

**Guidelines
For
Conducting
Cultural Resource Surveys**



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When the NRCS is conducting cultural resource surveys or archaeological field inventories this guidebook will give you a general step by step process to help in completing your field inventory.

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Archaeological field survey is the methodological process by which archaeologists collect information about the location, distribution and organization of past human cultures across a large area.

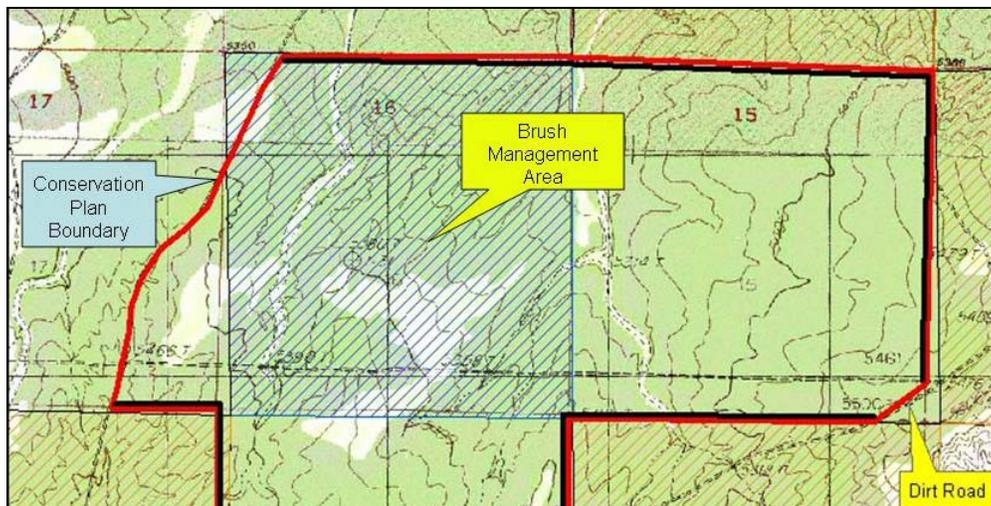
Why we care.

Section 106 of the National Historic Preservation Act (NHPA).

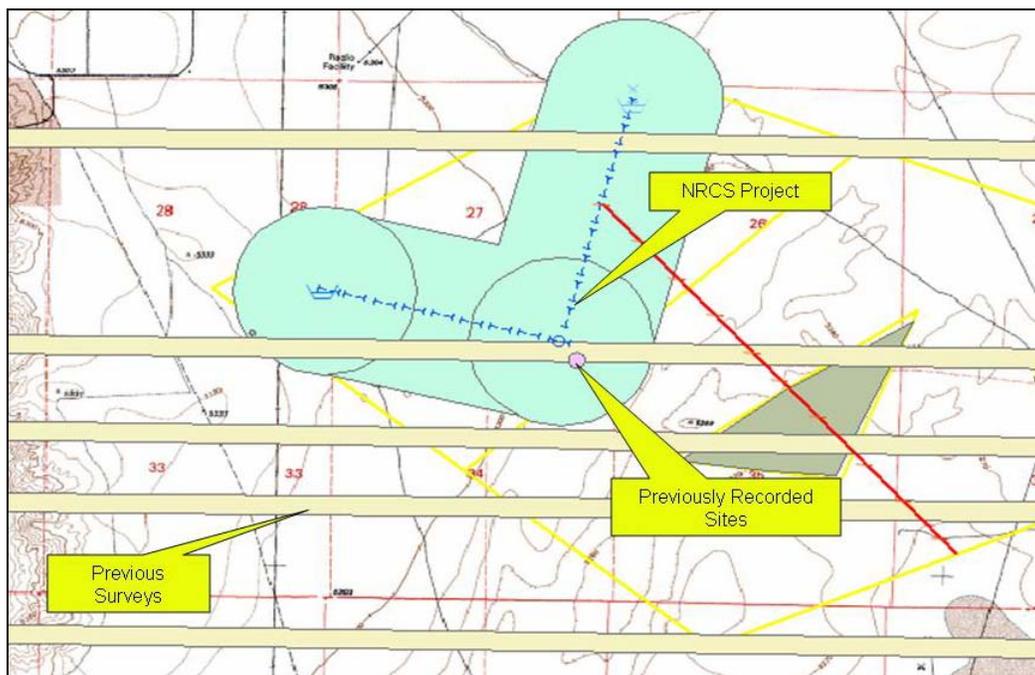
The head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department of independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure or object that is included in or eligible for inclusion in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation...a reasonable opportunity to comment with regard to such undertaking. (16 U.S.C. 470f)

Prior to field work:

Identify the area where the producer will be installing the practice; this is called the Area of Potential Effect or APE for short. This Area of Potential Effect shall include the area where the NRCS is investing money to assist in a practices' establishment. It will also (if necessary) include the area that will be disturbed in order to get equipment to the project site. An example would be bulldozing a road to get a drilling rig in to a potential livestock well location. In this case both the well location and the road would need to be surveyed, because, the livestock well is being partially funded with federal monies and to install that well the road is required to get equipment into the site.



Once the project area is defined, request an ARMS cultural resource records search of the proposed project area. This will require you to send an Arc-Map shapefile through E-Mail directly to ARMS (Archaeological Records Management Services). In turn you will receive a shapefile back from ARMS that identifies any previously recorded sites and/or surveys located within your project's area. This does not mean everything has been recorded in this area, that's up to your on-the-ground survey of the area.



These record searches will also provide you with the previous sites and surveys general information. This information will include: location, NMCRIS identification number, type of sites, who conducted the survey, and the date of surveys. For more in-depth information the State Cultural Resource Specialist will need to be notified.

Attributes of Hubbell_sites_83

FID	Shape*	ARCH_SITE	ARCH_OCCU	UTM_ZONE	UTM_EASTIN	UTM_NORTH	SITE_AREA	LITHIC_ART
0	Polygon	69495	PREH	13	353349	3870728	3000	UNKNOWN
1	Polygon	69496	UNK	13	351500	3870900	300	UNKNOWN

Attributes of Hubbell_surveys_83

FID	Shape*	NMCRIS_N	AGENCY_DES	ACTIVITY_S	ACTIVITY_E	MAIN_AU	PUBLICA	PERF_AGENC	TITLE_LINE
0	Polygon	25187	University of New Mexico	10/1/1988	8/2/1989	Winter, Jose	1989	185-361	Cultural Resource

Interviewing the land manager as to what they have seen or have heard about the project area is also a very good source of information.

However, remember existing past surveys never provide an adequate basis for planning or making an educated guess. This can only be completed by going to the project area and conducting an on the ground survey.

Survey Design:

Where are we surveying? What does the project area look like both now as well as the past? Is the project located in a river valley? Was this area capable of being farmed in the past, both recent and/or prehistoric? The geography of the area can assist you in identifying potential cultural resources located within the projects boundaries.



Northeastern New Mexico.



Southwest New Mexico (Basin and Range).

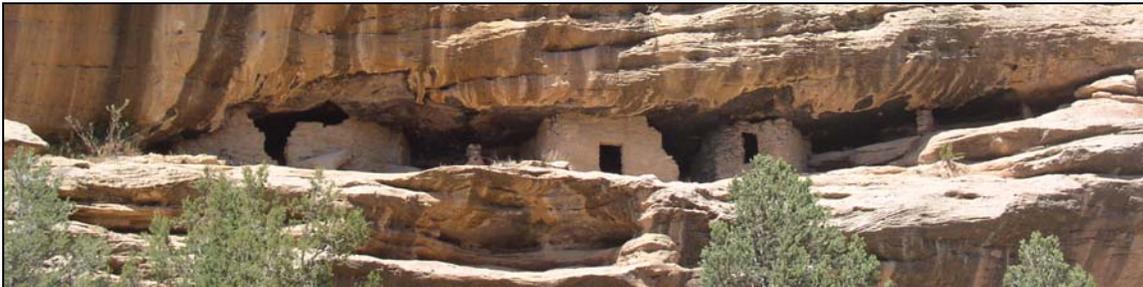
What are we looking for? You should already know what geographic area of New Mexico the project is located in. So now what took place in this area in the past? This can be either prehistoric, historic or both. Some examples of the historic past include; farming, ranching, mining and logging. For the prehistoric past it could include; farming, habitation, hunting and gathering. Is the project out on the plains, in the mountains or along a perennial stream? Knowing what may be present in the project area will help you when conducting the survey. Your ARMS data can also help you in determining the type of resources you are looking for.



Both Historic and Prehistoric farmed fields.



Historic coal mine.

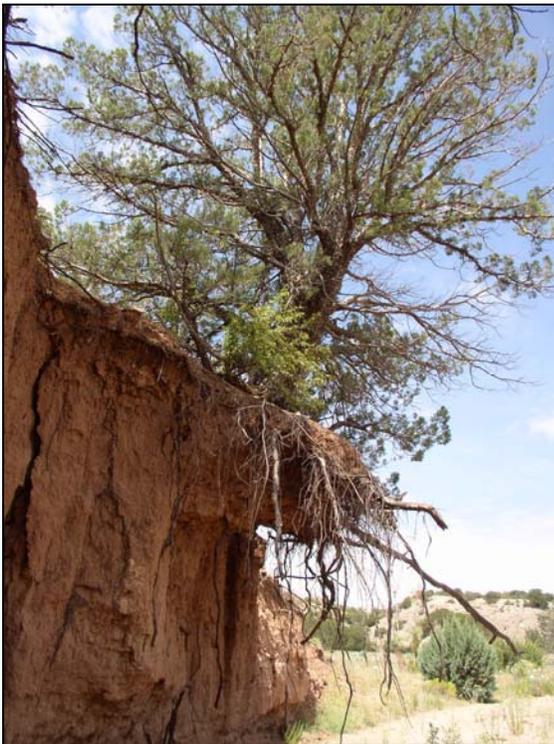


Prehistoric Anasazi cliff dwelling

How are you going to survey the project area or Area of Potential Effect? There are several different types of archaeological field survey methods which yield different kinds of results. However in New Mexico and working for the NRCS you have one option. We use a Non-Exclusive Surface Survey. With a non-exclusive survey, no portion of the project area or APE is excluded from the cultural resource survey. Your surveyed area is 100 percent of the APE. When conducting non-exclusive surface surveys the surface of the ground (wherever the surface is visible) is inspected. No attempt will be used to look below the soil surface other than looking at rodent borrows and exposed cut banks. For most of New Mexico this method works very well.



Rodent borrows



Exposed cut bank

Some typical New Mexico surface visibilities.



Mountain meadow (35% to 50%)



Pinyon / Juniper (50% to 95%)



Giant Sage (50% to 80%)



Yucca (70% to 95%)



Cholla (40% to 90%)



Mesquite (40% to 90%)



Plains Grasslands (30% to 90%)

In the field survey:

What are you going to need to take into the field to complete your survey?

1. Project maps.
2. GPS or compass.
3. Camera and extra batteries.
4. Notebook and pencil to record and draw what you see.
5. Flagging tape.
6. Backpack (handy).

As for your own personal safety, survival and comfort, this is up to you.

The actual survey is now ready to get started. The Crew Chief or lead individual is responsible for the following. 1) Sets the transect bearing, which is the direction you all are going. 2) Sets the survey pace, how fast you will walk. 3) Determines the coverage intensity, how far apart you will walk. 4) Responsible for recording and photographing sites and artifacts. 5) Quality control, it's your name on the report and your reputation at risk.

Coverage may be completed at several different levels of intensity; however this level of intensity will also affect the probability of locating archaeological sites. Every state and all agencies have varying ideas of coverage intensities. For New Mexico the survey transects will not exceed 15 meters or approximately 45 feet. When the ground visibility is poor these transects should be closer together. These guidelines can be found in the New Mexico Register Volume XVI, Number 15, Title 4 Chapter 10 Part 15, see Appendix 1. Survey velocity according to the New Mexico Register states "should not exceed 30 acres per person per 8 hour day", however USDA-NRCS New Mexico standards state 40 acres per person per 8 hour day.

Transect Method – A transect is a corridor of land 15 meters wide that is walked by a single individual. Multiple transects are multiple corridors each walked by an individual at a single time. Where as, each person surveys a corridor of 15 meters or less walking side by side across the project area. When several persons are involved in this type of survey the crew chief will always set the walking pace, distance apart and direction. These transects can either be conducted as parallel or zigzag lines. As a crew member your job is to concentrate on your own corridor and maintain your speed with that of your crew member beside you.



As you walk you should also be sweeping your eyes back and forth on either side of your path. Train yourself to look from one object to the next that stands out, this could be a distinctive color or shape.



Ceramic Sherd.



Soil Staining (Ash Pit)



Pithouse walls



Pueblo mound over blown with sand.

Maintaining transect integrity - Each crew member is responsible for maintaining the integrity of their corridor. This can be accomplished by each member of the survey team sighting on a distant object along your path. You can also use a GPS unit or a compass to get the same results. If you don't have either of the two above mentioned tools or a distant object to sight on you can use your shadow. In using your shadow one keeps it in the same place in relation to ones body.



Shadow in relation to body.

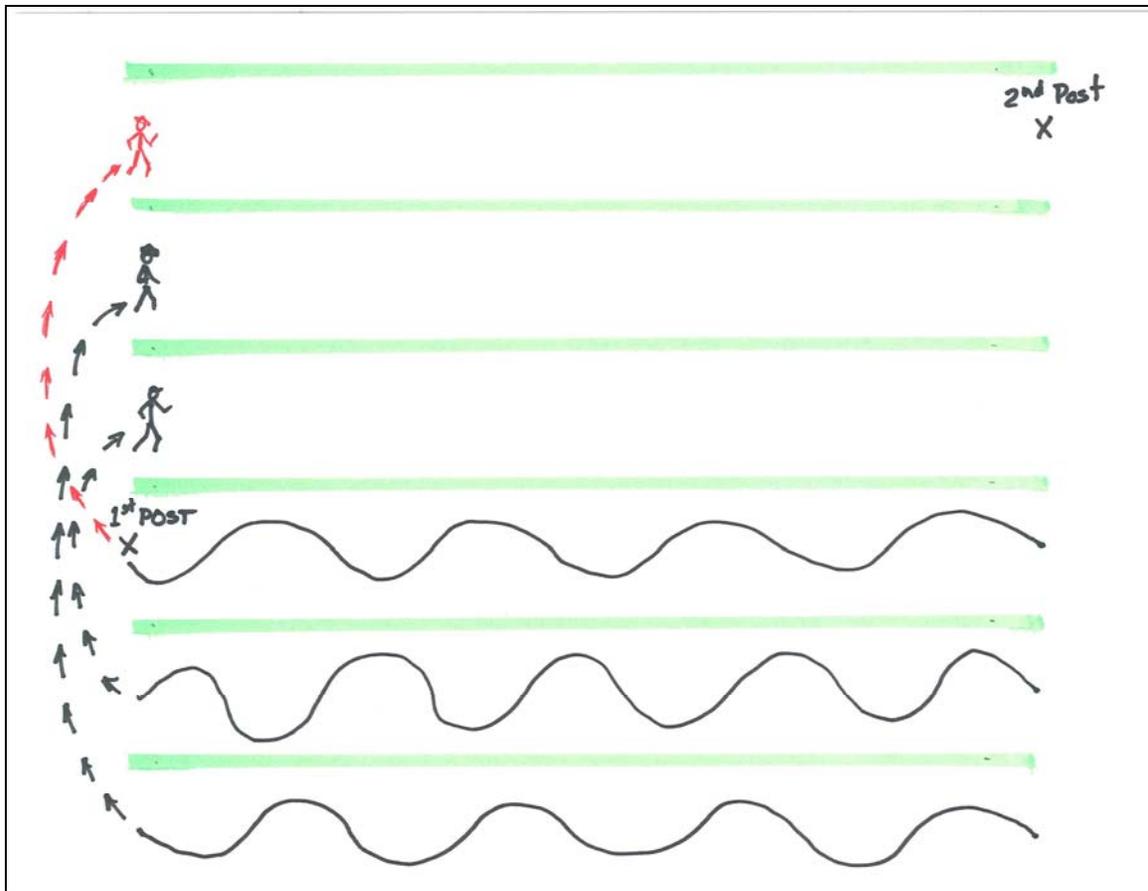
When your survey is being conducted on a large scale, such as brush management, you will need what is referred to as an anchor; this is usually the crew chiefs job. It is easy for the crew members to overlap each others parallel transect corridors. To make sure you don't walk over the same corridor area twice or miss a corridor area altogether you use an anchor person. It will be the anchors job to start the crew members off on the next transect by using one of the two following methods.

Method 1, The crew chief or inside person as they walk ties flagging on whatever is available to mark the edge of the last surveyed corridor. Generally the flagging is fairly close together so it can be easily seen. This will keep crew members from crossing over into what has already been surveyed. In grasslands or where there is nothing to tie to use pin flags.

Method 2, Here the crew chief walks the outer most corridor and when the group reaches the end of a corridor the crew chief will post at the end of that corridor. The rest of the survey crew proceeds past the post and spreads out to the set distances between surveyors, usually 15 meters. At this point the crew chief then walks down to the end and takes the outer most corridor again and it starts all over, (refer to diagram on page 14).

As mentioned above once the crew members start walking their respective corridors it is their responsibility to remain within their corridor.

Remember to examine eroded banks, road cuts and rodent burrows, these exposures may provide you with what may be buried below the soil surface. Also when surveying previously brushed areas look at the existing pushed root mounds or depressions. These also let you see below the soil surface.



Transect anchor diagram of Method 2, crew chief indicated in red.

Documenting your findings, there are two types of findings the site and the isolated occurrence.

A site is defined as a locus of historic human activity over 50 years old of intensity normally involving evidence of purposeful behavior beyond the level of one or a few (less than 25) accidentally deposited artifacts. All cultural resource sites encountered within the project area will be identified and recorded.

Minimal site identification criteria include at least one of the following:

- One or more features.
- One formal tool if associated with other cultural materials.
- An occurrence of three or more types of artifacts or materials.
- Single or multiple artifacts or material in a density of at least 25 artifacts per 100 square meters.

All other manifestations of human behavior will be recorded as isolated occurrences.

Isolated Occurrences – These are artifacts that are over 50 years old and are less than 25 artifacts per 100 square meters, (approximately 300 feet by 300 feet). Two types of isolated occurrences are recognized.

Scatters (less than 25 artifacts). However, a pot break (all the same type of pottery) is considered an isolated occurrence even if it contains more than 25 sherds.

Feature is a construction that is over 50 years old that lacks association and is not designated as a site. Examples include an isolated trash dump, abandoned road, old fence line, old campfire rings, etc. Features may or may not be recommended for protection.

Recording isolated occurrences during a survey. There is no standardized form for recording isolates however they will be listed and described. This can be done either as a simple list or as a table.

IO No.	Quantity	Description
1	1	Tularosa Black on White sherd
2	2	Cibola Whiteware sherds, unidentified Black on White
3	2	Primary purple chert flakes
4	1	Mid-section of a white and pink chert arrowhead
5	1	Mid-section of a black opaque obsidian arrowhead
6	2	Gallup Black on White sherds
7	1	Secondary black opaque obsidian flake
8	3	Cibola Whiteware sherds, unidentified Black on White
9	1	Small white chert scraper
10	6	Secondary white chert flakes
11	8	Secondary white chert flakes
12	5	Secondary black opaque obsidian flakes
13	2	Cibola Whiteware sherds, unidentified Black on White
14	5	Secondary black translucent obsidian flakes
15	1	Secondary white chert flake
16	2	Cibola Whiteware sherds, unidentified Black on White
17	1	Primary white chert flake
18	1	Reserve Black on White rim sherd
19	3	Primary white chert flakes
20	7	Gallup Black on White sherds
21	3	Reserve Indented Corrugated sherds
22	5	Red Mesa Black on White sherds

If the isolate consists of more than one item, record the actual number. Also include as much information as possible including, color, type and material.

Determine the location of the isolate and plot it on your 1: 24,000 topographic project map. Use your GPS unit for best results.

Illustrate unique or diagnostic artifacts, this can best be done with a digital camera.



Prehistoric corn cob



Light gray projectile point



World War II U.S. Army uniform button

Archaeological site documentation will be completed on all new sites discovered within your area of potential effects, see site criteria on page 14. It is at this stage of the survey that the state cultural resource specialist will be notified. However, as field office staff you should know how to document small cultural resource sites. This will help in reducing the time it takes for completing the 106 process. You will need to define its nature, extent and variability.



Recording a site.

In defining the site the first step is to define the sites boundaries. How far out does the site extend beyond its major component or what determined it as a site; such as a structure, a feature or a concentration of artifacts?

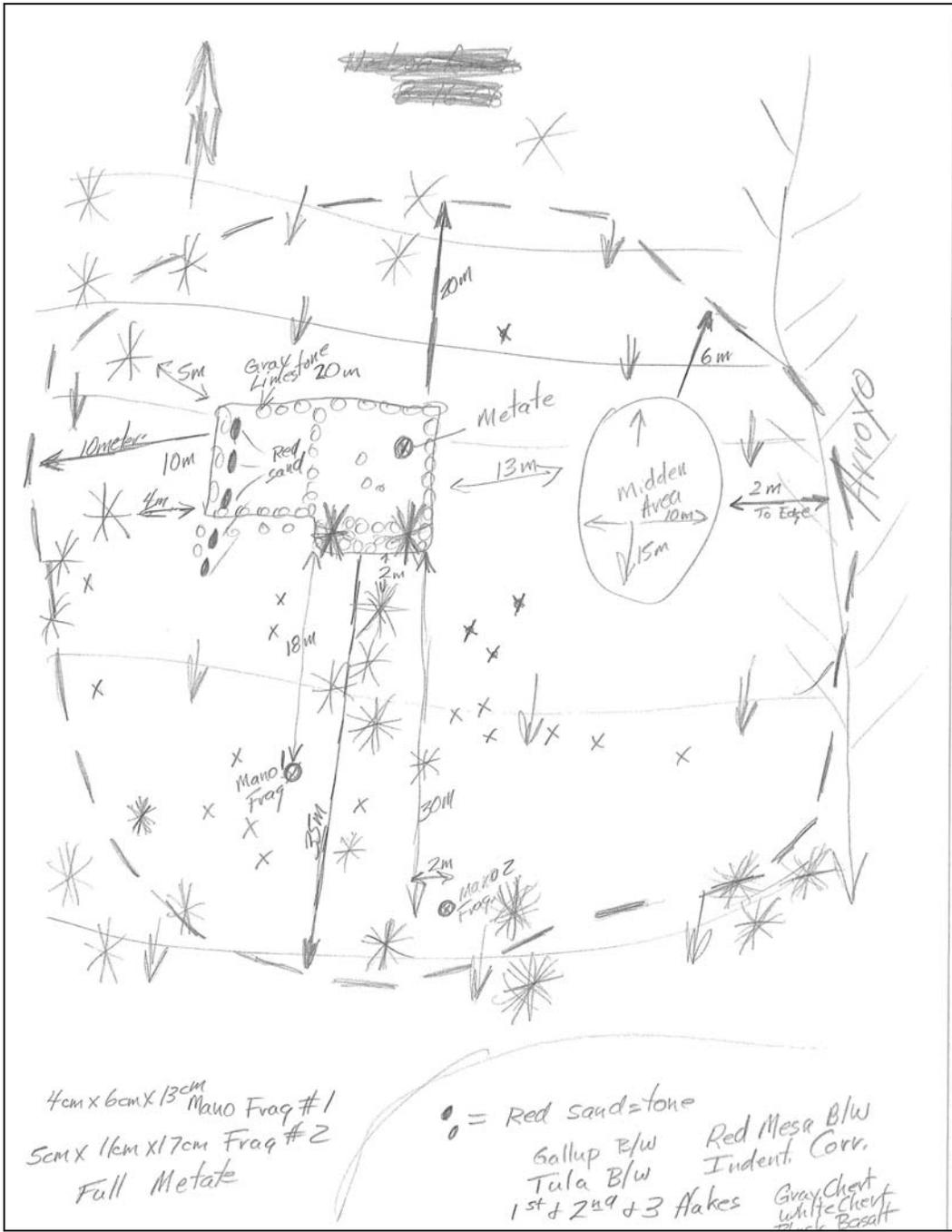
In determining the sites boundary you will start at the major component, here again a structure, feature or artifact scatter, and work your way out. The boundary is based on the density and distribution of surface findings such as but not limited to, ceramic sherds, lithic material, soil staining and masonry rock. This boundary line is generally where the artifact density is at one artifact located within a 10 meter by 10 meter square area. This is the site's boundary and once you have established this line you will add an additional 20 meters or 65 feet as a buffer area. At this line you will now tie bright colored flagging to mark the area to be avoided by the contractor.

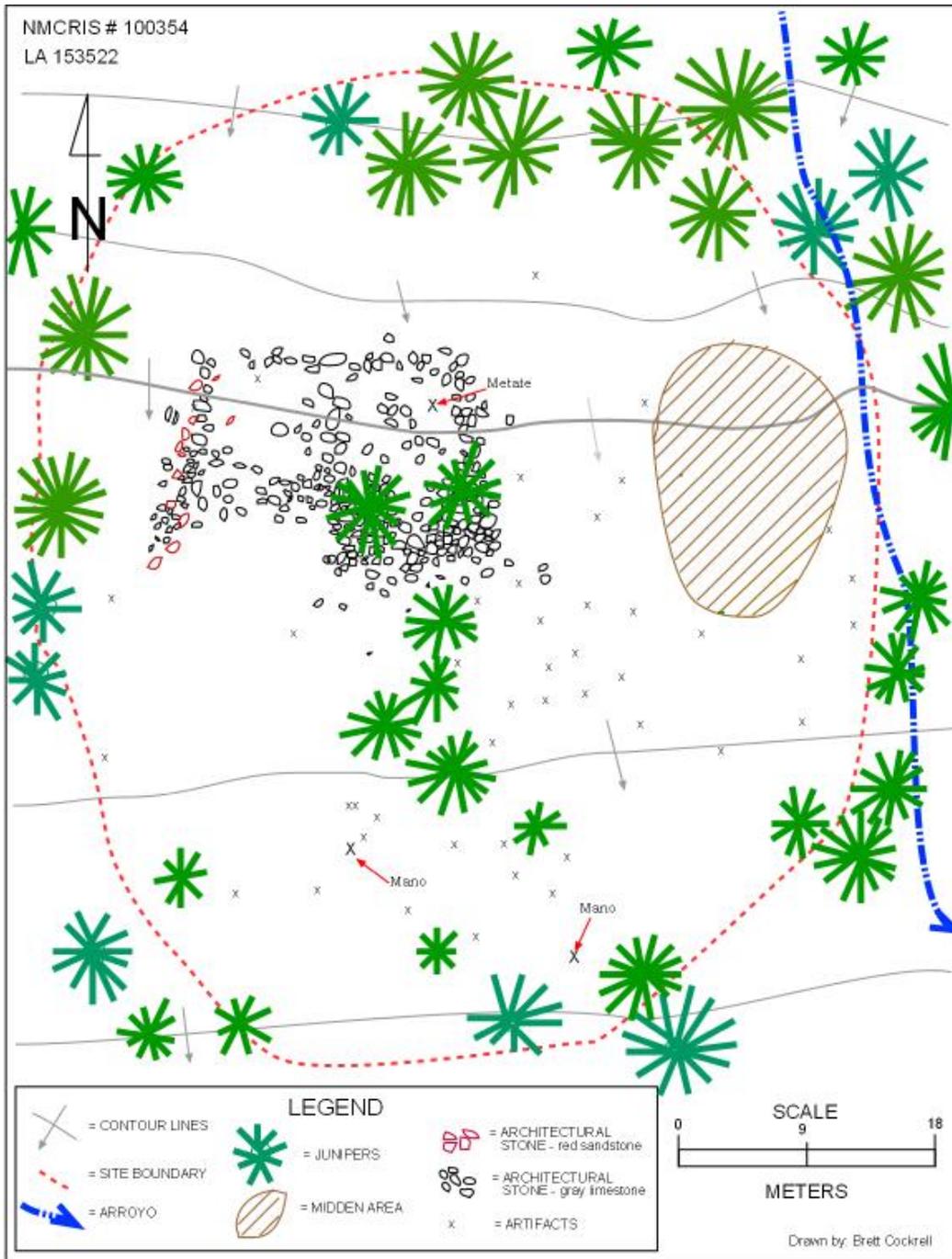


Flagging the sites boundary.

The flagging shall be tied to the outside or opposite side of the tree or brush, facing away from the site. Flagging shall be visible from one tree to the next and easily seen from the equipment used.

Now that you have a defined boundary you will need to place the structures, features and artifacts of the site to scale and in relation to each other on a sketch map of the site. This sketch map will also provide enough accurate landscape details to enable the site to be relocated at a future date. This map will later be cleaned up for the site description in your report, either re-drawn or computer generated.





Your final sketch map shall include the following; Map title or number, Scale, North arrow, Mappers name and Legend.

Once you have completed your sketch map and noted the artifact assemblage you will need to photograph the site. These photographs should include the structure and/or feature from several different directions. You will also need to photograph the unique artifacts these includes such items as; stone tools, arrowheads, bottles, kitchen utensils, cans, etc.



Mano Fragment.



Northwest corner of site.



West side of site looking northeast.



Metate Fragment.



Overview of site, facing north.

Writing a site description, this site record should contain a thorough description of the extent and variability of the site. This description should include a statement of the sites type; such as prehistoric Anasazi PII habitation site or Anglo/Euro-American statehood to WWII habitation site. This will also include account of the evidence which lead you to this conclusion. This record will also include; the sites area, features relationship to each other, materials observed, approximate artifact count and structures or features description. Here is an example for the site above.

LA 153522

Legal Description: T12N; R11W, Section 31 – NE ¼, SW ¼, SE ¼.

UTM Coordinates: NAD 1983, Zone 13 – 223801E; 3901870N.

Size: 57 meters N/S by 48 meters E/W

LA 153522 is a prehistoric habitation site that is located on the lower edge of a west to east running ridge coming out of a steep canyon. The site sets on the north side of the canyon at the toe where the ridge comes down and meets with the valley floor. The valley to the south consists of grasslands with a few scattered junipers invading in from the ridges. This valley at this point is approximately 300 to 400 meters across. The site itself consists of a one roomblock and associated midden area.

The roomblock is “L” shaped and consists of several rooms extending in an east to west axis. This roomblock measures 20 meters in length, east/west by 10 meters in width, north/south. Extending south off the east end of this alignment is an additional room area. This room measured approximately 4 meters north/south by 8 meters east/west. The roomblock itself is elevated 50 centimeters on the down slope side. The roomblock is composed of white to gray limestone rock varying from 15 centimeters to 40 centimeters in size. The western wall can be easily seen as a double row of up right flagstone limestone masonry rock. Also on this western side of the roomblock inter-dispersed with the limestone masonry rock is red sandstone masonry rock. This red sandstone parallels the wall and is flagstone as well; however most of these rocks are laying flat on the surface. Here again this area was chained back in the 1940’s and it’s hard to distinguish any real good wall alignments especially within the interior of the roomblock. On the surface this site has received some damage due to the chaining.

The midden is located approximately 13 meters to the east of the roomblock, on the edge of a small arroyo that runs north to south approximately 25 meters east of the roomblock. The measurements for this midden are 10 meters E/W by 15 meters N/S. The east side of the midden has been cut by water in the arroyo. The artifact assemblage for this midden consists of about 150 ceramic sherds and 100 lithic primary and secondary flakes.

Also located within the sites boundaries were two manos and one metate fragment. The metate fragment was located within the northeast corner of the roomblock. The two mano fragments were located approximately 20 meters south of the roomblock. The first mano is broken in half and measures 13 centimeters in length by 6 centimeters in width by 4 centimeters in thickness. The second is half of a mano which measures 17 centimeters in length by 11 centimeters in width by 5 centimeters in thickness. All three of these artifacts were constructed from black basalt rock.

The ceramic assemblage for this site is greater than 500, including Red Mesa B/W (900 AD to 1050 AD), Reserve B/W (940 AD to 1100 AD), Escavada B/W (1000 AD to 1130 AD), Gallup B/W (1030 AD to 1125 AD), Wingate B/R (1050 AD to 1200 AD), Chaco B/W (1075 AD to 1150 AD), and Reserve Indented Corrugated (1050 AD to 1250 AD). The ceramic make up consists of mineral paint and sherd and sand used as temper. The lithic debitage numbered between 200 to 250 flakes and included primary, secondary and tertiary flakes. Material was chert and included white, gray, yellow and pink.

In reporting sites most states and federal agencies use standard forms. Here in New Mexico and working for the USDA-NRCS you will have two separate forms to fill out for each new site discovered. For the NRCS you will use our Section 106 Form for simple non-complicated sites; however for more complicated sites a written report is required. As mentioned above the New Mexico State Historic Preservation Office (SHPO) requires you to also fill out and include their form Laboratory of Anthropology Site Record. In other words for each site you discover and record you will need to complete two reports, one for the NRCS and one for the SHPO. For help in filling out the Laboratory of Anthropology Site Record refer to the guidebook “Guidelines to completing the Laboratory of Anthropology Site Record”.

With these reports it is important to record enough information to allow the SHPO reviewer to determine the eligibility of the recorded site for the National Register of Historic Places.

E. "Areas of historic and scientific interest" means areas lacking surface evidence of cultural properties but where there is a high probability of finding subsurface material remains and cultural deposits or areas suitable for geomorphological or paleoenvironmental study.

F. "Buffer area" means an area extending 500 meters or 1000 meters in every direction of the edge of the APE or project area.

G. "Collection" means the removal of material remains from state land, whether or not the remains are located within an archaeological site or isolate as defined herein.

H. "Cultural landscape" means a geographic area including both cultural and natural resources associated with a historic event, activity or person or exhibiting other cultural or aesthetic values. Landscapes include formally designed landscapes, vernacular landscapes, sites and ethnographic landscapes.

I. "Cultural property" or "cultural resource" means a structure, place, site or object having historic, archaeological, scientific, architectural or other cultural significance.

J. "Excavation" means displacing, disturbing or moving earth, soil, dirt, other deposits or material remains from their current contexts or significant orientation in, or on, the ground within the boundaries of an archaeological site, isolate or area of historic and scientific interest using hand tools or mechanical earth-moving equipment.

K. "Historic preservation division" or "HPD" means the division within the department of cultural affairs created pursuant to Section 18-6-8A of the Cultural Properties Act.

L. "Historic structures and buildings" means structures or buildings that are 50 or more years old or properties less than 50 years old that either meet the requirements of national register criteria consideration G (properties that have achieved significance within the past 50 years) or properties that are likely to meet the integrity and significance criteria in 30 CFR 60.4 within 5 years of the date of recording.

(1) A historic structure is an engineered construction created principally for the conveyance of water, natural resources, railroad stock or automobiles and trucks; or an engineered construction created principally for the extraction, refinement and distribution of natural resources; or an engineered construction created principally to support a function other than human shelter. Structures include but are not limited to vehicular bridges, railroad bridges, engineered roads and highway, tunnels, dams, canals, turbines, pipelines, refineries, stamp mills, smelters, dams, power plants, silos, grain elevators or locomotives.

(2) A historic building is a construction created principally to shelter any form of sustained or temporary human activity; or a functional construction created principally to provide shelter for goods, animals, machinery or instrumentation. Buildings include but are not limited to houses, barns, stables, sheds, garages, warehouses, courthouses, city halls, social halls, commercial buildings, libraries, factories, mills, train depots, motels, theaters, schools, stores or churches.

M. "Human burial" or "unmarked human burial" means a human body or human skeletal remains and includes any funerary object, material object or artifact buried, entombed or sepulchered with that human body or skeletal remains.

N. "Intensive survey" means a visual inspection conducted on foot that examines, identifies, records, evaluates and interprets all surface-visible cultural properties 50 or more years old located in an APE or project area.

O. "Interpretation" means the inventory, registration, mapping and analysis of cultural properties and public educational programs designed to prevent the loss of cultural properties.

P. "Isolate" means a single object or artifact or a few artifacts greater than 50 or more years old that lack clear association. Examples of isolates include a single flake, projectile point, potsherd, sherds from a single broken pottery vessel, pieces of glass from a single bottle or a single feature that lacks integrity.

Q. "Items of cultural and religious significance" means ceremonial or cultural items, such as funerary objects, sacred objects, and objects of cultural patrimony.

R. "Limited tests" means the systematic placement of probes, cores, shovel tests or similar tests using hand tools. Limited tests are conducted during survey to augment survey-level information on an archaeological site or isolate without substantially damaging or diminishing the integrity of the archaeological site. The total surface disturbance resulting from the limited tests shall not exceed five one-hundredths percent (.05%) of the area of the site surface.

S. "Material remains" means any tangible evidence of past human life or activities. Such evidence includes without limitation:

(1) naturally occurring objects or raw materials extracted for use in the production of human-made objects or for other uses by humans that can be found within an archaeological site, or another context from which intended or actual human use can be reasonably inferred;

(2) items manufactured or modified by humans, including whole or fragmentary tools, implements, containers, and other objects such as pottery, ceramics, basketry, cordage, weavings, textiles, glassware, flaked stone, ground stone, pecked stone, worked bone, metal, wood, hide, feathers and pigments;

(3) byproducts, waste products and debris resulting from the manufacture or use of human-made items or from the human use of natural materials;

(4) organic material deposited through human actions, organic material remaining from the decay of perishable objects manufactured or modified by humans, and organic material deposited through natural processes when found within an archaeological site including without limitation soil or sediment samples, botanical and animal remains and coprolites; or

(5) human remains including without limitation bone, mummified flesh, teeth, the remains of cremations, any associated artifacts and objects, and the soil, sediments, or other matrix in which the human skeletal or mummified remains and associated artifacts and objects were deposited or are now associated.

T. "Mechanical earth-moving equipment" means any motorized machine or device that is capable of displacing, disturbing or moving earth, soil, dirt or other deposits or materials from their current contexts or significant orientation in, or on, the ground, including without limitation trenchers, backhoes, graders, scrapers, bulldozers and front-end loaders.

U. "Monitoring" means the presence of and visual inspection by a supervisory archaeologist on the ground immediately prior to and during ground-disturbing actions to ensure site protection, avoidance of site deposits or recovery of information from newly discovered cultural properties.

V. "Museum of Indian arts and culture-laboratory of anthropology" or "MIAC" means the museum division within the department of cultural affairs, museum of New Mexico, that serves as the repository for archaeological materials and associated records and documents taken or collected from state land.

W. "National register of historic places" or "national register" means the official federal register of historic properties maintained by the U.S. department of the interior, national park service.

X. "New Mexico cultural resource information system" or "NMCRIS" means the statewide archaeological and cultural properties database maintained by ARMS.

Y. "Permit" means the written authorization required for all public and private entities to conduct archaeological investigations of a particular kind, within a defined geographic location and for a specified period of time, all of which are specified in the written authorization.

Z. "Preservation" means sustaining the existing form, integrity, material or vegetative cover of a cultural property and includes protective maintenance or stabilization.

AA. "Project area" means the geographic area or areas of study for an archaeological investigation conducted for research purposes.

BB. "Registered cultural property" means a cultural property that the CPRC placed in the state register individually or as a contributing property within a district either on a permanent or temporary basis.

CC. "Sample survey" means a pedestrian survey that identifies all surface-visible cultural properties within defined sample units of a larger whole.

DD. "State agency" means a department, agency, institution or political subdivision of the state.

EE. "State archaeologist" means the archaeologist designated pursuant to Section 18-6-15 of the Cultural Properties Act.

FF. "State historian" means the historian designated pursuant to Section 18-6-14 of the Cultural Properties Act.

GG. "State historic preservation officer" or "SHPO" means the individual appointed pursuant to Section 18-6-8 of the Cultural Properties Act and serves as the director of the historic preservation division.

HH. "State land" means property owned, controlled, or operated by a department, agency, institution or political subdivision of the state. Examples of state land, include but are not limited to: state trust lands managed by the commissioner of public lands; New Mexico department of transportation rights of way and easements; state parks; state monuments; state game and fish lands; county and municipal property including open space areas, leased lands, and rights of way; and lands owned or managed by public schools and state colleges and universities.

II. "State register" or "official register" means the New Mexico register of cultural properties maintained by the CPRC for the purpose of recording cultural properties deemed worthy of preservation.

JJ. "Survey" means a visual inspection of land to examine, identify, record, evaluate and interpret cultural properties and may include limited tests but shall not include excavation or test excavation.

KK. "Test excavation" means the systematic placement of probes, cores, shovel tests or test pits using hand tools, and test trenches excavated by hand or with mechanical earth-moving equipment to expose geomorphological soils and buried cultural deposits to determine the research potential and nature and extent of cultural deposits at an archaeological site without substantially damaging or diminishing the integrity of the archaeological site. The total surface disturbance resulting from test excavation shall not exceed 5 percent of the surface area of the site area or 5 percent of the portion of the site that may be affected by an undertaking or project, whichever is less.

LL. "Thematic survey" means a pedestrian survey that identifies selected types of cultural properties and may be performed with written concurrence of the state agency.

MM. "Traditional cultural places" means a geographic place or area of cultural or religious importance to an Indian tribe or pueblo or other ethnic group. Traditions include beliefs, customs and practices of a living community of people that have been passed down through the generations.

NN. "Tribal consultation" means formal discussion between a state agency and Indian tribes and pueblos that may have knowledge of and interest in the general area of an archaeological investigation to assist in identification and protection of traditional cultural places and items of cultural and religious significance.

OO. "Unmarked burial ground" means a location where there exists a burial or burials of any human beings that are not visibly marked on the surface of the ground in any manner traditionally or customarily used for marking burials and includes any funerary object, material object or artifact associated with the burial or burials.
[4.10.15.7 NMAC - N, 1/01/06]

4.10.15.8 TYPES OF SURVEYS AND PERMITS: Surveys are conducted to identify, record, evaluate and interpret cultural properties and to relocate, update records and evaluate previously identified cultural properties including but not limited to archaeological sites, historic structures and buildings, isolates and other properties of cultural, historic and scientific interest. Management and research objectives determine the survey intensity, design and methods. Surveys may employ predictive models to assist in developing survey strategies. Geomorphological studies are helpful and suggested when there is a likelihood of deeply buried archaeological sites.

A. General permits. All surveys on state land performed under a general permit obtained pursuant to 4.10.8 NMAC shall be intensive surveys and shall be performed in conformance with 4.10.15.11 NMAC.

B. Project-specific permits. Sample, thematic and other types of surveys on state land are performed under a project-specific permit obtained pursuant to 4.10.8 NMAC and implemented in accordance with the approved research design prepared in conformance with 4.10.15.9 NMAC.
[4.10.15.8 NMAC - N, 1/01/06]

4.10.15.9 PRE-FIELD REQUIREMENTS:

A. Obtain a general permit or project-specific permit authorizing survey pursuant to 4.10.8 NMAC prior to commencement of work.

B. Conduct a literature and files search to identify the type, location and distribution of previously recorded cultural properties; to gather information on past surveys and other investigations; to identify current research issues pertinent to the project; and to identify factors such as geomorphological conditions that may affect site integrity or visibility. The scale of the literature review and records check shall be appropriate to the complexity and scale of the survey project.

(1) Identify and review literature pertinent to the project including but not limited to statewide and regional cultural-historical overviews and historic contexts, research designs, published archaeological, ethnographic and historical monographs and articles, cultural resource management technical reports, field reports (both positive and negative survey reports) and historic maps and records. Most archaeological reports are available from ARMS. Other federal and state agencies maintain pertinent archives and records.

(2) Review records and files including but not limited to:

(a) query the NMCRIS database and map server to identify previously recorded sites and previous archaeological investigations located in the APE or project area and in the buffer area extending 500 meters in every direction from the edge of the APE or project area; extend the buffer to 1000 meters in every direction from the edge of the APE or project area if the 500-meter search fails to identify the presence of previously recorded sites; query the NMCRIS database to identify additional surveys that may be in the APE or project area and buffer area that could be missing from the map server coverage (contact ARMS for assistance); append a copy of the NMCRIS map server map to the final report and mark the map search as confidential and not subject to general distribution;

(b) obtain appropriate copies of paper laboratory of anthropology (LA) archaeological site records for all sites in the APE or project area or likely to be in the APE or project area; for sites recorded after January 1994, information in the NMCRIS database supplemented by copies of the site narrative section of the LA archaeological site record and the site map may be used in lieu of obtaining a complete copy of the LA archaeological site record(s); do not obtain copies for sites in the 500-meter or 1000-meter buffer area unless there is a likelihood that the site boundaries may extend into the APE or project area;

(c) review national and state register property files maintained by HPD to determine whether properties listed in the national or state registers are present in the APE or project area; obtain copies of nominations for all state or national register properties that may be directly or indirectly affected by the project; HPD provides assistance in locating these records;

(d) examine historic cultural properties inventory (HCPI) forms, formerly known as historic building inventory (HBI) forms, to determine if any buildings, structures or other cultural properties are located within the APE or project area. HPD provides assistance in locating these records; and

(e) review additional documents and records, such as engineering records or historic documents, the historic architectural building survey/historic architect and engineering records (HABS/HAER) documents, when appropriate; contact the state agency and the archaeologist at the agency, if it has one, to see if additional records are required.

C. Review archival sources to identify historic structures, buildings and other cultural features and to determine historic land use practices and types of resources likely to be identified during the project, as appropriate to the scale and complexity of the project and the types of resources expected. Sources include but are not limited to general land office surveys or land grant survey plats; state land office lease records, county deeds and abstracts; Sanborn fire insurance maps; probate, tax and judicial records; and Spanish and Mexican archives at the state records center and archives.

D. If the file search reveals that the APE or project area or portion of the APE or project area has been previously surveyed and the survey or surveys were conducted more than 10 years ago, request a determination on whether a new survey will be required. Submit requests by letter, electronic mail or facsimile to the state agency or agencies if the state agency has an archaeologist or to HPD if the state agency does not have an archaeologist. The state agency or HPD will base its determination on a review of the field methods used, the results of the survey, the completeness of documentation, the stability of the geomorphological surface and any other pertinent factors that inform on whether the prior survey is consistent with the identification and documentation standards in this rule. HPD will provide a written determination within 10 working days of the request.

E. The permittee shall contact the state agency to incorporate results of tribal consultation as it may affect the survey pursuant to current state policy on consultation and repatriation.

[4.10.15.9 NMAC - N, 1/01/06]

[The NMCRIS map server may not be complete and up-to-date for all surveys, archaeological sites or state and national register properties. Check all appropriate files and databases to ensure a complete pre-field records search. Contact ARMS or HPD for assistance or more information. Not all information on the LA archaeological site record is included in the database. Obtain copies of the LA archaeological site record for the most complete information for the site.]

4.10.15.10 INTENSIVE SURVEY STANDARDS: Intensive surveys performed on state land shall be conducted in accordance with the following specifications. The state agency with jurisdiction may specify additional requirements and standards that meet or exceed the following specifications. All work shall be performed under the general supervision of individuals listed in the SHPO directory of qualified supervisory personnel (4.10.8.11 NMAC). All fieldwork shall be performed under the direct supervision of an archaeologist listed in the SHPO directory unless the properties recorded consist primarily of historic structures and buildings (see 4.10.15.12 NMAC). The supervisor in the field is responsible for assessing field conditions, altering field methods such as decreasing survey interval, making collections or conducting limited tests, and determining when slope, vegetation or other factors affect field conditions. Document these conditions and specific methods used during the survey in the survey report.

A. **Survey area.** Conduct a comprehensive, systematic, pedestrian survey of the APE or project area to identify, document and record all cultural properties including archaeological sites, historic structures and buildings, isolates and other properties of historic and scientific interest 50 or more years old that may be reasonably detected from the surface or which are exposed in profiles. Record historic structures and buildings less than 50 years old that may be eligible for the state or national registers within 5 years of the date of the survey. Identify and record properties that meet the requirements of national register criteria consideration G (properties that have achieved significance within the past 50 years).

B. Survey interval and transect width. Transect width for surveys shall not exceed 15 meters and shall be contiguous with no uninventoried areas left between transects. Intervals shall be reduced when surface visibility is poor. The terrain, vegetative cover and the nature of cultural properties influence transect width and intensity of survey coverage. For linear projects the minimum width of the APE or project area is 15 meters.

C. Survey velocity. The amount of area surveyed including recording time should not exceed a rate of 30 acres per person per eight hours of survey calculated for the survey project as a whole and not daily. Terrain and the number and complexity of cultural resources influence survey velocities. When survey velocities are greater than this standard, include an explicit explanation in the survey report. HPD and the state agency with jurisdiction will evaluate the explanation and results of the survey and may request that the survey or portion of the survey be reinventoried if the justification is inadequate.

D. Items of cultural and religious significance. If these items are encountered during a survey, they may be recorded. The permittee shall not disturb these items in any way.

E. Human burials. If a human burial or unmarked burial ground is encountered during survey, notify the local law enforcement agency pursuant to 4.10.11.8 NMAC. Do not disturb the human burial or unmarked burial ground in any way.

F. Survey visibility.

(1) Halt survey if falling precipitation (rain, snow, hail or freezing rain) exceeds trace amounts for any length of time. Do not conduct survey if fallen snow impairs ground visibility. Ground visibility is considered impaired if more than 20 percent of total ground surface is covered by snow.

(2) In areas with dense, continuous vegetative cover, shovel tests, augers, probes or small excavation tests may be necessary to identify cultural properties. The supervisory archaeologist shall document areas with reduced visibility and, if tests are conducted, document areas of the tests, on the project field map and through photographs, and discuss in the survey report.

(a) Place shovel tests, augers, probes or small excavation units in a systematic pattern at an interval not to exceed 15 meters.

(b) Shovel tests shall be approximately 30 cm in diameter.

(c) Limited test excavation units shall be 50 cm by 50 cm in size.

(d) Shovel tests and limited test excavation units typically should be excavated to a minimum depth of 30 cm or to the depth of cultural materials whichever is less.

(e) Sediments removed from all limited test units shall be passed through a screen of no greater than one-quarter inch (6.35mm).

G. Alternate inventory procedures. In some circumstances a state agency including municipalities and counties may propose an alternate method to the standards in this section to survey and inventory cultural properties in the APE or project area. The proposal shall be submitted in writing to HPD and shall provide a detailed description of the alternate methods proposed and justification. HPD shall review and provide written comments on the proposal within 10 calendar days of receipt. Alternate procedures require consensus between the state agency and HPD prior to implementation.

[4.10.15.10 NMAC - N, 1/01/06]

4.10.15.11 RECORDING ARCHAEOLOGICAL SITES DURING SURVEY:

A. Record all archaeological sites located within the project area and include the portions of sites that extend outside of the APE or project area if the entirety of the site lies on state land. If a portion of the site lies on land not owned, controlled or operated by a state agency, the portion on state land shall be recorded. If permission for access can be obtained from the owner of the remaining portion of the site, record the entire site. If permission cannot be obtained from the owner of the remaining portion of the site, document observations about features outside of, but visible from the APE or project area.

B. If large sites extend outside the APE or project area, record all features and artifacts within and immediately adjacent to the APE or project area and make observations about features outside of but visible from the project area. Incorporate observations made by previous recorders regarding the sites and how those observations relate to the part of the site recorded during the current project.

C. Document all archaeological sites on an LA archaeological site record form consistent with this section and the NMCRIS *guidelines for submitting archaeological records*, July 1993, available from the ARMS website <http://potsuii.arms.state.nm.us/>. Additional forms may be used at the discretion of the permittee. The LA archaeological site record shall be typed or word-processed. Complete the following fields except for SHPO consultation.

(1) Identification and ownership. Include LA number, site name(s), other site numbers(s), agency assigning number, current site owner(s) and site update.

(2) Recording information. Include the NMCRIS number, field site number, site marker, recorder(s), agency, recording date, site accessibility, surface visibility, remarks, recording activities, description of analysis or excavation activities, photographic documentation, surface collections, records inventory, repository for original records and repository for collected artifacts.

(3) Condition. Include archaeological status (surface collection, test excavation, partial excavation, complete excavation), source of disturbance, vandalism, percentage of site intact and observations on site condition.

(4) Recorder recommendations. Include national register eligibility and criteria, basis for the recommendation, assessment of project impacts and treatment recommendations.

(5) SHPO consultation for use by SHPO and agency or sponsor. Leave section blank.

(6) Location. Identify source graphics; [map-based or global position system-based \(GPS\) coordinates to 10-meter accuracy; directions to site; town, county and state; USGS 7.5-minute \(1:24,000\) topographic quadrangle name, date and code](#); public land survey system (PLSS) unplatted or township, range, section, quarter-section to nearest 40-acre unit and protraction. Indicate if PLSS is protracted.

(7) Physical description. Include site dimensions, basis for dimensions, site area, basis for area, site boundaries, depositional and erosional environment, stratigraphy and depth of archaeological deposits, estimated depth of deposits, basis for depth determinations, observations on subsurface archaeological deposits, local vegetation, vegetative community, topographic location and observations on site setting.

(8) Assemblage data. Include assemblage content for lithics, prehistoric ceramics, historic artifacts and other artifacts and materials, assemblage size by artifact class, dating potential and assemblage remarks including description of assemblage.

(9) Cultural and temporal affiliation(s). Include total number of components defined and the following information for each component: cultural affiliation, basis for temporal affiliation, period of occupation, beginning and ending dates, dating status, basis for affiliation, component type and remarks.

(10) Feature data. Include feature type, reliability of identification, number observed, associated component number, feature identification number(s), notes and remarks.

(11) References. Include written sources of information and additional sources of information.

(12) Narrative site description. Provide a complete description of the site, features and assemblages and interpretation of the site, features and intrasite proveniences. This information provides the basis for site evaluation and future nomination of the site to the state or national registers.

(13) Site record attachments. Append a copy of 7.5-minute (1:24,000) topographic quadrangle scale with the location of the site, the site sketch map or site plan, continuation forms and any other materials.

D. Newly recorded sites.

(1) Complete all data items within every section of the LA archaeological site record.

(2) Prepare a detailed site plan map for each newly recorded site located during the survey. The map may be a scaled sketch map or an instrument-generated map. Each map shall display:

(a) LA number;

(b) north arrow (indicate if true north and/or magnetic north);

(c) map scale and scale bar;

(d) key that identifies all symbols used on the map;

(e) site boundary (indicate whether the boundary is complete or incomplete);

(f) features, feature numbers, the distribution of artifacts and artifact concentrations;

(g) site datum (indicate whether the datum is temporary or permanent);

(h) collection and limited test units, if any;

(i) photographic points;

(j) natural features such as drainages, rock outcrops, vegetation patterns and other noncultural manifestations within or adjacent to the site and topography as represented by estimated contour lines;

(k) boundary of the APE or project area relative to the site or distance and direction to the project if the site is away from areas of ground disturbance;

(l) cultural or natural landmarks within or adjacent to the site (such as roads, fences, buildings, benchmarks);

(m) location and extent of any vandalized or disturbed areas of the site; and

(n) the name of the map artist(s), institutional affiliation and date the map was drawn.

E. Previously recorded sites.

(1) Review and update the information obtained during the pre-field files check pursuant to 4.10.15.9 NMAC consistent with the standards set forth below. Special attention shall be paid to changes in physical description and assemblage data resulting from natural or cultural modifications to the site since the last site visit.

(a) If an archaeological site has been documented on an LA archaeological site record since January 1994 and all data items in all sections of the form are complete and accurate, check the site update box and complete the identification and ownership, recording information, condition and recommendations sections.

(b) If an archaeological site has been documented on an LA archaeological site record since January 1994 but some information is incomplete or incorrect, update the incomplete or incorrect sections and clearly differentiate observations made during the current survey from observations made by previous recorders. Check the site update box and complete the identification and ownership, recording information, condition, recommendations and narrative site description sections. Summarize changes and updates in the narrative site description section.

(c) If the site was recorded prior to January 1994 and has not been updated since that time, complete all fields of the current version of the LA archaeological site record. Note any changes in condition or content from the earlier field recording.

(d) If the previously recorded site cannot be relocated, check the site update box on the LA archaeological site record and complete the identification and ownership, recording information, condition, recommendations and narrative site description sections. Explain in the narrative site description section specific efforts that were made to find the site and possible reason(s) the site could not be relocated.

(2) Prepare a new detailed site plan map for each previously recorded site following the standards in 4.10.15.11D NMAC. Annotated copies of existing maps are not acceptable. The site plan shall be based on the previous site map and should include important features of the previous map along with new observations. Observations made during the current survey shall be clearly distinguished from the observations made on the existing map.

F. Documentation of features. Individual features shall be illustrated if the form of a feature cannot be accurately rendered on the site plan map. Measurements shall be taken in metric units unless the feature is historic and English measurements are more appropriate. Render standing structures and other standing features in both plan and elevation.

G. In-field artifact analysis. Perform in-field analysis on all or a sample of all classes of surface-visible artifacts including but not limited to lithics, ceramics and historic artifacts. The size of the sample shall be sufficient to document the full variety of types of artifacts represented at the site and to delineate intrasite activity areas. Formal, bounded sample units are recommended. Required information may be documented in a table, on a form developed by the individual or firm performing the survey or on a form required by the state agency. Required information includes class of artifact, make, type or series and other attributes that relate to interpretation of chronology, form and function. If measurements will aid in the identification or classification, measure artifacts with a ruler, tape or calipers. Measurement shall be taken in metric units unless the artifact is historic and English measurements are more appropriate. Illustrations or photographs of diagnostic artifacts are encouraged. Attach copies of the in-field analysis forms, narrative descriptions and illustrations to the LA archaeological site record.

H. Photography.

(1) Take photographs of all newly recorded and previously recorded sites. Photograph the following subjects:

(a) general setting of the site within its boundaries; incorporate features or background landmarks in site setting photographs;

(b) individual cultural features;

(c) representative diagnostic artifacts or items representative of the major classes of artifacts within the site assemblage; and

(d) scale and photographic board.

(2) Photographs shall conform to the standards detailed below.

(a) Black-and-white negatives, prints, color transparencies, color prints or digitally captured images are all acceptable media. Black-and-white images printed on silver-emulsion resin-coated paper or black-and-white prints produced from digital images that meet or exceed a 75-year-permanence standard as defined by the national park service, national register of historic places, are preferred for archival stability. Digital images shall not be submitted on compact discs. Attach a photographic log that includes, but is not limited to, the NMCRIS number, the LA number, provenience, content, orientation, photographer and date.

(b) Submit all photographic materials in archivally stable sleeves as an attachment to the report. Do not append photographs to the LA archaeological site record. Prints, negatives and slides shall be sleeved in page preservers made to fit the format size. Label the back of prints or slide sleeves with pencil or archivally approved photographic ink. Do not label with a ballpoint pen, permanent ink or adhesive labels.

(c) Do not affix photographs to paper with glue, tape or staples.

(d) Digital images shall not be submitted on compact discs. If digital images are submitted, print on acid-free paper using a toner-based printer.

I. Other agency requirements. The state agency may require other recording activities. The state agency may also require the permanent or temporary marking of the site datum and/or boundaries. Contact the archaeologist at the agency to see if additional recording or marking procedures are required.
[4.10.15.11 NMAC - N, 1/01/06]

4.10.15.12 RECORDING HISTORIC STRUCTURES, BUILDINGS AND OTHER CULTURAL PROPERTIES DURING SURVEY:

A. Record all large historic sites and districts 50 or more years old that are located within the APE or project area or that may be eligible for the state or national registers within 5 years of the date of the survey. The recording shall be performed under the review of an architectural historian, historian or historic architect listed in the SHPO directory (4.10.8.11 NMAC). Identify and record properties that meet the requirements of national register criteria consideration G (properties that have achieved significance within the past 50 years).

B. If portions of the historic resource extend outside of the project area and the resource is on state land, record the entire resource. If a portion of the resource lies on land not owned or controlled by a state agency, record the portion on state land. If permission for access can be obtained from the owner of the remaining portion of the resource, record the entire resource.

C. Complete an HCPI form for all historic structures, buildings and other cultural properties in conformance with the *historic cultural properties inventory manual*, July 31, 2001, available on HPD website (<http://nmhistoricpreservation.org/>) or from HPD. HCPI form 1 shall be used for recording historic structures, buildings and other cultural properties that are not potentially eligible for nomination to the state register of cultural properties and national register of historic places. HCPI form 2 shall be used for historic structures, buildings and other cultural properties that are potentially eligible or are already on the state or national registers. HCPI form 2 shall be completed by architectural historians, historical architects or historians listed in the SHPO directory (4.10.8.11 NMAC). Information includes but is not limited to:

(1) administrative and project information including name of property, location, local reference number, property type, date of survey, previous survey date(s), name of project, universal transverse mercator (UTM) coordinates, source graphics and photographic information; GPS coordinates to 10-meter accuracy or better are encouraged;

(2) a brief description of the property, present use; construction data and setting, relationship to surroundings; additional perspectives (photographs, drawings, footprint), name of recorder and performing agency or group and owner or individuals knowledgeable about the property;

(3) the significance of the property and identifying the state register and national register status and name of property if listed and whether it is part of a district;

(4) detailed information on the property including architectural and construction details, number of stories, foundation, roof construction materials, windows, doors, chimneys, porches and other significant features, modifications and date if known or estimated; primary architectural style, associated documents and location of source materials and associated properties; and

(5) a site plan with footprint, porches and balconies, major landscape features, north arrow, associated properties, walls, fences, gates, nearby roads and driveways.

D. Photography.

(1) Take photographs of all recorded buildings, structures and other cultural properties recorded on the HCPI form; include related context images or streetscapes as appropriate. Black-and-white prints are required. Black-and-white images printed on silver-emulsion resin-coated papers or black-and-white prints produced from digital images that meet or exceed a 75-year-permanence standard as defined by the national park service, national register of historic places, are acceptable. Digital images shall not be submitted on compact discs.

(2) Submit all photographic materials in archivally stable sleeves as an attachment to the HCPI form. Prints, negatives and slides shall be sleeved in page preservers made to fit the appropriate format size. Label the pack of prints or slide sleeves with pencil or archivally approved photographic ink. Do not label with a ballpoint pen, permanent ink or adhesive labels. Do not affix photographs to paper with glue, tape or staples.

[4.10.15.12 NMAC - N, 1/01/06]

4.10.15.13 RECORDING ISOLATES DURING SURVEY:

A. There is no standardized form for recording isolates on state lands. Isolates shall be listed and described in a table, on a form developed by the individual or firm performing the survey or on a form required by the state agency.

(1) Include all qualitative and quantitative observations relevant to the artifact consistent with the standards for in-field analysis in this section. Make type or series identifications when possible.

(2) If the isolate consists of more than one item, record the dimensions of the distribution (for example, three flakes scattered over 2-by-3 meter area or sherds from a single pottery vessel scattered over a 75-cm diameter area).

B. Determine the location of the isolate and plot on a copy of a USGS 7.5-minute (1:24,000) topographic quadrangle map; include name, date and code of the map. Determining location with a global positioning system (GPS) unit to 10-meter accuracy is encouraged.

C. Illustrate diagnostic artifacts and other items or take photographs if they will aid in the description or identification of the item.

[4.10.15.13 NMAC - N, 1/01/06]

4.10.15.14 COLLECTION OF ARTIFACTS DURING SURVEY:

A. Collection of artifacts. Collection of artifacts from archaeological sites and isolates is strongly discouraged. Collection of artifacts from state trust lands shall be allowed only with the written permission of the Commissioner. In all other cases, collections are permitted if the items are likely to be lost through illegal collection, are required to address specific predefined research issues that necessitate laboratory analysis or are necessary for accurate classification. Collections shall be analyzed in the laboratory, reported upon in the survey report and curated at an acceptable repository pursuant to 4.10.8 NMAC.

(1) **Collection from archaeological sites.** A sample of artifacts may be collected in accordance with the following specifications. Exceptions to these specifications are allowed with the written concurrence of the state agency.

(a) **Sampling.** Artifacts collected from archaeological sites shall only represent an extremely small and nominal percentage of the total surface-visible artifact assemblage and shall never involve collection of all surface-visible artifacts.

(b) **Recording.** Attach a list of all collected artifacts with provenience information to the LA archaeological site record and as an appendix to the survey report.

(c) **Location of collected artifacts.** Plot the location of each collected artifact on the site plan map unless defined spatial collection units are used such as 1-by-1 meter grid units or 1-meter diameter collection units. If collection units are employed, plot the location of each unit on the site plan map and indicate the dimensions of the collection units and artifacts collected. Plot artifact and collection unit locations relative to a permanent datum.

(2) **Collection of isolates.** Attach a list of all collected isolates and their GPS coordinates to 10-meter accuracy to the survey report.

B. Analysis of collected artifacts. Analyze collected artifacts in a laboratory and in accordance with current professional standards for the class of artifact in the region. At a minimum, required information includes class of artifact, make, type or series and other attributes that relate to interpretation of chronology, form and function. Include results of the analyses in the survey report.

[4.10.15.14 NMAC - N, 1/01/06]

4.10.15.15 LIMITED TESTS DURING SURVEY:

A. Purpose. Limited tests of archaeological sites during survey are strongly discouraged. Total surface disturbance resulting from the tests shall not exceed five one-hundredths percent (.05%) of the total site area. The supervisory archaeologist should consider the following when making a decision on whether to conduct limited tests.

(1) Do not conduct limited tests if a site can be avoided by the undertaking.

(2) Do not conduct limited tests to assess potential for subsurface deposits if a recommendation of eligibility can be made from visible evidence such as cultural deposits exposed in road beds or arroyo cuts.

(3) Conduct limited tests only when the tests are likely to produce sufficient information to make a definitive recommendation on whether the site should or should not be listed on the state register or determined eligible for the national register. Often limited tests are too restricted in scale to demonstrate the absence of subsurface cultural deposits. Test excavations (see 4.10.16 NMAC) are recommended in these situations and produce more reliable information about the site.

(4) Limited tests are prohibited if no adequate screen is available during survey.

B. Limited test equipment. Use hand tools such as trowels, shovels, hand corers and non-mechanical bucket augers. The use of mechanized equipment is prohibited.

C. Standards.

(1) Design limited tests to gather the appropriate information and to minimize damaging or diminishing the integrity of the archaeological site and features within the site. Make systematic tests to maximize interpretation of results. All shovel tests, augers, probes, small excavation units and test pits shall be given a unique field designation and shall be point-provenienced or excavated on a grid.

(a) Shovel tests shall be approximately 30 cm in diameter.

(b) Small test excavation units shall be 50-by-50 cm in size.

(c) Do not conduct trowel tests.

(2) With the exception of soil samples, sediments removed from all limited test units shall be passed through a screen of no greater than one-quarter inch (6.35mm). Consider using a smaller screen size.

(3) The bottom of the tests shall be lined with landscape cloth or marked in some other fashion to indicate depth of disturbance.

(4) Excavation of features is prohibited during limited tests.

(5) Collection of artifacts recovered from limited tests is discouraged and in-field artifact analysis is recommended.

(a) In-field analysis. Record recovered artifacts to professional standards in the region for the class of artifact. At a minimum, required information includes class of artifact, make, type or series and other attributes that relate to interpretation of chronology, form and function. Illustrations or photographs of diagnostic artifacts are encouraged. Attach copies of the in-field analysis forms, narrative descriptions and illustrations to the LA archaeological site record.

(b) Collections. If collections are made, note the provenience or collection unit and depth from which the artifact was retrieved. Analyze collected artifacts in a laboratory and in accordance with current professional standards for the class of artifacts in the region. Include results of the analyses in the survey report and indicate disposition of artifacts on the LA archaeological site record form. Collections shall be curated at an acceptable repository pursuant to 4.10.8 NMAC.

D. Documentation of limited test activities. At a minimum, the following information shall be included:

(1) explain the purpose of the limited tests on the archaeological site record and discuss in the survey report;

(2) location of test units. Plot the location of all test units on the site plan map relative to a permanent datum. List the point provenience or grid coordinate of each limited test unit relative to the site datum. Label limited test units according to their provenience on the site plan map, or attach a list of proveniences to the LA archaeological site record; and

(3) description of deposits. Describe the nature of the subsurface deposits encountered in each test unit and the depth of the unit. Use standard scientific terminology; color descriptions shall be made in Munsell terminology. Prepare profile drawings and photographs of at least one wall of each small excavation unit or test pit and features. Append the deposit descriptions to the LA archaeological site record and discuss in the survey report. Deposit descriptions include but are not limited to sediment color, texture, moisture content, nature of inclusions, organic content and an inventory of cultural materials, if any.

[4.10.15.15 NMAC - N, 1/01/06]

4.10.15.16 EVALUATION AND STATEMENT OF SIGNIFICANCE: Evaluate each property identified during the survey in conformance with this section and document in the technical report and on the LA archaeological site record or HCPI form. Depending on the complexity and scale of the project, present evaluations in both narrative and tabular form.

A. Apply the criteria for integrity and significance to evaluate each property over 50 years old identified during the survey pursuant to 36 CRF Part 60.4. Identify the property as a district, site, building, structure or object. Indicate whether the property should be listed on the state register or should be determined as eligible for national register listing. Properties less than 50 years old should be evaluated if it is apparent that they will be eligible for the state or national registers within 5 years of the date of survey. Properties less than 50 years old that may be eligible for inclusion in the national register based on exceptional significance should be evaluated using national register criteria consideration G. If a property has been previously nominated for either the state or national registers, discuss the register status of the property.

B. Significance statement. Prepare a clear statement of significance for each archaeological site, historic structure or building, or other cultural property identified during the project. Indicate the level of significance as local, state or national and include in the technical report.

(1) If the cultural property is recommended as not significant or not eligible for listing, provide a clear discussion and complete documentation to support the recommendation. For archaeological sites, the discussion shall demonstrate that the site has been thoroughly studied, that surface artifacts and features have been recorded and that sufficient subsurface tests have been performed to support a conclusion that the site is unlikely to contribute important information. The lack of subsurface deposits is not in itself sufficient to support a recommendation that a site is not significant or not eligible. If the cultural property is from the historic period, provide basic archival documentation to augment field information and support the significance evaluation.

(2) If the cultural property is recommended as significant or eligible for listing, provide evidence supporting its significance including reference to historic contexts and scholarly research in the region. Include a specific, evidence-based argument, linked to specific research topics and characteristics (historic values) observed. The recommendation shall be documented on the LA archaeological site record, HCPI form or other HPD-approved inventory form. For archaeological sites provide detailed descriptions of the types and numbers of surface artifacts and the types and numbers of features visible on the surface or in arroyos or road cuts. The presence of a large artifact scatter or the potential for subsurface deposits is not sufficient information to support an eligibility recommendation without additional discussion. If the cultural property is historic, include the results of archival research to support the evaluation.

(3) Survey data alone may not be sufficient to evaluate the property. For archaeological sites, it may be necessary to conduct more extensive test excavations, beyond survey-level study and limited tests, to gather sufficient information to evaluate the specific research potential to support a recommendation for listing or not listing the property on the state or national registers. Additional archival research and detailed documentation may be necessary to evaluate the specific potential and criteria for historic structures, buildings and engineering features. Provide a clear explanation that details the need for additional information. Document the recommendation on the LA archaeological site record, the HCPI form or other HPD-approved inventory form.

[4.10.15.16 NMAC - N, 1/01/06]

4.10.15.17 RESEARCH DESIGNS UNDER PROJECT-SPECIFIC PERMITS: Prepare a research design for sample, thematic and other surveys to be performed under a project-specific permit. Research designs are not required for surveys performed under a general permit.

A. Purpose. A research design shall detail the reason for the survey and how the survey will contribute to the public's knowledge of the cultural heritage of the state. Research designs shall take into account broad regional research needs and strive to fill in gaps in current state of knowledge and shall be realistic and attainable from the nature of the study. Research designs shall be flexible enough to accommodate unanticipated discoveries.

B. Components. A research design shall include the following components. The length of each section shall be appropriate to the complexity and scale of the study.

(1) **Title page.**

(2) **Table of contents, lists of figures and tables** (for documents with more than 10 pages of text).

(3) **Purpose of the study.** Provide a succinct overview of the proposed survey including:

(a) goals for the survey;

(b) the name of the project;

(c) brief description of the history of the project;

(d) the project sponsor or client, state agency and other land jurisdictions;

(e) project location and size of area to be surveyed in acres and hectares; and

(f) project map at a USGS 7.5-minute (1:24,000) topographic quadrangle scale depicting survey

area boundaries, land ownership boundaries, north arrow, key and name of USGS quadrangle(s).

(4) **Research context.** The context provides a foundation for the development of specific research questions. Scale the discussion to the complexity, size and limitations of the proposed study. The length of each discussion may vary but shall include the following elements:

(a) review of pertinent literature including but not limited to statewide and regional cultural-historical overviews and historic contexts, research designs, published archaeological, ethnographic and historical monographs and articles, cultural resource management technical reports, field reports and archival sources;

(b) discussion of the theoretical orientation and assumptions guiding the proposed research;

(c) identification of general research problems and topics relevant to the region; discuss the research problems in the context of the culture history and knowledge of the area and current research gaps;

(d) specification of research questions; provide a clear link between the questions and the theoretical assumptions;

(e) identification of the specific data needed to answer the questions; explain how the survey results are likely to contain data relevant to answer the questions;

(f) discussion of survey procedures; adopt the standards for intensive survey whenever possible (4.10.15.11 NMAC); explain and justify deviation from these standards; discuss how the specific field methods and approach are related to the research goals; provide a specific link between the data needs and the survey approach; for sample surveys, explain why the proposed sampling strategy is appropriate to the research questions; samples may be random or stratified but also shall be appropriate to estimate the nature, distribution and density of cultural properties within the entire project area; and

(g) discussion of analytical procedures; provide a specific link between the research questions, data needs and proposed analyses to resolve the research questions; discuss sampling strategy and sampling fraction if all artifacts recorded and specimens collected will not be analyzed; include copies of analysis forms expected to be used for field or laboratory analysis in addition to the LA archaeological site record form.

(5) **Personnel.** Identify all supervisory personnel and analysts who will perform the fieldwork, laboratory analyses and prepare the report. Include subcontractors, if appropriate, and off-site laboratories for specialized analyses if proposed. If specific personnel or subcontractors have not been identified for all activities, provide a list of personnel or subcontractors who may be retained, or list the minimum qualifications of the personnel that will be retained.

(6) **Schedule.** Explain the expected time frame to implement the field, analysis and reporting phases of the project.

(7) **References cited.**

(8) **Appendices as needed.**

[4.10.15.17 NMAC - N, 1/01/06]

4.10.15.18 NMCRIS INVESTIGATION ABSTRACT:

A. Obtain a NMCRIS number from ARMS immediately following the completion of the survey and prior to writing and submitting a report. If any archaeological sites were encountered during survey, request an LA archaeological site number for each newly discovered site. Do not request new numbers for previously recorded sites if they already have LA numbers.

B. Complete the NMCRIS investigation abstract for the survey. The NMCRIS investigation abstract includes the following information.

(1) **Administrative data.** Provide the NMCRIS number; the name of the federal or state agency or sponsor for purposes of consultation, if applicable, and agency identification number; performing agency name, field personnel and report number; report title in its entirety with no abbreviations, the author(s) and report date; permit number(s); client or customer name, contact information and project number; beginning and end dates for the investigation and investigation type. Indicate status of tribal consultation.

(2) **Location and land status.** Indicate landownership status type (federal, state, tribal, private or any combination thereof) and name or administrative unit (such as, bureau of land management Farmington field office, state land office, New Mexico department of transportation, pueblo of Taos). Specify survey area and APE in acres for each land status; for linear surveys include length and width. Enter USGS 7.5-minute (1:24,000) topographic quadrangle name, date and code; township, range, section, quarter section to nearest 40-acre unit or unplatted. Indicate if the PLSS is protracted. Identify other source graphics if used. Specify the nearest city or town, county and state for the survey and include other descriptions including but not limited to well pad footages, mile markers or land grant names.

(3) **Project data.** Enter the project name (if known), date of NMCRIS database and other agency records check and name of individual conducting the search. Provide a description of the project or undertaking, the environmental setting, condition of the project area (such as grazed, bladed or dense vegetative cover) and percent ground visibility.

(a) For surveys provide a brief description of survey methods, type of survey, configuration, scope, coverage method, survey interval, time in field for survey, time recording archaeological sites and time recording the built-environment.

(b) For monitoring projects list sites monitored by LA site number and provide a brief description of any area of historic and scientific interest monitored, if applicable. Include NMCRIS number(s) and the report title in its entirety with no abbreviations for the previous project that identified the sites to be monitored. Indicate any changes in site condition noted during the monitoring project and whether site updates were completed.

(c) For limited tests, test excavation and excavation, list sites by LA site number and indicate the type of tests performed, the number and size of each test unit and whether site updates were completed.

(4) Cultural resource findings. Summarize the cultural resources identified. Specify the number of sites, the number of historic structures, buildings or other cultural properties and the number of isolates discovered. Indicate the number of sites and other cultural properties registered; the number of sites and other cultural properties not registered, and the number of previously recorded sites revisited. List archaeological sites by LA site number. Indicate if collections were made and whether tests were conducted. For negative surveys only, discuss the possible reasons for the lack of sites, evaluate significance of the identified resources pursuant to 4.10.15.16 NMAC and make management recommendations.

[4.10.15.18 NMAC - N, 1/01/06]

4.10.15.19 NEGATIVE SURVEY REPORTS: The NMCRIS investigation abstract constitutes the final survey report for surveys that do not identify cultural properties of any kind or only identify isolates. Letter reports are prohibited.

A. Complete all sections of the NMCRIS investigation abstract. An electronic version of the NMCRIS investigation abstract and guidelines for its use are available from ARMS and HPD. It is permissible to increase or decrease the size of the data fields on the paper copy of the form, as needed, or attach continuation sheets.

B. In the event an archaeological site reported to be located within the APE or project area is not relocated during the survey, check the site update box on the LA archaeological site record and complete the identification and ownership, recording information, condition, recommendations and narrative site description sections. Explain in the narrative site description section specific efforts that were made to find the site and the reason(s) the site could not be relocated.

C. Append the following to the NMCRIS investigation abstract:

- (1) a copy of the NMCRIS map server map check; NMCRIS table is optional;
- (2) a project map based on a USGS 7.5-minute (1:24,000) topographic quadrangle source that depicts the exact location of the APE, survey area (if different from the APE) and exact location of all isolates;
- (3) a list of all isolates and detailed information on each isolate consistent with 4.10.15.13 NMAC;
- (4) a list of all isolates collected;
- (5) photographs and photographic log, illustrations and other graphics;
- (6) a copy of all updated LA archaeological site records consistent with 4.10.15.11E NMAC; and
- (7) signature of the principal investigator certifying accuracy of the information provided.

D. Report review. The NMCRIS investigation abstract shall be reviewed in conformance with 4.10.8.18 NMAC. If collections were made during survey, the permittee shall curate the collections in accordance with the procedures outlined in 4.10.8.18 NMAC.

[4.10.15.19 NMAC - N, 1/01/06]

4.10.15.20 POSITIVE SURVEY REPORTS: Prepare a technical report for all surveys that identify archaeological sites, historic structures and buildings, isolates and other cultural properties. Letter reports are prohibited. Include the results of any limited tests conducted. A standard survey report shall contain the following sections unless indicated as optional below. The length of each section shall be appropriate to the complexity and scale of the survey project. State agencies may have additional report requirements.

A. Title page. List the following information:

- (1) NMCRIS number in the upper left-hand corner;
- (2) report title, author(s) and the principal investigator if different from the author;
- (3) name of the organization that performed the survey;
- (4) agency(ies) requiring and receiving the report;
- (5) state permit number and other permit numbers for project; and
- (6) report date (month, day and year).

B. Abstract. Complete all sections of the NMCRIS investigation abstract, which serves as the report abstract.

C. Table of contents (required only for reports with more than 10 pages of text). Include:

- (1) list of major report sections, subheadings and appendices with page numbers;
- (2) list of figures and plates with page numbers; and
- (3) list of tables with page numbers.

D. Introduction and Project Description. Discuss the purpose of the survey and project background.

Include the following information:

- (1) purpose of the survey and project background;
- (2) project description and location;
- (3) description of the project area and survey area (if different from the project area or the APE);
- (4) size of the project area and size of area surveyed in acres and hectares;
- (5) name of each public agency and the portion of surveyed land owned by each in acres and hectares;

privately owned land may be reported as a cumulative total in acres and hectares rather than by each private land owner; if multiple areas and land jurisdictions are involved, the information may be presented in a table; if a project falls under the jurisdiction of multiple state and federal agencies, discuss the relationship between the various agencies;

- (6) the township, range, section and quarter section and protraction; for state trust land identify the section to nearest 40-acre parcel;
- (7) map showing the general project location within the state or region (and land jurisdiction if more than one owner);
- (8) project personnel: the names and position titles of the individuals who participated in the survey, including crewmembers and any analytical or support staff who did not participate in the fieldwork but assisted in preparing information for the report; the client or sponsor; and
- (9) exact dates of the survey.

E. Environmental setting of the project area. The length of each of the following discussions shall be appropriate to the complexity and scale of the survey project, and should include representative photographs of environmental features as appropriate.

(1) **Natural environment.** Describe the topography, geology and soils; contemporary flora and fauna; and current climatological conditions. Discuss the effect of current environmental conditions and past environmental processes (such as erosion or deposition) on the visibility and preservation of archaeological remains.

(2) **Cultural environment.** Identify modern land use impacts such as mining, logging, agricultural activities or urban development and discuss the effect that modern land uses have on the visibility and integrity of archaeological sites and other cultural properties. Note evidence of vandalism or looting.

F. Results of records check. Summarize the results of all records checked for the project area and 500-meter or 1000-meter buffer. List all known previous surveys or investigations and summarize their results. List each archaeological site, national and state register property, historic structure and building and other cultural properties located in the project area and all archaeological sites within the 500 meter or 1000 meter buffer. Provide a brief summary of these resources. The lists may be presented in tabular form. Include the date when the records check was conducted and name of the individual performing the check.

G. Culture history, literature review and research orientation. The length and detail of this section shall be appropriate to the type and scale of the project and the findings.

(1) Discuss the past human occupation of the survey area in its regional context within established culture-historical frameworks or chronologies for all periods of occupation. Based upon current research, describe the cultural and historic developments for each major period of time, the archaeological evidence (site types, types of artifacts) characteristic of each time period and the major research questions associated with each period with a goal to aid in the understanding and evaluation of resources identified during the project. Tailor discussion to the types of cultural resources found during survey. For example, if only sites dating to the U.S. Territorial period were located, then the culture history section should be devoted to the cultural and historic developments of late nineteenth and the early twentieth centuries. The discussion of other periods of occupations should be abbreviated.

(2) Incorporate results of the pre-field literature review. Reference statewide and regional cultural-historical overviews and research designs, published archaeological, ethnographic and historical monographs and articles, cultural resource management technical reports, field reports (both positive and negative survey reports) and historic maps and records, as appropriate, given the results of the project. Incorporate the results of the records check.

H. Research design (required for surveys under a project-specific permit; optional for surveys under a general permit). Detail the problem orientation and specific research issues and questions that guided the survey.

I. Field methods. Include the following information:

- (1) the size of the survey crew;
- (2) the transect interval(s) and transect method;
- (3) field conditions during survey, including access, lighting, ground cover and other factors affecting

identification or recording of cultural properties;

- (4) methods of site location (maps, global positioning system, topography);
- (5) methods of site recording (compass and pace, compass and tape, instrument mapping);
- (6) types of photographs taken and the media used (black-and-white prints, color transparencies, color prints or digital images);
- (7) any additional documentation methods, such as video recording, illustration of artifacts and features, remote sensing, or specialized in-field artifact analysis;
- (8) strategies employed for collection or limited tests, including the strategies employed for the location of collection or limited test units, the rationale for the collection or test unit size used and the choice of testing implements; and
- (9) list the types of documents and other media used for all types of recording.

J. Description of cultural resources and analysis of survey results. The results of the survey shall be both descriptive and interpretive and contribute to the public's knowledge of the cultural heritage of the state. Describe all archaeological sites recorded during the survey, all historic structures, buildings and other cultural properties and all isolates and discuss them in relationship to the culture history of the area. Include the results of any limited tests conducted. Include illustrations and photocopied or digitally reproduced photographs to augment the text.

(1) **Location of cultural properties.** The public disclosure of the location of archaeological sites on state and private lands is prohibited by Section 18-6-11.1 NMSA 1978. The public disclosure of the location of archaeological sites on federal lands is prohibited by 36 CFR 296.18. Include all detailed locational information (UTM coordinates, township, range and sections) whether in narrative or maps in an appendix for easy removal so that the report may be made available to members of the public.

(2) **Descriptions of archaeological sites.** Provide a description of each site. The description should summarize rather than duplicate information contained in the LA archaeological site record. Discuss the environmental setting of the site; the site condition; the nature and distribution of site features; and the nature and distribution of artifacts. Discuss the nature and potential of subsurface deposits and the basis for the description. Include in the body of the report a copy of the site plan if it aids in understanding the narrative description of the site. Include illustrations and photocopied or digitally reproduced photographs of features and artifacts specific to the site. If the site was previously recorded, discuss briefly the recording history of the site and summarize any changes in the physical condition of the site since it was last recorded.

(3) **Descriptions of archaeological sites not relocated.** Provide a brief description of the site as it was last recorded. Discuss efforts to try to locate the sites and the possible reason why the site could not be relocated (for example, the artifacts on the surface of the site were collected or the site was destroyed by development).

(4) **Descriptions of other cultural properties.** Describe all other cultural properties, including but not limited to historic structures, buildings, and cultural landscapes identified during the survey area or properties that may be directly or indirectly affected by the project. Discuss the condition and integrity of the properties. Incorporate information obtained from archival sources to place the property in its historic context.

(5) **Descriptions of isolates.** Information on isolates may be presented in narrative or tabular format. Include all qualitative and quantitative observations relevant to the artifact class and make type or series identifications when possible. If the isolate consists of more than one item, include the distribution area. Include information on physiographic location or vegetation in the immediate area and the depositional or erosional context of the isolate.

(6) **Interpretive summary.** Discuss the results of the survey in the context of the regional occupation of the area and knowledge of the cultural heritage of the state.

K. Evaluation and statement of significance. Apply the criteria for integrity and significance to evaluate each property identified during the survey pursuant to 36 CRF Part 60.4 and in conformance with 4.10.15.16 NMAC. Depending on the complexity and scale of the project, present evaluations in both narrative and tabular form.

L. Effect determination. If not a research survey, identify whether the project has the potential to affect the cultural properties located during the survey and provide a statement on how the project will affect the properties. Discuss how the historic values or significant characteristics of each property will or will not be affected by the project. Discuss how properties may be avoided or protected and whether it will be necessary to develop a mitigation program if the properties cannot be avoided or protected. Depending on the complexity and scale of the project, present evaluations in both narrative and tabular form.

M. Summary and recommendations.

(1) Discuss the survey results in relation to the archaeology and history of the area as described in the culture history section. Include isolates as well as sites in the discussion. The size and scale of the discussion should be relative to the size of the survey and its findings. Place the sites and isolated artifacts within the context of the currently known pattern of archaeological remains in the general area of the survey.

(2) Explain how the survey findings contribute to the understanding of the current research problems defined for the area. If the findings were not consistent with the known culture history of the area (for example, if fewer sites were found than would be expected, or site types not previously known to occur in the area were located), possible explanations for these anomalous findings must be explored.

(3) Any concerns expressed through tribal consultation shall be discussed in general terms. Detailed information on traditional cultural places, if any, and other properties shall be included in an appendix for easy removal so that the report may be made available to members of the public.

(4) Discuss any management concerns or recommendations for future study.

N. References cited. List all references cited in the report.

O. Appendices. Mark as confidential all pages that discuss or depict exact locations of archaeological sites or traditional cultural places pursuant to Section 18-6-11.1 NMSA 1978. At a minimum include the following:

(1) a project map(s) depicting the exact location of the project area, survey area and exact location of all archaeological sites, historic structures, buildings and other cultural properties, water delivery systems (acequias) and other cultural properties identified during the survey; isolates may be plotted on this map or a separate map at the same scale; the map shall be at the equivalent of a USGS 7.5-minute (1:24,000) topographic quadrangle scale;

(2) a list of all isolates, detailed information on each isolate if this information has not been included in the body of the report, and GPS location. Include photographs and illustrations, as appropriate; and

(3) a list of artifacts collected during the survey project. Include provenience information and associated illustrations and photographs;

P. Attachments. Mark as confidential all pages that discuss or depict exact locations of archaeological sites pursuant to Section 18-6-11.1 NMSA 1978. Append the following to the report:

(1) a copy of the NMCRIS map server map;

(2) LA archaeological site records consistent with 4.10.15.11 NMAC for all newly recorded sites, all relocated sites and all sites that could not be relocated, as appropriate; attach a site plan map and a copy of the portion of a USGS 7.5-minute (1:24,000) topographic quadrangle map showing the site location to each LA archaeological site record; include any other site-specific records generated, such as in-field artifact analysis forms or analysis forms for collections; if coded analysis forms are attached, place a copy of the code key with every site form; do not include copies of site records obtained as part of the records check;

(3) HCPI form consistent with 4.10.15.12 NMAC for all historic structures, buildings and other cultural properties recorded during the survey;

(4) all archivally packaged photographic materials and photographic logs consistent with the standards in 4.10.15.11 or 4.10.15.12 NMAC;

(5) oversize (greater than 11x17 inches) maps and plans of individual sites; do not attach these materials to the LA archaeological site record; and

(6) engineering plan maps, aerial photographs and other nonstandard source graphics.

Q. Report review. The report shall be reviewed in conformance with 4.10.8.18 NMAC. If collections were made during survey, the permittee shall curate the collections in accordance with the procedures outlined in 4.10.8.18 NMAC.

[4.10.15.20 NMAC - N, 1/01/06]

4.10.15.21 POPULAR REPORTS: For positive surveys of 160 acres or more, surveys that identify 10 or more sites, or whenever the cultural resources of importance or of general interest are identified, prepare a short popular summary suitable for distribution in a newspaper, newsletter or magazine. The purpose of the report is to provide information to the interested general public about the state's heritage and contributions from on-going research and studies on state land. The public disclosure of the location of archaeological sites on state and private lands is prohibited by Section 18-6-11.1 NMSA 1978. The public disclosure of the location of archaeological sites on federal lands is prohibited by 36 CFR 296.18. The report may be brief, approximately 250 to 500 words in length, and may include photographs or graphs as appropriate. The popular report shall be submitted to the state agency with the final positive survey report.

[4.10.15.21 NMAC - N, 1/01/06]

4.10.15.22 DEVIATIONS: The CPRC, SHPO and state archaeologist reserve the right to waive or deviate from this rule or any parts of this rule under circumstances deemed necessary by the CPRC, SHPO and state archaeologist. Any waiver or deviance from this rule shall occur while maintaining the spirit, intent and objective of this rule and the Cultural Properties Act.

[4.10.15.22 NMAC - N, 1/01/06]

Appendix B:

Example New Mexico Laboratory of Anthropology Site Record

LABORATORY OF ANTHROPOLOGY SITE RECORD

1

1. IDENTIFICATION & OWNERSHIP

LA Number: _____ (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): _____

Site Type: _____ Occupation Type: _____

2. RECORDING INFORMATION

NMCRIS Activity No.: _____ Field Site Number: _____

Site Marker? (specify ID#): _____

Recorder(s): _____

Agency: _____ Recording Date (dd-**MMM**-yyyy): _____

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): _____

Description of Analysis or Excavation Activities: _____

Photographic Documentation: _____

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: _____

Repository for Original Records: _____

Repository for Collected Artifacts: _____

NMCRIS 2000 vers. 1/00

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): _____
 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: _____

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: _____
 Assessment of Project Impact: _____
 Treatment Recommendations: _____

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- MM- yyyy): day month year

Sponsor Remarks: _____

SHPO NR Concurrence: eligible not eligible not determined Applicable Criteria: (a) (b) (c) (d)
 HPD Staff: _____ Date (dd- MM- yyyy): day month year 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
- other topo maps [Scale: _____]
- GPS unit
- other source (describe): _____
- rectified aerial photos [Scale: _____]
- unrectified aerial photos [Scale: _____]
- GPS accuracy (choose one): < 1.0 m 1-10 m 10-100 m >100 m

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

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

GPS-based Coordinates Datum: NAD27 Zone: 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?
<u>New Mexico</u>	<input type="checkbox"/>	T _____	R _____	—	_____	<input type="checkbox"/>
<u>New Mexico</u>	<input type="checkbox"/>	T _____	R _____	—	_____	<input type="checkbox"/>
<u>New Mexico</u>	<input type="checkbox"/>	T _____	R _____	—	_____	<input type="checkbox"/>
<u>New Mexico</u>	<input type="checkbox"/>	T _____	R _____	—	_____	<input type="checkbox"/>

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: _____

LA 0

4

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

Other items (specify): _____

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

Assemblage Size (all components):

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

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: _____

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): _____

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

LA __0

6

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): _____