APPENDIX C

Cultural Resources Survey

Hammerstone Archaeological Services

NMCRIS INVESTIGATION ABSTRACT FORM (NIAF)

1. NMCRIS Activity No.: 132711	2a. Lead (Sponsoring) Agency: US Federal Aviation Administration	2b. Other Permitting Agency(ies):	3. Lead Agency Report No.:

4. Title of Report: *Cultural Resource Survey* Of Approximately 725.2 Acres for a Proposed Master Plan for Future Development at the Las Cruces International Airport in Doña Ana County, New Mexico

Author(s) Richard Burleson

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

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

7. Description of Undertaking (what does the project entail?): From February 3-8, 2015, Hammerstone Archaeological Services (HAS), conducted a Class III cultural resources survey of 725.2 acres at the Las Cruces International Airport in Doña Ana County, NM in anticipation of a 20 year Master Plan for the airport consistent with guidance found in FAA Advisory Circular 150/5070-6B "Airport Master Plans". This project is being conducted under NMCRIS Number 132711. The Federal Aviation Administration is the lead federal agency for the project. The Class III inventory is being conducted in order to identify cultural resource properties that might be affected by the proposed undertaking in an effort to comply with Section 106 of the National Historic Preservation Act. The cultural resource survey is required in an effort to meet state guidelines in preparation of a master plan for the 20-year development of the airport. The project is being conducted for Delta Airport Consultants. Existing airport facilities are not adequate to meet the forecast needs of the airport. The scope of work will include airfield facilities such as aircraft apron, taxiways, and hangars and landside facilities such as general aviation terminal building, maintenance building, airport circulation roads, autoparking, and fencing. This work will include some rehabilitation of existing facilities and some new infrastructure – all to be phased over 20 years.

8. Dates of Investigation: (from: 2/3/15-2/8/15)

9. Report Date: 2/12/15

10. Performing Agency/Consultant: Hammerstone Archaeological Services
Principal Investigator: Richard Burleson
Field Supervisor: Robert Phippen
Field Personnel Names: Robert Phippen, Cherlyn Burleson

11. Performing Agency/Consultant Report No.: 328

12. Applicable Cultural Resource Permit No(s):
NM-15-205-SMT

13. Client/Customer (project proponent): Delta Airport Consultants, Inc.
Contact: Rusty Chapman
Address: 9711 Farrar Court, Suite 100
Richmond, VA 23236
Phone: (770) 864-3976

14. Client/Customer Project No.:

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

Land Owner	Acres Surveyed	Acres in APE
City of Las Cruces	725.2	725.2
TOTALS	725.2	725.2

16 Records Search(es):

Date(s) of ARMS File Review 1/12/15	**Name of Reviewer(s) R. Burleson**	
Date(s) of NR/SR File Review 1/12/15	**Name of Reviewer(s) R. Burleson**	
Date(s) of Other Agency File Review	**Name of Reviewer(s)**	**Agency**

17. Survey Data:

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

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

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

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

Picacho Mountain, NM	**32106C8**

c. County(ies): Dona Ana

17. Survey Data (continued):

d. Nearest City or Town: Las Cruces

e. Legal Description:

Township (N/S)	Range (E/W)	Section	¼ ¼ ¼
23S	**1W**	**21-22 and 27-28**	, , .
			, , .

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

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

18. Survey Field Methods:

Intensity: ☒ 100% coverage ☐ <100% coverage

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

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

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

Survey Interval (m): 15 m Crew Size: 3 Fieldwork Dates: 2/3/15-2/8/15

Survey Person Hours: 154.5 Recording Person Hours: 23.5 Total Hours: 178

Additional Narrative: Ten hour work days were employed due to heavy work schedules

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.): The project area is located in the Rio Grande Subsection of the Mexican Highland Section of the Basin and Range Province of central New Mexico. Scattered block-faulted ranges separated by intermountain basins having internal drainage (bolsons) typify the region. The Rio Grande Valley is a rift system filled with Quaternary age alluvial gravels. As a result of incision by the Rio Grande River, these gravel bar deposits are now expressed as several terraces east and west of the river bottom. The geomorphology of the project area is primarily comprised of dunal formations (coppice dunes) occurring across a large, rolling flat. This landscape is set within a larger landscape of abrupt relief, of faultblock mountains raised along steep-angled planes and zones to produce scarps and precipitous slopes. Between the uplifts are extensive basins, downfaulted, downwarped, in-filled with erosional deposits from the mountains to the east. This filling has tended to smooth out the lowlands, to produce a widespread surface, or series of narrowly joined surfaces, which has, or have, been extended across the mountain flanks by the development of pediments. These deposits are, on average, several thousand feet deep and have been gravitationally distributed as an almost even surface. The area of lowlands has thus been gradually enlarged. This lowland or surface may be called locally the Cuchillo surface, the Palomas surface, the Jornada surface, and is probably the correlative of the Ortiz surface to the north and the La Mesa surface to the south. It is incised by drainages throughout, to form the major valley of the Rio Grande (located to the west) and the numerous arroyos. Where the Rio Grande drainage does not extend, the surface is not deeply dissected. The terrain here is relatively smooth, a feature which induced early travelers in this country to use the Jornada del Muerto rather than struggle with the ups and downs of the route in and out of arroyos along the Rio Grande. The soils within the proposed project area have largely been derived from alluvial and aeolian processes and consist mainly of sands and gravels (New Mexico Geological Society 1996). Before the Rio Grande was confined between levees, the river was characterized by both natural levees and a flood basin, as well as braided ephemeral channels and channel islands that were confined between sloped valley walls. The river today exhibits ephemeral channels and channel islands that are confined between the levees. The Rio Grande floodplain has been increasingly used for agriculture since the late 1800s and a number of irrigation features (e.g. drains, canals, and lateral) have been constructed. Most of the floodplain has been cleared of trees and leveled to facilitate irrigation and urban development. Specifically, the project area is located immediately west of Las Cruces, just north of Interstate 10. The project area occurs atop a gentle flat/plain characterized by numerous ephemeral dissecting drainages and internally drained basins represented by dunal and coppice dune formations. Elevation across the project area ranges from 4425 to 4455 feet above mean sea level. The project area is located in the Rio Grande Subsection of the Mexican Highland Section of the Basin and Range Province of central New Mexico. Scattered block-faulted ranges separated by intermountain basins having internal drainage (bolsons) typify the region. The Rio Grande Valley is a rift system filled with Quaternary age alluvial gravels. Specifically, the project area is located immediately west of Las Cruces, just north of Interstate 10. The project area occurs atop a gentle flat/plain characterized by numerous ephemeral dissecting drainages and internally drained basins represented by dunal and coppice dune formations. Elevation across the project area ranges from 4425 to 4455 feet above mean sea level. Soils in the project are classified as Cacique-Las Cruces complex and Wink-Pintura complex soils. These soil types are characterized as moderately-drained soils comprised of sandy loams and fine loamy sands with varying gravel content found across relatively flat to extremely gentle rolling slopes. The project area vegetation is in the Chihuahuan desert scrub zone. Dominant species within the vegetation community include grasses such as blue grama (*Bouteloua gracilis*), purple three-awn (*Aristaida purpurea*), broom snakeweed (*Gutierrezia sarothrae*), bunchgrasses such as little bluestem (*Schizachyrium scoparium*), big bluestem (*Andropogon gerardii*), mesa dropseed (*Sporobolus flexuosus*), and alkalai sacaton (*Sporabolus airiodies*); and shrubs such as honey mesquite (*Prosopis glandulosa*), creosote bush (Larrea tridentate), fourwing saltbush (Atriplex canescens), tarbush (*Flourensia cernua*), and fourwing saltbush (*Atriplex canescens*). Wildlife in the vicinity of the project area includes various small mammals, diverse avifauna, reptiles and occasional big game species (Brown and Lowe 1980).

20a. Percent Ground Visibility: 70-90% b. Condition of Survey Area (grazed, bladed, undisturbed, etc.): Modern land use impacts were identified within the project area and two-track roads, utilities, road construction/maintenance, livestock grazing, and the development of the Las Cruces International Airport.

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

22. Required Attachments (check all appropriate boxes):

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

23. Other Attachments:

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

***(Describe)*:**

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

Principal Investigator/~~Responsible~~ Archaeologist: Richard Burleson

Signature _____ **Date** **2/12/2015** **Title (if not PI):**

25. Reviewing Agency: Reviewer's Name/Date Accepted ( ) Rejected ( ) Tribal Consultation (if applicable): ☐ Yes ☐ No	26. SHPO Reviewer's Name/Date: HPD Log #: SHPO File Location: Date sent to ARMS:

CULTURAL RESOURCE FINDINGS

[fill in appropriate section(s)]

1. NMCRIS Activity No.:	2. Lead (Sponsoring) Agency:	3. Lead Agency Report No.:
132711	US Federal Aviation Administration	

SURVEY RESULTS:
Sites discovered and registered: 0
Sites discovered and NOT registered: 0
Previously recorded sites revisited (*site update form required*): 7
Previously recorded sites not relocated ***(site update form required):***
TOTAL SITES VISITED: 10
Total isolates recorded: 24 **Non-selective isolate recording?** ☒
Total structures recorded (*new and previously recorded, including acequias*): **0**

MANAGEMENT SUMMARY: During the course of the Class III survey, seven previously recorded sites, three newly discovered sites, and 24 isolated manifestations were encountered and documented. Several other previously recorded sites are located near the project area, however a field assessment determined that they were outside of the present survey corridor. All sites are recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential with the exception of LA 78981 which is no longer in existence and is now recommended as not eligible for the National Register of Historic Places. Prior to conducting the field survey, it was determined that likely subsurface deposits would be found on Archaic and Mogollon sites within a dunal setting, as was typically larger site sizes (LA 26964, 70914, 169053, and 169056), a portion of the project area would require exclusion from any future ground disturbing activities associated with the project undertaking. The area of exclusion is depicted on Appendix A Map 1. New sites LA 181137, 181138, and 181139 are smaller, but also have subsurface deposits. It is recommended that all sites be avoided by any ground disturbing activities associated with the project undertaking.

IF REPORT IS NEGATIVE YOU ARE DONE AT THIS POINT.

SURVEY LA NUMBER LOG
Sites Discovered:

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

Previously recorded revisited sites:

LA No.	Field/Agency No.	Eligible? (Y/N, applicable criteria)
26964		Y, D
78981		N
79014		Y, D
169053		Y, D
169056		Y, D
169057		Y, D
169058		Y, D
181137	HAS-1	Y, D
181138	HAS-2	Y, D
181139	HAS-3	Y, D

MONITORING LA NUMBER LOG *(site form required)*
Sites Discovered (*site form required*) **:** **Previously recorded sites** ***(Site update form required):***

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

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

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

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

Cultural Resource Survey

Of Approximately 725.2 Acres for a Proposed Master Plan for Future Development at the Las Cruces International Airport in Doña Ana County, New Mexico

Prepared by

Richard Burleson

Project conducted under
New Mexico State Land Permit Number NM-15-205-SMT

NMCRIS Number 132711

Organization

Hammerstone Archaeological Services
7016 Tampico Road, NE
Rio Rancho, New Mexico 87144
(505) 771-2257

For Submission to

Delta Airport Consultants
9711 Farrar Court, Suite 100
Richmond, Virginia 23236

HAS Report Number 406

February 2015

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INTRODUCTION

From February 3-8, 2015, Hammerstone Archaeological Services (HAS), conducted a Class III cultural resources survey of 725.2 acres at the Las Cruces International Airport in Doña Ana County, NM in anticipation of a 20 year Master Plan for the airport consistent with guidance found in FAA Advisory Circular 150/5070-6B "Airport Master Plans". This project is being conducted under NMCRIS Number 132711. The Federal Aviation Administration is the lead federal agency for the project. The Class III inventory is being conducted in order to identify cultural resource properties that might be affected by the proposed undertaking in an effort to comply with Section 106 of the National Historic Preservation Act.

During the course of the Class III survey, seven previously recorded sites, three newly discovered sites, and 24 isolated manifestations were encountered and documented. Several other previously recorded sites are located near the project area, however a field assessment determined that they were outside of the present survey corridor. All sites are recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential with the exception of LA 78981 which is no longer in existence and is now recommended as not eligible for the National Register of Historic Places. The isolated occurrences are not likely to yield significant data towards our present understanding of the prehistoric or historic periods of the region and therefore, require no further treatment.

DESCRIPTION OF PROJECT UNDERTAKING/LOCATION

The cultural resource survey is required in an effort to meet state guidelines in preparation of a master plan for the 20-year development of the airport. The project is being conducted for Delta Airport Consultants. Existing airport facilities are not adequate to meet the forecast needs of the airport. The scope of work will include airfield facilities such as aircraft apron, taxiways, and hangars and landside facilities such as general aviation terminal building, maintenance building, airport circulation roads, autoparking, and fencing. This work will include some rehabilitation of existing facilities and some new infrastructure – all to be phased over 20 years. Surface land ownership for the project is the City of Las Cruces. The project area (Figure 1 and Appendix A Map 1) is located within Township 23 South, Range 1 West, Sections 21-22 and 27-28 on the Picacho Mountain, NM USGS 7.5 minute quadrangle map.

This undertaking complies with the provisions of the National Historic Preservation Act of 1966, as amended through 2002. This survey complies with the provisions of the New Mexico Cultural Properties Act (18-6-1 through 18-6-17 New Mexico Statues Annotated [NMSA] 1978), and the Prehistoric and Historic Sites Preservation Act (18-8-1 through 18-8-9 NMSA 1978), and applicable regulations. The report is consistent with applicable state and federal standards for cultural resource management. Field work was performed by Richard Burleson, who served as field director and Robert Phippen who served as crew member. Richard Burleson served as principal investigator.

ENVIRONMENTAL SETTING

The project area is located in the Rio Grande Subsection of the Mexican Highland Section of the Basin and Range Province of central New Mexico. Scattered block-faulted ranges separated by intermountain basins having internal drainage (bolsons) typify the region. The Rio Grande Valley is a rift system filled with Quaternary age alluvial gravels. As a result of incision by the Rio Grande River, these gravel bar deposits are now expressed as several terraces east and west of the river bottom. The soils within the proposed project area have largely been derived from alluvial and aeolian processes and consist mainly of sands and gravels (New Mexico Geological Society 1996). Before the Rio Grande was confined between levees, the river was characterized by both natural levees and a flood basin, as well as braided ephemeral channels and channel islands that were confined between sloped valley walls. The river today exhibits

ephemeral channels and channel islands that are confined between the levees. The Rio Grande floodplain has been increasingly used for agriculture since the late 1800s and a number of irrigation features (e.g. drains, canals, and lateral) have been constructed. Most of the floodplain has been cleared of trees and leveled to facilitate irrigation and urban development. Specifically, the project area is located immediately west of Las Cruces, just north of Interstate 10. The project area occurs atop a gentle flat/plain characterized by numerous ephemeral dissecting drainages and internally drained basins represented by dunal and coppice dune formations. Elevation across the project area ranges from 4425 to 4455 feet above mean sea level.

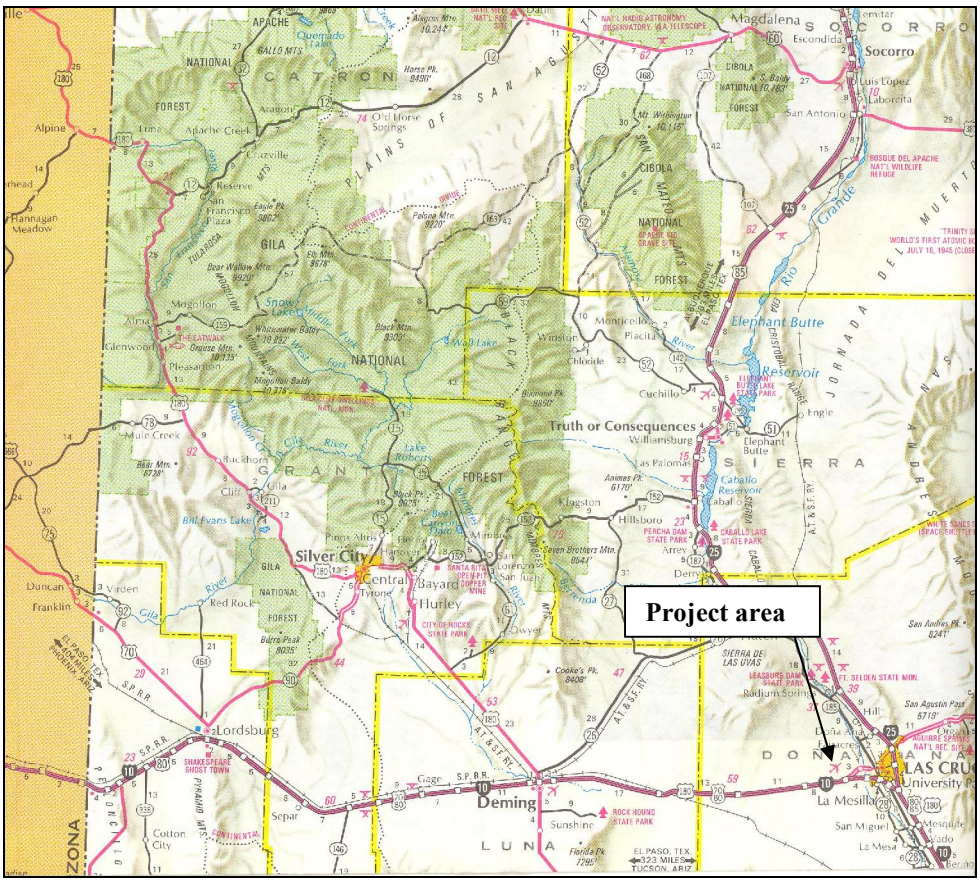

Figure 1. Project Location.

Climate

Spring months tend to be mild with strong winds. Summers tend to be hot with average annual temperatures ranging from 34.6° Centigrade (C) (94.4° Fahrenheit [F]) to 35.4° C (95.8° F). Winters tend to be cooler. Average temperatures range from 14.7° C (58.5° F) to 17.9° C (64.3° F). Annual precipitation is 12.61 inches. The frost-free growing season is about 25 to 30 weeks (Williams 1986).

Soil Types

The ***USDA Soil Conservation Service Web Soil Survey (http://websoilsurvey.nrcs.usda.gov)*** was used to describe and analyze impacts to soils from the proposed action. The soil map units represented in the project area are:

Soils in the project are classified as Cacique-Las Cruces complex and Wink-Pintura complex soils. These soil types are characterized as moderately-drained soils comprised of sandy loams and fine loamy sands with varying gravel content found across relatively flat to extremely gentle rolling slopes.

Local Drainage Patterns and Streams

The larger regional drainage pattern typically consists of the Rio Grande River system to the east and the smaller, intermittent drainages that flow into the Rio Grande River. Surface water within the area is affected by geology, precipitation, and water erosion. Ephemeral surface water is primarily drained into the Rio Grande River to the west. Small internally drained basins are present sporadically throughout the project area. Groundwater within the area is affected by geology and precipitation. The watershed and hydrology in the area is affected by land and water use practices. Factors that currently cause short-lived alterations to the hydrologic regime in the area include livestock grazing management, recreational use activities, groundwater pumping, permanent roads, temporary roads, pipelines, and power lines.

Flora and Fauna

The project area vegetation is in the Chihuahuan desert scrub zone. Dominant species within the vegetation community include grasses such as blue grama (*Bouteloua gracilis*), purple three-awn (*Aristaida purpurea*), broom snakeweed (*Gutierrezia sarothrae*), bunchgrasses such as little bluestem (*Schizachyrium scoparium*), big bluestem (*Andropogon gerardii*), mesa dropseed (*Sporobolus flexuosus*), and alkalai sacaton (*Sporabolus airiodies*); and shrubs such as honey mesquite (*Prosopis glandulosa*), creosote bush (Larrea tridentate), fourwing saltbush (Atriplex canescens), tarbush (*Flourensia cernua*), and fourwing saltbush (*Atriplex canescens*). Wildlife in the vicinity of the project area includes various small mammals, diverse avifauna, reptiles and occasional big game species (Brown and Lowe 1980).

Birds
Bird species that frequent the aforementioned habitat types within the project area include scaled quail (*Callipepla squamata*), mourning doves (*Zenaida macroura*), loggerhead shrike (*Lanius ludovicianus*), northern flicker (*Colaptes auratus*), western meadowlark (*Sturnella neglecta*), horned lark (*Eremophila alpestris*), chihuahuan raven (*Corvus cryptoleucus*), and the roadrunner (*Geococcyx californianus*).

Raptors
Raptors that could be found within the project area include the common nighthawk (*Chordeiles minor*), ferruginous hawk (*Buteo regalis*), swainson's hawk (*Buteo swainsoni*), red-tailed hawk (*Buteo jamaicensis*), and the American kestrel (*Falco sparverius*).

Mammals
Many species of mammalian carnivores occur within the habitat types within the project area. These include the striped skunk (*Mephitis mephitis*), coyote (*Canis latrans*), badger (*Meles meles*), bobcat (*Lynx rufus*), and gray fox (*Urocyon cinereoargenteus*). Small mammals that serve as the prey base in the project area include the deer mouse (*Peromyscus maniculatus*), pocket mouse (*Perognathus sp*.), ground squirrel (*Spermophilus sp*.), kangaroo rat (*Dipodomys ordii*), white-throated woodrat (*Neotoma albigula*), desert cottontail (*Sylvilagus audubonii*), and the black-tailed jackrabbit (*Lepus californicus*).

Reptiles and Amphibians
A diverse assemblage of reptiles and amphibians is present within the project area. These include species such as the southern prairie lizard (*Sceloporus undulatus consobrinus*), lesser earless lizard (*Holbrookia maculata*), side-blotched lizard (*Uta stansburiana*), tree lizard (*Urosaurus ornatus*), various *Eumeces* spp, western rattlesnake (*Crotalus viridis*), western diamondback (*Crotalus atrox*), coachwhip (*Masticophis flagellum*), western box turtle (*Terrapene ornata*), and spadefoot toads (*Spea multiplicata*).

Geomorphology

The geomorphology of the project area is primarily comprised of dunal formations (coppice dunes) occurring across a large, rolling flat. This landscape is set within a larger landscape of abrupt relief, of faultblock mountains raised along steep-angled planes and zones to produce scarps and precipitous slopes. Between the uplifts are extensive basins, downfaulted, downwarped, in-filled with erosional deposits from the mountains to the east. This filling has tended to smooth out the lowlands, to produce a widespread surface, or series of narrowly joined surfaces, which has, or have, been extended across the mountain flanks by the development of pediments. These deposits are, on average, several thousand feet deep and have been gravitationally distributed as an almost even surface. The area of lowlands has thus been gradually enlarged. This lowland or surface may be called locally the Cuchillo surface, the Palomas surface, the Jornada surface, and is probably the correlative of the Ortiz surface to the north and the La Mesa surface to the south. It is incised by drainages throughout, to form the major valley of the Rio Grande (located to the west) and the numerous arroyos. Where the Rio Grande drainage does not extend, the surface is not deeply dissected. The terrain here is relatively smooth, a feature which induced early travelers in this country to use the Jornada del Muerto rather than struggle with the ups and downs of the route in and out of arroyos along the Rio Grande.

The surface is modified positively by late features, volcanic cones, lava flows, and pyroclastic accumulations. These, commonly more resistant to erosion than the alluvial deposits upon which they rest, are emphasized physiographically where dissection has occurred. Basin filling was probably occurring widely in Miocene time. It continued into the Pliocene, when the Cuchillo-Palomas-Jornada surface began to appear as an integrated surface. The full development of this surface was probably not attained till Pleistocene time, though it is not necessarily true that it reached its maximum perfection everywhere at the same time, nor that dissection began everywhere simultaneously.

Cultural Environment

The project area has been impacted primarily by the installation of power lines, gas pipelines, and previous range development. Two-track road development and fence lines exist in several areas, although not consistent throughout the project area. Livestock grazing is actively occurring throughout the project area.

PREVIOUS ARCHAEOLOGICAL WORK

A site records search of the Archaeological Records Management Section (ARMS) of the Museum of New Mexico and Bureau of Land Management, Las Cruces District resulted in finding 20 previously recorded sites within 500 m of the project area. They are described in further detail in Table 1 below.

Table 1. Previously recorded sites within 500 m of the project area.

LA Number	Site Type	Occupation Type
26964	Nonstructural	Prehistoric
43957	Structural	Prehistoric
69323	Structural	Prehistoric/Historic
77481	Nonstructural	Unknown
78422	Nonstructural	Unknown
78981	Structural	Historic
78983	Nonstructural	Unknown
78984	Nonstructural	Unknown

79011	Nonstructural	Historic
79014	Structural	Unknown
118525	Structural	Prehistoric
122271	Structural	Unknown
122272	Structural	Prehistoric
169053	Structural	Prehistoric
169054	Structural	Prehistoric
169055	Structural	Prehistoric
169056	Structural	Prehistoric
169057	Structural	Prehistoric
169058	Structural	Prehistoric
173977	Structural	Prehistoric

A records search of the Archaeological Records Management Section (ARMS) of the Museum of New Mexico and Bureau of Land Management, Las Cruces District resulted in finding 15 previously conducted archaeological projects within 500 m of the project area. They are described in further detail in Table 2 below.

Table 2. Previously conducted projects within 500 m of the project area.

NMCRIS Number	**Project Type**	**Reference**
11166	Linear survey	Leftwich 1980
16537	Block survey	Hoyt 1979
18226	Linear survey	Hart et al 1987
19781	Linear survey	Bond 1987
23325	Block survey	Johnson 1988
31424	Block survey	Stuart 1990
38269	Block survey	Stuart 1991
57761	Linear survey	Ackerly 1997
61253	Linear survey	Michalik 1998
113557	Block survey	Lundquist 2009
119639	Block survey	Gibbs and Jackson 2011
122687	Block and linear survey	Poitevant 2012
125132	Block survey	Leonard 2012
126208	Block survey	Report not on file at ARMS
127391	Block survey	Stowe 2013

CULTURE HISTORY OVERVIEW

A comprehensive culture history overview is provided below. The research orientation for this project is primarily guided by questions surrounding the prehistoric occupation by the Eastern Branch of the Jornada Mogollon as it relates to chronology, settlements patterns, and subsistence and resource acquisition. Therefore, primary emphasis is placed on the Mogollon period of the following culture history. As previously stated, Archaic materials are also expected, but in lesser quantities as are historic occupation relating to the development and the homesteading of the region.

Paleoindian Period (11,000 to 5500 B.C.)

The earliest documented occupation of the Southwest has been dated to the Pleistocene/early Holocene transition, 9000 to 6000 B.C. The subsistence strategy employed by these early New World hunter-gatherers is generally described as highly mobile. This high mobility is seen in part to be a response to the low human population density and limited competition for access to resources. Although the density of game on the western Plains would have been greater than that of today, the relative dependence on megafauna, and the relative dependence on animal versus plant foods, remains unclear. However, climatic reconstruction, ethnographic study, and archaeological evidence suggest the emphasis on big game hunting by Paleoindians may have been overstated (Cordell 1997).

The Paleoindian traditions represented in the region include Clovis (9500 to 9000 B.C.); Folsom (8800 to 8300 B.C.); and the Midland, Belen, and Cody Complexes (7000 to 6000 B.C.) (Irwin-Williams and Haynes 1970). The Paleoindian toolkit includes lanceolate projectile points/knives, end and side scrapers, knives, gravers, chisel gravers, drills, spokeshaves, and utility flakes (Judge 1973).

Archaic Period (5500 to 300 B.C.)

During the Pleistocene and Holocene transition, the climate became warmer and dryer. This general xeric trend had far reaching effects on plant and animal habitats utilized by the indigenous human populations. The Pleistocene mammalian extinctions and environmental shift to modern conditions were completed by the fifth millennium B.C.

Human occupation during the Archaic period was a continuation of the mobile hunting and gathering of the earlier Paleoindian period with a shift towards resource diversification. In response to the drier Holocene conditions, the Archaic period is depicted as having a more generalized subsistence adaptation, incorporating a more expanded resource base with a focus on plants and the modern forms of Southwest animals. The greater dependence on plant foods is reflected in the increased presence of ground stone in the archaeological record (Cordell 1997).

Projectile point styles changed during the Archaic period. Smaller points with notched and shouldered hafting elements were manufactured around 3200 B.C. Settlement patterns were diverse and typically mobile, and sites tended to be situated in areas of high floral and faunal seasonal yield. Later in the period (ca. 1200 B.C.), maize was introduced to the area, but does not become a dietary staple until the following period (Dello-Russo 1999).

According to Berman (1979), regional Archaic sites have several manifestations that include: scatters found in rockshelters and caves, various combinations of chipped stone scatters, ground stone, fire-cracked rock, and isolated artifacts and dwellings. Material goods and data from excavated cave sites in the Hueco and Guadalupe Mountains (Cosgrove 1947; Sayles 1935) were used by Lehmer (1948) to define a late Archaic phase (Hueco) for the Jornada Mogollon. The excavated caves contained substantial quantities of milling and grinding tools and woven goods. More recent work indicates that the Hueco

phase may not be a useful concept and that its material manifestations do not underlie the entire Jornada Mogollon area (Beckett 1979). According to Beckett (1979), the San Andres Mountains may have been a geographic and cultural barrier for peoples west of these mountains representing the Cochise Archaic Tradition. Excavations in the Sacramento Mountains and Hooper Canyon Cave in the Guadalupe Mountains indicate that the origins of these Archaic period peoples may have been in north-central Mexico, east of the Sierra Madre Occidental Range (Irwin-Williams 1979:42).

Mogollon Period (300 B.C. /A.D. 700 to 1400)

The Mogollon Tradition emerged from an Archaic hunting and gathering base and was defined on the basis of excavations at pithouse villages in western New Mexico (Haury 1936). At its maximum extent, between A.D. 800 to 900, Mogollon peoples occupied the highlands of western New Mexico, the highlands of eastern Arizona, and portions of the Basin and Range Province to the south and east. In later times, the spread of Anasazi elements from the north obscured the representative material culture and traditional Mogollon adaptation.

Six regional variants, or branches, have been distinguished within the Mogollon (Wheat 1955) based on cultural and geographical features. These branches are the Mimbres, San Simon, Forestdale, Black River, Cibola, and Jornada.

Four distinct chronological sequences of ceramic phases have been identified in this region (Sebastian and Larralde 1993), all of which are affiliated with the development of the Jornada Mogollon. These include: (1) Eastern Branch of the Jornada Mogollon culture by Lehmer (1948); (2) ceramic period groups that closely resembled the Jornada Mogollon in the extreme southeastern part of the state by Leslie (1979); (3) south-central highlands by Kelley (1984); and (4) the Pecos Valley between Roswell and Santa Rosa by Jelinek (1967). The south-central highlands will not be discussed here as it does not related to the project area.

The chronology developed by Lehmer (1948) includes a Terminal Archaic phase (Hueco), which was considered to be a phase that developed out of the Cochise tradition of the southern boundary of the Southwest. Following this are three ceramic phases (Mesilla, Dona Ana, and El Paso), which are based on local variations. The introduction of pithouse structures and ceramics was considered by Lehmer (1948) to have originated from the San Marcial peoples of the Middle Rio Grande Valley who exhibited mixed Anasazi and Mogollon traits. The Mesilla phase is identified by El Paso Brownwares in association with pithouse structures. Pithouses were either round or rectangular with features including storage pits and exterior hearths. The Dona Ana phase exhibits the same pithouses, but includes the incorporation of the above-ground multi-roomed structures. El Paso Brownware persists with the introduction of El Paso Polychrome. Tradewares, including Mimbres wares become more frequent during this period. The El Paso phase is identified by the El Paso Polychrome and adobe structures arranged in room blocks around a central plaza. Chupadero Black-on-white, Three Rivers Red-on-terracotta, and Lincoln Black-on-red are tradewares associated with this period.

The chronology developed by Leslie (1979) is based on the previous works of Corley (1965). Leslie suggests that the occupants of extreme southeastern New Mexico were closely affiliated with the eastern branch of the Jornada Mogollon. This chronology also includes a Hueco phase similar to that discussed in the previous section by Lehmer (1948). The four ceramic phases include: Querecho, Maljamar, Transitional, and Ochoa. The Querecho phase is primarily a non-structural phase with small pithouses identified from a limited number of sites dating to the late portions of the phase. Ceramics associated with this phase include variations on Jornada Brownware. Imported tradewares include Cebolleta Black-on-white and Mimbres wares. The Maljamar phase is identified by both non-structural sites and rectangular pithouse villages, the largest villages found in the region at any given time period. Associated

diagnostic ceramics include Jornada Brownware and corrugated domestic wares towards the later stages of the phase. It is during this phase that Chupadero Black-on-white makes its first appearance as a tradeware. Three Rivers Red-on-terracotta and El Paso Polychrome are the other tradewares associated with this period. Stuart and Gauthier (1988) suggest that this phase ended around A.D. 1150-1200. At this time, the area was abandoned and it is assumed that people left to exploit areas of the Plains that were more productive in terms of food resources. This hiatus seems to correlate with fluorescence in the highlands of the region (south-central highlands represented by the Corona, Lincoln, and Glencoe phases). Transitional phase sites are identified based on the presence of ceramics such as El Paso Polychrome, Lincoln Black-on-red, Gila, Ramos, and Glaze A Red and Yellow. The Ochoa phase is identified by sites with both single room and roomblock structures. Ceramic variation greatly declines during this phase, yet includes a locally-produced Ochoa Indented and the Chupadero Black-on-white tradeware.

The following discussion of the prehistoric culture history is adapted and modified from an overview of the Jornada Mogollon region by Miller and Kenmotsu (2004), but adapted for the present study area. Archaeological research in the Jornada region has lagged behind other regions of the Southwest. Because of the region's remoteness, and the prevalence of nonarchitectural hunter-gatherer sites, the prehistory of the Jornada region was viewed as peripheral to developments in better-known and more archaeologically visible culture areas, such as the Mimbres Valley to the east, Casas Grandes to the south, and Anasazi puebloan cultures to the north and northeast. Despite this past neglect, the Jornada region has become increasingly important for several crucial research domains. These include the nature of hunter-gatherer mobility and organization in a region characterized by spatially and temporally variable resources; the ecological and social aspects underlying a high degree of settlement mobility among horticultural and agricultural groups; and causal factors leading to the adoption and intensification of agricultural production in the Southwest (Miller and Kenmotsu 2004). Moreover, the Jornada region represents an important transitional point between several geographic and cultural regions of the Southwest and southern Plains regions of the United States and northern Mexico. As the effects of scale on archaeological interpretation achieve wider recognition, the prehistory of the Jornada region is achieving greater importance for understanding relationships between long-term change in adaptive systems and pan-regional social and economic systems across the greater Southwest.

The following discussion focuses exclusively on the Formative period. The Formative period encompasses several important transitions in settlement adaptations. These include a relatively rapid succession of changes in architectural form, settlement structure, subsistence, and technology (including a trend of decreasing mobility), coupled with increasing agricultural pursuits and specialization that culminated in puebloan occupations. These developments have almost universally been perceived in terms of increasing agricultural emphasis. Evidence from excavations in the Jornada region, however, suggests that prehistoric populations may not have become more agriculturally specialized until AD 1250–1450. The Formative period in the Jornada region has been conventionally divided into three general phases (Lehmer 1948): the Mesilla phase (AD 200–1000), the Doña Ana phase (AD 1000–1200), and the El Paso phase (AD 1200–1450). In the following discussion, normative characteristics of each phase are presented first, followed by a more detailed review of specific adaptive trends that occurred throughout the Formative period.

The Mesilla phase is characterized by the appearance of the El Paso brownware ceramic tradition. Intrusive ceramics (predominantly Mimbres white wares and other Mogollon wares) appeared in the region after AD 600, but usually were not common. Limited evidence also indicates that painted brownware (El Paso Bichrome) may have made its first appearance late in this phase, but evidence is extremely limited (Stuart 1991). Pithouses were constructed during this period (Lehmer 1948), but were generally similar to huts of the Archaic period (Hard 1983a), becoming more formal after AD 600. Sites are generally more numerous, larger, and contain more artifacts than those from the preceding Archaic

period. Using survey data for the region, Whalen (1977, 1978) has proposed a site typology based on site size, number of features, and the presence of ceramics, lithics, and ground stone. Though the characteristics change through time, Whalen (1977, 1978) suggests that artifact variety and site size distinguish residential sites from camps. Mesilla phase sites for all environmental zones show a slight association between sites and playas in the central basin. Because all types of sites are found in all zones, Whalen (1977, 1978) believes that the subsistence practices of the Mesilla phase were based primarily on hunting and foraging supplemented by limited agriculture, and that occupation of the Hueco Bolson was residential in nature. Other archaeologists see the Mesilla phase as a continuation of Late Archaic period subsistence and settlement practices (Carmichael 1986; Hard 1983b; O'Laughlin 1979, 1980). Carmichael's (1986) work in the area differs in some respects from Whalen's (1977, 1978), especially in defining the role of the Hueco Bolson in cultural development. Carmichael (1986) contends that the basins could not have been the only area utilized by prehistoric groups. He argues that the basin areas are nonresidential in nature, rather than used by sedentary peoples (Carmichael 1986). More permanent residential sites were probably located outside of the basins, most likely near the Rio Grande. Carmichael (1986) does not see a linear-cultural progression for the Jornada peoples, but rather a cyclical progression of increased population followed by declines. Despite some differences, Carmichael's (1986) interpretation of cultural development for the region is similar to that of Whalen (1977, 1978): a gradual population, technological, and social organizational increase through time. Hard (1983b) has proposed a settlement-subsistence model in which differences in environment influence choices for seasonal rounds and activities. Hard (1983b) believes that winter and spring sites were located on the mountain alluvial fans, while the central basins were used for foraging. In this view, the summer and fall seasons saw the central basins used for temporary residences. More recent work by Mauldin (1998) indicates that Mesilla phase peoples may be characterized as residential foragers. The central basins and alluvial fans are thought to have been components in a residential foraging strategy in which groups lived throughout the region as hunter-gatherers. After AD 600, feature related activities in the central basins drastically decreased. Mauldin and others (1998) believe that this may indicate a shift in the settlement and subsistence practices of these groups. Research by these archaeologists characterizes the Mesilla phase population as increasing over the previous Archaic period, utilizing all environmental zones, and showing trends toward sedentism. Pottery was introduced and may have been important for cooking and storage of wild plant resources as well as cultigens. Artifact inventories indicate increasing use of ground stone during this period, and the bow and arrow was adopted. Settlement is thought to have been seasonal, with shallow huts utilized as summer abodes and deeper pithouses used as winter residences. Subsistence was based on generalized hunting (rabbits and small game) and the foraging of wild plant resources. Agriculture early in this period may have been largely opportunistic, with increasing emphasis coming later in the Mesilla phase.

Overall, the changes that occurred during the Doña Ana phase include the introduction of El Paso Polychrome pottery, rapid population increase, artifact changes that included larger manos and metates, increasing arrow point frequencies (although larger dart forms were still in use), and changes in intrusive ceramic types. Chupadero Black-on-white, Three Rivers Red-on-terracotta, St. John's Polychrome, and Chihuahuan wares appear during the Doña Ana phase, with Mimbres white wares disappearing by around AD 1150. Increasingly formal pit structures (including some rectangular and square examples) eventually led to above-ground pueblo architecture typical of the following El Paso phase. Another crucial change that occurred during this time was the shift from a general use of all environmental zones within the region to concentrated use of specific zones. These areas included the river and the distal alluvial fans (transition zone) that are notable for their abundance of water and arable land for growing cultigens.
The appearance of square pithouses during the Doña Ana phase marks a significant departure from the round domiciles of preceding periods. Although the floor plans vary considerably, square or subrectangular pit structures occur at most habitation sites. The structures themselves range from rather expedient, shallow varieties with sloping walls, informal fire pits, and unprepared floors (Miller 1989, 1990) to deeper, more elaborate versions with vertical walls, plastered floors, collared hearths, and

ramped entryways. The motivation behind the architectural style shift remains uncertain, but explanations for the variability within these structures include occupational permanency (less intensive effort would be expended on structures intended for short-term habitation) or temporal affiliation (structures became more formal as agricultural emphasis increased) (Lukowski, Smith, and Yduarte 2006; Miller 1990). Typically viewed as a transitional period between a hunting-foraging economy and a sedentary, agriculture-oriented subsistence system, the Doña Ana phase represents relatively rapid changes in adaptive strategies and trade networks. Despite significant excavations at several habitation sites in the region (Miller 1989, 1990; Lukowski, Smith, and Yduarte 2006), the Doña Ana phase remains the least understood of the Formative phases.

The final and most intensive prehistoric use of the region occurred during the El Paso phase, or Pueblo period. This phase is characterized by an increase in the number of large and small residential sites, increased artifact densities, and a clustered settlement pattern (Carmichael 1986; Whalen 1977, 1978). The more conspicuous diagnostic artifacts for this period include the locally produced painted brownware, El Paso Polychrome, along with intrusive decorated wares such as Lincoln Black-on-red, Playas redware, Seco Corrugated, and Chihuahuan polychromes. Although the popularity of the bow and arrow was well established by this time, larger projectile point styles are regularly found on the floors of rooms, suggesting continuing use of the atlatl in conjunction with the bow and arrow. In addition, isolated, formal room structures appear to be part of the El Paso phase settlement system (Browning et al. 1992; Dering et al. 2001). Hueco Bolson survey data outline important changes that occurred during the El Paso phase. Whalen (1977, 1978), who documented a cluster of large sites along the alluvial fans of the Franklin and Hueco Mountains, suggests that a shift in settlement patterns from earlier phases may indicate increased use of the lower alluvial fans for farming activities. Carmichael (1986) documented similar areas in the northern Hueco Bolson, which he suggests were established during the Doña Ana phase. He argues that the sites are part of a larger regional exchange network related to Casas Grandes in Mexico. Mauldin (1986) developed a settlement-subsistence model for the El Paso phase based on Hard's (1983b) work with the Mesilla phase, but assumed more dependence on agriculture. Mauldin (1986) suggests a division between primary villages and secondary villages. Primary village locations are near reliable water sources on mountain slopes but had fluctuating populations during the year and a high intensity of use. Subsistence at these sites was based primarily on agriculture. Secondary villages, which are located on both mountain slopes and in the central basin near playas, are associated with late summer residential occupations focused on hunting and foraging. Small sites (e.g., campsites and limited activity loci) are not included in this, or other models of settlement and subsistence for this region. Debate over the role of agriculture and its importance to subsistence for this period is currently ongoing, and the actual degree of sedentism remains unresolved. Thus, the El Paso phase is characterized by peak population levels, diverse artifact assemblages, use of pit structures along with aboveground pueblos, and dependence on agriculture, but not to the exclusion of hunting and foraging. Residential permanency at sites during wet years and seasonal movement during periods of dryness or lean years is postulated. Additionally, a seasonal, sedentary lifestyle alternating between the desert floor, alluvial fan, and river-oriented habitation may have been the norm.

Eastern Mimbres Mogollon Period (300 B.C. /A.D. 700 to 1400)

The Mimbres Mogollon period, which follows the Archaic Cochise/Oshara traditions, is chronologically divided into Early Pithouse (A.D. 200-550), Late Pithouse (A.D. 550-1000), Early Pueblo (A.D. 1000-1200), and Late Pueblo (A.D. 1200-1400). The Early and Late Pueblo periods are further divided into the Reserve (A.D. 1000-1125), Apache Creek (A.D. 1075-1150), Tularosa (A.D. 1125-1300), Animas (A.D. 1250-1300), and Salado (A.D. 1300-1450) phases.

Early Pithouse Period (A.D. 200-550)

The Early Pithouse period probably developed from the preceding Cochise tradition. The period is characterized by the appearance of plainware pottery (Alma Plain and San Francisco Red), oval-shaped pitstructures, large semi-subterranean structures, increased reliance on cultivated crops, and distinctive lithic assemblages. The latter are varied and often contain ground stone implements. Sites tend to be on high mesas, ridges, and hills with steeply sloped sides. Many sites are some distance from the nearest water source.

Late Pithouse Period (A.D. 550-1000)

The Late Pithouse period is characterized by a shift in residence, the appearance of distinctive black-on-white pottery, more elaborate burial practices, larger pitstructures, and construction of water control features. Site density and site size increased during this period. Sites tend to occur on lower terrain and in areas sparsely or previously unoccupied during the Early Pithouse period.

Considerably less is known about the Pithouse period occupation of the eastern Mimbres area than about the Mimbres Valley. No large pithouse clusters or villages of a size comparable to the large clusters in the Mimbres Valley have been identified in the eastern Mimbres area, despite intensive survey along the major drainages (Brady 1999, 2001; Lekson 1983; Nelson 1989, 1999; Swanson and Schollmeyer 2005). Several sites consisting of a small number of pithouses have been identified along the Palomas drainage (Lekson 1983; Nelson 1989), and a few additional sites lacking surface architecture and containing surface ceramics consistent with a pithouse occupation may also date to this period (Brady 1999, 2001; Nelson 1989). In addition, pithouses not indicated by surface remains were located underneath several Classic Mimbres and Postclassic period sites during excavation (Nelson 1999; Nelson et al. 1984; Schollmeyer 2003; Schollmeyer et al. 2000; Schollmeyer et al. 2008b). As existing archaeological research in this area has been focused primarily on Classic Mimbres and Reorganization phase sites, it is likely that the extent of the Pithouse period occupation of the area has been underestimated thus far. However, the relatively low numbers and small sizes of known pithouse sites located on surveys of the major drainages indicate that the Late Pithouse period occupation of the eastern Mimbres area must have been substantially lighter than that of the Mimbres Valley. Near the end of this period, pithouse villages in the Mimbres Valley show evidence of purposeful burning of large communal pit structures. This process included the placement of offerings on pit structure floors, after which the structures were filled with flammable materials, burned, and structure walls purposely toppled over the fallen roofs to fill in the pit structures (Creel and Anyon 2003a, 2003b). Evidence for trade with the Hohokam region, previously plentiful, abruptly decreases at the same time as this burning took place (Creel and Anyon 2003a; LeBlanc 1983). Within a few decades, people had shifted residential forms from individual pithouses to clusters of contiguous surface rooms forming pueblo villages.

Pueblo Period (A.D. 1000-1450)

The Pueblo period is characterized by the presence of cobble masonry and adobe surface structures, many with kivas, rather than pithouses. Agriculture was more intense, with the construction of check dams and irrigation systems. Mimbres Classic pottery was manufactured. Sites tend to be associated with earlier Pithouse period occupations and with small field sites. Three main temporal phases exist: Reserve (A.D. 1000-1125), a transitional phase known as the Apache Creek, and Tularosa/Mimbres (A.D. 1125-1300) (Anyon and LeBlanc 1980; Berman 1989; Cunkle 1994).

Classic Mimbres villages in the eastern Mimbres area show very similar site construction, layout, and ceramic assemblages to those in the Mimbres Valley. Average and maximum village sizes in the eastern Mimbres area are somewhat smaller, with most villages consisting of over fifty rooms and occasionally

up to one hundred rooms (Nelson 1999). Several villages show evidence of underlying pithouse occupations (Nelson 1999; Nelson et al. 1984; Schollmeyer 2003; Schollmeyer et al. 2000). Most villages include at least one roomblock with a large room possibly used for communal gatherings, and at least one excavated habitation room contained artifacts and features suggesting it also had a ritual function (Hegmon 2002; Schollmeyer 2003). As in the Mimbres Valley, large villages are located on low terraces adjacent to the broadest areas of floodplain land (Nelson 1999). Charred seed remains from hearths indicate that agricultural products formed the bulk of the Classic Mimbres diet, supplemented by locally available wild plants and animals (Nelson and Diehl 1999). The lack of perennial surface water in this area makes it less likely that irrigation agriculture was the primary farming strategy, although it may have been possible in a few locations where springs or high bedrock outcrops encouraged surface water.

In addition to villages, a second Classic Mimbres site type particularly important to this analysis consists of structures referred to as field houses or farmsteads. In the Mimbres Valley, some fairly substantial multi-room structures located on upper tributaries of the Mimbres river are classified as "field houses" (Stokes and Roth 1999). In the eastern Mimbres area, sites of a similar size but with somewhat more substantial construction are generally referred to as small villages or hamlets. "Field house" in this area refers to isolated masonry rooms or small blocks of 2-3 rooms, showing more ephemeral construction than village roomblocks, frequently open on one side, and lacking internal domestic features such as interior hearths and central roof support posts (Nelson 1999). Unlike most villages, field houses in the eastern Mimbres area are in diverse locations across the landscape, including along small side drainages and adjacent to arroyos without floodplains (Brady 2001; Nelson 1989, 1999). These less substantial structures were probably used for intermittent occupation during some seasons, providing shelter near smaller patches of arable land away from the villages (Nelson 1999). Although the term "field house" has not been consistently applied, some form of less-substantial structure appears to have been used in both of these areas of the Mimbres region for short-term residential mobility related to farming (Hegmon 2002).

Protohistoric Period (A.D. 1400 to 1600)

There are little data concerning the Protohistoric period. It is around the beginning of this period that buffalo hunting appears to have declined. Sebastian and Larralde (1989) suggest that the peoples of this region withdrew from the area as a result of deteriorating environmental conditions. Kelley (1984) states that the highland region of Sierra Blanca was abandoned around ca. A.D. 1300 and by A.D. 1400 the majority of southeastern New Mexico had experienced the same consequences. The reasons for this are environmental and/or the migration of Athabaskan peoples into the region accompanied by the appearance of tipi rings during the Protohistoric. Projectile points decrease in size and morphology with small triangular points as the predominant type.

Historic Period (A.D. 1600 to Present)

The first historic visitors to the region were the Spanish explorers who first arrived in 1541. Francisco Vazquez de Coronado led an expedition in search of gold and riches. Expeditions that followed were led by those such as Fray Agustin Rodriguez and Captain Francisco Sanchez Chamuscado in 1581, Antonio de Espejo in 1582, Don Juan de Onate y Salazar in 1598, and Gaspar Castano de Sosa in 1590. The Spanish were driven out of New Mexico during the Pueblo Revolt of 1680. In 1692, Diego de Vargas led the reconquest of New Mexico which resulted in a realignment of pueblo settlement. Sebastian and Larralde (1989) indicate that some of the Rio Grande Pueblos may have joined nomadic, mobile groups in the Pecos region.

The Jornada del Muerto (Spanish for "single day's journey of the dead man" hence "route of the dead man"), was the name given by the Spanish conquistadors to the Jornada del Muerto Desert basin, and the particularly dry 100-mile (160 km) stretch of a route through it. The roughest and deadliest part of the

Camino Real, from Mexico City to Santa Fe, was this stretch between Las Cruces and Socorro. A broad, flat valley with no water, grazing or firewood, it offered no amenities to travelers for 100 miles. Caravans left the comparative ease of the Rio Grande River at Points of Rocks, north of Las Cruces, and prepared for a brutal, three day march with little rest and no water. Oñate, first traveled the trail in 1598. After three days of passage, Oñate reached the river near present day San Marcial. Pueblo dwellers of the village Teipana, gave food and succor to the strangers. Oñate promptly changed the village name to Socorro, meaning help. The trail led northward from central Spanish colonial New Spain, present-day Mexico, to the farthest reaches of the viceroyalty in northern Nuevo México Province. The route later became El Camino Real de Tierra Adentro.

During this time period, the Apaches ranged over most of eastern New Mexico and western Texas by taking advantage of the horse. Bands of Utes and Comanches, armed with guns and horses obtained during raiding, began fighting back against the Apaches, driving them into the Pecos Valley and mountains of southeastern New Mexico (Sebastian and Larralde 1989).

FIELD METHODS

Cultural Resources

The term "cultural resources" refers to any historic or prehistoric resource. The term "historic property" specifically refers to a cultural resource that has been determined eligible for inclusion to the National Register of Historic Places (NRHP). These terms imply a great deal more than prehistoric and historic material remains, ruins, or standing structures. They encompass a wide range of material remains that have the potential to provide information about the occupation of the project area. These terms also refer to any records related to such a resource or property. A total of five classes of historic properties (districts, buildings, structures, sites, and objects) are defined as eligible for listing on the NRHP (36 CFR 60.3). Usually, historic properties are classified within more than one of these categories.

Archaeological Categories

- **Archaeological Site**
  A site is a physical location of past human activities or events. Cultural resource sites are extremely variable in size, and range from a cluster of several objects or materials to structures with associated objects or features. A site may consist of secondarily deposited cultural resource remains. Features such as hearths, cairns, rock alignments, masonry concentrations, burned adobe, fire-cracked rock, cisterns, corrals, and rock art are generally recorded as sites. Sites also include definite locations of traditional cultural or religious importance to specified social and/or cultural groups.
- **Archaeological Features**
  A feature is defined as nonportable cultural remains including but not limited to hearths, storage pits, firepits, architecture, or undisturbed layers of deposited material.
- **Artifact**
  Artifacts are portable cultural remains that exhibit evidence of human use or alteration.
- **Culturally Altered Landscape**
  A culturally altered landscape is a landscape modified by human activity, including but not limited to roadways, agricultural fields, farming terraces, and irrigation ditches or other water control devices.
- **Component**
  A site component is defined as a generally continuous site occupation with a single cultural affiliation.

- **Historical Site**
  An historic site is a location, building, or neighborhood more than 50 years old.

The New Mexico BLM recognizes three categories of cultural resources: Category One sites, Category Two sites, and isolated manifestations. The significance of Category One sites lies solely in their potential to yield information under Eligibility Criterion D, National Register of Historic Places: "Sites that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that have yielded, or may be likely to yield, information important in prehistory or history." In addition, the information potential of these sites can be exhausted by field recording of essential basic data such that any remaining significance can be preserved in archival form through the documented site record. These sites:

- contain small numbers of artifacts (<15 total); and/or
- contain few features; and/or
- are surface scatters; and
- may include soil stains, but no associated artifacts or features; and
- have been shown to have no depth of deposit, either through limited testing, or through surface observations that establish that the site area has little to no depth of sedimentary matrix; and
- contain no dateable hearths, hearths that may contain significant ethnobotanical or ethnozoological remains, prehistoric architectural features, or shrines; and
- do not relate to other nearby Category One sites.

Category Two sites are all sites which do not fit in the criteria for isolated manifestations or Category One sites. Although field recordation to professional standards usually will not be sufficient in and of itself to preserve the information content of Category Two sites, not all Category Two sites will be eligible for nomination to the National Register of Historic Places.

Isolated Manifestations are defined by:

- presence of fewer than 10 artifacts; or
- a single, undateable feature; and
- frequently are found to be redeposited material that lacks significant locational context; and
- are not related to other nearby isolated manifestations or sites.

Prefield Records Search

A site records search of the Archaeological Records Management Section (ARMS) of the Museum of New Mexico and Bureau of Land Management, Las Cruces District for previously recorded sites within 500 m of the project area was conducted.

Field Survey

A 100 percent pedestrian survey (Class III) inventory of the project area was conducted from February 3-8, 2015. Non-overlapping transects with no greater than 15 m (50 ft) wide intervals (each side of centerline) were used. All cultural resources were documented using standard procedures and forms. Detailed sketch maps were completed in the field. No artifacts were collected. Archaeological site and isolated manifestation locational information was collected using a GPS that has an accuracy of ± 3 m (10 ft). Field conditions during the survey were optimal. Portions of the survey area had been impacted minimally by county roads, two track roads, previous water pipelines, fencelines. The project area is presently under moderate vegetation cover. Ground visibility is estimated to range between 70-90%. Cattle grazing is also present.

In-Field Analysis

A total of 100% of the artifact assemblage on each site was analyzed in-field for all new sites identified with assemblages less than 100 total artifacts. Sites with larger assemblages were sampled and characterized. Lithic debitage and artifacts were to be measured for a variety of attributes that included: dimensions (pending a complete artifact), artifact type, percentage of cortex, material type, and platform type. Assemblages from previously recorded sites were compared to previous documentation.

NATIONAL AND STATE REGISTER HISTORIC PROPERTIES

A search of the National Register of Historic Places (NRHP) was conducted prior to initiating fieldwork. No sites within 500 m of the project area are listed on the National Register of Historic Places (NRHP) occur.

INVENTORY SURVEY RESULTS

During the survey a total of seven previously recorded sites and three newly discovered sites were identified within the survey area. The ARMS file search identified two other previously recorded sites immediately adjacent to the survey area (LA 699323 and 43957). A thorough field inspection identified these two sites as being located outside of the current project undertaking.

Previously Recorded Sites

A total of seven previously unrecorded sites were identified and are described below.

LA 26964

Site Type: Thermal features with associated artifact scatter
No. of Components: 1
Cultural Affiliation: Mogollon
Elevation: 4450 feet above mean sea level

LA 26964 is a Formative period prehistoric occupation site dating from AD 900-1350. The site was originally recorded in 1980 by New Mexico State University. The recording documented 5 thermal features. The present update identified a total of 18 thermal features and expanded the site site significantly to the east along the dune ridge. The site is a single component (Mogollon) site based on the presence of diagnostic artifacts and feature types. The site is located across a large east-west trending coppice dune ridge setting. This area due west of the runways at the Las Cruces International Airport. The site measures approximately m 480 x m 90 m and is at an elevation of 4450 feet above mean sea level. The desert scrub vegetation community consists of an overstory of mesquite. The understory is comprised of forbs, bunch grasses, and broom snakeweed. Disturbances across the site include a county road, and active cattle grazing. The area is subject to periodic sheetwashing.

A total of 18 features were identified. Feature 1 consists of the remnants of a roasting pit. It measures 2 m in diameter. Feature 2 consists of the remnants of a roasting pit. It measures 2 m. Feature 3 consists of the remnants of a roasting pit. It measures 1 m in diameter. The feature contains intact deposits within its interior. Feature 4 consists of the remnants of a roasting pit. It measures 1.5 m in diameter. Feature 5 consists of the remnants of a roasting pit. It measures 1.75 m in diameter. Feature 6 consists of the remnants of a roasting pit. It measures 2 m in diameter. The feature contains intact deposits within its interior. Feature 7 consists of the remnants of a roasting pit. It measures 1 m in diameter. Feature 8 consists of the remnants of a roasting pit. It measures 2 m in diameter. Feature 9 consists of the remnants of a roasting pit. It measures 0.5 m in diameter. Feature 10 consists of the remnants of a roasting pit. It measures 2 m in diameter. The feature contains intact deposits within its interior. Feature 11 consists of the remnants of a roasting pit. It measures 2 m in diameter. Feature 12 consists of the remnants of a roasting pit. It measures 1 m in diameter. Feature 13 consists of the remnants of a roasting pit. It measures 0.75 m in diameter. Feature 14 consists of the remnants of a roasting pit. It measures 2.5 m in diameter. The feature contains intact deposits within its interior. Feature 15 consists of the remnants of a roasting pit. It measures 2 m in diameter. The feature contains intact deposits within its interior. Feature 16 consists of the remnants of a roasting pit. It measures 1 m in diameter. Feature 17 consists of the remnants of a roasting pit. It measures 0.75 m in diameter. Feature 18 consists of the remnants of a roasting pit. It measures 2 m in diameter. The feature contains intact deposits within its interior. Scattered pieces of burned caliche are present across the site that may indicate other features were present at one time, but are now completely deflated with dispersed elements located across the site.

The surface assemblage includes 1000+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics, groundstone, and ceramics. Flaked lithics identified include hundreds of expedient core flakes and flake fragments. Raw materials identified include limestone, quartzite, chalcedony, andesite, and chert. The flaked lithic assemblage is primarily the product of hard hammer percussion producing single facet platforms with varying degrees of cortex. The flakes exhibit use wear along lateral and distal margins. Tools identified include several specimens of core fragments, scrapers, and unifaces. Groundstone identified includes dozens of andesite slab metate fragments and cobble mano fragments. Ceramics observed included more than 100 Jornada Brown (c.a. A.D. 900-1350), El Paso Brownware (c.a. A.D. 200-1450), El Paso Red-on-brown (ca A.D. 900-1100) and El Paso Polychrome (ca A.D. 1100-1350) sherds.

ELIGIBILITY RECOMMENDATION: The site represents a large Mogollon temporary encampment at which roasting activities took place. The site most likely dates from A.D. 900-1350 based on the presence of diagnostic ceramics. The site is in a good state of preservation. Disturbance sources were identified and include periodic sheet washing and active cattle grazing. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative Mogollon occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

LA 78981

Site Type: Rock alignment
No. of Components: 1
Cultural Affiliation: Historic
Elevation: 4400 feet above mean sea level
Vegetation Community: Desert scrub

Site LA 78981 was a small historic site comprised of a rock alignment. The site area was relocated in the field. The site no longer exists. The site's location has been removed by mechanized equipment in order to construct some type of excavated pit. The pit is quite large and deep and covers the entire area where the site would have been located.

ELIGIBILITY RECOMMENDATION: The site has presently been removed by mechanical excavation and no longer exists. Therefore, the site is recommended as not eligible for inclusion to the National Register of Historic Places.

LA 79014

Site Type: Thermal features with associated artifact scatter
No. of Components: 1
Cultural Affiliation:
Elevation: 4400 feet above mean sea level
Vegetation Community: Desert scrub

LA 79014 is a previously recorded site that was originally recorded in 1981 and updated in 2012 by the University of New Mexico, Office of contract Archaeology. As recorded in 2012, LA 79012 encompasses one feature and an extensive variable-density scatter of artifacts, fire-cracked rock, and burned caliche, which appeared to extend outside the project area to the north and west. The site boundaries have been greatly expanded during the current project undertaking to the northwest and west with an additional ten features and 1,000s of artifacts observed. The boundaries still remain incomplete within the southwestern portion of the site as this fell outside of the current survey area and could not be evaluated. A two-track road extends along the eastern and northern parts of the site. The site is in the midst of coppice dunes separated by blowouts of varying size. All of the artifacts and features were observed in the blowouts or in the two-track road, and other remains are undoubtedly present under the dunes. Each coppice dune is overgrown with mesquite bushes. Other vegetation in the site area includes soap tree yucca and various grasses and small weedy annuals. The surfaces of the blowouts are generally covered with a lag deposit of small (pea- to cherry-size) gravel, which includes examples of most the raw materials used on site for flaked lithics. The site has a gentle downslope grade to the southeast. Surface visibility overall is about 65 percent. LA 79014 include the previously recorded West Mesa Site 89, defined as a result of archaeological work associated with the Elena Gallegos Land Exchange in the early 1980s (Miller et al. 1989). Although records are poor, surface artifacts were collected from the site, including ceramics and the site was apparently tested. A subsurface stain of some kind was encountered. Site 89 eventually became designated as LA79014 but the site as previously recorded was far smaller than what was observed in the 2012 survey.

The only feature observed in 2012 (recorded as Feature 7) is a 45-cm-diameter concentration of fire cracked rock and both burned and unburned caliche pieces up to 15 cm in maximum dimension. The rocks appear to be volcanics along with one piece of quartzite. No soil staining or charcoal was visible. No ceramics or diagnostic artifacts were associated with the feature but it appeared to be prehistoric. The present undertaking identified ten additional features and an extensive amount of scattered burned rock and caliche that are likely the remnants of dozens of other features that have been deflated and dispersed

across the surface. The documented features (Features 8-17) are all burned rock features. Feature 8 consists of a 1.5 m diameter concentration of burned rock/caliche. Feature 9 consists of a 1.25 m diameter concentration of burned rock/caliche. Feature 10 consists of a 0.5 m diameter concentration of burned rock/caliche. Feature 11consists of a 3.5 m x 1.5 diameter concentration of burned rock/caliche. Feature 12 consists of a 2.5 m x 2 m diameter concentration of burned rock/caliche. Feature 13 consists of a 5 m x 4 m diameter concentration of burned rock/caliche. Feature 14 consists of a 1 m diameter concentration of burned rock/caliche. Feature 15 consists of a 0.75 m diameter concentration of burned rock/caliche. Feature 16 consists of a 3 m x 2 m diameter concentration of burned rock/caliche. Feature 17 consists of a 2 m x 1 m diameter concentration of burned rock/caliche. The entire site boundary extension to the west-northwest is covered with a dispersed scatter of burned rock/caliche. These elements are likely deflated and eroded feature remnants of dozens of additional features that are now dispersed across the site surface.

The artifact assemblage observed in 2012 consisted mostly of flaked lithic debitage (approximately 290 pieces), as well as a hammerstone, three cores, several flaked lithic tools, two one-hand manos, a fragmentary basin metate, and another, unidentified ground stone fragment. Lithic raw materials were diverse, but mostly appeared to be derived from the lag gravels that occurred on site. Various cherts were most frequent, followed chalcedony. The lithic assemblage included 3 formal bifaces, a projectile point and a higher frequency of bifacial thinning flakes than the other sites in the project area. This may indicate that hunting related activities were more important at LA79014 or that more of its occupation occurred during the Archaic. The single projectile point was a small, undiagnostic lateral fragment of white chert with a serrated blade margin. In 2012, no ceramics were encountered, although in the early 1980s, eight plain brownware sherds were collected (Miller at el. 1989:51-52). The present site u[date identified 1,000s of additional artifacts that include flaked lithics, groundstone, and ceramic artifacts. The flaked lithics include both hard and soft hammer percussion flakes. Groundstone identified includes dozens of pieces of andesite slab metate and mano fragments. Ceramics identified include 100s of small El Paso Brownware sherds.

ELIGIBILITY RECOMMENDATION: LA 79014 apparently represents a series of short-term camps occupied by small groups, presumably engaged in hunting and/or gathering wild plant resources. The thermal feature most likely represents a campfire or hearth for stone boiling or pit roasting. Based on the artifacts recorded, the camps probably represent repeated, but perhaps sporadic, occupations over a long time span from the Archaic to the Formative period. LA 79014 contains at least one thermal feature that may contain dateable charcoal and identifiable botanical and faunal remains. Some areas of moderately high artifact density are present. Furthermore, other intact cultural deposits and features may be preserved under coppice dunes and sand sheets at the site and ash stains and possible hearths were reported at the site in the 1980s (Miller et al. 1989). SHPO determined the site to eligible under criterion D, information potential on 3/28/2013 (HPD Log 96290). Nothing was seen during the present site update that would warrant a change in eligibility.

LA 169053

Site Type: Thermal features and associated artifact scatter
No. of Components: 3
Cultural Affiliation: Paleoindian, Archaic, Mogollon
Elevation: 4435 feet above mean sea level
Vegetation Community: Desert scrub

Site LA 169053 is a very large multi-component prehistoric site with 22 features and tens of thousands of artifacts on the mesa west of Las Cruces, New Mexico. The site was originally recorded by Zia in 2011. The f9ollwing site description is taken from Gibbs and Jackson 2011. Diagnostic artifacts from LA 169053 range from the Paleoindian, Early Archaic, Middle Archaic, Late Archaic, and Formative periods.

The site plots on the Picacho Mountain (32106-C8) USGS 7.5' series quadrangle and measures 563 m by 405 m (33.92 acres/13.72 hectares). LA 169053 is on a flat plain with large coppice dunes covering much of the site. It has been impacted by wind and water erosion, but is otherwise undisturbed and in good condition. An east-west two-track road is situated 100 m to the north. Vegetation consists of mesquite, creosote, four-wing saltbush, broom snakeweed, and cowpen daisy.

Twenty-two features are visible on the site. All but one of these consist of concentrations of fire-cracked rock scatters, some buried or partially buried and eroding out of the dunes and some located in blowout areas between the dunes. The fire-cracked cobbles range in size from 2 to 3 cm in diameter to over 10 cm. One feature consists of large cobbles that have not been thermally altered, assembled there but for some reason not used for a hearth (Feature 9). With tens of thousands of artifacts on Site LA 169053, only a small sample of the total number of artifact observed was analyzed. These were taken from artifact concentrations. All flaked and ground stone tools were analyzed on-site. These included eight projectile points and thirteen other types of formal tools, such as bifaces and unifaces and at least one formal tool that has both a bifacial edge on one end and a unifacial edge on the other — a kind of prehistoric all-purpose tool.

Among the projectile points is an Agate Basin point base (8500-7400 B.C.), a Plainview base (8150-8000 B.C.), a complete Gypsum point (2000-800 B.C.), a complete Bajada point (6000-3300 B.C.), a Plainview with a missing tip (8150-8000 B.C.), and a San Jose point with one missing basal ear (4500-1500 B.C.) Two projectile point fragments are non-diagnostic: a point tip and a deeply serrated fragment, reminiscent of Maljamar or San Jose points. This collection of projectile points spans the entire Archaic period and even goes back into the Paleoindian period a couple thousand years. Based on just this evidence, LA 169053 appears to have been repeatedly utilized for many thousands of years, starting during the final millennia of the Pleistocene. The presence of two thumbnail uniface scrapers on LA 169053, in addition to the Paleoindian period projectile points, including basal fragments, suggest this site was utilized by Paleoindian groups as a hunting camp where animal processing and retooling occurred. This type of assemblage has been linked to hunting camps, as opposed to hunting stands (Binford 1980; Legare 2010). Legare states: "Material evidence for a hunting camp can be found in the artifact assemblage on the site. A hunting camp is likely to have relatively large numbers of damaged projectile points, some of which may be the result of damage during manufacture. There would likely be associated thermal features. The site would have more formal tools and indications of tool manufacture than would be found at a hunting stand. Correlative to the indications of tool manufacture would be a tendency for the debitage assemblage to reflect late stage lithic reduction. A hunting camp occupied by mobile hunter/gatherers would be likely to have relatively large amounts of non-local lithic materials." (20:2010). Nineteen expedient flake tools were also recorded during analysis, including one core that has been reused as a chopper. Groundstone artifacts include predominantly mano and metate fragments. No whole metates were identified on the site and only one whole mano with marginal use was identified. With such fragmentary evidence, determining the types of manos and metates was not always possible, and so the general category of "mano" or "metate," without any further type assignation, was indicated in the analysis. The whole expedient mano was large enough to have been used with both hands, but could have also been used with one hand, so it has not been assigned a type either. The only type of metate identified among the ground stone artifacts analyzed was the slab metate. Seven El Paso brownware sherds are present. None are rim sherds, so absolute type identification as El Paso Brown cannot be made. However, no El Paso Bichrome or Polychrome was identified, increasing the likelihood that the brownware sherds are from El Paso Brown vessels. These sherds were not in a tight concentration indicative of a pot drop, but found throughout the site, and although they are few in number the presence of these sherds does suggest another temporal component to the site possibly during the Mesilla phase.

ELIGIBILITY RECOMMENDATION: Because of the twenty-two fire-cracked rock features present on the site, as well as the large and diverse artifact assemblage that spans a range of time from the Late

Paleoindian period to the Early Formative period, the site contains potential to address research domains within the regional prehistory of south-central New Mexico. SHPO determined the site eligible for inclusion to the National Register of Historic Places under criterion D, information potential on March 13, 2011 (HPD Log 91580. Nothing was seen during the current site update that would warrant a change in eligibility.

LA 169056

Site Type: Thermal features and associated artifact scatter
No. of Components: 1
Cultural Affiliation: Mogollon
Elevation: 4430 feet above mean sea level
Vegetation Community: Desert scrub

Site LA 169056 is a prehistoric artifact scatter with two fire-cracked rock features on the mesa west of Las Cruces, New Mexico. The site was originally recorded by Zia in 2011. The f9ollwing site description is taken from Gibbs and Jackson 2011. The site plots on the Picacho Mountain (32106-C8) USGS 7.5' series quadrangle and measures 130 m by 89 m (1.66 acres/0.67 hectares). It is on level ground within a series of large mesquite coppice dunes. The site has been slightly impacted by wind and water erosion, but is otherwise undisturbed. Vegetation consists of mesquite, creosote, broom snakeweed, and cowpen daisy.

Two fire-cracked rock features are present at LA 169056. Feature 1 is a large scatter containing 35-40 pieces of limestone, basalt, quartzite, and chert. Several flakes, one El Paso brownware sherd, and a hammerstone are associated with the feature. Feature 2 is much smaller and contains only 5-10 pieces of limestone and no associated artifacts. There are heavy aeolian sand deposits on the site, suggesting there is a potential for subsurface deposits.

Lithic debitage is present throughout the site, and an on-site analysis of approximately 50 percent of the flaked artifacts was conducted. Four tools, including two hammerstones, one chopper, and one scraper were also analyzed. None of the lithic artifacts identified were temporally diagnostic. The presence of brownware ceramics on the site indicates a Formative period time range for the site dating between A.D. 200 and 1450

ELIGIBILITY RECOMMENDATION: The site represents a probable Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation. Even though most of the cultural materials are visible on the surface of site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Formative occupation of the region. SHPO determined the site eligible for inclusion to the National Register of Historic Places under criterion D, information potential on March 13, 2011 (HPD Log 91580. Nothing was seen during the current site update that would warrant a change in eligibility.

LA 169057

Site Type: Thermal features and associated artifact scatter
No. of Components: 1
Cultural Affiliation: Mogollon
Elevation: 4430 feet above mean sea level
Vegetation Community: Desert scrub

Site LA 169057 is a large Formative prehistoric site with five fire-cracked rock features and two sizable lithic artifact concentrations on the mesa west of Las Cruces, New Mexico. The site was originally recorded by Zia in 2011. The f9ollwing site description is taken from Gibbs and Jackson 2011. The site plots on the Picacho Mountain (32106-C8) USGS 7.5' series quadrangle. It measures 117 m by 115 m (1.95 acres/0.78 hectares). LA 169057 is on level ground with large coppice dunes. It has been slightly impacted by wind and water erosion, but is otherwise undisturbed. Vegetation consists of mesquite, creosote, broom snakeweed, and cowpen daisy.

Five fire-cracked rock features are present on LA 169057. These range in size from 2 or 3 meters in diameter to 5 or 6 meters in diameter, and contain between 15-20 and 60-70 pieces of fire-cracked rock, several also containing artifacts as well. The largest feature, Feature 5, is eroding out of the side of a coppice dune. There are heavy aeolian sand deposits on the site, suggesting there is a potential for subsurface deposits.

Hundreds of artifacts are present on LA 169057. A sample of 15 percent of the lithic debitage was analyzed on-site. In addition to the debitage, 13 tools were also analyzed, including one small triangular projectile point tip, probably from a Formative period type, such as Western Triangular. Four expedient flake tools were identified during the lithic analysis, bringing the tool total up to 17 artifacts. All of the ground stone recorded has been reused as fire-cracked rock. Two types of ceramics are present on LA 169057, from possibly two Formative period phases. The earliest type recorded on the site is El Paso brownware. Fourteen sherds of this type were observed across the site. Three sherds of Chupadero Black-on-white are associated with Feature 5, which has a date range from A.D. 1150 to as late as the 1600s (Clark 2006:67-68) and may even include a polychrome variety described by Mera (1935:31). Chupadero Black-on-white was manufactured in two areas: one was the large pueblo communities of the Chupadera Mesa area northwest of Carrizozo, New Mexico, and the other in the Sierra Blanca-Capitan mountain area of the northern Jornada branch of the Mogollon (Clark 2006:39-44). This type is found throughout the Jornada Mogollon culture region, and as far away as the northern Rio Grande Valley, the Pecos River Valley of eastern New Mexico and west Texas, and most of the Casas Grandes region, and even on to the Southern Plains (Creel, Clark, and Neff 2002). Since none of the El Paso brownware sherds are rim sherds, they cannot be absolutely identified as El Paso Brown, and could be undecorated body sherds from one of the later El Paso series types, El Paso Polychrome or Bichrome. This would fit with the three Chupadero Black-on-white potsherds also documented. El Paso Polychrome and Chupadero Black-on-white are contemporaneous, with date ranges of A.D. 1150-1450 for El Paso Polychrome and A.D. 1150-1550 for Chupadero Black-on-white.

ELIGIBILITY RECOMMENDATION: The site represents a probable Late Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation. Even though most of the cultural materials are visible on the surface of site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the

Late Formative occupation of the region. SHPO determined the site eligible for inclusion to the National Register of Historic Places under criterion D, information potential on March 13, 2011 (HPD Log 91580. Nothing was seen during the current site update that would warrant a change in eligibility.

LA 169058

Site Type: Thermal features and associated artifact scatter
No. of Components: 1
Cultural Affiliation: Mogollon
Elevation: 4430 feet above mean sea level
Vegetation Community: Desert scrub

Site LA 169058 is a large prehistoric site with three fire-cracked rock features and thousands of artifacts and one diagnostic historic artifact on the mesa west of Las Cruces, New Mexico. The site was originally recorded by Zia in 2011. The f9ollwing site description is taken from Gibbs and Jackson 2011. The site plots on the Picacho Mountain (32106-C8) USGS 7.5' series quadrangle and measures 164 m by 150179 m (3.54 acres/1.43 hectares). LA 169058 is on level ground with large coppice dunes. It has been slightly impacted by wind and water erosion, but is otherwise undisturbed and in good condition. Vegetation consists of mesquite, creosote, broom snakeweed, and cowpen daisy.

Three fire-cracked rock features are present at LA 169058. All three contain burned caliche. These range in size from a half meter in diameter to ten meters in diameter, and contain between 20 and over 300 pieces of fire-cracked rock, all three containing artifacts as well. Feature 1 is eroding out between two dunes. There are heavy aeolian sand deposits on the site, suggesting potential for subsurface deposits. The largest of the three features, Feature 3, contains two prominent stains, indicating a high potential for radiocarbon data. Feature 3 also has well over 300 pieces of fire-cracked rocked and burned caliche and dozens of artifacts associated with it.

Twenty-five tools are present on LA 169058, which include one projectile point, three unifaces, one biface, 16 ground stone artifacts, and four expedient flake tools. The single projectile point may have been a San Jose point at one time, but has been so extensively reworked that it is no longer diagnostic. One of the diagnostic characteristics of San Jose points is evidence of reworking, but this point does not exhibit the other characteristics associated with the type, such as serrated edges or a recognizable expanding base. No other lithic artifacts on the site are diagnostic, but given the presence of 14 El Paso brownware sherds on the site, the projectile point may be an Early Formative type instead. One diagnostic historic artifact is present on LA 169058. This is a 58. Caliber 2-Ring Confederate States issue Gardner musket bullet. This particular type of bullet was patented by the Confederate States of America on August 17, 1861, and is often referred to as "the" Confederate bullet. It is of the Mini ball design and was used throughout the Civil War by the Confederate Army. Since La Mesilla was the capital of the Confederate Territory of Arizona from July 1861 until August 1862, the presence of this bullet is significant. While Civil War era weapons were certainly used following the war by settlers coming west and the bullet could have come to rest on LA 169058 anytime during those years, there is a clear beginning date for this particular artifact of no earlier than August 1861. However, this artifact appears to be only an isolate, and not indicative of an historic component to the site.

ELIGIBILITY RECOMMENDATION: The site represents a probable Late Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation. Even though most of the cultural materials are visible on the surface of site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the

subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative occupation of the region. SHPO determined the site eligible for inclusion to the National Register of Historic Places under criterion D, information potential on March 13, 2011 (HPD Log 91580. Nothing was seen during the current site update that would warrant a change in eligibility.

Newly Recorded Sites

LA 181137

Site Type: Thermal features and associated artifact scatter
No. of Components: 1
Cultural Affiliation: Late Archaic/Early Formative
Elevation: 4450 feet above mean sea level
Vegetation Community: Desert scrub

LA 181137/HAS-1 is a probable Late Archaic/Early Formative period prehistoric occupation site. The site is a single component (Unknown prehistoric) site based on the presence of diagnostic feature types. The site could not be assigned a specific cultural/temporal designation due to a lack of diagnostic artifacts; however the presence of burned rock features and high quality lithic materials that are a product of biface thinning techniques suggests a Late Archaic/Early Formative period of occupation. The site is located across a large flat within a coppice dune setting. This area is due west of the runways at the Las Cruces International Airport. The site measures approximately 50 m x 75 m and is at an elevation of 4450 feet above mean sea level. The desert scrub vegetation community consists of an overstory of mesquite. The understory is comprised of forbs, bunch grasses, and broom snakeweed. Disturbances across the site include active cattle grazing. The area is subject to periodic sheetwashing and is highly deflated.

A total of two features were identified. Feature 1 consists of the remnants of a roasting pit. It measures 2 m in diameter and contains approximately 20 pieces of burned and fire-cracked heating elements. The feature contains intact deposits within its interior. Feature 2 consists of the remnants of a roasting pit. It measures 1.5 m in diameter and contains approximately 40 pieces of burned and fire-cracked heating elements. Scattered pieces of burned caliche are present across the site that may indicate other features were present at one time, but are now completely deflated with dispersed elements located across the site.

The surface assemblage includes an estimated 100+ flaked lithic artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include almost exclusively biface thinning debitage. Raw materials identified include limestone, fine-grained quartzite, andesite, silicified wood, and two different types of chert. The flaked lithic assemblage is the product of soft hammer percussion producing multi-facet/ground platforms. Most flakes exhibit use wear along lateral and distal margins. Tools identified include one chert biface fragment and one silicified wood bifice fragment. Groundstone identified include an andesite mano fragment and an andesite slab metate fragment.

ELIGIBILITY RECOMMENDATION: The site represents a probable Late Archaic/Early Formative temporary encampment at which roasting activities took place. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover portions of the site. Intact deposits may exist within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features. The site is likely to yield significant chronological, settlement, and subsistence data towards our present

understanding of the Late Archaic/Early Formative occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

LA 181138

Site Type: Thermal features and associated artifact scatter
No. of Components: 1
Cultural Affiliation: Mogollon
Elevation: 4435 feet above mean sea level
Vegetation Community: Desert scrub

LA 181138/HAS-2 is a Formative period prehistoric occupation site dating from AD 900-1350. The site is a single component (Mogollon) site based on the presence of diagnostic artifacts and feature types. The site is located across a large flat within a coppice dune setting. This area due west of the runways at the Las Cruces International Airport. The site measures approximately m 60 x m 48 m and is at an elevation of 4435 feet above mean sea level. The desert scrub vegetation community consists of an overstory of mesquite. The understory is comprised of forbs, bunch grasses, and broom snakeweed. Disturbances across the site include a county road, and active cattle grazing. The area is subject to periodic sheetwashing.

A total of three features were identified. Feature 1 consists of the remnants of a roasting pit. It measures 2.5 m in diameter and contains approximately 75 pieces of burned and fire-cracked limestone heating elements. The feature contains intact deposits within its interior. Feature 2 consists of the remnants of a roasting pit. It measures 2 m in diameter and contains approximately 30 pieces of burned and fire-cracked limestone heating elements. Feature 3 consists of the remnants of a roasting pit. It measures 2 m in diameter and contains approximately 100 pieces of burned and fire-cracked limestone heating elements. The feature contains intact deposits within its interior. Scattered pieces of burned caliche are present across the site that may indicate other features were present at one time, but are now completely deflated with dispersed elements located across the site.

The surface assemblage includes an estimated 250+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics, groundstone, and ceramics. Flaked lithics identified include more than 150 expedient core flakes and flake fragments. Raw materials identified include limestone, andesite, and chert. The flaked lithic assemblage is the product of hard hammer percussion producing single facet platforms with varying degrees of cortex. The flakes exhibit use wear along lateral and distal margins. Groundstone identified includes two andesite slab metate fragments and two sandstone cobble mano fragments. Ceramics observed included more than 100 Jornada Brown (c.a. A.D. 900-1350), El Paso Brownware (c.a. A.D. 200-1450), El Paso Red-on-brown (ca A.D. 900-1100), and El Paso Polychrome (ca A.D. 1100-1350) sherds.

ELIGIBILITY RECOMMENDATION: The site represents a Mogollon temporary encampment at which roasting activities took place. The site most likely dates from A.D. 900-1350 based on the presence of diagnostic ceramics. The site is in a good state of preservation. Disturbance sources were identified and include periodic sheet washing and active cattle grazing. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative Mogollon occupation of the region. Therefore,

the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

LA 181139

Site Type: Thermal features and associated artifact scatter
No. of Components: 1
Cultural Affiliation: Unknown prehistoric
Elevation: 4455 feet above mean sea level
Vegetation Community: Desert scrub

LA 181139/HAS-3 is a probable Formative period prehistoric occupation site. The site is a single component (Unknown prehistoric) site based on the presence of flaked lithic and groundstone artifacts and feature types. A definitive cultural/temporal designation could not be assigned due to a lack of diagnostic artifacts. The site occupation is presumed to be a Formative period occupation due to the flaked lithic assemblage being dominated by expedient core reduction debitage. The site is located across a large flat within a coppice dune setting. This area is due west of the runways at the Las Cruces Internationsl Airport. The site measures approximately 45 m x 65 m and is at an elevation of 4455 feet above mean sea level. The desert scrub vegetation community consists of an overstory of mesquite. The understory is comprised of forbs, bunch grasses, and broom snakeweed. Disturbances across the site include active cattle grazing. The area is subject to periodic sheetwashing.

A total of three features were identified. Feature 1 is defined as a feature area that measures approximately 2.5 m x 2 m. It is located along the north edge of a large dune. Feature 2 consists of the remnants of a roasting pit. It measures 1.5 m in diameter and contains approximately 75 pieces of burned and fire-cracked limestone heating elements. Feature 3 consists of the remnants of a roasting pit. It measures 1 m in diameter and contains approximately 25 pieces of burned and fire-cracked limestone heating elements. Scattered pieces of burned caliche are present across the site that may indicate other features were present at one time, but are now completely deflated with dispersed elements located across the site.

The surface assemblage includes an estimated 100+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics and groundstone. Flaked lithics identified include more than 100 flakes and flake fragments. Raw materials identified include limestone, andesite, and chert. The flaked lithic assemblage is primarily the product of expedient core reduction activities. The flakes are are a product hard hammer percussion producing single facet platforms with varying degrees of cortex. Tools observed include a chert core fragment. Many of the flakes exhibit use wear along lateral and distal margins. Groundstone observed includes one piece of andesite slab metate fragment.

ELIGIBILITY RECOMMENDATION: The site represents a probable Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation even though it is somewhat deflated. Disturbance sources were identified and include periodic sheet washing, and active cattle grazing. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Formative period of occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

ISOLATED OCCURRENCES

A total of 24 isolated occurrences were identified during the survey. The isolates are not likely to provide significant data towards our present understanding of the prehistoric and historic periods of the region. They are described in more detail below in Table 3.

Table 3. Isolated Occurrences (NAD83 Zone 13).

IO#	DESCRIPTION	EASTING	NORTHING
1	Gray chert core flake (36 x 27 x 10 mm)	317490	3573462
2	Deflated 0.5 m feature w/ no artifacts (6 pieces of burned caliche)	317546	3573340
3	Chalcedony proximal core flake fragment	316003	3573068
4	Deflated 0.75 m feature w/ no artifacts (8 pieces of burned caliche)	316239	3573526
5	Deflated 1 m feature w/ no artifacts (9 pieces of burned caliche)	316395	3573374
6	Chert scraper tool (54 x 30 x 15 mm)	316430	3573334
7	Deflated 1.2 m feature w/ no artifacts (9 pieces of burned caliche)	316572	3573571
8	Church key opened beverage can	318235	3573966
9	Andesite scraper plane	318268	3573966
10	Turpentine can	317823	3573319
11	.44 cal. Cartridge casing	317899	3573810
12	Quartzite cobble mano fragment	318125	3573815
13	Quartzite hammerstone	317280	3573939
14	Chalcedony flake fragment	317606	3574021
15	Chert core flake (33 x 29 x 11 mm)	317651	3574795
16	Chert core flake fragment	317020	3573860
17	Deflated, eroded 0.5 m fcr feature with no artifacts	317386	3573397
18	Deflated, eroded 0.75 m fcr feature with no artifacts	317502	3573376
19	Chert distal flake fragment	317643	3573368
20	Chert proximal core flake	317392	3573205
21	Chert biface thinning flake fragment	316266	3573550
22	1m Scattered fcr in 20 m dune blowout	316320	3573007
23	Andesite metate fragment	316323	3573562
24	Andesite cobble mano fragment	316476	3573431

CULTURAL RESOURCE MANAGEMENT RECOMMENDATIONS/SUMMARY

From February 3-8, 2015, Hammerstone Archaeological Services (HAS), conducted a Class III cultural resources survey of 725.2 acres at the Las Cruces International Airport in Doña Ana County, NM in anticipation of a 20 year Master Plan for the airport. This project is being conducted under NMCRIS Number 132711. The Federal Aviation Administration is the lead federal agency for the project. The Class III inventory is being conducted in order to identify cultural resource properties that might be affected by the proposed undertaking in an effort to comply with Section 106 of the National Historic Preservation Act.

During the course of the Class III survey, seven previously recorded sites, three newly discovered sites, and 24 isolated manifestations were encountered and documented. Several other previously recorded sites are located near the project area, however a field assessment determined that they were outside of the present survey corridor. All sites are recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential with the exception of LA 78981 which is no longer in existence and is now recommended as not eligible for the National Register of Historic Places.

Prior to conducting the field survey, it was determined that likely subsurface deposits would be found on Archaic and Mogollon sites within a dunal setting, as was typically larger site sizes (LA 26964, 70914, 169053, and 169056), a portion of the project area would require exclusion from any future ground disturbing activities associated with the project undertaking. The area of exclusion is depicted on Appendix A Map 1. New sites LA 181137, 181138, and 181139 are smaller, but also have subsurface deposits. It is recommended that all sites be avoided by any ground disturbing activities associated with the project undertaking.

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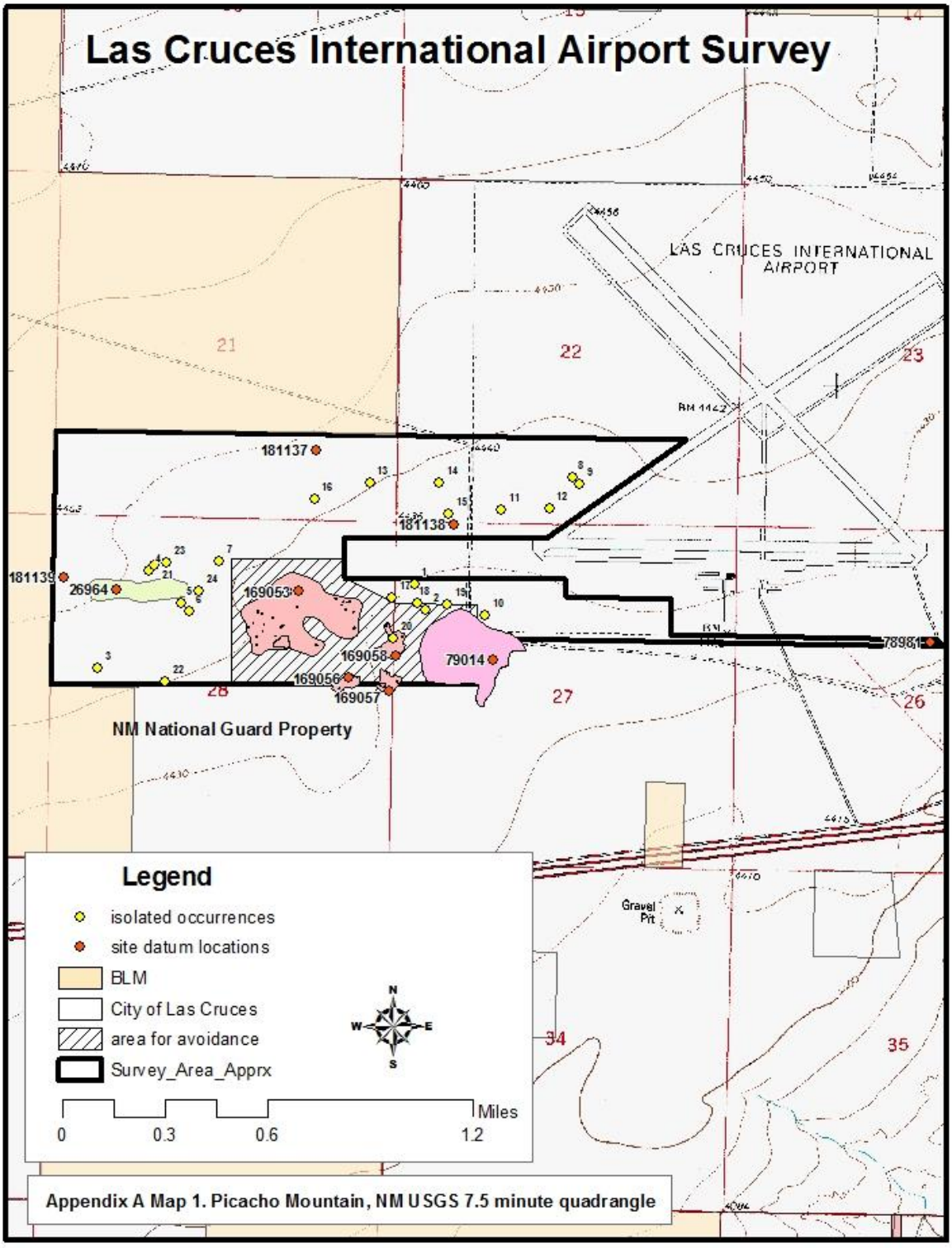
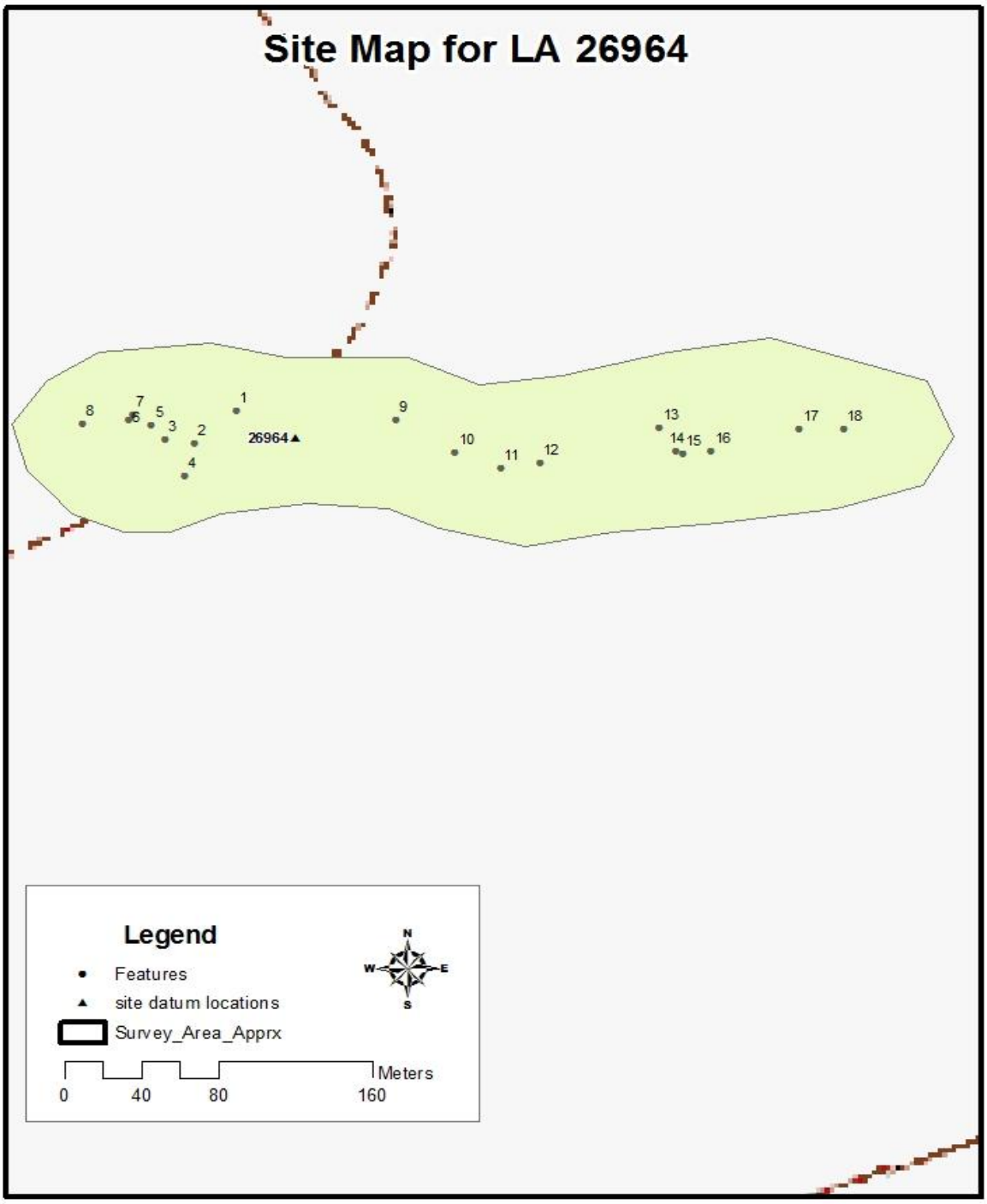
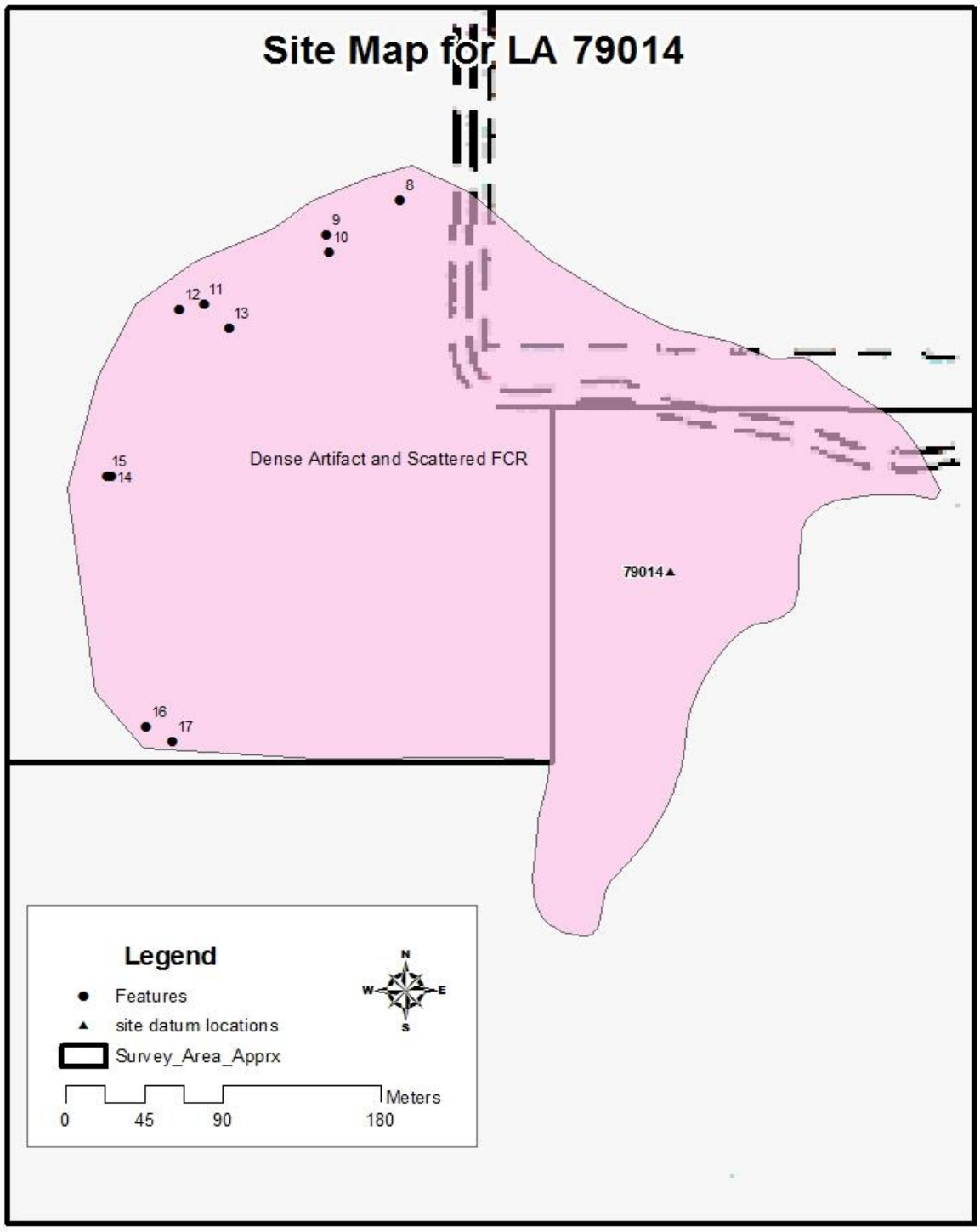
APPENDIX A: MAPS



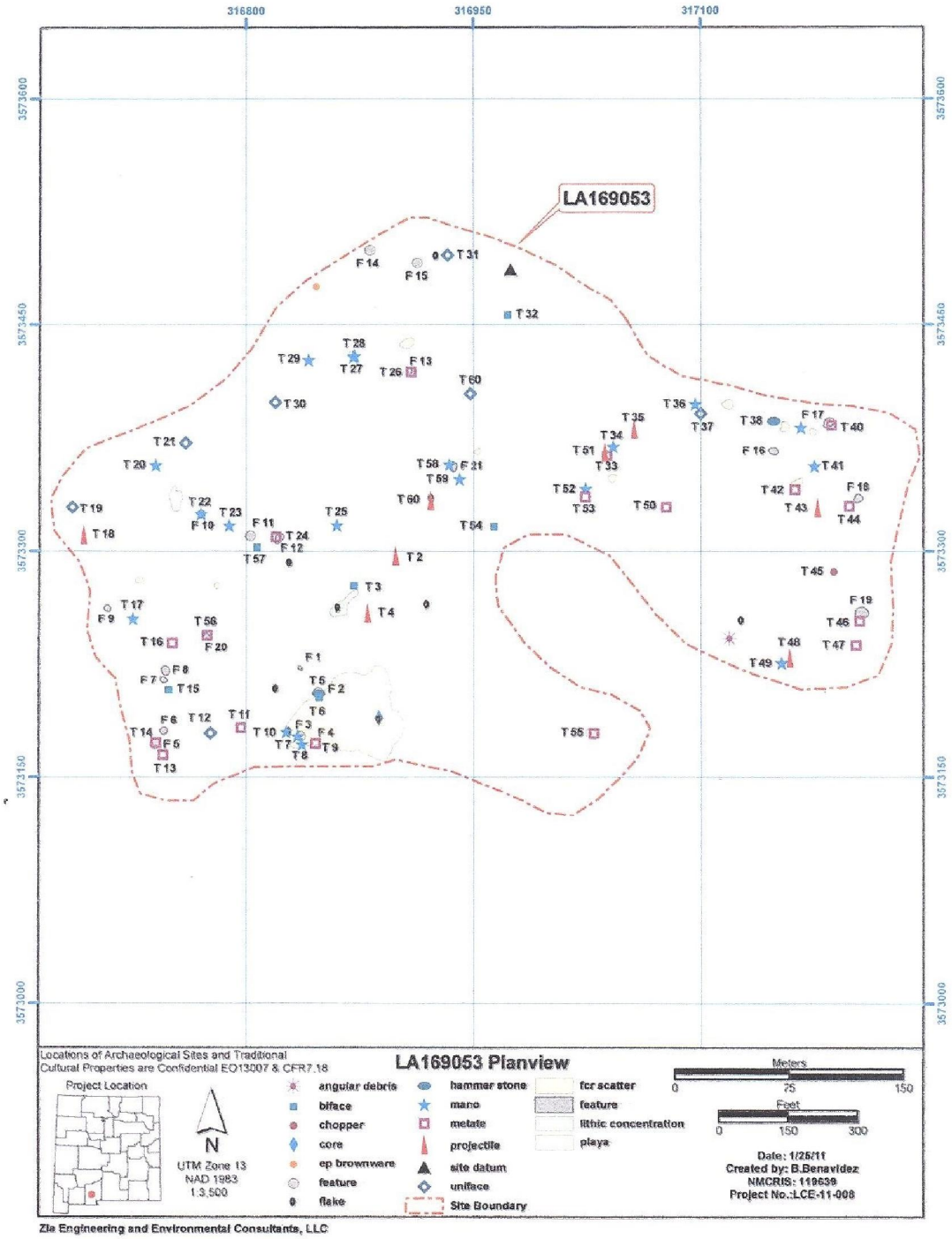
Appendix A Map 1. Picacho Mountain, NM USGS 7.5 minute quadrangle



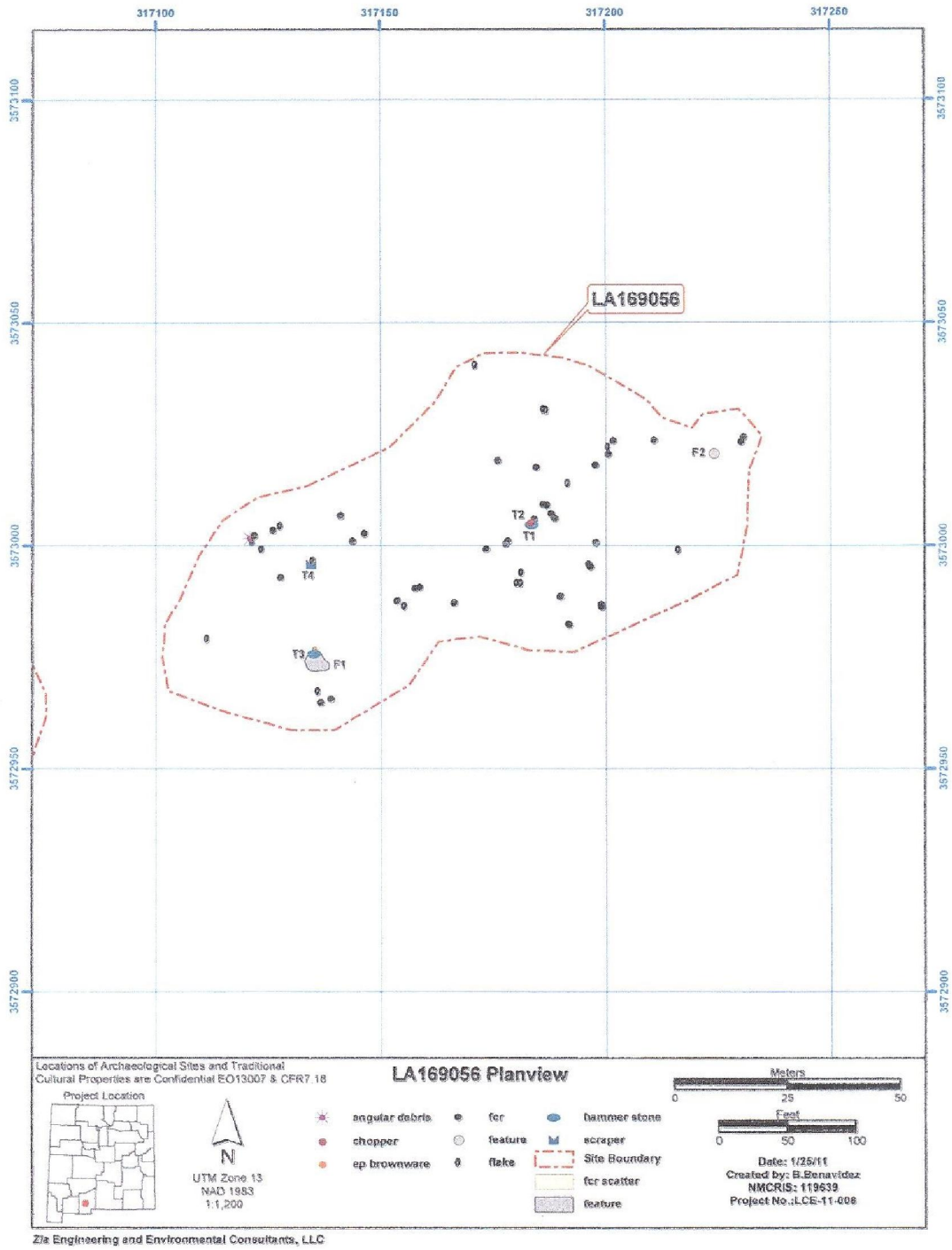
Appendix A Map 2. Site map for LA 26964.



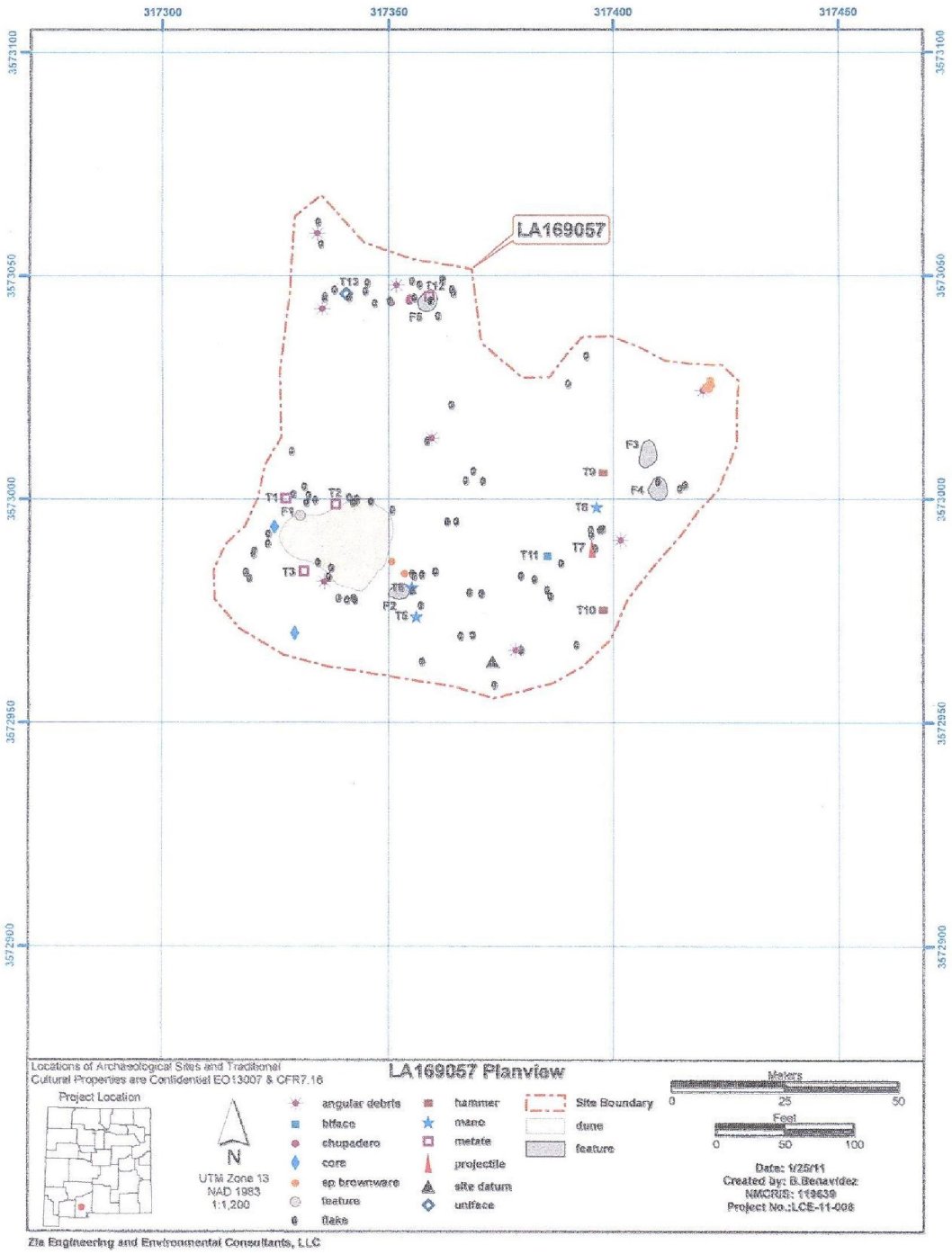
Appendix A Map 3. Site map for LA 79014.



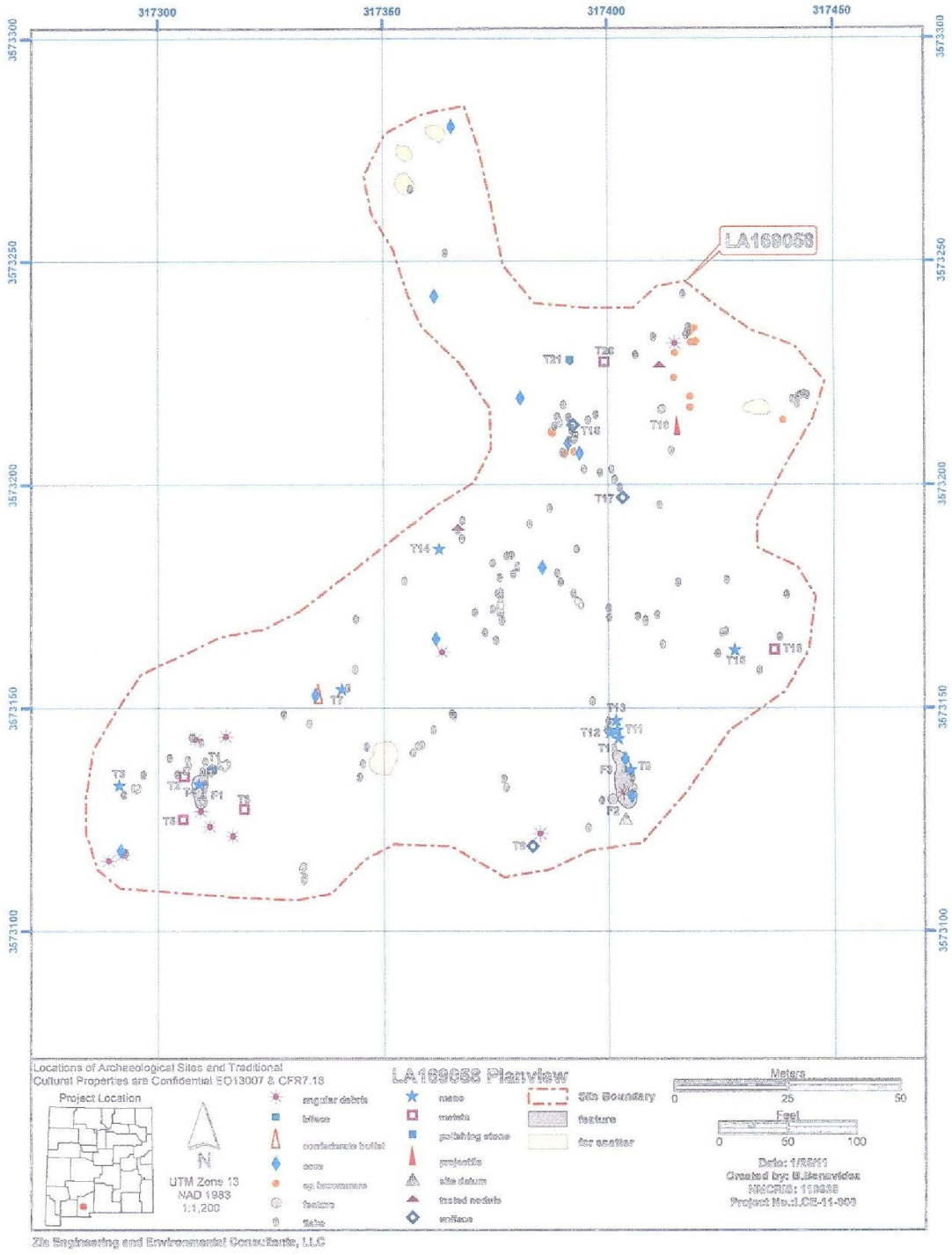
Appendix A Map 4. Site map for LA 169053.



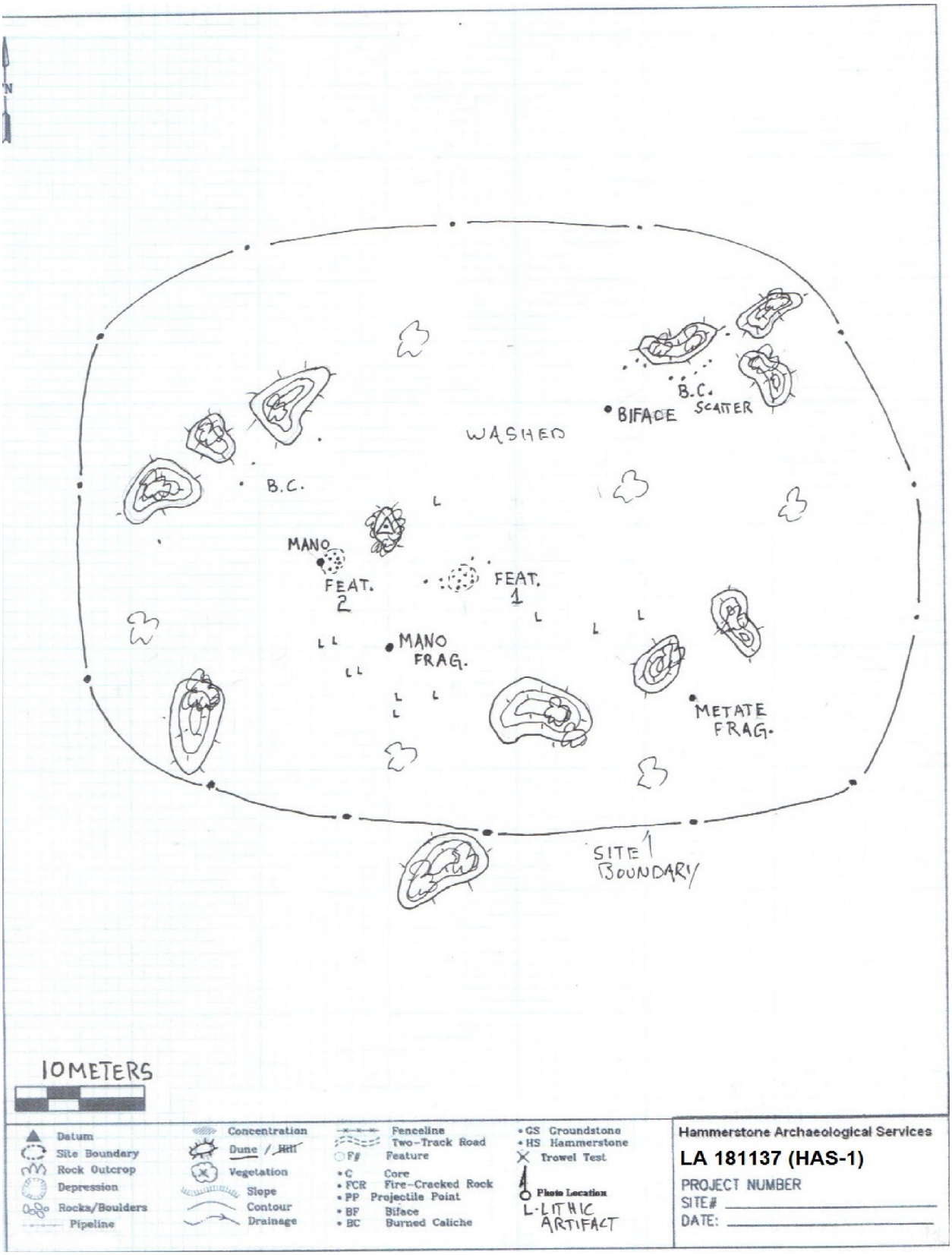
Appendix A Map 5. Site map for LA 169056.



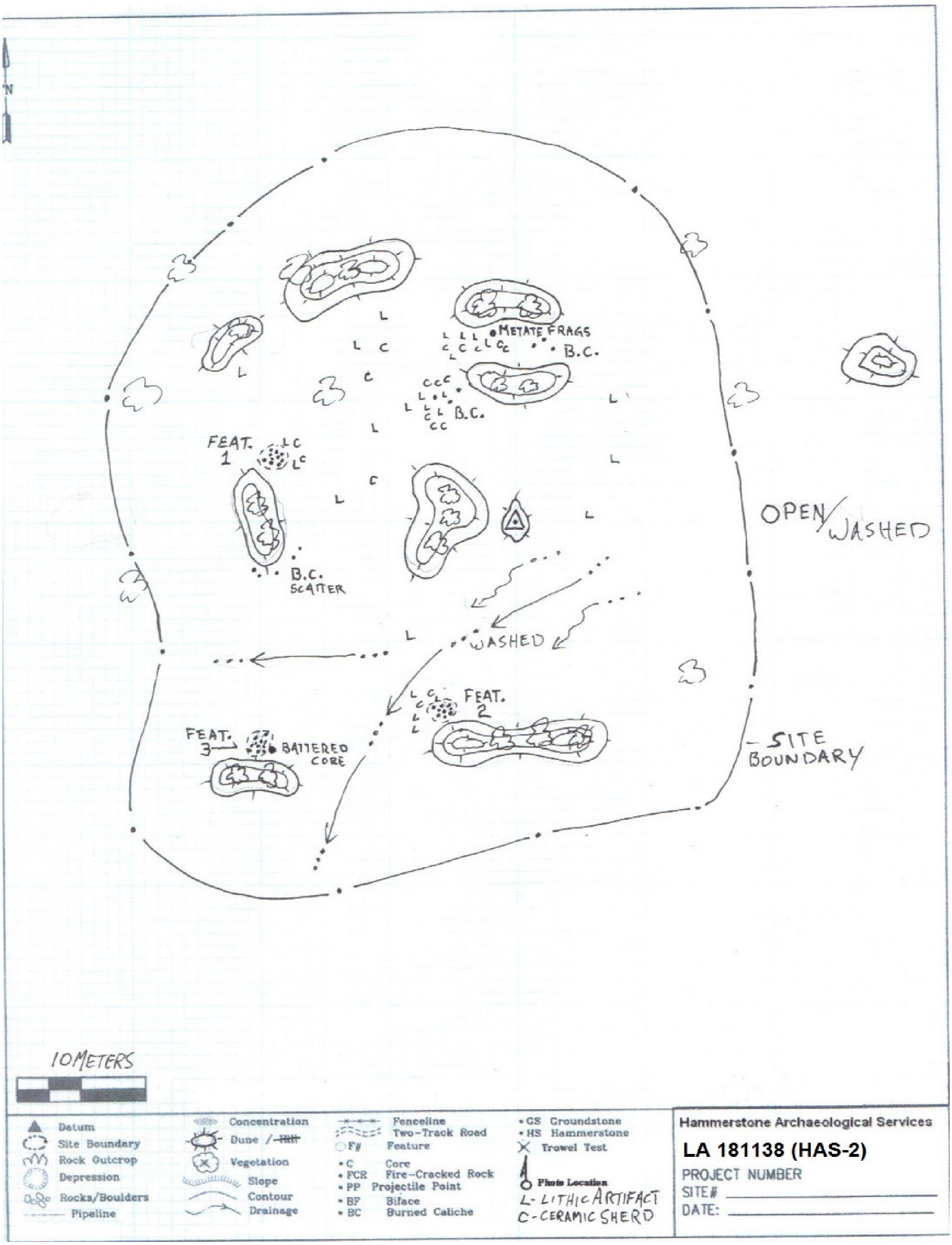
Appendix A Map 6. Site map for LA 169057.



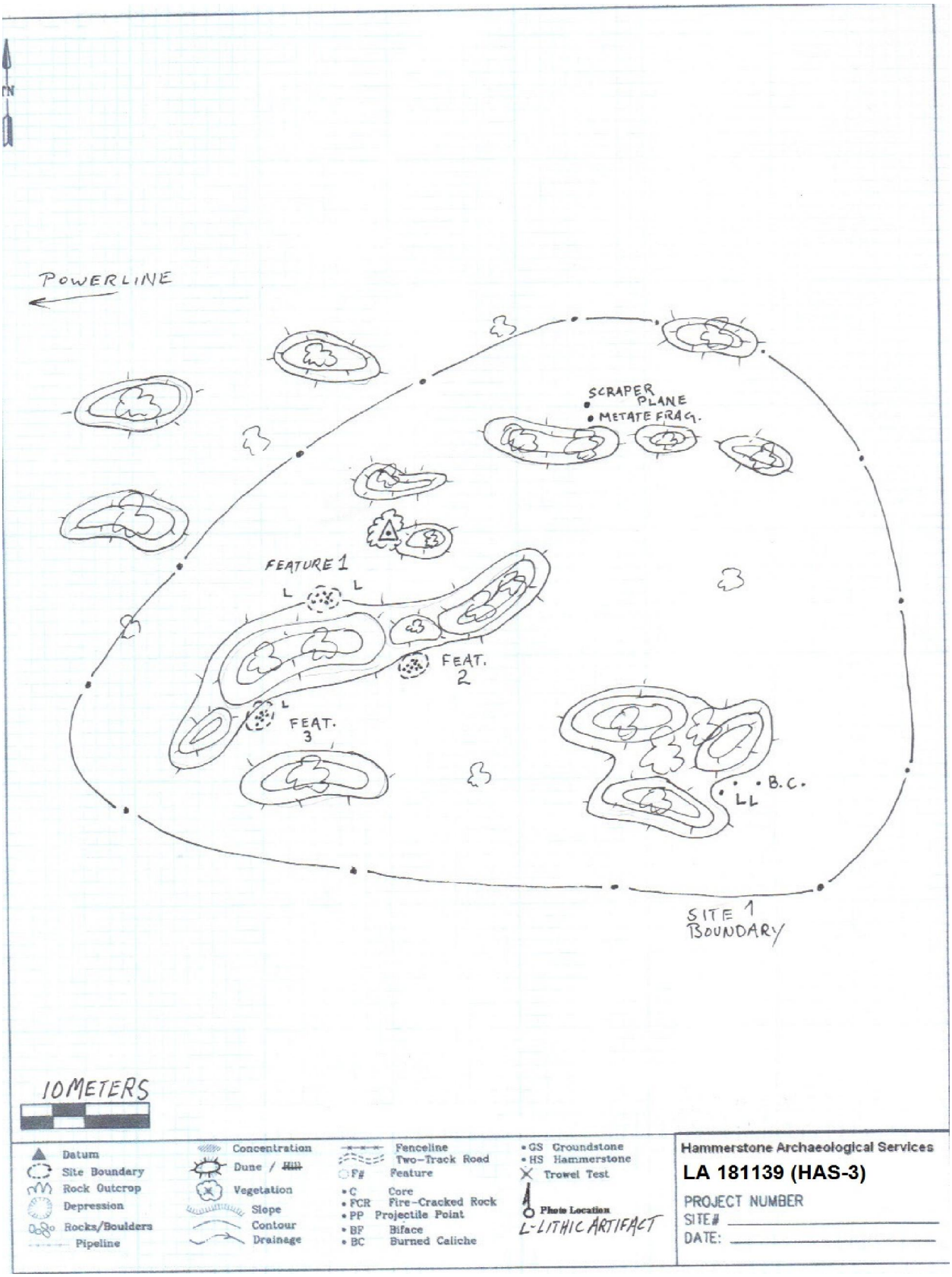
Appendix A Map 7. Site map for LA 169058.



Appendix A Map 8. Site map for LA 181137 (HAS-1).

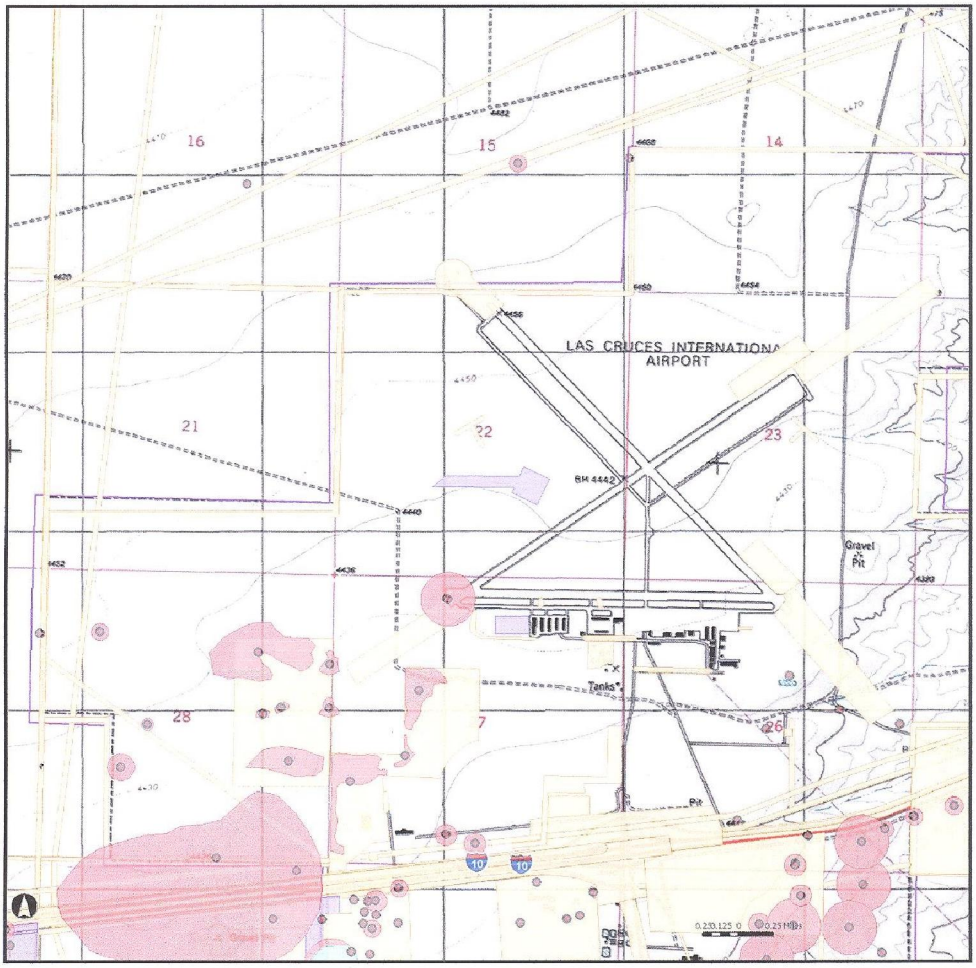


Appendix A Map 9. Site map for LA 181138 (HAS-2).



Appendix A Map 10 Site map for LA 181139 (HAS-3).

Map



Site Labels

Site Boundaries (Edit)

Site Boundaries
- Not Defined
- Proposed
- Approved

Building Labels

Buildings
- Not Defined
- Proposed
- Approved

Objects
- Not Defined
- Proposed
- Approved

Linear Resources
- Not Defined

Archaeological Surveys (Edit)

Archaeological Surveys
- Not Defined
- Proposed
- Approved

Highways
- Primary Limited Access or Interstate
- Primary US and State Highways
- Secondary State and County

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 26,964 (contact ARMS for site registration) ☒ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s): **Agency Assigning Number:**

_____ _____

_____ _____

_____ _____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** _____

Site Marker? ☐ (specify ID#): _____

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 8 February, 2015

Site Accessibility (choose one): ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one): ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: _____

Recording Activities:

☐ sketch mapping
☐ instrument mapping (e.g., total station mapping)
☐ surface collection (controlled or uncontrolled)
☐ in-field artifact analysis
☒ other activities (specify): site update
☐ photography
☐ shovel or trowel tests; probes
☐ test excavation
☐ excavation (data recovery)

Description of Analysis or Excavation Activities: The site's present conditiions were compared to the previous recording to determine if any significant changes have occurred.

Photographic Documentation: HAS digital

Surface Collections (choose one):

☒ no surface collection
☐ uncontrolled surface collection
☐ collections of specific items only
☐ controlled (sample: <100%)
☐ controlled (complete: 100%)
☐ other method (describe): _____

Records Inventory:

☐ site location map
☐ sketch map(s)
☐ instrument map(s)
☐ excavation, collection, analysis records
☐ photos, slides, and associated records
☒ other records: **site update**
☐ field journals, notes
☐ NM Historic Building Inventory form

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a good state of preservation with minimal disturbance. Portuions of the site remain withinm a buried context.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☐ eligible ☒ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c)

☐ (b) ☐ (d)

Basis for Recommendation: The site represents a large Mogollon temporary encampment at which roasting activities took place. The site most likely dates from A.D. 900-1350 based on the presence of diagnostic ceramics. The site is in a good state of preservation. Disturbance sources were identified and include periodic sheet washing and active cattle grazing. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative Mogollon occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

Assessment of Project Impact: Future planning projects at the airport involving ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Due to the size of LA 26964 and the subsurface deposits present, the entire area is recommended for avoidance.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** 316,092 **N:** 3,573,437

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** Dona Ana

USGS Quadrangle Name	Date	USGS Code
Picacho Mountain, NM	1994	32106C8
_____	____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T 23 S	R 1 W	28	SW	NE	NW	☐
New Mexico	☐	T 23 S	R 1 W	28	SE	NW	NW	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: 480x90 meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: 43,200 sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** 4,450 feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☒ alluvial ☒ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☒ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: 1 m+

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☒ other observations (describe): **dune heights**

Observations on Subsurface Archeological Deposits: Subsurface deposits are likely as artifacts and feature elements were observed eroding out of the bottoms of the dune edges.

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: **mesquite**

Understory: **forbs, bunch grasses, broom snakeweed**

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☒ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:				
☐ alluvial fan	☐ bench	☒ dune	☐ low rise	☒ ridge
☐ arroyo/wash	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ badlands	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ base of cliff	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of talus slope	☐ cliff/scarp/bluff	☐ hill top	☐ plain/flat	☐ terrace
☐ other location (describe): _____	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☒ lithic debitage
- ☒ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☒ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☒ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☒ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☒ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:** estimated frequency

artifact class	0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☒	☐	☐	_____
prehistoric ceramics (choose one):	☐	☐	☐	☒	☐	☐	_____
historic artifacts (choose one):	☒	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☐	☒	☐	_____

Dating Potential: ☒ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: The surface assemblage includes 1000+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics, groundstone, and ceramics. Flaked lithics identified include hundreds of expedient core flakes and flake fragments. Raw materials identified include limestone, quartzite, chalcedony, andesite, and chert. The flaked lithic assemblage is primarily the product of hard hammer percussion producing single facet platforms with varying degrees of cortex. The flakes exhibit use wear along lateral and distal margins. Tools identified include several specimens of core fragments, scrapers, and unifaces. Groundstone identified includes dozens of andesite slab metate fragments and cobble mano fragments. Ceramics observed included more than 100 Jornada Brown (c.a. A.D. 900-1350), El Paso Brownware (c.a. A.D. 200-1450), El Paso Red-on-brown (ca A.D. 900-1100) and El Paso Polychrome (ca A.D. 1100-1350) sherds.

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: 1

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Mogollon _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☒ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	Late Pithouse	900 AD	1,350 AD
Latest Period (if any)**:**	Late Pueblo		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: presence of diagnostic ceramicvs

Component Type: Features/artifact scatter _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____	_____	_____

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
Fcr Concentrations	Yes	18	1	Features 1-18

Feature Remarks: see narrative below

11. REFERENCES

Written Sources of Information: _____

Additional Sources of Information: _____

12. NARRATIVE DESCRIPTION

LA 26964 is a Formative period prehistoric occupation site dating from AD 900-1350. The site was originally recorded in 1980 by New Mexico State University. The recording documented 5 thermal features. The present update identified a total of 18 thermal features and expanded the site site significantly to the east along the dune ridge. The site is a single component (Mogollon) site based on the presence of diagnostic artifacts and feature types. The site is located across a large east-west trending coppice dune ridge setting. This area due west of the runways at the Las Cruces International Airport. The site measures approximately m 480 x m 90 m and is at an elevation of 4450 feet above mean sea level. The desert scrub vegetation community consists of an overstory of mesquite. The understory is comprised of forbs, bunch grasses, and broom snakeweed. Disturbances across the site include a county road, and active cattle grazing. The area is subject to periodic sheetwashing.

A total of 18 features were identified. Feature 1 consists of the remnants of a roasting pit. It measures 2 m in diameter. Feature 2 consists of the remnants of a roasting pit. It measures 2 m. Feature 3 consists of the remnants of a roasting pit. It measures 1 m in diameter. The feature contains intact deposits within its interior. Feature 4 consists of the remnants of a roasting pit. It measures 1.5 m in diameter. Feature 5 consists of the remnants of a roasting pit. It measures 1.75 m in diameter. Feature 6 consists of the remnants of a roasting pit. It measures 2 m in diameter. The feature contains intact deposits within its interior. Feature 7 consists of the remnants of a roasting pit. It measures 1 m in diameter. Feature 8 consists of the remnants of a roasting pit. It measures 2 m in diameter. Feature 9 consists of the remnants of a roasting pit. It measures 0.5 m in diameter. Feature 10 consists of the remnants of a roasting pit. It measures 2 m in diameter. The feature contains intact deposits within its interior. Feature 11 consists of the remnants of a roasting pit. It measures 2 m in diameter. Feature 12 consists of the remnants of a roasting pit. It measures 1 m in diameter. Feature 13 consists of the remnants of a roasting pit. It measures 0.75 m in diameter. Feature 14 consists of the remnants of a roasting pit. It measures 2.5 m in diameter. The feature contains intact deposits within its interior. Feature 15 consists of the remnants of a roasting pit. It measures 2 m in diameter. The feature contains intact deposits within its interior. Feature 16 consists of the remnants of a roasting pit. It measures 1 m in diameter. Feature 17 consists of the remnants of a roasting pit. It measures 0.75 m in diameter. Feature 18 consists of the remnants of a roasting pit. It measures 2 m in diameter. The feature contains intact deposits within its interior. Scattered pieces of burned caliche are present across the site that may indicate other features were present at one time, but are now completely deflated with dispersed elements located across the site.

The surface assemblage includes 1000+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics, groundstone, and ceramics. Flaked lithics identified include hundreds of expedient core flakes and flake fragments. Raw materials identified include limestone, quartzite, chalcedony, andesite, and chert. The flaked lithic assemblage is primarily the product of hard hammer percussion producing single facet platforms with varying degrees of cortex. The flakes exhibit use wear along lateral and distal margins. Tools identified include several specimens of core fragments, scrapers, and unifaces. Groundstone identified includes dozens of andesite slab metate fragments and cobble mano fragments. Ceramics observed included more than 100 Jornada Brown (c.a. A.D. 900-1350), El Paso Brownware (c.a. A.D. 200-1450), El Paso Red-on-brown (ca A.D. 900-1100) and El Paso Polychrome (ca A.D. 1100-1350) sherds.

ELIGIBILITY RECOMMENDATION: The site represents a large Mogollon temporary encampment at which roasting activities took place. The site most likely dates from A.D. 900-1350 based on the presence of diagnostic ceramics. The site is in a good state of preservation. Disturbance sources were identified and include periodic sheet washing and active cattle grazing. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative Mogollon occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize): _____

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 78,981 (contact ARMS for site registration) ☒ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s): **Agency Assigning Number:**

_____ _____

_____ _____

_____ _____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Historic

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** _____

Site Marker? ☐ (specify ID#): _____

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 7 February, 2015

Site Accessibility (choose one): ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one): ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: _____

Recording Activities:

☐ sketch mapping
☐ instrument mapping (e.g., total station mapping)
☐ surface collection (controlled or uncontrolled)
☐ in-field artifact analysis
☒ other activities (specify): site update
☐ photography
☐ shovel or trowel tests; probes
☐ test excavation
☐ excavation (data recovery)

Description of Analysis or Excavation Activities: The site's present conditiions were compared to the previous recording to determine if any significant changes have occurred.

Photographic Documentation: n/a. The site was thoroughly photographed during the previous recording.

Surface Collections (choose one):

☒ no surface collection
☐ uncontrolled surface collection
☐ collections of specific items only
☐ controlled (sample: <100%)
☐ controlled (complete: 100%)
☐ other method (describe): _____

Records Inventory:

☐ site location map
☐ sketch map(s)
☐ instrument map(s)
☐ excavation, collection, analysis records
☐ photos, slides, and associated records
☒ other records: **site update**
☐ field journals, notes
☐ NM Historic Building Inventory form

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☒ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site no longer exists as it has been removed by mechan ical excavation.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☐ eligible ☒ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c)

☐ (b) ☐ (d)

Basis for Recommendation: The site has presently been removed by mechanical excavation and no longer exists. Therefore, the site is recommended as not eligible for inclusion to the National Register of Historic Places.

Assessment of Project Impact: None as the site no longer exists.

Treatment Recommendations: None

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one)**:** ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe)**:** _____

UTM Coordinates (@ center of site; at least one set of coordinates required)**:**

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** _____ **N:** _____

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits)**:** _____ **State:** NM **County:** _____

USGS Quadrangle Name	Date	USGS Code
_____	_____	_____
_____	_____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T _____ N	R _____ W	__	NW	SE	SE	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: _____x_____ meters **Basis for Dimensions** (choose one)**:** ☐ estimated ☒ measured

Site Area: _____ sq m **Basis for Area** (choose one)**:** ☐ estimated ☒ measured **Elevation:** _____ feet

Site Boundaries Complete? (choose one)**:** ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☐ alluvial ☐ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one)**:** ☐ unknown/not determined

☐ no subsurface deposits present ☐ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: _____

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☐ other observations (describe): _____

Observations on Subsurface Archeological Deposits: _____

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: _____

Understory: _____

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☐ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ bench	☐ dune	☐ low rise	☐ ridge	
☐ alluvial fan	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ arroyo/wash	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ badlands	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of cliff	☐ cliff/scarp/bluff	☐ hill top	☐ plain/flat	☐ terrace
☐ base of talus slope	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

☐ other location (describe): _____

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☐ lithic debitage
- ☐ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☐ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☐ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☐ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:** ——— estimated frequency ———

artifact class	0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☐	☐	☐	_____
prehistoric ceramics (choose one):	☐	☐	☐	☐	☐	☐	_____
historic artifacts (choose one):	☐	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☐	☐	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: _____

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: __

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Other (specify): _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____	BC	AD

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: Other (describe): _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____	_____	_____

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type : _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes

Feature Remarks: _____

11. REFERENCES

Written Sources of Information: _____

Additional Sources of Information: _____

12. NARRATIVE DESCRIPTION

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize): _____

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 79,014 (contact ARMS for site registration) ☒ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s): **Agency Assigning Number:**

West Mesa Site 89 _____

OCA 1057-2 UNM, OCA

_____ _____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** OCA 1057-2

Site Marker? ☒ (specify ID#)**:** OCA 1057-2 stamped on aluminum tag attached to datum

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 8 February, 2015

Site Accessibility (choose one)**:** ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: _____

Recording Activities:

- ☒ sketch mapping
- ☐ instrument mapping (e.g., total station mapping)
- ☐ surface collection (controlled or uncontrolled)
- ☒ in-field artifact analysis
- ☒ other activities (specify): site update
- ☒ photography
- ☐ shovel or trowel tests; probes
- ☐ test excavation
- ☐ excavation (data recovery)

Description of Analysis or Excavation Activities: The site's present conditiions were compared to the previous recording to determine if any significant changes have occurred.

Photographic Documentation: n/a. The site was thoroughly photographed during the previous recording.

Surface Collections (choose one)**:**

- ☒ no surface collection
- ☐ uncontrolled surface collection
- ☐ collections of specific items only
- ☐ controlled (sample: <100%)
- ☐ controlled (complete: 100%)
- ☐ other method (describe): _____

Records Inventory:

- ☐ site location map
- ☐ sketch map(s)
- ☐ instrument map(s)
- ☐ excavation, collection, analysis records
- ☐ photos, slides, and associated records
- ☒ other records: **site update**
- ☐ field journals, notes
- ☐ NM Historic Building Inventory form

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☒ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☒ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a good state of preservation. Disurbances include a gravel road, fence lines, cattle grazing, and periodic sheet washing.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☒ eligible ☐ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c) ☐ (b) ☒ (d)

Basis for Recommendation: LA 79014 apparently represents a series of short-term camps occupied by small groups, presumably engaged in hunting and/or gathering wild plant resources. The thermal feature most likely represents a campfire or hearth for stone boiling or pit roasting. Based on the artifacts recorded, the camps probably represent repeated, but perhaps sporadic, occupations over a long time span from the Archaic to the Formative period. LA 79014 contains at least one thermal feature that may contain dateable charcoal and identifiable botanical and faunal remains. Some areas of moderately high artifact density are present. Furthermore, other intact cultural deposits and features may be preserved under coppice dunes and sand sheets at the site and ash stains and possible hearths were reported at the site in the 1980s (Miller et al. 1989). SHPO determined the site to eligible under criterion D, information potential on 3/28/2013 (HPD Log 96290). Nothing was seen during the present site update that would warrant a change in eligibility.

Assessment of Project Impact: Future planning projects at the airport involving ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Due to the size of LA 79014 and several sites immediately adjacent to it, the entire area is recommended for avoidance.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** 317,787 **N:** 3,573,219

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** Dona Ana

USGS Quadrangle Name	Date	USGS Code
{Picacho Mountain, NM	1994	32106C8
_____	_____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T 23 S	R 1 W	27	NW	NW	NW	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: 487x460 meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: 224,020 sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** 4,430 feet

Site Boundaries Complete? (choose one): ☐ Yes ☒ No (explain): **The southwesty portion of the site occurs on property that was not accessible during the present project undertaking.**

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☒ alluvial ☒ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☒ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: 1 m+

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☒ other observations (describe): **Height of dunes**

Observations on Subsurface Archeological Deposits: **Extensive deposits were observed on site with carbonaceous sediment within features and numerous artifacts and feature elements eroding out of the edge of dune margins.**

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: **mesquite, soaptree yucca**

Understory: **forbs, bunch grasses, broom snakeweed**

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☒ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:				
☐ alluvial fan	☐ bench	☒ dune	☐ low rise	☐ ridge
☐ arroyo/wash	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ badlands	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ base of cliff	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of talus slope	☐ cliff/scarp/bluff	☐ hill top	☒ plain/flat	☐ terrace
☐ other location (describe): _____	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☒ lithic debitage
- ☒ chipped-stone tools
- ☒ diagnostic projectile points
- ☐ non-local lithic material
- ☒ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☒ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☒ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☒ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:**

artifact class	estimated frequency: 0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☐	☒	☐	_____
prehistoric ceramics (choose one):	☐	☐	☐	☒	☐	☐	_____
historic artifacts (choose one):	☒	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☐	☒	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: _____

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: 1

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Mogollon

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☒ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	Early Pithouse	200 AD	1,450 AD
Latest Period (if any)**:**	Late Pueblo		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify):

Basis for Cultural/Temporal Affiliation: presence of el Paso Brownware ceramics

Component Type: Features/artifact scatter

Remarks:

***Associated Phase/Complex Name(s):**

COMPONENT #2

Cultural Affiliation:

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:			
Latest Period (if any)**:**			

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify):

Basis for Cultural/Temporal Affiliation:

Component Type:

Remarks:

***Associated Phase/Complex Name(s):**

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
FCR Concentration	Yes	10	1	Features 8-17

Feature Remarks: see narrative below

11. REFERENCES

Written Sources of Information:

Additional Sources of Information:

12. NARRATIVE DESCRIPTION

LA 79014 is a previously recorded site that was originally recorded in 1981 and updated in 2012 by the University of New Mexico, Office of contract Archaeology. As recorded in 2012, LA 79012 encompasses one feature and an extensive variable-density scatter of artifacts, fire-cracked rock, and burned caliche, which appeared to extend outside the project area to the north and west. The site boundaries have been greatly expanded during the current project undertaking to the northwest and west with an additional ten features and 1,000s of artifacts observed.. The boundaries still remain incomplete within the southwestern portion of the site as this fell outside of the current survey area and could not be evaluated. A two-track road extends along the eastern and northern parts of the site. The site is in the midst of coppice dunes separated by blowouts of varying size. All of the artifacts and features were observed in the blowouts or in the two-track road, and other remains are undoubtedly present under the dunes. Each coppice dune is overgrown with mesquite bushes. Other vegetation in the site area includes soap tree yucca and various grasses and small weedy annuals. The surfaces of the blowouts are generally covered with a lag deposit of small (pea- to cherry-size) gravel, which includes examples of most the raw materials used on site for flaked lithics. The site has a gentle downslope grade to the southeast. Surface visibility overall is about 65 percent. LA 79014 include the previously recorded West Mesa Site 89, defined as a result of archaeological work associated with the Elena Gallegos Land Exchange in the early 1980s (Miller et al. 1989). Although records are poor, surface artifacts were collected from the site, including ceramics and the site was apparently tested. A subsurface stain of some kind was encountered. Site 89 eventually became designated as LA79014 but the site as previously recorded was far smaller than what was observed in the 2012 survey.

The only feature observed in 2012 (recorded as Feature 7) is a 45-cm-diameter concentration of fire cracked rock and both burned and unburned caliche pieces up to 15 cm in maximum dimension. The rocks appear to be volcanics along with one piece of quartzite. No soil staining or charcoal was visible. No ceramics or diagnostic artifacts were associated with the feature but it appeared to be prehistoric. The present undertaking identified ten additional features and an extensive amount of scattered burned rock and caliche that are likely the remnants of dozens of other features that have been deflated and dispersed across the surface. The documented features (Features 8-17) are all burned rock features. Feature 8 consists of a 1.5 m diameter concentration of burned rock/caliche. Feature 9 consists of a 1.25 m diameter concentration of burned rock/caliche. Feature 10 consists of a 0.5 m diameter concentration of burned rock/caliche. Feature 11consists of a 3.5 m x 1.5 diameter concentration of burned rock/caliche. Feature 12 consists of a 2.5 m x 2 m diameter concentration of burned rock/caliche. Feature 13 consists of a 5 m x 4 m diameter concentration of burned rock/caliche. Feature 14 consists of a 1 m diameter concentration of burned rock/caliche. Feature 15 consists of a 0.75 m diameter concentration of burned rock/caliche. Feature 16 consists of a 3 m x 2 m diameter concentration of burned rock/caliche. Feature 17 consists of a 2 m x 1 m diameter concentration of burned rock/caliche. The entire site boundary extension to the west-northwest is covered with a dispersed scatter of burned rock/caliche. These elements are likely deflated and eroded feature remnants of dozens of additional features that are now dispersed across the site surface.

The artifact assemblage observed in 2012 consisted mostly of flaked lithic debitage (approximately 290 pieces), as well as a hammerstone, three cores, several flaked lithic tools, two one-hand manos, a fragmentary basin metate, and another, unidentified ground stone fragment. Lithic raw materials were diverse, but mostly appeared to be derived from the lag gravels that occurred on site. Various cherts were most frequent, followed chalcedony. The lithic assemblage included 3 formal bifaces, a projectile point and a higher frequency of bifacial thinning flakes than the other sites in the project area. This may indicate that hunting related activities were more important at LA79014 or that more of its occupation occurred during the Archaic. The single projectile point was a small, undiagnostic lateral fragment of white chert with a serrated blade margin. In 2012, no ceramics were encountered, although in the early 1980s, eight plain brownware sherds were collected (Miller at el. 1989:51-52). The present site u[date identified 1,000s of additional artifacts that include flaked lithics, groundstone, and ceramic artifacts. The flaked lithics include both hard and soft hammer percussion flakes. Groundstone identified includes dozens of pieces of andesite slab metate and mano fragments. Ceramics identified include 100s of small El Paso Brownware sherds.

ELIGIBILITY RECOMMENDATION: LA 79014 apparently represents a series of short-term camps occupied by small groups, presumably engaged in hunting and/or gathering wild plant resources. The thermal feature most likely represents a campfire or hearth for stone boiling or pit roasting. Based on the artifacts recorded, the camps probably represent repeated, but perhaps sporadic, occupations over a long time span from the Archaic to the Formative period. LA 79014 contains at least one thermal feature that may contain dateable charcoal and identifiable botanical and faunal remains. Some areas of moderately high artifact density are present. Furthermore, other intact cultural deposits and features may be preserved under coppice dunes and sand sheets at the site and ash stains and possible hearths were reported at the site in the 1980s (Miller et al. 1989). SHPO determined the site to eligible under criterion D, information potential on 3/28/2013 (HPD Log 96290). Nothing was seen during the present site update that would warrant a change in eligibility.

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize): _____

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 169,053 (contact ARMS for site registration) ☒ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s): **Agency Assigning Number:**

_____ _____

_____ _____

_____ _____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** _____

Site Marker? ☐ (specify ID#): _____

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 3 February, 2015

Site Accessibility (choose one): ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one): ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: _____

Recording Activities:

☐ sketch mapping ☐ photography

☐ instrument mapping (e.g., total station mapping) ☐ shovel or trowel tests; probes

☐ surface collection (controlled or uncontrolled) ☐ test excavation

☐ in-field artifact analysis ☐ excavation (data recovery)

☒ other activities (specify): site update

Description of Analysis or Excavation Activities: The site's present conditiions were compared to the previous recording to determine if any significant changes have occurred.

Photographic Documentation: n/a. The site was thoroughly photographed during the previous recording.

Surface Collections (choose one):

☒ no surface collection

☐ uncontrolled surface collection ☐ collections of specific items only

☐ controlled (sample: <100%) ☐ controlled (complete: 100%)

☐ other method (describe): _____

Records Inventory:

☒ site location map ☐ excavation, collection, analysis records ☐ field journals, notes

☒ sketch map(s) ☐ photos, slides, and associated records ☐ NM Historic Building Inventory form

☐ instrument map(s) ☒ other records: **site update**

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a very good state of preservation. A significant portion of the site is covered in aeolian dune sands. The site remains unchanged since its previous recording.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☒ eligible ☐ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c) ☐ (b) ☒ (d)

Basis for Recommendation: Because of the twenty-two fire-cracked rock features present on the site, as well as the large and diverse artifact assemblage that spans a range of time from the Late Paleoindian period to the Early Formative period, the site contains potential to address research domains within the regional prehistory of south-central New Mexico. SHPO determined the site eligible for inclusion to the National Register of Historic Places under criterion D, information potential on March 13, 2011 (HPD Log 91580. Nothing was seen during the current site update that would warrant a change in eligibility.

Assessment of Project Impact: Future planning projects at the airport involving ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Due to the size of LA 169053 and several sites immediately adjacent to it, the entire area is recommended for avoidance.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** _____ **N:** _____

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** _____

USGS Quadrangle Name	Date	USGS Code
_____	_____	_____
_____	_____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T _____ N	R _____ W	__	NW	SE	SE	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: _____ x _____ meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: _____ sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** _____ feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☐ alluvial ☐ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☐ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: _____

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☐ other observations (describe): _____

Observations on Subsurface Archeological Deposits: _____

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: _____

Understory: _____

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☐ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ alluvial fan	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ arroyo/wash	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ badlands	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of cliff	☐ cliff/scarp/bluff	☐ hill top	☐ plain/flat	☐ terrace
☐ base of talus slope	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

☐ other location (describe): _____

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☐ lithic debitage
- ☐ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☐ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☐ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☐ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:**

artifact class	estimated frequency: 0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☐	☐	☐	_____
prehistoric ceramics (choose one):	☐	☐	☐	☐	☐	☐	_____
historic artifacts (choose one):	☐	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☐	☐	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: _____

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: __

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Other (specify): _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____	_____ BC	_____ AD
Latest Period (if any)**:**	_____		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: Other (describe): _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____

Feature Remarks:

11. REFERENCES

Written Sources of Information:

Additional Sources of Information:

12. NARRATIVE DESCRIPTION

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize):

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 169,056 (contact ARMS for site registration) ☒ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s): **Agency Assigning Number:**

_____ _____

_____ _____

_____ _____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** _____

Site Marker? ☐ (specify ID#): _____

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 3 February, 2015

Site Accessibility (choose one): ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one): ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: _____

Recording Activities:

☐ sketch mapping ☐ photography

☐ instrument mapping (e.g., total station mapping) ☐ shovel or trowel tests; probes

☐ surface collection (controlled or uncontrolled) ☐ test excavation

☐ in-field artifact analysis ☐ excavation (data recovery)

☒ other activities (specify): site update

Description of Analysis or Excavation Activities: The site's present conditiions were compared to the previous recording to determine if any significant changes have occurred.

Photographic Documentation: n/a. The site was thoroughly photographed during the previous recording.

Surface Collections (choose one):

☒ no surface collection

☐ uncontrolled surface collection ☐ collections of specific items only

☐ controlled (sample: <100%) ☐ controlled (complete: 100%)

☐ other method (describe): _____

Records Inventory:

☒ site location map ☐ excavation, collection, analysis records ☐ field journals, notes

☒ sketch map(s) ☐ photos, slides, and associated records ☐ NM Historic Building Inventory form

☐ instrument map(s) ☒ other records: **site update**

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a very good state of preservation. A significant portion of the site is covered in aeolian dune sands. The site remains unchanged since its previous recording.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☒ eligible ☐ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c)

☐ (b) ☒ (d)

Basis for Recommendation: The site represents a probable Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation. Even though most of the cultural materials are visible on the surface of site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Formative occupation of the region. SHPO determined the site eligible for inclusion to the National Register of Historic Places under criterion D, information potential on March 13, 2011 (HPD Log 91580. Nothing was seen during the current site update that would warrant a change in eligibility.

Assessment of Project Impact: Future planning projects at the airport involvong ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Due to the size of LA 169056 and several sites immediately adjacent to it, the entire area is recommended for avoidance.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** _____ **N:** _____

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** _____

USGS Quadrangle Name	Date	USGS Code
_____	_____	_____
_____	_____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T _____ N	R _____ W	__	NW	SE	SE	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: _____ x _____ meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: _____ sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** _____ feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☐ alluvial ☐ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☐ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: _____

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☐ other observations (describe): _____

Observations on Subsurface Archeological Deposits: _____

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: _____

Understory: _____

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☐ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ alluvial fan	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ arroyo/wash	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ badlands	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of cliff	☐ cliff/scarp/bluff	☐ hill top	☐ plain/flat	☐ terrace
☐ base of talus slope	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

☐ other location (describe): _____

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☐ lithic debitage
- ☐ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☐ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☐ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☐ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:**

artifact class	estimated frequency: 0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☐	☐	☐	_____
prehistoric ceramics (choose one):	☐	☐	☐	☐	☐	☐	_____
historic artifacts (choose one):	☐	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☐	☐	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: _____

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: __

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Other (specify): _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____	_____ BC	_____ AD
Latest Period (if any)**:**	_____		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: Other (describe): _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____

Feature Remarks:

11. REFERENCES

Written Sources of Information:

Additional Sources of Information:

12. NARRATIVE DESCRIPTION

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize):

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 169,057 (contact ARMS for site registration) ☒ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s): **Agency Assigning Number:**

_____ _____

_____ _____

_____ _____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** _____

Site Marker? ☐ (specify ID#): _____

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 4 February, 2015

Site Accessibility (choose one): ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one): ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: _____

Recording Activities:

☐ sketch mapping ☐ photography

☐ instrument mapping (e.g., total station mapping) ☐ shovel or trowel tests; probes

☐ surface collection (controlled or uncontrolled) ☐ test excavation

☐ in-field artifact analysis ☐ excavation (data recovery)

☒ other activities (specify): site update

Description of Analysis or Excavation Activities: The site's present conditiions were compared to the previous recording to determine if any significant changes have occurred.

Photographic Documentation: n/a. The site was thoroughly photographed during the previous recording.

Surface Collections (choose one):

☒ no surface collection

☐ uncontrolled surface collection ☐ collections of specific items only

☐ controlled (sample: <100%) ☐ controlled (complete: 100%)

☐ other method (describe): _____

Records Inventory:

☒ site location map ☐ excavation, collection, analysis records ☐ field journals, notes

☒ sketch map(s) ☐ photos, slides, and associated records ☐ NM Historic Building Inventory form

☐ instrument map(s) ☒ other records: **site update**

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a very good state of preservation. A significant portion of the site is covered in aeolian dune sands. The site remains unchanged since its previous recording.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☒ eligible ☐ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c)

☐ (b) ☒ (d)

Basis for Recommendation: The site represents a probable Late Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation. Even though most of the cultural materials are visible on the surface of site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative occupation of the region. SHPO determined the site eligible for inclusion to the National Register of Historic Places under criterion D, information potential on March 13, 2011 (HPD Log 91580. Nothing was seen during the current site update that would warrant a change in eligibility.

Assessment of Project Impact: Future planning projects at the airport involving ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Due to the size of LA 169057 and several sites immediately adjacent to it, the entire area is recommended for avoidance.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** _____ **N:** _____

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** _____

USGS Quadrangle Name	Date	USGS Code
_____	_____	_____
_____	_____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T _____ N	R _____ W	__	NW	SE	SE	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: _____ x _____ meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: _____ sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** _____ feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☐ alluvial ☐ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☐ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: _____

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☐ other observations (describe): _____

Observations on Subsurface Archeological Deposits: _____

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: _____

Understory: _____

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☐ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ alluvial fan	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ arroyo/wash	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ badlands	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of cliff	☐ cliff/scarp/bluff	☐ hill top	☐ plain/flat	☐ terrace
☐ base of talus slope	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

☐ other location (describe): _____

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☐ lithic debitage
- ☐ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☐ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☐ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☐ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:**

artifact class	estimated frequency: 0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☐	☐	☐	_____
prehistoric ceramics (choose one):	☐	☐	☐	☐	☐	☐	_____
historic artifacts (choose one):	☐	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☐	☐	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: _____

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: __

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Other (specify): _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records ☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____	_____ BC	_____ AD
Latest Period (if any)**:**	_____		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration ☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: Other (describe): _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records ☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration ☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____

Feature Remarks:

11. REFERENCES

Written Sources of Information:

Additional Sources of Information:

12. NARRATIVE DESCRIPTION

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize):

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 169,058 (contact ARMS for site registration) ☒ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s): **Agency Assigning Number:**

_____ _____

_____ _____

_____ _____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** _____

Site Marker? ☐ (specify ID#): _____

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 4 February, 2015

Site Accessibility (choose one): ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one): ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: _____

Recording Activities:

☐ sketch mapping ☐ photography

☐ instrument mapping (e.g., total station mapping) ☐ shovel or trowel tests; probes

☐ surface collection (controlled or uncontrolled) ☐ test excavation

☐ in-field artifact analysis ☐ excavation (data recovery)

☒ other activities (specify): site update

Description of Analysis or Excavation Activities: The site's present conditiions were compared to the previous recording to determine if any significant changes have occurred.

Photographic Documentation: n/a. The site was thoroughly photographed during the previous recording.

Surface Collections (choose one):

☒ no surface collection

☐ uncontrolled surface collection ☐ collections of specific items only

☐ controlled (sample: <100%) ☐ controlled (complete: 100%)

☐ other method (describe): _____

Records Inventory:

☒ site location map ☐ excavation, collection, analysis records ☐ field journals, notes

☒ sketch map(s) ☐ photos, slides, and associated records ☐ NM Historic Building Inventory form

☐ instrument map(s) ☒ other records: **site update**

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a very good state of preservation. A significant portion of the site is covered in aeolian dune sands. The site remains unchanged since its previous recording.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☒ eligible ☐ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c)

☐ (b) ☒ (d)

Basis for Recommendation: The site represents a probable Late Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation. Even though most of the cultural materials are visible on the surface of site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative occupation of the region. SHPO determined the site eligible for inclusion to the National Register of Historic Places under criterion D, information potential on March 13, 2011 (HPD Log 91580. Nothing was seen during the current site update that would warrant a change in eligibility.

Assessment of Project Impact: Future planning projects at the airport involving ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Due to the size of LA 169058 and several sites immediately adjacent to it, the entire area is recommended for avoidance.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** _____ **N:** _____

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** _____

USGS Quadrangle Name	Date	USGS Code
_____	_____	_____
_____	_____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T _____ N	R _____ W	__	NW	SE	SE	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: _____ x _____ meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: _____ sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** _____ feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☐ alluvial ☐ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☐ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: _____

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☐ other observations (describe): _____

Observations on Subsurface Archeological Deposits: _____

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: _____

Understory: _____

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☐ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ alluvial fan	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ arroyo/wash	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ badlands	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of cliff	☐ cliff/scarp/bluff	☐ hill top	☐ plain/flat	☐ terrace
☐ base of talus slope	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

☐ other location (describe): _____

Observations on Site Setting: _____

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☐ lithic debitage
- ☐ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☐ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☐ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☐ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:**

artifact class	estimated frequency: 0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☐	☐	☐	_____
prehistoric ceramics (choose one):	☐	☐	☐	☐	☐	☐	_____
historic artifacts (choose one):	☐	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☐	☐	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: _____

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: __

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Other (specify): _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____	_____ BC	_____ AD
Latest Period (if any)**:**	_____		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: Other (describe): _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____
_____	_____	_____	__	_____

Feature Remarks:

11. REFERENCES

Written Sources of Information:

Additional Sources of Information:

12. NARRATIVE DESCRIPTION

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize):

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 181,137 (contact ARMS for site registration) ☐ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s):	**Agency Assigning Number:**
HAS-1	Hammerstone Archaeological Services
_____	_____
_____	_____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** HAS-1

Site Marker? ☒ (specify ID#)**:** HAS-1 stamped on aluminum tag attached to datum

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 3 February, 2015

Site Accessibility (choose one)**:** ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: Surface visibility is excellent as the site is located with sheetwashed coppice dunes

Recording Activities:

☒ sketch mapping	☒ photography
☐ instrument mapping (e.g., total station mapping)	☐ shovel or trowel tests; probes
☐ surface collection (controlled or uncontrolled)	☐ test excavation
☒ in-field artifact analysis	☐ excavation (data recovery)
☐ other activities (specify): _____	

Description of Analysis or Excavation Activities: Surface features and artifacts analyzed and described.

Photographic Documentation: HAS digital

Surface Collections (choose one)**:**

☒ no surface collection	
☐ uncontrolled surface collection	☐ collections of specific items only
☐ controlled (sample: <100%)	☐ controlled (complete: 100%)
☐ other method (describe): _____	

Records Inventory:

☐ site location map	☐ excavation, collection, analysis records	☐ field journals, notes
☐ sketch map(s)	☐ photos, slides, and associated records	☐ NM Historic Building Inventory form
☐ instrument map(s)	☒ other records: **site update**	

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a fair to good state of preservation. Active catle grazing is occurring on site and the site area is subject to periodic sheet washing. Artifacts and /or features are likely obscurred by aeolian dune sands.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☒ eligible ☒ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c) ☐ (b) ☒ (d)

Basis for Recommendation: The site represents a probable Late Archaic/Early Formative temporary encampment at which roasting activities took place. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover portions of the site. Intact deposits may exist within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Archaic/Early Formative occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

Assessment of Project Impact: Future planning projects at the airport involving ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Ground disturbing activities are likely to destroy potential subsurface deposits. Avoidance of the site is recommended.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** 317,028 **N:** 3,574,093

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** Dona Ana

USGS Quadrangle Name	Date	USGS Code
Picacho Mountain, NM	1994	32106C8
_____	_____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T 23 S	R 1 W	21	NW	SE	SE	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: 50x75 meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: 3,750 sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** 4,450 feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☒ alluvial ☒ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☒ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: up to 1 m within the dune margins

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☒ other observations (describe): height of coppice dunes on site

Observations on Subsurface Archeological Deposits: Subsurface deposits are likely as artifacts and feature elements were observed eroding out of the bottoms of the dune edges.

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: **mesquite**

Understory: **forbs, bunch grasses, broom snakeweed**

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☒ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:				
☐ bench	☒ dune	☐ low rise	☐ ridge	
☐ alluvial fan	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ arroyo/wash	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ badlands	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of cliff	☐ cliff/scarp/bluff	☐ hill top	☒ plain/flat	☐ terrace
☐ base of talus slope	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

☐ other location (describe): _____

Observations on Site Setting: **The site is located across a large flat within a coppice dune setting. This area is due west of the runways at the Las Cruces International Airport.**

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☒ lithic debitage
- ☒ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☐ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☒ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☒ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:** estimated frequency

artifact class	0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☒	☐	☐	_____
prehistoric ceramics (choose one):	☒	☐	☐	☐	☐	☐	_____
historic artifacts (choose one):	☒	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☒	☐	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: The surface assemblage includes an estimated 100+ flaked lithic artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include almost exclusively biface thinning debitage. Raw materials identified include limestone, fine-grained quartzite, andesite, silicified wood, and two different types of chert. The flaked lithic assemblage is the product of soft hammer percussion producing multi-facet/ground platforms. Most flakes exhibit use wear along lateral and distal margins. Tools identified include one chert biface fragment and one silicified wood bifice fragment. Groundstone identified include an andesite mano fragment and an andesite slab metate fragment.

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: 1

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Unknown prehistoric

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☒ associated diagnostic artifact or feature types ☒ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	unknown		
Latest Period (if any)**:**	unknown	BC	AD

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: presence of burned rock features and biface thinning debitage

Component Type: Features/artifact scatter _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____	_____	_____

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
Fcr Concentration	Yes	2	1	Features 1-2

Feature Remarks: see narrative below

11. REFERENCES

Written Sources of Information: _____

Additional Sources of Information: _____

12. NARRATIVE DESCRIPTION

LA 181137/HAS-1 is a probable Late Archaic/Early Formative period prehistoric occupation site. The site is a single component (Unknown prehistoric) site based on the presence of diagnostic feature types. The site could not be assigned a specific cultural/temporal designation due to a lack of diagnostic artifacts; however the presence of burned rock features and high quality lithic materials that are a product of biface thinning techniques suggests a Late Archaic/Early Formative period of occupation. The site is located across a large flat within a coppice dune setting. This area is due west of the runways at the Las Cruces International Airport. The site measures approximately 50 m x 75 m and is at an elevation of 4450 feet above mean sea level. The desert scrub vegetation community consists of an overstory of mesquite. The understory is comprised of forbs, bunch grasses, and broom snakeweed. Disturbances across the site include active cattle grazing. The area is subject to periodic sheetwashing and is highly deflated.

A total of two features were identified. Feature 1 consists of the remnants of a roasting pit. It measures 2 m in diameter and contains approximately 20 pieces of burned and fire-cracked heating elements. The feature contains intact deposits within its interior. Feature 2 consists of the remnants of a roasting pit. It measures 1.5 m in diameter and contains approximately 40 pieces of burned and fire-cracked heating elements. Scattered pieces of burned caliche are present across the site that may indicate other features were present at one time, but are now completely deflated with dispersed elements located across the site.

The surface assemblage includes an estimated 100+ flaked lithic artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include almost exclusively biface thinning debitage. Raw materials identified include limestone, fine-grained quartzite, andesite, silicified wood, and two different types of chert. The flaked lithic assemblage is the product of soft hammer percussion producing multi-facet/ground platforms. Most flakes exhibit use wear along lateral and distal margins. Tools identified include one chert biface fragment and one silicified wood bifice fragment. Groundstone identified include an andesite mano fragment and an andesite slab metate fragment.

ELIGIBILITY RECOMMENDATION: The site represents a probable Late Archaic/Early Formative temporary encampment at which roasting activities took place. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover portions of the site. Intact deposits may exist within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Archaic/Early Formative occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize): _____

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 181,138 (contact ARMS for site registration) ☐ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s):	**Agency Assigning Number:**
HAS-2	Hammerstone Archaeological Services
_____	_____
_____	_____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** HAS-2

Site Marker? ☒ (specify ID#)**:** HAS-2 stamped on aluminum tag attached to datum

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 4 February, 2015

Site Accessibility (choose one)**:** ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: Surface visibility is excellent as the site is located with sheetwashed coppice dunes

Recording Activities:

☒ sketch mapping	☒ photography
☐ instrument mapping (e.g., total station mapping)	☐ shovel or trowel tests; probes
☐ surface collection (controlled or uncontrolled)	☐ test excavation
☒ in-field artifact analysis	☐ excavation (data recovery)
☐ other activities (specify): _____	

Description of Analysis or Excavation Activities: Surface features and artifacts analyzed and described.

Photographic Documentation: HAS digital

Surface Collections (choose one)**:**

☒ no surface collection	
☐ uncontrolled surface collection	☐ collections of specific items only
☐ controlled (sample: <100%)	☐ controlled (complete: 100%)
☐ other method (describe): _____	

Records Inventory:

☐ site location map	☐ excavation, collection, analysis records	☐ field journals, notes
☐ sketch map(s)	☐ photos, slides, and associated records	☐ NM Historic Building Inventory form
☐ instrument map(s)	☒ other records: **site update**	

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a fair to good state of preservation. Active catle grazing is occurring on site and the site area is subject to periodic sheet washing. Artifacts and /or features are likely obscurred by aeolian dune sands.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☒ eligible ☒ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c)

☐ (b) ☒ (d)

Basis for Recommendation: The site represents a Mogollon temporary encampment at which roasting activities took place. The site most likely dates from A.D. 900-1350 based on the presence of diagnostic ceramics. The site is in a good state of preservation. Disturbance sources were identified and include periodic sheet washing and active cattle grazing. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative Mogollon occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

Assessment of Project Impact: Future planning projects at the airport involving ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Ground disturbing activities are likely to destroy potential subsurface deposits. Avoidance of the site is recommended.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** 317,674 **N:** 3,573,742

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** Dona Ana

USGS Quadrangle Name	Date	USGS Code
Picacho Mountain, NM	1994	32106C8
_____	____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T 23 S	R 1 W	22	SE	SW	SW	☐
New Mexico	☐	T 23 S	R 1 W	27	NE	NW	NW	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: 60x48 meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: 2,880 sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** 4,435 feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☒ alluvial ☒ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☒ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: up to 1 m within the dune margins

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☒ other observations (describe): height of coppice dunes on site

Observations on Subsurface Archeological Deposits: Subsurface deposits are likely as artifacts and feature elements were observed eroding out of the bottoms of the dune edges.

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: **mesquite**

Understory: **forbs, bunch grasses, broom snakeweed**

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☒ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ bench	☒ dune	☐ low rise	☐ ridge	
☐ alluvial fan	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ arroyo/wash	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ badlands	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of cliff	☐ cliff/scarp/bluff	☐ hill top	☒ plain/flat	☐ terrace
☐ base of talus slope	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

☐ other location (describe): _____

Observations on Site Setting: **The site is located across a large flat within a coppice dune setting. This area is due west of the runways at the Las Cruces International Airport.**

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☒ lithic debitage
- ☒ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☒ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☒ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☒ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☒ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:** estimated frequency

artifact class	0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☒	☐	☐	_____
prehistoric ceramics (choose one):	☒	☐	☐	☒	☐	☐	_____
historic artifacts (choose one):	☒	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☒	☐	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: The surface assemblage includes an estimated 250+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics, groundstone, and ceramics. Flaked lithics identified include more than 150 expedient core flakes and flake fragments. Raw materials identified include limestone, andesite, and chert. The flaked lithic assemblage is the product of hard hammer percussion producing single facet platforms with varying degrees of cortex. The flakes exhibit use wear along lateral and distal margins. Groundstone identified includes two andesite slab metate fragments and two sandstone cobble mano fragments. Ceramics observed included more than 100 Jornada Brown (c.a. A.D. 900-1350), El Paso Brownware (c.a. A.D. 200-1450), El Paso Red-on-brown (ca A.D. 900-1100), and El Paso Polychrome (ca A.D. 1100-1350) sherds.

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: 1

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Mogollon _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☒ associated diagnostic artifact or feature types ☒ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	Late Pithouse	900 AD	1,350 AD
Latest Period (if any)**:**	Late Pueblo		

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: presence of burned rock features and diagnostic ceramics

Component Type: Features/artifact scatter _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____	_____	_____

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
Fcr Concentration	Yes	3	1	Features 1-3

Feature Remarks: see narrative below

11. REFERENCES

Written Sources of Information: _____

Additional Sources of Information: _____

12. NARRATIVE DESCRIPTION

LA 181138/HAS-2 is a Formative period prehistoric occupation site dating from AD 900-1350. The site is a single component (Mogollon) site based on the presence of diagnostic artifacts and feature types. The site is located across a large flat within a coppice dune setting. This area due west of the runways at the Las Cruces International Airport. The site measures approximately 60 m x 48 m and is at an elevation of 4435 feet above mean sea level. The desert scrub vegetation community consists of an overstory of mesquite. The understory is comprised of forbs, bunch grasses, and broom snakeweed. Disturbances across the site include a county road, and active cattle grazing. The area is subject to periodic sheetwashing.

A total of three features were identified. Feature 1 consists of the remnants of a roasting pit. It measures 2.5 m in diameter and contains approximately 75 pieces of burned and fire-cracked limestone heating elements. The feature contains intact deposits within its interior. Feature 2 consists of the remnants of a roasting pit. It measures 2 m in diameter and contains approximately 30 pieces of burned and fire-cracked limestone heating elements. Feature 3 consists of the remnants of a roasting pit. It measures 2 m in diameter and contains approximately 100 pieces of burned and fire-cracked limestone heating elements. The feature contains intact deposits within its interior. Scattered pieces of burned caliche are present across the site that may indicate other features were present at one time, but are now completely deflated with dispersed elements located across the site.

The surface assemblage includes an estimated 250+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics, groundstone, and ceramics. Flaked lithics identified include more than 150 expedient core flakes and flake fragments. Raw materials identified include limestone, andesite, and chert. The flaked lithic assemblage is the product of hard hammer percussion producing single facet platforms with varying degrees of cortex. The flakes exhibit use wear along lateral and distal margins. Groundstone identified includes two andesite slab metate fragments and two sandstone cobble mano fragments. Ceramics observed included more than 100 Jornada Brown (c.a. A.D. 900-1350), El Paso Brownware (c.a. A.D. 200-1450), El Paso Red-on-brown (ca A.D. 900-1100), and El Paso Polychrome (ca A.D. 1100-1350) sherds.

ELIGIBILITY RECOMMENDATION: The site represents a Mogollon temporary encampment at which roasting activities took place. The site most likely dates from A.D. 900-1350 based on the presence of diagnostic ceramics. The site is in a good state of preservation. Disturbance sources were identified and include periodic sheet washing and active cattle grazing. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Late Formative Mogollon occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize): _____

LABORATORY OF ANTHROPOLOGY SITE RECORD

1. IDENTIFICATION & OWNERSHIP

LA Number: 181,139 (contact ARMS for site registration) ☐ **Site Update**? (complete at least Sections 1-4)

Site Name(s): _____

Other Site Number(s):	**Agency Assigning Number:**
HAS-3	Hammerstone Archaeological Services
_____	_____
_____	_____

Current Site Owner(s): City of Las Cruces

Site Type: Structural **Occupation Type:** Prehistoric

2. RECORDING INFORMATION

NMCRIS Activity No.: 132,711 **Field Site Number:** HAS-1

Site Marker? ☒ (specify ID#)**:** HAS-1 stamped on aluminum tag attached to datum

Recorder(s): R. Phippen, R. Burleson

Agency: Hammerstone Archaeological Services **Recording Date (dd-MMM-yyyy):** 6 February, 2015

Site Accessibility (choose one)**:** ☒ accessible ☐ buried (sterile overburden) ☐ flooded ☐ urbanized ☐ not accessible

Surface Visibility (% visible; choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☐ 51-75% ☒ 76-99% ☐ 100%

Remarks: Surface visibility is excellent as the site is located with sheetwashed coppice dunes

Recording Activities:

☒ sketch mapping	☒ photography
☐ instrument mapping (e.g., total station mapping)	☐ shovel or trowel tests; probes
☐ surface collection (controlled or uncontrolled)	☐ test excavation
☒ in-field artifact analysis	☐ excavation (data recovery)
☐ other activities (specify): _____	

Description of Analysis or Excavation Activities: Surface features and artifacts analyzed and described.

Photographic Documentation: HAS digital

Surface Collections (choose one)**:**

☒ no surface collection	
☐ uncontrolled surface collection	☐ collections of specific items only
☐ controlled (sample: <100%)	☐ controlled (complete: 100%)
☐ other method (describe): _____	

Records Inventory:

☐ site location map	☐ excavation, collection, analysis records	☐ field journals, notes
☐ sketch map(s)	☐ photos, slides, and associated records	☐ NM Historic Building Inventory form
☐ instrument map(s)	☒ other records: **site update**	

Repository for Original Records: Laboratory of Anthropology

Repository for Collected Artifacts: n/a

3. CONDITION

Archaeological Status: ☐ surface collection ☐ test excavation ☐ partial excavation ☐ complete excavation

Disturbance Sources: ☒ wind erosion ☒ water erosion ☐ bioturbation ☐ vandalism ☐ construction/land development

☒ other source (specify): cattle grazing

Vandalism: ☐ defaced glyphs ☐ damaged/defaced building ☐ surface disturbance ☐ manual excavation

☐ mechanical excavation ☐ other vandalism (specify): _____

Percentage of Site Intact (choose one)**:** ☐ 0% ☐ 1-25% ☐ 26-50% ☒ 51-75% ☐ 76-99% ☐ 100%

Observations on Site Condition: The site is in a fair to good state of preservation. Active catle grazing is occurring on site and the site area is subject to periodic sheet washing. Artifacts and /or features are likely obscurred by aeolian dune sands.

4. RECOMMENDATIONS (for Performer/Recorder use only)

National Register Eligibility (choose one)**:** ☒ eligible ☒ not eligible ☐ not sure

Applicable Criteria: ☐ (a) ☐ (c)

☐ (b) ☒ (d)

Basis for Recommendation: The site represents a probable Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation even though it is somewhat deflated. Disturbance sources were identified and include periodic sheet washing, and active cattle grazing. Even though most of the cultural materials are visible on the surface of the site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Formative period of occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

Assessment of Project Impact: Future planning projects at the airport involving ground disturbing activities would likely destroy extensive subsurface cultural deposits.

Treatment Recommendations: Ground disturbing activities are likely to destroy potential subsurface deposits. Avoidance of the site is recommended.

5. SHPO CONSULTATIONS (for SHPO and Sponsor use only)

Sponsor NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

Sponsor Staff: _____ **Date (dd-MMM-yyyy):** _____

Sponsor Remarks: _____

SHPO NR Determination: ☐ eligible ☐ not eligible ☐ not determined **Applicable Criteria:** ☐ (a) ☐ (b) ☐ (c) ☐ (d)

HPD Staff: _____ **Date (dd-MMM-yyyy):** _____ **HPD Log No:** _____

Register Status: ☐ listed on National Register ☐ listed on State Register ☐ formal determination of eligibility

State Register No.: _____

SHPO Remarks: _____

6. LOCATION

Source Graphics:

☒ USGS 7.5' (1:24,000) topo maps ☐ rectified aerial photos [Scale: _____]

☐ other topo maps [Scale: _____] ☐ unrectified aerial photos [Scale: _____]

☒ GPS unit GPS accuracy (choose one): ☐ < 1.0 m ☒ 1-10 m ☐ 10-100 m ☐ >100 m

☐ other source (describe): _____

UTM Coordinates (@ center of site; at least one set of coordinates required):

Map-based Coordinates Datum: NAD27 **Zone:** 13 **E:** _____ **N:** _____

GPS-based Coordinates Datum: NAD83 **Zone:** 13 **E:** 315,841 **N:** 3,573,494

Directions to Site: _____ **In highway R-O-W?** ☐

Town (if in city limits): _____ **State:** NM **County:** Dona Ana

USGS Quadrangle Name	Date	USGS Code
Picacho Mountain, NM	1994	32106C8
_____	_____	_____

PLSS Meridian	Unplatted	Township	Range	Section	¼ Sections			Protracted?
New Mexico	☐	T 23 S	R 1 W	28	SW	NW	NW	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐
New Mexico	☐	T _____	R _____	__	_____	_____	_____	☐

7. PHYSICAL DESCRIPTION

Site Dimensions: 45x65 meters **Basis for Dimensions** (choose one): ☐ estimated ☒ measured

Site Area: 2,925 sq m **Basis for Area** (choose one): ☐ estimated ☒ measured **Elevation:** 4,455 feet

Site Boundaries Complete? (choose one): ☒ Yes ☐ No (explain): _____

Basis for Site Boundaries: ☒ distribution of archeological features & artifacts ☐ modern features or ground disturbance

☐ property lines ☐ topographic features ☐ other (specify): _____

Depositional/Erosional Environment: ☒ alluvial ☒ aeolian ☐ colluvial ☐ residual ☐ no deposition (on bedrock)

☐ other process (describe): _____

Stratigraphy & Depth of Archeological Deposits (choose one): ☐ unknown/not determined

☐ no subsurface deposits present ☒ subsurface deposits present ☐ stratified subsurface deposits present

Estimated Depth of Deposits: up to 1 m within the dune margins

Basis for Depth Determinations: ☒ estimated ☐ shovel/trowel tests ☐ core/auger tests ☐ excavations

☐ road or arroyo cuts ☐ rodent burrows ☒ other observations (describe): height of coppice dunes on site

Observations on Subsurface Archeological Deposits: Subsurface deposits are likely as artifacts and feature elements were observed eroding out of the bottoms of the dune edges.

Local Vegetation (list species in decreasing order of dominance)**:**

Overstory: **mesquite**

Understory: **forbs, bunch grasses, broom snakeweed**

Vegetation Community (choose one or two): ☐ forest ☐ woodland ☐ grassland ☐ scrubland ☒ desert scrubland ☐ marshland

☐ other community (specify): _____

Topographic Location:

☐ bench	☒ dune	☐ low rise	☐ ridge	
☐ alluvial fan	☐ blowout	☐ flood plain/valley	☐ mesa/butte	☐ rockshelter
☐ arroyo/wash	☐ canyon rim	☐ foothill/mountain front	☐ mountain	☐ saddle
☐ badlands	☐ cave	☐ hill slope	☐ open canyon floor	☐ talus slope
☐ base of cliff	☐ cliff/scarp/bluff	☐ hill top	☒ plain/flat	☐ terrace
☐ base of talus slope	☐ constricted canyon	☐ lava flow (malpais)	☐ playa	

☐ other location (describe): _____

Observations on Site Setting: **The site is located across a large flat within a coppice dune setting. This area is due west of the runways at the Las Cruces International Airport.**

8. ASSEMBLAGE DATA

Assemblage Content (all components)**:**

Lithics:

- ☒ lithic debitage
- ☒ chipped-stone tools
- ☐ diagnostic projectile points
- ☐ non-local lithic material
- ☒ stone-tool manufacturing items (cores, hammerstones, etc.)
- ☒ ground-stone tools
- ☐ other stone tools

Prehistoric Ceramics

- ☐ whole ceramic vessels
- ☐ diagnostic ceramics
- ☐ other prehistoric ceramics

Historic Artifacts:

- ☐ diagnostic glass artifacts
- ☐ other glass artifacts
- ☐ diagnostic metal artifacts
- ☐ other metal artifacts
- ☐ whole ceramic vessel
- ☐ diagnostic ceramics
- ☐ other historic ceramics

Other Artifacts and Materials:

- ☐ bone tools
- ☐ faunal remains
- ☐ macrobotanical remains
- ☐ perishable artifacts
- ☐ ornaments
- ☐ figurines
- ☐ mineral specimens
- ☐ architectural stone
- ☐ burned adobe
- ☒ fire-cracked rock/burned caliche

☐ Other items (specify): _____

Assemblage Size (all components)**:** estimated frequency

artifact class	0	1s	10s	100s	1000s	>10,000	*Counts (if <100)
lithic artifacts (choose one): (include debitage)	☐	☐	☐	☒	☐	☐	_____
prehistoric ceramics (choose one):	☒	☐	☐	☐	☐	☐	_____
historic artifacts (choose one):	☒	☐	☐	☐	☐	☐	_____
total assemblage size (choose one):	☐	☐	☐	☒	☐	☐	_____

Dating Potential: ☐ radiocarbon ☐ dendrochronology ☐ archeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Assemblage Remarks: The surface assemblage includes an estimated 100+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics and groundstone. Flaked lithics identified include more than 100 flakes and flake fragments. Raw materials identified include limestone, andesite, and chert. The flaked lithic assemblage is primarily the product of expedient core reduction activities. The flakes are are a product hard hammer percussion producing single facet platforms with varying degrees of cortex. Tools observed include a chert core fragment. Many of the flakes exhibit use wear along lateral and distal margins. Groundstone observed includes one piece of andesite slab metate fragment.

9. CULTURAL/TEMPORAL AFFILIATIONS

TOTAL NUMBER OF COMPONENTS DEFINED: 1

COMPONENT #1 (EARLIEST)

Cultural Affiliation: Unknown prehistoric

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☐ based on associated chronometric data or historic records

☒ associated diagnostic artifact or feature types ☒ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	unknown		
Latest Period (if any)**:**	unknown	BC	AD

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☒ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: presence of burned rock features and biface thinning debitage

Component Type: Features/artifact scatter _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

COMPONENT #2

Cultural Affiliation: _____ _____

Basis for Temporal Affiliations (choose one)**:** ☐ not applicable ☒ based on associated chronometric data or historic records

☐ associated diagnostic artifact or feature types ☐ based on analytically derived assemblage data or archeological experience

***Period of Occupation:** (*see NMCRIS Guidelines for valid periods, default occupation dates, and phase/complex names)

	Period Name	Begin Date	End Date
Earliest Period:	_____		
Latest Period (if any)**:**	_____	_____	_____

Dating Status: ☐ radiocarbon ☐ dendrochronology ☐ archaeomagnetism ☐ obsidian hydration

☐ relative techniques (e.g. seriation, diagnostics, etc.) ☐ other methods (specify): _____

Basis for Cultural/Temporal Affiliation: _____

Component Type: _____ _____

Remarks: _____

***Associated Phase/Complex Name(s):** _____

10. FEATURE DATA

(see NMCRIS User's guide for a list of valid feature types)

Feature Type	Reliable ID ?	# Observed	Assoc. Comp. #s	Feature ID, Notes
Fcr Concentration	Yes	3	1	Features 1-3

Feature Remarks: see narrative below

11. REFERENCES

Written Sources of Information: _____

Additional Sources of Information: _____

12. NARRATIVE DESCRIPTION

LA 181139/HAS-3 is a probable Formative period prehistoric occupation site. The site is a single component (Unknown prehistoric) site based on the presence of flaked lithic and groundstone artifacts and feature types. A definitive cultural/temporal designation could not be assigned due to a lack of diagnostic artifacts. The site occupation is presumed to be a Formative period occupation due to the flaked lithic assemblage being dominated by expedient core reduction debitage. The site is located across a large flat within a coppice dune setting. This area is due west of the runways at the Las Cruces Internationsl Airport. The site measures approximately 45 m x 65 m and is at an elevation of 4455 feet above mean sea level. The desert scrub vegetation community consists of an overstory of mesquite. The understory is comprised of forbs, bunch grasses, and broom snakeweed. Disturbances across the site include active cattle grazing. The area is subject to periodic sheetwashing.

A total of three features were identified. Feature 1 is defined as a feature area that measures approximately 2.5 m x 2 m. It is located along the north edge of a large dune. Feature 2 consists of the remnants of a roasting pit. It measures 1.5 m in diameter and contains approximately 75 pieces of burned and fire-cracked limestone heating elements. Feature 3 consists of the remnants of a roasting pit. It measures 1 m in diameter and contains approximately 25 pieces of burned and fire-cracked limestone heating elements. Scattered pieces of burned caliche are present across the site that may indicate other features were present at one time, but are now completely deflated with dispersed elements located across the site.

The surface assemblage includes an estimated 100+ artifacts. It is likely that the aeolian dune sands are obscuring additional cultural materials. Artifacts identified include flaked lithics and groundstone. Flaked lithics identified include more than 100 flakes and flake fragments. Raw materials identified include limestone, andesite, and chert. The flaked lithic assemblage is primarily the product of expedient core reduction activities. The flakes are are a product hard hammer percussion producing single facet platforms with varying degrees of cortex. Tools observed include a chert core fragment. Many of the flakes exhibit use wear along lateral and distal margins. Groundstone observed includes one piece of andesite slab metate fragment.

ELIGIBILITY RECOMMENDATION: The site represents a probable Formative period temporary encampment at which roasting activities took place. The site is in a good state of preservation even though it is somewhat deflated. Disturbance sources were identified and include periodic sheet washing, and active cattle grazing. Even though most of the cultural materials are visible on the surface of ther site, it is anticipated that additional site materials appear to remain within a buried context. At least 1 m or more of aeolian dunal sand continues to cover an extensive portion of the site. Intact deposits identified on site within several of the features are likely to yield additional data as it relates to the chronology of occupation, in addition to the subsistence data within intact roasting pit features and larger feature areas. The site is likely to yield significant chronological, settlement, and subsistence data towards our present understanding of the Formative period of occupation of the region. Therefore, the site is recommended as eligible for inclusion to the National Register of Historic Places under criterion D, information potential.

13. SITE RECORD ATTACHMENTS

☒ site location map (USGS 7.5' topo; required) ☒ sketch map or site plan (required) ☐ continuation forms?

☐ other materials (itemize): _____