AN ARCHAEOLOGICAL SURVEY OF APPROXIMATELY 600 ACRES ON
PUEBLO OF SANDIA LAND, BERNALILLO COUNTY, NEW MEXICO

PREPARED BY
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FOR
THE PUEBLO OF SANDIA

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This report documents a Class III (100%) non collecting, non disturbing cultural resource survey that was completed during September, 1995 in Sections 1 and 12 of R3E, T11N and Sections 6 and 7 of R4E, T11N, Bernalillo County. A total of approximately 600 acres has been inspected.

The purpose of this survey is to fulfill compliance obligations under all relevant federal antiquity and historic preservation regulations. Copies of this report will be forwarded to the New Mexico State Archaeological Records Center (ARMS) in Santa Fe, and the Bureau of Indian Affairs Area Archaeologist in Albuquerque.

No archaeological sites were encountered during the course of the survey. A number of Isolated Occurrences were recorded and are described in this report. None of the Isolated Occurrences are National Register eligible and I recommend that archaeological clearance be granted.
INTRODUCTION

In the month of September, 1995, Dr. Henry Walt, with the assistance of archaeological technician Dawne Miller, completed a Class III (100%) non-collecting cultural resource survey on Pueblo of Sandia land. This tract of land is approximately 600 acres and is bounded by the following UTM coordinates:
- 356810E and 3898110N for the northwest corner,
- 358075E and 3898110N for the upper north east corner,
- 358075E and 3897920N for the inner northeast corner,
- 358595E and 3897290N for the eastern northeast corner,
- 358595E and 3896380N for the southeast corner,
- and 356595E and 3896595N for the southwest corner.
These coordinates appear on the Alameda Quadrangle USGS Map. The archaeological survey described in this report has been completed in compliance with federal antiquity regulations in advance of the development of this land by the Pueblo of Sandia.

Very few cultural resources were encountered during the course of this survey. These resources are described below under the heading of 'Cultural Resources'.

SURVEY METHODOLOGY

The survey was completed by a two person crew walking parallel transects no more than 20 meters apart. Transects were flagged upon completion in order to monitor progress. During the course of this survey, hill tops, erosional cuts, and other locations likely to produce cultural remains were closely examined. Several diagonal transects were also paced in order to double check the survey results. The survey crew made frequent reference to compass bearings and GPS readings in order to maintain locational accuracy.

The only archaeological features that we encountered during the survey were a series of cairns. These were photographed, described and located by Global Positioning System (GPS) units. Other isolated cultural occurrences were also GPS located.
PROJECT ENVIRONMENT

Sandia Pueblo is situated in central New Mexico, between the Sandia Mountains and the Rio Grande. The entire area including and surrounding the pueblo is situated in the geologic depression known as the Albuquerque Basin. The Albuquerque Basin in turn occurs in the Mexican Highlands part of the Basin and Range Province. The study area typically consists of flat to gently sloping or rolling expanses of desert grassland cut by east-west trending arroyos that convey storm water runoff from the Sandia Mountains and the associated bahada to the Rio Grande. The vegetation consists primarily of perennial grasses and forbs, in some areas interspersed with widely scattered juniper. The climate is semiarid, averaging between 8 and 10 inches (20 and 25 centimeters [cm]) of rainfall annually. The study area varies in elevation from 5190 to 5400 feet above sea level. (Paul Knight: personal communication, October, 1995).

CULTURAL OVERVIEW

Cordell (1979) and Stuart & Gauthier (1981) offer good regional overviews, although they are becoming a little dated. They include discussions specific to the Albuquerque area. Several other regional summaries offer additional temporally specific information. These include Judge (1973) for the PaleoIndian, Irwin-Williams (1973) and Chapman (1979) for the Archaic, Rienhart (1967) for Basketmaker II, Schnader (1994) for Basketmaker III-Pueblo I, and Wendorf and Reed (1955) for the Anasazi in general.

Although the prehistory of the region is long and complex, it may be divided into major prehistoric periods that include the PaleoIndian, Archaic, and Anasazi developmental phases. The earliest known occupation in the region, the PaleoIndian period, has its origins about 9500 B.C. or perhaps earlier. This period lasted until about 5500 B.C. (Cordell 1979). The Sandia Cave site in the Sandia Mountains is said to date to this period, although numerous questions have been raised as to the reliability of this data. A survey by Judge (1973) failed to locate additional PaleoIndian sites in the Albuquerque area. It should be pointed out, however, that sites of this time frame are extremely difficult to find and rarely encountered anywhere in the New World. However, isolated chipped stone tools made by Paleo hunters have been found in the area, and are not uncommon in and around Rio Rancho.

Pleistocene traditions were replaced by the Archaic hunter and gatherer horizon C.A. 5500 B.C. Hunting strategies shifted from big-game animals of the Pleistocene to a wider variety of medium and small-sized game animals, as well as to the utilization of wild plants. Cordell summarizes this regional pattern:

"Archaic sites have been reported from the area north and west of Albuquerque between the West Mesa and the San Ysidro area (Reinhart 1968, Snow 1974, Scheafstoa 1968, 1973, Agonino and Hester 1953, Wiseman 1974, Beal 1976). The sites are generally located well above the Rio Grande floodplain on eroded surfaces cut by arroyos. Sand dune formations are a marked feature of the terrain. Although most sites occur as exposed surface deposits or in arroyo cuts (Agonino and Hester 1953), there are rock shelters which appear to
have been used sporadically from the Archaic through Anasazi and Historic times (Beal 1976, Reinhart 1968)." (Cordell 1979:41).

A survey of Sandia lands by Marshall and Walt (1985) found extensive evidence of Archaic period sites along the base of the Sandia Mountains. These were found at the mouths of Water and Juan Tabo Canyons.

By about 500 B.C., profound changes were beginning to transform the Archaic way of life. Corn had been introduced as had the bow-and-arrow. More substantial habitation structures also pointed towards an incipient sedentism. This ill-defined period of transition between Archaic and sedentary life is referred to as Basketmaker II. Sites from this time period have been found in Rio Rancho (Reinhart 1968).

The earliest well-defined villages in the region consist of semisubterranean pithouses of the Basketmaker 3-Pueblo1 transition (Schmader 1994:11). All sites from this phase include the first extensive assemblages of pottery characterized as Lino Graywares, groundstone, as well as more substantial architecture. Albuquerque pithouse villages contain both Anasazi graywares (from Albuquerque north) and Mogollon brownwares (centered in southern New Mexico). Albuquerque has often been referred to as a frontier between Anasazi and Mogollon. Pitrooms include storage pits and cysts as well as structures that may have functioned as kivas or society houses. By the 6th century AD, small pithouse villages could be found along many of the terraces overlooking the Rio Grande, from Belen to Bernalillo.

"Pithouses reported for the Albuquerque District have been located on gravel bluffs near Sandia (Peckham 1957), on low terraces and sandy hills west of the Rio Grande between Bernalillo and Jemez (Reinhart 1968, Skinner 1965, Vivian and Clendenen 1965, Vytlacil and Brody 1958, Frisbie 1967) and on top of a hill in Tijeras Canyon (Oaks 1978). In all cases, the sites are in close proximity to water in the form of intermittent tributaries of the Rio Grande. " (Cordell 1979:43).

Of special interest are the pithouses located on gravel bluffs near Sandia (1957). These are, in fact, located a short distance to the west of Casino Sandia along Tramway road as it descends from the terraces overlooking the flood plain to the flood plain itself.

The transition between Pueblo I and Pueblo II has conventionally been be placed CA 900 A.D. It is a time when new ceramic types were being introduced but little else appears to be markedly different.

The Pueblo III period (1150 or 1200 to 1300 AD) is a period of great ceramic diversity as well as one which saw the proliferation of sites, and a growing diversity of architecture. It is evident that a dramatic increase in population occurred during this period. Above-ground roomblocks begin to be common and co-exist in many instances with pithouses. Pueblo III sites are found throughout the region: in Corrales (Frisbie 1967), throughout the Albuquerque area (Marshall and Walt 1985), and in Tijeras Canyon (Cordell 1979). Pithouses and pithouse villages continued to be constructed within the Rio Grande valley until the end of the 13th century.
Three sites on Sandia Pueblo land found by Marshall and Walt date to the Pueblo III period. They are all located to the north of the Pueblo, on the first terraces overlooking the flood plain. These small villages incorporate both linear roomblocks and circular pithouses. Several other nearby sites may well be related to or ancestral to Sandia Pueblo. These include Pueblo Corrales (LA298), the Bulman site (LA713), and Pueblo Cardo (LA50272).

The Pueblo IV period (1300-1600 AD) has been characterized as a cultural florescence and a time when the population of the region reached its maximum prehistoric level (Cordell 1979:45). The population increase was more than likely fueled by the migration of peoples from the San Juan Basin and the southern Colorado Plateau. Large aggregate, multi-story villages were built, murals were painted on kivas and other interior walls, and a wide variety of objects were manufactured and decorated. It has been suggested that the mountains nearby made it possible to absorb population increases through hunting and gathering, a more energy-efficient economic endeavor than farming. However, with quickly expanding populations, this system could no longer function, necessitating a move to intensive agriculture and larger villages (Lee 1969).

There are a number of large PIV villages in what is now metropolitan Albuquerque: Kuaua (Tichy 1938), Alameda (Marshall and Walt 1985), Los Ranchos, Puaray (Schaafsma 1968), as well as the Pueblos of Sandia and Isleta.

By the time of the arrival of the Spanish and the colonization of the region, a series of villages had been established along the Rio Grande from Belen north to Bernalillo. The Spanish called this the province of Tiguex after the Tiwa language spoken by the region's inhabitants. During the first eighty years of colonization (1600-1680), these many Tiguex villages were reduced to Sandia and Isleta.
CULTURAL RESOURCES

The survey crew encountered no archeological sites during the course of the survey. However, 18 Isolated Occurrences were encountered, 13 of which were cairns or cairn complexes. These are described below as are the other Isolated Occurrences. All cultural manifestations are also noted on the map.

1. Cairn #1

Location: UTM zone 13, 357200E, 3898040N
Section 1, T11N, R3E, Alameda Quadrangle

Elevation: 5240 feet

Topography: The two cairns here are on the north side and overlooking a large west-trending arroyo with another drainage close-by to the north.

Description: There are the scattered remains of two cairns at this location. One appears to be quite old, with low-lying and partially buried cobbles arranged in either a shallow cross or "L" shape. Approximately 4 meters to the north is a second cairn, a somewhat more exposed scatter of cobbles.
2. Cairn #2

Location: UTM zone 13, 356920E, 389787N
Section 1, T11N, R3E, Alameda Quadrangle

Elevation: 5225 feet

Topography: This single cairn is near the crest of a hill overlooking 125 nearby.

Description: This is a small and compactly scattered cairn, perhaps of a more recent vintage than others nearby. There are no covered cobbles. It is approximately one meter in diameter.
3. Cairn #3

Location: UTM zone 13, 357014E, 3897852N  
Section 1, T11N, R3E, Alameda Quadrangle  
Elevation: 5210 feet

Topography: To the northeast of cairn #2, overlooking an arroyo to the north, these cairns are near the crest of a hill.

Description: There are two cairns here, one appears to be older and partially covered. Associated with what may be the more recent cairn are several fragments of brown bottle glass, dating perhaps to CA 1910-1920.
4. Cairn #4

Location: UTM zone 13, 357594E, 3897996N
Section 6, T11N, R4E, Alameda Quadrangle

Elevation: 5305 feet

Topography: This location is on a high, flat ridge with good visibility in all directions. There are a number of arroyos extending from this ridge to the west.

Description: This is a small, low, and partially buried, older cairn. The scatter is less than one meter in diameter.
5. Cairn #5

Location: UTM zone 13, 356753E, 3896846N
Section 1, T11N, R3E, Alameda Quadrangle

Elevation: 5215 feet

Topography: This is on the crest of a low hill, overlooking a large arroyo to the south and a smaller arroyo to the north. It is close to I25, directly across from the Sandia Casino.

Description: There are the scattered remains of two cairns here. One is older and partially covered, the other is more exposed and probably of a more recent vintage. They are approximately 3.5 meters apart and are each about one meter in diameter.
6. Cairn #6

Location: UTM zone 13, 357055E, 3896905N
Section 1, T11N, R3E, Alameda Quadrangle

Elevation: 5230 feet

Topography: This cairn is on a west-trending ridge top with good visibility in all directions. It overlooks a broad arroyo to the south.

Description: This is a single low scatter of cobbles that appears to be relatively old. The scatter is 1.5 meters in diameter.
7. Cairn #7

Location UTM zone 13, 358050E, 3898000N
Section 6, T11N, R4E, Alameda Quadrangle

Elevation: 5320 feet

Topography: This location overlooks a large, wide arroyo to the north. It is below the ridge crest with extended visibility in all directions except to the south.

Description: This compact basalt cobble scatter is approximately one meter in diameter.
8. Cairns #8

Location: UTM zone 13, 357880E, 3899051N
Section 6, T11N, R4E, Alameda Quadrangle

Elevation: 5305 feet

Topography: This is on the crest of a broad, level ridge with extended visibility in all directions.

Description: Here the remains of a relatively old cairn are scattered and partially covered in a one meter circle.
Cairn #9

Location: UTM zone 13, 357636E, 3890880N
Section 6, T11N, R4E, Alameda Quadrangle

Elevation: 5290 feet

Topography: This location overlooks a steep arroyo to the south. It is on the crest of a ridge with extended visibility in all directions.

Description: This is the remnant of a single cairn that is scattered in a circle of cobbles, 140 cm in diameter. A Red Flicker feather is associated with this scatter. This is not a normal habitat for Flickers.
Cairn #10

Location: UTM zone 13, 357606E, 3898018N
Section 6, T11N, R4E, Alameda Quadrangle

Elevation: 5275 feet

Topography: 100 meters to the south of cairn #9, this location directly overlooks the same deep arroyo that cairn 9 does.

Description: This cobble concentration appears to be somewhat older than cairn #9. It is low, scattered and partially covered, measuring 150 cm in diameter.
Cairn #11

Location: UTM zone 13, 357451E, 3898109N
Section 6, T11N, R4E, Alameda Quadrangle

Elevation: 5250 feet

Topography: This cairn is to the west of #s 9 and 10 and overlooks the same arroyo to the south. Again with good visibility, there are two other cairns within site of #11 in an alignment at approximately 320°. These cairns are about 100 meters and 175 meters to the northwest, outside of the study area.

Description: This is a compactly scattered cairn remnant, approximately 160 cm in diameter.
Cairn #12

Location: UTM zone 13, 357687E, 3897613N
Section 6, T11N, R4E, Alameda Quadrangle

Elevation: 5300 feet

Topography: This cairn is on the north side of a broad arroyo, directly overlooking it with extended visibility.

Description: This is a single, old, and partially covered scatter of cobbles, about one meters in diameter.
Cairn #13

Location: UTM zone 13, 357111E, 3898030N
Section 6, T11N, R4E, Alameda Quadrangle

Elevation: 5210 feet

Topography: Close to I25, this cairn overlooks a steep arroyo to the south, and has clear visibility in all directions.

Description: There are two cairns here, approximately 10 meters apart, east to west. The Easterly cairn is 120 cm in diameter, dispersed and low-lying. The west-side cairn is even more dispersed, scattered over a 2 meter diameter.
A sheep rattle, 100m to the east of cairn #7. This is along the eastern edge of the study area. This is a tall baking powder can that has been modified. It has been pressed together along its rim, fastened with wire, and has a wire handle. Small stones within the can serve as a rattle or noise-maker. The baking powder can probably dates to the 1930's.
IO 2  
357370E  3897955N  
This is an historic trash scatter, near the crest of a hill, overlooking an arroyo to the south. There are approximately 20 fragments here. They include amber bottle glass from a thick-walled bottle and perhaps two thin-walled bottles. Also here are a few fragments of thin tempered steel.

IO 3  
357105E  3897820N  
This isolated find consists of one key. It is an old-fashioned, cylindrical key with a heavy, circular, wire handle. Keys of this type are uncommon by the 20th century.

IO 4  
357050E  3896680N  
One smoky gray obsidian flake with cortex.

IO 5  
358315E  3896720N  
A single white primary chert flake with cortex.

CONCLUSIONS AND RECOMMENDATIONS

No archaeological sites were found within the study area. Thirteen cairns and five additional Isolated Occurrences were discovered, located, and described in this report. The cairns may have something to do with sheep herding, although their function with reference to stock raising is not clear. IO 1, the sheep rattle is also an artifact of the local, small-scale sheep industry. Several Sandia Pueblo members recall local Hispanic shepherds herding their flocks in the study area during the first half of the 20th century.

The study area is situated on an open, sandy grassland between the floodplain of the Rio Grande to the west, and the foothills of the Sandia Mountains to the east. It is, in fact, some distance from both of these prominent features, and as a result was not especially prized or heavily utilized by nearby prehistoric or historic inhabitants. Until its relatively recent use for stock raising, it was simply an area to pass through for the Sandia people and their neighbors. Nearby prehistoric sites overlook the Rio Grande to the west or are found closer to the Sandias to the east.

No National Register-eligible sites were encountered within the study area. I, therefore recommend that clearance be granted.
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