEXICO**

# Archaeological Monitoring of the Installation of Seven Light Posts on the Santa Fe Plaza in Downtown Santa Fe, New Mexico

Matthew J. Barbour

Stephen S. Post Principal Investigator

**Archaeology Notes 412** 

**New Mexico** 

Santa Fe 2010

# *Administrative Summary*

At the request of Mr. James Lilienthal, project manager for the Public Works Department, City of Santa Fe, the Office of Archaeological Studies (OAS), Department of Cultural Affairs, conducted archaeological monitoring of the excavation of seven light-post holes on the Santa Fe Plaza (LA 80000) in downtown Santa Fe, New Mexico.

Archaeological monitoring resulted in the documentation of three discrete strata and the infield examination of twelve artifacts. No archaeological features or prehistoric or Spanish Colonial deposits were encountered. However, the stratigraphic sequence reflects previous archaeological work on the plaza, and these similarities suggest that culturally significant intact deposits may be widely distributed across the plaza at a depth of 45 cm below the present ground surface. In the future, if further ground disturbance activities are required on the Santa Fe Plaza, data recovery or monitoring may be necessary to mitigate the effects on buried cultural deposits. However, no further work is scheduled by the City of Santa Fe at this time.

CIP Project No. 430 A MNM Project No. 41.887 NMCRIS Activity No. 113286 General Permit NM-08-027-M

# **Contents**

Administrative Summary	iii
Introduction	
Environmental Setting	
Historical Background	
Archival Research	
Previous Archaeological Work in and around the Santa Fe Plaza	15
Field Methods	
Results of Monitoring	
Summary and Recommendations	
References Cited	
Appendix 1: Site Location Information	25
Figures	
1. Site location map	2
2. Light-post locations.	
3. Santa Fe Plaza, ca. 1881	
4. Joseph de Urrutia map of Santa Fe, 1766	
5. Excavated light-post hole	
6. Profile of Light Post 2.	
7. Completed plaza light post.	21

## Introduction

At the request of Mr. James Lilienthal, project manager for the Public Works Department, City of Santa Fe, the Office of Archaeological Studies (OAS), Department of Cultural Affairs, conducted archaeological monitoring on the Santa Fe Plaza (LA 80000) in downtown Santa Fe, New Mexico (Fig. 1). The Santa Fe Plaza is a national historic landmark registered in the National Register of Historic Places (Oct. 15, 1966, Item No. 66000491, NHLS) and the State Register of Cultural Properties (No. 27).

On November 10, 2008, and January 21, 2009, OAS supervisory archaeologist, Matthew Barbour, and OAS volunteer, Barry Kirschbaum, monitored the excavation of seven light-post holes under General Permit NM-08-027-M. Stephen Post, OAS Deputy Director, served as the principal investigator.

Each light-post hole, roughly 60 cm in diameter and 90 cm in depth, was placed over the location of a previously existing light post (Fig. 2). Archaeologists documented and sifted through fill that was mechanically or hand-excavated by AIC Contractors, using 1/8-inch mesh to systematically recover a sample of artifacts. This resulted in the documentation of three discrete strata and the in-field examination of eleven artifacts.

The stratigraphic sequence identified coincides well with previously published descriptions derived from construction of the gazebo in 2004 (Lentz 2004). These similarities suggest culturally significant intact deposits may be widely distributed across the area at depths approximately 45 cm below the present ground surface.

All monitoring activities were conducted in compliance with 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 Section 18-6-5 (NMSA 1978) of the Cultural Properties Act (4.10.17 NMAC-N, January 1, 2006). The project area is within the Historic Downtown Archaeological District, and activities undertaken at the location followed the guidelines included in the Archaeological Review District Ordinance for the City of Santa Fe, adopted October 12, 1987.

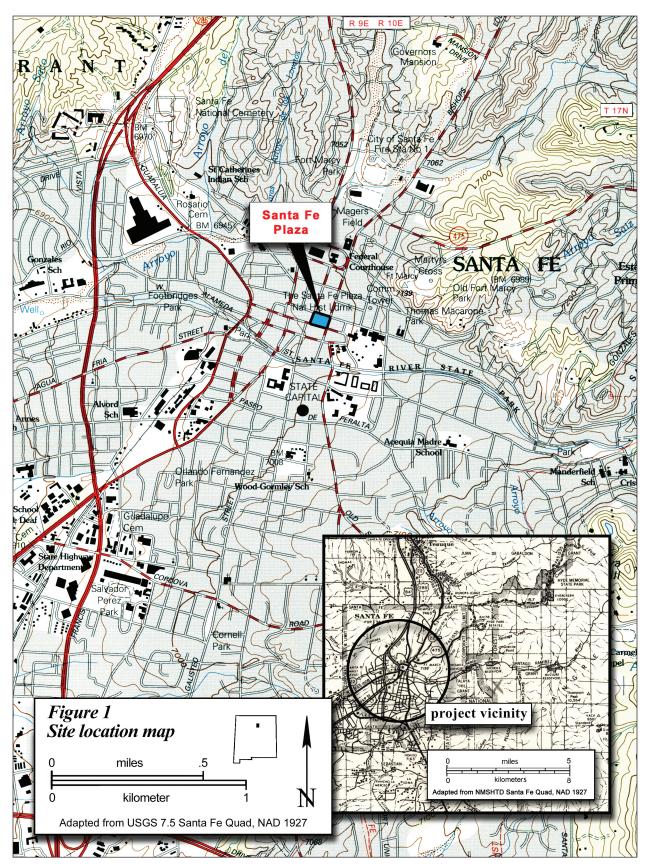


Figure 1. Site location map.

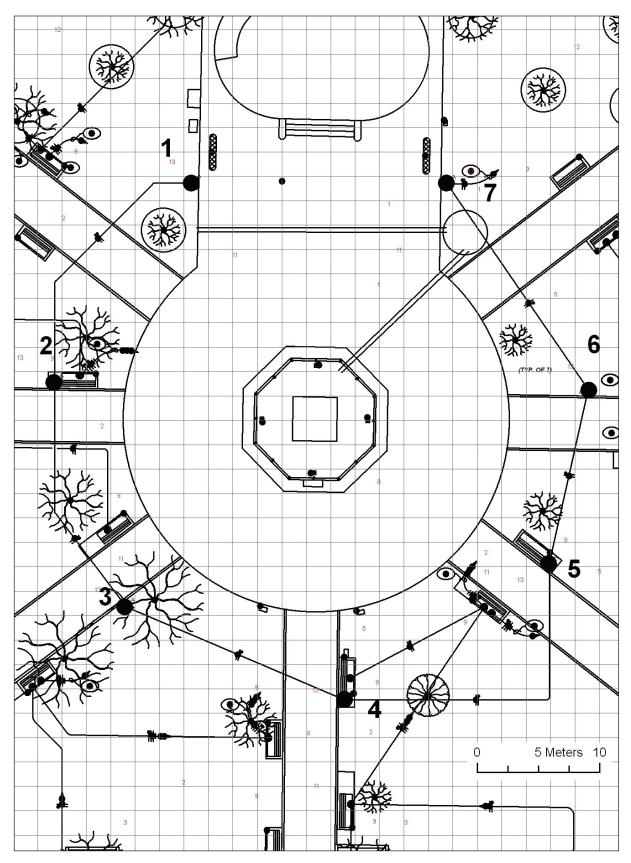


Figure 2. Light-post locations.

# **Environmental Setting**

## (adapted from Lentz 2004:5-6)

Santa Fe is in a fault zone within a subdivision of the Southern Rocky Mountain physiographic zone known as the Española Basin, one in a chain of basins comprising the Rio Grande rift, which extends from southern Colorado to southern New Mexico (Kelly 1979:281). Local topography at the Santa Fe Plaza is a nearly level southern terrace of the Santa Fe River at an elevation of 2,126 m and is part of an ancient alluvial fan upon which most of Santa Fe resides. Soils are formed of reworked, mixed alluvial material of the Tertiary/Quaternary-period Santa Fe formation (Folks 1975). The major soil association is Bluewing gravelly sandy loam (Folks 1975:15-16). This soil occurs on 0- to 5-percent slopes and may coexist with Pojoaque and Fivemile soils.

Santa Fe has a semiarid climate. The mean annual temperature reported by the Santa Fe station is 10.5 degrees C (Gabin and Lesperance 1977), and precipitation can fluctuate widely. The climatological data further indicates that the study area conforms to the general temperature regime of New Mexico, that is, hot summers and relatively cool winters. 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).

Historically, flora and fauna have been typical of a piñon-juniper grassland habitat. Characteristic vegetation includes piñon, juniper, prickly pear, cholla, yucca, and several species of muhly and grama grass. However, by the nineteenth century, this environment had been heavily modified by human agents (Fig. 3). Animal species included covote, badger, porcupine, black-tailed jackrabbit, desert cottontail, spotted ground squirrel, and many species of birds. Mule deer and black bear were known to occur in low numbers (Pilz 1984).

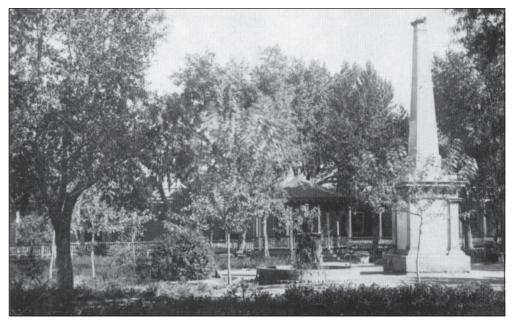


Figure 3. Santa Fe Plaza, ca. 1881. Courtesy Museum of New Mexico, Neg. No. 15282.

# Historical Background

## (adapted from Lentz 2004:7–13)

A history of the Santa Fe Plaza from its inception in 1610 by Juan de Peralta was written by David Snow (1992:14-52) and has also been covered by Hordes (1990), Noble (1989) and Wilson (1981). Researchers have also addressed the configuration and size of the original plaza (Pratt 1990; Snow 1990) and the early buildings surrounding the plaza (Ellis 1976). Below is a brief historical description of Santa Fe from its inception in 1610 until the end of the American Territorial period (1912).

## SPANISH CONTACT, PUEBLO REVOLT, AND RECONQUEST (AD 1540 TO 1692)

Initial colonization of New Mexico occurred in 1598 by Don Juan de Oñate at the site of San Gabriel de los Caballeros. However, this initial colonization fell short of expectations, and in 1610 the capital was moved from San Gabriel to Santa Fe by Oñate's successor, Don Pedro de Peralta (Ortiz 1979:281; Pearce 1965:146; Spicer 1962:157).

In 1676 there began a series of events that ultimately led to the Pueblo Revolt of 1680. Fortyseven Pueblo religious leaders were jailed and flogged in Santa Fe for their adherence to traditional Pueblo beliefs. Among them was the San Juan moiety chief, Popé, under whose leadership the Pueblo Revolt was subsequently planned and carried out (Spicer 1962:162–163). Twenty-one of the Franciscan friars in the territory were killed, along with 400 Spaniards. Santa Fe was besieged by an alliance of Pueblo forces, and on August 21, 1680, Governor Otermín was forced to surrender and evacuate the city (Hackett and Shelby 1942:11, 56–57; Lentz 2004).

The Pueblos held firm to their independence for 12 years. During the winter of 1681–82, an attempted reconquest by Governor Otermín was turned back. Otermín managed to sack and burn most of the pueblos south of Cochiti before returning to Mexico. Taking advantage of inter-Pueblo factionalism, the definitive reconquest was initiated in 1692 by Don Diego de Vargas (Dozier 1970:61; Simmons 1979:186).

## LATER SPANISH COLONIAL PERIOD (AD 1692 to 1821)

During the later Spanish Colonial period, Spain under Hapsburg (until 1700) and Bourbon (1700– 1821) rulers was changed from a world empire to a second-tier political and economic power as its European landholdings dissolved, its New World riches were spent, and the social hold of its missionization effort was diminished (Kamen 2003). At the height of its empire, early in the eighteenth century, Spain had economic ties covering threequarters of the known world. The empire was based on economic superiority gained through alliances with the rich bankers and royalty of the Italian city states, with the Flemish, and with its neighbor Portugal, a sea power. New Spain and New Mexico were affected by imperial trends as the structure of the government, the focus of the economy, and pressures on the imperial borderlands changed. New Mexico and Santa Fe were on the frontier of the Spanish Empire and at the end of the Camino Real, the main communication and transport route for public, governmental, and ecclesiastic institutions and individuals (Fig. 4). Pressured until 1789 by French and English advances into the North American interior, Santa Fe soon felt the social and economic pressures brought on by the growing pains of the United States and its rapid institution of manifest destiny. These pressures were exerting tremendous influence on New Mexico as Mexico gained its independence from Spain in 1821.

## MEXICAN PERIOD (AD 1821 TO 1846)

With the signing of the Treaty of Cordova on August 24, 1821, Mexico secured its independence from Spain, and New Mexico became part of the Mexican nation.

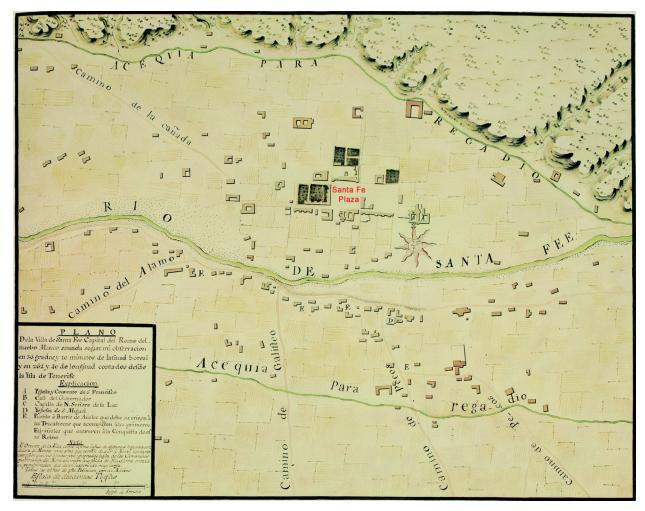


Figure 4. Joseph de Urrutia map of Santa Fe, 1766.

Until January 31, 1824, New Mexico remained one of the "internal provinces" attached to the comandancia of Chihuahua, and actually joined with Chihuahua and Durango to form the Internal State of the North. New Mexico soon reverted to its status as a Mexican territory.

The brief Mexican period saw the opening of the Santa Fe Trail, and expanded trade networks brought new settlers and manufactured goods. The Santa Fe Trail was the first American trans-Mississippi pathway to the West and the only route that entered into another country (Simmons 1989). Early in the fall of 1821, William Becknell set out from Franklin, Missouri, taking a small load of goods to trade with the Indians of the Rocky Mountains, and made his way across Raton Pass, where he was met by Mexican troops. Instead of being taken prisoner for entering the territory illegally, he was escorted to Santa Fe to dispose of his goods. The trade eventually became centered in Santa Fe and overflowed into the Mexican provinces, where merchants found lucrative markets for their wares. The Santa Fe trade drew Mexican silver coins, furs, wool, and raw material into the United States. Josiah Gregg brought the first printing press to New Mexico in 1834. Conflicts with Indians and lack of adequate finances continued to plague New Mexico. Poorly organized governments provided less to New Mexico than the Spanish governments that preceded them (Elliott 1988:34-35; Jenkins and Schroeder 1974:34-37).

# AMERICAN TERRITORIAL PERIOD (AD 1846 to 1912)

Following the short-lived Mexican period, General Stephen Kearny marched to Santa Fe to accept the surrender of Acting Governor Juan Bautista

Vigil y Alaríd. The US flag was run up over the Palace of the Governors on August 18, 1846. By the Treaty of Guadalupe Hidalgo, which ended the Mexican War, United States dominion was established in New Mexico.

In 1850 New Mexico was officially made a territory of the United States. Under Territorial-period laws, Pueblo Indians were tacitly afforded the same rights as all US citizens (Lentz 1991:10). In Santa Fe, General Kearny immediately set about planning Fort Marcy and erected some earthen embankments on top of what is now known as Fort Marcy Hill. Constructed in case of resistance to the American presence, it was never occupied. Instead, a complex of barracks, buildings, and corrals constructed just north of the plaza became known as Fort Marcy. It was abandoned in 1890.

When Mexico gained independence from Spain in 1821, the borders of New Mexico were opened, and trading with the United States began by means of the Santa Fe Trail. Started in the Mexican period, the Santa Fe Trail brought a minor economic boom to Santa Fe during the American Territorial period. The arrival of the railroads brought about the demise of the Santa Fe Trail. The first train of the Atchison, Topeka & Santa Fe Railway arrived in Las Vegas, New Mexico, on April 4, 1879. Though Santa Fe citizens prepared themselves for an economic boom, the main line of the railroad bypassed the city to a depot at Lamy, over twenty miles away. This lack of accessibility gradually brought about a general business decline, and after 1880 Santa Fe gradually lost its prominence as a social and economic center.

New Mexico failed to obtain statehood in 1850, 1867, 1870, and 1889. President William Howard Taft signed the bill making New Mexico the 47th state of the Union on January 6, 1912.

## Archival Research

Archival research was conducted in the New Mexico Cultural Resource Information System to identify archaeological sites within a 500 m radius of the project area prior to monitoring. This search turned up 86 sites representing 132 temporal components (Table 1). Seven of these sites are listed in the National Register of Historic Places (NRHP) and ten (including the seven on the NRHP) are listed in the State Register of Cultural *Properties* (SRCP). The project area, designated LA 80000, is a national historic landmark registered in the NRHP (Item No. 66000491,Oct. 15, 1966, NHLS) and the SRCP (No. 27). Other sites in the NRHP or SRCP within 500 m of the project area are LA 111 (Fort Marcy), LA 608 (La Garita), LA 930 (Ogapoge), LA 1051 (El Pueblo de Santa Fe), LA 1111 (Barrio de Analco), LA 1838, LA 1876, LA 4451 (Palace of the Governors), LA 4449 (San Miguel Chapel), and LA 35100 (Santa Fe Presidio).

The vast majority of components (n = 87) are historic Hispanic and Euroamerican in origin, representing nearly 400 years of European occupation of the area in and around Santa Fe. These Hispanic and Euroamerican components are a diverse array of governmental, industrial, military, and residential settings. Many of these sites date back to the founding of Santa Fe in ca. 1610 or slightly thereafter. Some of the more noteworthy historic sites include the Palace of the Governors, the military and administrative center for New Mexico throughout the seventeenth, eighteenth, and nineteenth centuries; San Miguel Chapel, possibly built by Nahuatl Indians in the Barrio de Analco; and La Garita, which functioned as a military outpost overlooking the city in the nineteenth century.

The remaining cultural components are unknown (n = 7) and Anasazi/Pueblo (n = 35). The vast majority of Anasazi/Pueblo sites date to between AD 1100 and 1600. These dates can be linked to a large pueblo, LA 930/LA 1051, which dominated what is now the downtown Santa Fe area during the Coalition and Classic periods (Lentz 2005).

Table 1. Sites in the vicinity of LA 80000

Component	Dates (AD)	Total
Anasazi/Pueblo		
Anasazi artifact scatter	1050-1600	1
Anasazi artifact scatter	1200-1325	1
Anasazi artifact scatter	1200-1450	2
Anasazi artifact scatter	1200-1600	2
Anasazi artifact scatter	1325–1600	1
Anasazi features and artifact scatter	600–1400	1
Anasazi features and artifact scatter	1050–1450	1
Anasazi features and artifact scatter	1100–1325	2
Anasazi features and artifact scatter	1200–1325	1
Anasazi features and artifact scatter	1200–1600	1
Anasazi features and artifact scatter	1275–1450	1
Anasazi multiple residence	1050–1600	1
Anasazi multiple residence	1100–1325	1
Anasazi multiple residence	1100–1600	1
Anasazi residential complex/community	1100–1240	1
Anasazi single residence	600–1325	1
Anasazi unknown	1–1600	1
Anasazi unknown	900–1300	1
Anasazi unknown	1100–1300	2
Anasazi unknown	1100–1600	4
Pueblo artifact scatter	1692–1821	1
Pueblo multiple residence	1680–1692	1
Pueblo unknown	1539–1680	1
Pueblo unknown	1680–1692	1
Pueblo unknown	1692–1821	4
Subtotal		35
Hispanic		
Hispanic artifact scatter	1539–1680	1
Hispanic artifact scatter	1600–1912	1
Hispanic artifact scatter	1600–1977	1
Hispanic artifact scatter	1610–1800	1
Hispanic artifact scatter	1610–1846	1
Hispanic artifact scatter	1600–1821	1
Hispanic artifact scatter	1650–1900	1
Hispanic artifact scatter	1680–1912	1
Hispanic artifact scatter	1700–1850	1
Hispanic artifact scatter	1700–1945	1
Hispanic artifact scatter	1720–1750	1
Hispanic artifact scatter	1720–1800	1
Hispanic artifact scatter	1720–1821	1
Hispanic artifact scatter	1750–1846	1
Hispanic artifact scatter	1767–1810	1
Hispanic artifact scatter	1800–1899	1
Hispanic artifact scatter	1850–1890	1
Hispanic artifact scatter	1880–1912	1
Hispanic artifact scatter	1886–1960	1

Table 1 (continued)

Component	Dates (AD)	Total
Hispanic simple features	1692–1846	1
Hispanic simple features	1900-1920	1
Hispanic features and artifact scatter	1598–1912	1
Hispanic features and artifact scatter	1610–1680	1
Hispanic features and artifact scatter	1610–1700	1
Hispanic features and artifact scatter	1620–1930	1
Hispanic features and artifact scatter	1835–1945	1
Hispanic features and artifact scatter	1880–1920	1
Hispanic governmental	1605–1680	1
Hispanic governmental	1692–1846	1
Hispanic military	1609–1848	1
Hispanic military	1804–1846	1
Hispanic ranching/agricultural	1605–1912	1
Hispanic ranching/agricultural	1620–1949	1
Hispanic residential complex/community	1605–1680	1
Hispanic residential complex/community	1605–1846	1
· · · · · · · · · · · · · · · · · · ·	1692–1846	1
Hispanic residential complex/community		2
Hispanic residential complex/community	1714–1996	1
Hispanic residential complex/community	1821–1846	
Hispanic residential complex/community	1846–1999	1
Hispanic residential complex/community	1853–1858	1
Hispanic single residence	1750–1856	1
Hispanic unknown	1539–1680	2
Hispanic unknown	1539–1993	1
Hispanic unknown	1692–1821	3
Hispanic unknown	1821–1846	2
Hispanic unknown	1846–1912	2
Hispanic unknown	1945–1993	1
Subtotal		53
Anglo/Euroamerican		
Anglo/Euroamerican artifact scatter	1848–1945	1
Anglo/Euroamerican simple features	1850-1920	1
Anglo/Euroamerican features and artifact scatter	1821–1859	1
Anglo/Euroamerican features and artifact scatter	1840-1912	1
Anglo/Euroamerican features and artifact scatter	1846-1912	1
Anglo/Euroamerican features and artifact scatter	1846-1955	1
Anglo/Euroamerican features and artifact scatter	1846-1999	1
Anglo/Euroamerican features and artifact scatter	1850-1930	1
Anglo/Euroamerican features and artifact scatter	1870-1880	1
Anglo/Euroamerican features and artifact scatter	1880-1950	1
Anglo/Euroamerican features and artifact scatter	1880-1969	1
Anglo/Euroamerican features and artifact scatter	1900-1971	1
Anglo/Euroamerican commercial	1881–1886	1
Anglo/Euroamerican industrial	1891-1960	1
Anglo/Euroamerican governmental	1846-1945	1
Anglo/Euroamerican military	1846–1851	1
Anglo/Euroamerican military	1846–1867	1
,		

Table 1 (continued)

Component	Dates (AD)	Total
Anglo/Euroamerican military	1846–1912	2
Anglo/Euroamerican military	1848-1920	1
Anglo/Euroamerican multiple residence	1930-1945	1
Anglo/Euroamerican residential complex/community	1846-1912	1
Anglo/Euroamerican single residence	1846-1990	1
Anglo/Euroamerican single residence	1883-1912	1
Anglo/Euroamerican single residence	1930-1950	1
Anglo/Euroamerican unknown	1539-1993	1
Anglo/Euroamerican unknown	1846-1912	5
Anglo/Euroamerican unknown	1846-1945	1
Anglo/Euroamerican unknown	1912-1945	2
Subtotal		34
Unknown		
Unknown artifact scatter	900–1800	1
Unknown artifact scatter	900-1880	1
Unknown features and artifact scatter	900-1945	1
Unknown/reserved		7
Subtotal		10
Total		132

# Previous Archaeological Work in and around the Santa Fe Plaza

## (adapted from Lentz 2004:13–15)

One of the first excavations undertaken near the plaza was at the Palace of the Governors. Jesse Nusbaum, who excavated several rooms in 1909-10, recovered materials and six human burials of Native American affiliation (Peckham 1982). As part of the Palace renovation (1909-13), "twentysix hundred wagon loads of debris were removed, which was filled up to the level of the windows" (Hewett 1912:5). Undoubtedly some of the debris referred to in Hewett (1912) was an accumulation of prehistoric (Coalition and Classic periods) and seventeenth- through nineteenth-century archaeological deposits. Subsequent investigators (Snow 1992) attribute the absence of eighteenth-century materials in the Palace complex to this large-scale removal of "debris." One has to wonder where these voluminous materials were deposited.

Across the plaza, opposite the Palace of the Governors, the Military Chapel of La Castrense was investigated by Stubbs and Ellis (1955). Built by Governor Francisco Antonio Marín del Valle about 1760, the excavations revealed the foundations of the old church. These findings were compared to Fray Francisco Domínguez's descriptions of the chapel in 1776. Domínguez's measurements were remarkably similar, even though they were estimated. Materials dating to the seventeenth and eighteenth centuries were also exposed. These "date from the Indian occupancy of the Santa Fe Plaza during the 1680–1693 Revolt" (Stubbs and Ellis 1955:16).

In the fall of 1990, David Snow excavated 10 sq m on the Santa Fe Plaza (Snow 1992). These test

pits were placed on the extreme west side, in the southeast central quadrant, and on the extreme east side. Cultural materials were not recovered below 90 cm. The report concludes that the pre-1974 surface represents a highly disturbed, probably considerably modified plaza level dating from the pre-Reconquest period of Santa Fe's history.

In 2004, under the direction of Stephen Lentz (2004), the OAS excavated 29 whole and partial 1 by 1 m units in the location of the gazebo that now occupies the north-central plaza. The excavation exposed seven cultural and natural strata to a depth of 1 m below the current plaza level. Exposed were an 1880s plaza surface (75–85 cm below the present ground surface), a seventeenthcentury artifact-rich deposit interpreted as a pre-Revolt/Pueblo Revolt plaza surface (100 cm below the present ground surface), and an acequia deposit interpreted as one of the seventeenthcentury water sources that served the plaza and surrounding buildings. Artifact content was surprisingly rich. Artifacts 234 chipped stone artifacts, of which 78 were formal or informal tools; 18 miscellaneous historic-era artifacts; 78 glass artifacts; 86 Euroamerican ceramics, of which 28 were Mexican-made majolica types; 247 metal artifacts; and 7, 260 historic and pre-Hispanic ceramic sherds, of which 190 were analyzed. This work demonstrated the presence of intact cultural deposits from seventeenth- and nineteenthcentury plaza use below the 1974 plaza surface and overburden.

## Field Methods

I observed mechanical auguring and hand excavation of the seven light-post holes. This work created a pit roughly 70 cm in diameter and 90 cm in depth (Fig. 5). Excavation was performed by the general contractor, AIC Contractors.

The locations where the light posts were installed had been the locations of light posts installed in the 1970s. Because of this, most of the fill excavated had been previously mixed. However, the holes used in the 1970s were smaller than the current holes, measuring 50 cm in diameter and 60 cm in depth, providing the potential for some unmixed deposits to be encountered.

As mechanical excavation progressed, I sifted through the backdirt for artifacts or evidence of intact pre-twentieth-century deposits. Roughly

50 percent of the fill was screened through 1/8inch mesh to recover a sample of artifacts.

Because few artifacts were recovered, they were analyzed in the field and not collected. After the excavation of each pit, a profile was drawn documenting all the major stratigraphic layers. Depths were recorded in meters below the present ground surface (bgs), and strata were described according to color, texture, composition, origin, and artifact content or cultural inclusions, such as charcoal, coal, or fragments of building materials. All field recording was conducted on standard OAS forms under the provisions of General Permit NM-08-027-M. No archaeological features were encountered.



Figure 5. Excavated light-post hole.

# Results of Monitoring

Each of the seven light posts was assigned a number and recorded individually (Fig. 2). Strata encountered during monitoring were identical to those discussed in Lentz (2004). However, only base-course, mixed fill associated with the twentieth century (Stratum 0) and intact late nineteenthcentury deposits (Stratum 1) were observed. No Spanish Colonial or prehistoric deposits were identified, and no archaeological features were present.

Table 2 summarizes the depths at which strata were encountered and the artifacts analyzed from each stratum. Figure 6 depicts the typical stratigraphic sequences encountered at LA 80000. However, at Light Posts 3 and 4, mixed twentieth-century materials were found at the deepest depths reached because of previous utility installations. In other instances, the fill immediately below the base course appeared to represent intact nineteenth-century deposits. The individual strata encountered are described below in conjunction with a brief discussion of artifacts analyzed.

#### CONCRETE AND BRICK

Concrete (Light Posts 1 and 7) and brick (Light Posts 2 through 6) visible in profiles represent the modern walkways around the plaza. A concrete walkway leads from the Civil War Memorial to

the bandstand and is roughly 15 cm thick. The remaining walkways leading out from the memorial to the northeast, east, southeast, south, southwest, west, and northwest are constructed of fire-hardened bricks roughly 10 cm thick.

#### **BASE COURSE**

Soil is a 5 YR 4/6 yellowish red sand with small gravel inclusions (< 1 cm in diameter) presumably functioning as a base course below the concrete pad adjacent to Light Posts 1 and 7. The base course varied widely in its thickness. No artifacts were visible in profile.

#### STRATUM 0

Sediment in Stratum 0 is a 10 YR 6/4 light yellowish brown silty sand matching the Level 1 described by Lentz (2004:21). The stratum is roughly 35 cm thick and typically extends between 10 and 45 cm bgs. Within the soil were traces of charcoal flecking (2 percent), gravel (5 percent), and ash (1 percent). Artifacts visible within the profile included plastics and cigarette butts. The stratum is believed to represent backfilling of the plaza in the 1970s and twentieth-century disturbance caused by utility installation (Lentz 2004:21).

Table 2. Stratum depths and artifacts

Unit	Brick and Concrete (cm bgs)	Base Course (cm bgs)	Stratum 0 (cm bgs)	Stratum 1 (cm bgs)	Artifacts
Light Post 1	0-14 (concrete)	15-67	_	67-90	No artifacts.
Light Post 2	0-10 (brick)	_	10-46	46-90	Saw-cut cow femur and one undecorated white-bodied earthenware fragment.
Light Post 3	0-10 (brick)	_	10-90	_	Green bottle glass, plastic wrapper, and cigarette butt.
Light Post 4	0-10 (brick)	-	10-90	-	One white-bodied earthenware rim fragment with transfer print, one shard of clear bottle glass, and one Tewa Redware sherd.
Light Post 5	0-10 (brick)	_	10-45	45-90	One piece of window glass 2 mm thick.
Light Post 6	0-10 (brick)	_	10-50	50-90	No artifacts.
Light Post 7	0-14 (concrete)	15-36	-	36-90	Two pieces of window glass 2 mm thick and fragment of an undecorated white-bodied earthenware.

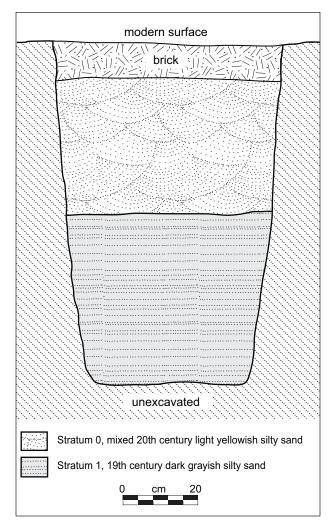


Figure 6. Profile of Light Post 2.

#### STRATUM 1

Sediment in Stratum 1 is a 10YR 3/2 dark grayish brown silty sand with small quantities of gravel and charcoal inclusions. The stratum is roughly 45 cm thick and typically extends between 45 cm and 90+ cm bgs. Artifacts included white-bodied earthenware, window glass, and a saw-cut fragment of cow femur. Such items are typically found in association with American Territorial-period deposits encountered throughout the Santa Fe area dating to the late nineteenth century. Lentz (2004:21) split the American Territorial period

into two distinct strata (Stratum 1 and Stratum 2) separated by a ca. 1880 plaza surface. This surface was not encountered during current monitoring activities. However, the soil of this stratum fits better with the Munsell colors and material culture of Lentz's Stratum 1.

#### **A**RTIFACTS

Twelve artifacts were documented. Four were observed in association with Stratum 0, and eight were identified from Stratum 1. The artifacts documented in association with Stratum 0 were a plastic candy wrapper, cigarette butts, a shard of window glass, and a small fragment of green bottle glass, possible from a wine bottle. The plastic wrapper and cigarette butts are typical indicators of twentieth-century deposits and appear to confirm Lentz's (2004) assertion that the materials reflect backfilling in 1974.

The few artifacts encountered in Stratum 1 also compared well with findings published in earlier plaza studies (Lentz 2004). The artifacts included three white-bodied earthenware fragments (one of which had a pink transfer print design), two shards of window glass, one piece of clear bottle glass, a Tewa Redware sherd, and a saw-cut proximal portion of a cow femur.

Santa Fe ordinances first passed in 1833, during the Mexican period, prohibited the disposal of municipal waste on the plaza. However, these measures were not enforced until the 1870s and were reissued by county authorities in 1879 (Simmons 2001; Barbour 2008). It is likely that artifacts encountered in Stratum 1 reflect use of the plaza after this period. None of the artifacts encountered were larger than 2 cm in diameter, suggesting these materials do not represent large-scale waste disposal, but rather items washed in from adjacent areas.

No prehistoric materials were encountered. The Tewa Redware encountered in Stratum 1 could represent materials dating to the Spanish Colonial period. However, red wares continued to be produced in the nineteenth century.

# Summary and Recommendations

Light Posts 1, 2, 5, 6, and 7 confirm the nineteenthcentury stratigraphic sequence for the plaza first proposed by Lentz (2004). The upper fill, Stratum 0, is roughly 35 cm thick and typically extends between 10 and 45 cm bgs. This fill represents backfilling of the plaza in the 1970s and twentieth-century disturbance. The lower fill, Stratum 1, is roughly 45 cm thick and typically extends between 45 cm and 90+ cm bgs. This fill may represent intact nineteenth-century deposits dating after the sanitation ordinance of the 1870s, which prohibited the disposal of refuse on the plaza.

No Spanish Colonial or prehistoric deposits were encountered, and no features were identified. Furthermore, as witnessed by Light Posts 3 and 4, sediments in the southern and southwestern areas of the plaza may have been heavily mixed by twentieth-century utility installation. However, the holes excavated were too small to

form any but the most general of conclusions regarding site integrity and deposits.

Based on this archaeological monitoring, I determined that no intact cultural deposits occurred within the light-post holes to a depth of roughly 45 cm bgs, at which point intact deposits dating to the late American Territorial period were encountered (post-1879). Earlier Colonial or prehistoric deposits (if they exist) are more deeply buried and have likely not been impacted by previous construction and utility work. Should further ground disturbance activities be planned in the Santa Fe Plaza, it is recommended that data recovery or archaeological monitoring be required. However, these investigations should be restricted to actions that will disturb deposits deeper than 45 cm below the present ground surface.



Figure 7. Completed plaza light post.

# References Cited

#### Barbour, Matthew

2008 Sanitation in the City Different: A Study of Santa Fe's Nineteenth and Twentieth Century Privies. Presented at the 2008 Society for Historical Archaeology Annual Conference, Albuquerque, New Mexico.

#### Dozier, Edward P.

1970 The Pueblo Indians of North America. Holt, Rinehart and Winston, New York.

#### Folks, James J.

1975 Soil Survey of Santa Fe Area, New Mexico. United States Department of Agriculture Soil Conservation Service. US Government Printing Office, Washington, DC.

#### Elliott, Michael L.

1988 The Archaeology of Santa Fe: A Background Report. Jemez Mountain Research Center 87-13. Albuquerque, New Mexico.

#### Ellis, Bruce T.

1976 Santa Fe's Seventeenth Parish Church and Convent Reconsidered. In Collected Papers in Honor of Marjorie Ferguson Lambert, edited by Albert H. Schroeder, pp. 183-198. Papers of the Archaeological Society of New Mexico 3. Archaeological Society of New Mexico, Albuquerque.

## Folks, James J.

1975 Soil Survey of Santa Fe Area, New Mexico. United States Department of Agriculture Soil Conservation Service. US Government Printing Office, Washington, DC.

#### Gabin, Vickie L. and Lee E. Lesperance

1977 New Mexico Climatological Data: Precipitation, Temperature, Evaporation, and Wind, Monthly and Annual Means, 1850-1975. W. K. Summers, Socorro.

1942 Revolt of the Pueblo Indians of New Mexico and Otermin's Attempted Reconquest, 1680–1682. Vols. 8 and 9. Coronado Cuarto Centennial Publications: 1540-1940. University of New Mexico Press, Albuquerque.

#### Hewett, Edgar Lee

1912 First Annual Report of the Museum of New Mexico. Santa Fe.

#### Hordes, Stanley M.

1990 The History of the Santa Fe Plaza, 1610-1720. In Santa Fe Historic Plaza Study I, with Translations from Spanish Colonial Documents, edited by Linda Tigges, pp. 3-36. Santa Fe City Planning Department, Santa Fe.

## Jenkins, Myra E., and Albert H. Schroeder

1974 A Brief History of New Mexico. University of New Mexico Press, Albuquerque.

#### Kamen, Henry

2003 Empire: How Spain Became a World Power, 1492-1763. Harper Collins Press, New York.

#### Kelley, Vincent C.

1979 Geomorphology of the Española Basin. In New Mexico Geological Society Guidebook: Santa Fe County (30th Field Conference), pp. 281-288. University of New Mexico, Albuquerque.

#### Lentz, Stephen C.

1991 Survey, Test Excavation Results, and Data Recovery Plan for Cultural Resources near San Juan Pueblo, Rio Arriba County, New Mexico. Archaeology Notes 17. Office of Archaeological Studies, Museum of New Mexico, Santa Fe.

2004 Excavations at LA 80000, the Santa Fe Plaza Community Stage Location, Santa Fe, New Mexico. Archaeology Notes 343. Office of Archaeological Studies, Museum of New Mexico, Santa Fe.

### Lentz, Stephen C.

2005 El Pueblo de Santa Fe (LA 1051): Archaeological

Testing of the Proposed Santa Fe Civic Center. Archaeology Notes 355. Office of Archaeological Studies, Museum of New Mexico, Santa Fe.

#### Noble, David G.

1989 Santa Fe: History of an Ancient City. School of American Research Press, Santa Fe.

#### Ortiz, Alfonso

1979 San Juan Pueblo. In *Handbook of the North American Indians*, Vol. 9, *Southwest*, edited by Alfonso Ortiz, pp. 278–295. Smithsonian Institution, Washington, DC.

#### Pearce, Thomas M.

1965 New Mexico Place Names: A Geographical Dictionary. University of New Mexico Press, Albuquerque.

#### Peckham, Stewart

1982 Nusbaum's Old Headquarters Excavations, 1916. *El Palacio* 88(2):41–42.

#### Pilz, Wayne R

1984 KV Transmission Project Biotic Resources Technical Report. Ms. on file, Public Service Company of New Mexico.

#### Pratt, Boyd C.

The Santa Fe Plaza: An Analysis of Various Theories of Its Size and Configuration: A Look at Several Crucial Documents, and a Comparison with other Spanish Colonial Towns. In *Santa Fe Historic Plaza Study I, with Translations from Spanish Colonial Documents*, edited by Linda Tigges, pp. 37–54. Santa Fe City Planning Department, Santa Fe.

#### Reynolds, S. E.

1956 Climatological Summary, New Mexico: Temperature 1850–1954; Frost 1850–1954; and Evaporation 1850–1954. Technical Report 5. State Engineer's Office, State of New Mexico.

#### Simmons, Marc

1979 History of Pueblo-Spanish Relations to 1821.

In *Handbook of North American Indians*, Vol. 9, Southwest, edited by A. Ortiz, pp. 178–193. Smithsonian Institution, Washington, DC.

- 1989 Santa Fe in the Days of the Trail. In *Santa Fe: History of An Ancient City,* edited by David Noble, pp.115–128. School of American Research Press, Santa Fe.
- 2001 Spanish Pathways: Readings in History of Hispanic New Mexico. University of New Mexico Press, Albuquerque.

#### Snow, Cordelia T.

1988 A Brief History of the Palace of the Governors and a Preliminary Report on the 1974 Excavation. *El Palacio* 80(3):1–22.

1990 A Hypothetical Configuration of the Early Santa Fe Plaza Based on the 1573 Ordenanzas or the Law of the Indies. In *Santa Fe Historic Plaza Study I, with translations from Spanish Colonial Documents*, edited by Linda Tigges, pp. 55–74. Santa Fe Planning Department, Santa Fe.

#### Snow, David H.

1992 Santa Fe Historic Plaza Study II: Plaza Excavation Final Report: Fall 1990. Cross Cultural Research Systems, Santa Fe.

#### Spicer, Edward

1962 *Cycles of Conquest.* University of Arizona Press, Tucson.

#### Stubbs, Stanley A., and Bruce T. Ellis

1955 Archaeological Investigations at the Chapel of San Miguel and the Site of La Castrense, Santa Fe New Mexico. Monographs of the School of American Research 18. Santa Fe.

#### Wilson, Christopher

1981 The Santa Fe, New Mexico Plaza: An Architectural and Cultural History, 1610–1921. Master's thesis, University of New Mexico, Albuquerque.

# Appendix 1: Site Location Information

## LA 80000

Centerpoint: UTM Zone 13, PLSS Data: Unplatted in New Mexico PM. USGS Santa Fe 7.5' quadrangle.