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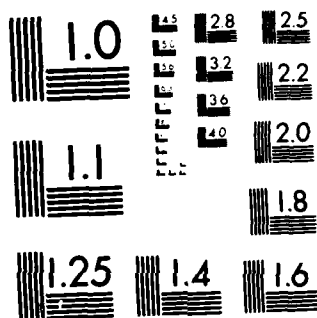
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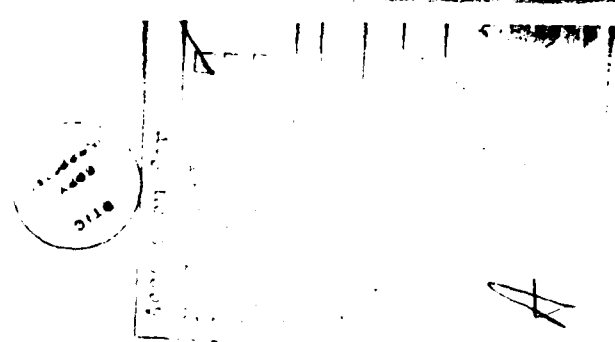
ARCHAEOLOGICAL MITIGATION
OF AR-102

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Prepared for the
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July 16, 1978

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REPORT DOCUMENTATION PAGE		1. REPORT NO.	2.	3. Recipient's Accession No.
4. Title and Subtitle		5. Report Date		
Archeological Mitigation of AR-102		7/16/78		
6. Author(s)		7.		
Schaafsma, Curtis P.		8. Performing Organization Rept. No.		
9. Performing Organization Name and Address		10. Project/Task/Work Unit No.		
Contract Program		11. Contract(C) or Grant(G) No.		
School of American Research		(C)		
Santa Fe, NM		(G)		
12. Sponsoring Organization Name and Address		13. Type of Report & Period Covered		
U.S. Army COE		Final 1977		
Albu. District		14.		
Albu., NM				
15. Supplementary Notes				
16. Abstract (Limit 200 words)				
Work performed consisted of a survey of approximately 40 acres in the UPPER Canones area at Abiquiu Reservoir, and to grid, collect and analyze a sample of the material on site AR-102 in order to mitigate the impact to that site from increasing useage as a campground and fishing area.				
17. Document Analysis & Descriptors				
Prehistoric Archeology				
18. Identifiers/Open-Ended Terms				
Northeast New Mexico, Archaic, lithics				
19. COSATI Field/Group				
Availability Statement				
Unrestricted				
20. Security Class (This Report)				
Unclassified				
21. No. of Pages				
27				
22. Security Class (TMs Page)				
Unclassified				
23. Price				



INTRODUCTION

The School of American Research was contracted by the U.S. Army, Corps of Engineers to perform a cultural resources survey of approximately 40 acres in the Upper Cañones area at Abiquiu Reservoir (see map), and to grid, collect and analyze a sample of the material on site AR-102 in order to mitigate the impact to that site from increasing useage as a campground and fishing area. The field work was accomplished in three days on June 26, 27 and 28, 1978. Personnel were Curtis Schaafsma, Richard Lang and Hoski Schaafsma.

The area being dealt with is a tract of Corps fee land bounded on the north by Cañones Creek, on the northeast by the Chama River, on the east by Abiquiu Dam, and on the south and west by the Corps boundary fence. On the indicated days, the water of Abiquiu Reservoir filled Cañones Creek and the Chama River Valley to the 6159 contour. The present survey was restricted to those Corps fee lands that are above the 6362 contour.

This area, below contour 6362 had previously been surveyed in the Phase III survey of May, 1975 (Schaafsma 1976). Patricia Moberly directed the survey of this locality and identified sites AR-102 and AR-103 discussed below. Both sites were described as pedregal quarry sites in the Phase III survey report (1976:Table 4) and were discussed with the other sites of this type (1976:59-64). A field inspection of the area covered by the present survey and sites AR-102 and AR-103 was made by Ms. Donna Roxey and Mr. William Tully of the Corps of

Engineers on March 10, 1978. Their report is discussed below; it was the background for the present project.

In addition to the archaeological work by the School of American Research in this immediate vicinity (Schaafsma 1975; 1976, 1977), Frank G. Hibben conducted a major excavation in 1936 at the Riana Ruin (1937) which is directly across ($\frac{1}{4}$ mile distant) Cañones Creek from site AR-102. Two petroglyph sites are on the bluff on the north side of the creek (AR-26 and AR-27). These sites were described by Hibben (1937) and were visited and recorded by the State Planning Office survey of the rock art of New Mexico in 1971 (Polly Schaafsma 1972). The Palisade Ruin excavated by Peckham (1959) is on the terrace top about one mile to the northeast.

SURVEY

The survey area lies in the southern edge of Section 8, T 23N, R 5E. It consists of a high point of land to the north of State Highway 96 bounded by contour 6362 and a narrow strip to the south of the highway adjacent to the Corps' fence that extends to BM 10D-4 on the crest of a knoll at elevation 6746. The area has been extensively impacted by the construction of the highway and by bulldozing the crest of the point. Additionally, there are several roads cut in the area that were made at the time the dam was constructed.

Geologically, the entire area is underlain by the shale member of the Triassic Chinle formation. The lower, Todilto sandstone member of the Chinle formation appears about contour 6360. Overlying the

Chinle formation are basalt, Pedernal chert and quartzite boulders which commonly rest directly on the shale. These apparently are colluvial in origin and represent resistant boulders and cobbles left and fallen from the erosion of the Miocene Abiquiu Tuff and Quaternary basalt flow that caps the mesa to the south (Church and Hack 1939).

The flora of the slope is a mixture of one seed junipers and pinyon pines. There is a good cover of gramma grasses and other range grasses. Also present are yucca, annuals and prickly pear cactus. For a discussion of the flora of the Abiquiu District see Schaafsma 1977.

The survey was accomplished by three people spaced at intervals of approximately 50 feet. Notes were made of all archaeological materials observed and collection was made of all significant artifacts found. There were no field maps made, as no discrete features were observed. No photographs were taken for the same reason.

RESULTS OF THE SURVEY:

1) Strip Along Fence: The narrow strip indicated on the map adjacent to the fence was covered as was the entire point north of BM 10-4 to State Highway 96. This latter area was not indicated as part of the coverage and was walked with wider spacing than elsewhere.

The entire slope between State Highway 96 and the knoll at BM 10D-4 is a colluvial boulder field consisting of basalt and nodules

of Pedernal Chert. As mentioned, this material is residuum from the erosion of formations that are now either absent in the immediate area or present on the top of the mesa to the south. This is a classic example of a pedregal quarry locality as discussed in the Phase III report (Schaafsma 1976:59-64). Throughout this area there is abundant evidence that the chert nodules were quarried in place. There are many cores ranging from nodules with a few large flakes removed to cores with nearly all the cortex removed and many flake scars. Accompanying the cores, and lying alone on the slope are many decortication flakes (large flakes with cortex on the dorsal surface), pieces of shatter, primary flakes and other indications of quarry debris. Several shaped quarry blanks were found, which apparently are the roughly shaped items which were generally carried away from the quarry. Two of these were collected. While this material is occasionally concentrated, it occurs generally over the entire slope. Overall, the density must be on the order of one item per 20 square meters. These indications of quarry activities are distributed on the slope where the boulders are thickest, and it appears that nodules were worked in place. There are numerous small benches on the slope where one might expect that nodules would be collected and worked, since it was a more convenient space. However, these benches have no greater density than do the slopes; on the contrary, the density is often less due to the fewer naturally occurring boulders. Distribution appears to be determined entirely by the natural occurrence of rocks

which were worked in place, regardless of the slope. Aside from a few rare pieces of quartzite that have flakes removed, the material on the slope is almost entirely Pedernal chert. The absence of Polvadera Peak obsidian is especially noticeable.

Roxey and Tully noted three discrete lithic areas on this slope adjacent to the fence (see map). The first area was on the west slope of the knoll with BM 10D-X4, about elevation 6640. The second area was on the east side of a shallow drainage area. These areas were relocated in the field. When considered in the context of the wider coverage extended by current activity, these areas are seen as points of concentration within the overall slope such as occur generally over the whole area.

In addition to the abundant quarry evidence, prepared tools of several types indicate that the slope was used for other activities also. Roxey and Tully found a projectile point of Pedernal chert at their area 2. A second point was found by us on the slope about 10 meters northeast of their area 3. This point is the midsection of a Basketmaker III - Pueblo I point of Polvadera Peak obsidian. These

points were probably lost during hunts on the slope. Several bifacial knives with heavy bifacial attrition wear (Schaafsma 1977) were on the slope, mostly in the drainage basin where areas #2 and 3 are located (map). Also present are several choppers with cutting and percussion wear on a prepared edge. Both types of tool are quite possibly related to field dressing game hunted on the slope. The absence of light cutting and scraping tools on the slope is again indicative that only heavy field dressing of game took place there.

In contrast with the lack of small knives, trimming flakes and small lithics on the slope is the concentration of trimming, pressure and resharpening flakes found on the very top of the knoll where BM 10D-4 is located. This concentration of small tools strongly suggests the repair of tools on this locality which commands a wide view of the terrain. This area is confined to the knoll top, and probably is no more than 4 x 4 meters in size. Especially interesting is the fact that this knoll overlooks a pass to the southwest which is the only reasonable topographic location for a game trail that bypassed the Chama Canyon to the north. Any animals which used this pass to migrate along the Chama River Valley and bypass the canyon could have been readily observed from this vantage point on the knoll top. Deer, elk and mountain sheep are animals which conceivably would take such a higher, more open route to avoid the narrow, constricting canyon route. In other words, the knoll overlook and tool repair location, the local topography that could determine patterns of game movement,

and the tools appropriate for field dressing large game on the slope and in the drainage just north of the pass may all form an integrated hunting area that could be worked out in detail from a study of the tools and their distribution in the various areas.

2) Area between Highway 96 and Contour 6362: As observed above much of the area below Highway 96 was extensively modified by the construction of the highway, leveling a large area of the point, and minor roads built in the constructing of Abiquiu Dam. Approximately 50% of the area indicated has been disturbed. The remaining undisturbed surfaces are limited to steep slopes between the point and the 6362 contour. This area was walked with a spacing of approximately 50 feet; the steepness made precise spacing impossible. We did not continue down the slope to AR-103, near point AP-1 on the Corps boundary fence, as did Roxey and Tully but stopped on the west at 6362 contour or slightly beyond.

The topographic and geologic situation found to the south of Highway 96 continues in the area north of the highway. The underlying surface is the shale member of the Chinle formation and there are colluvial boulders of Quaternary basalt and Miocene Pedernal chert resting on the shale. An exceptionally steep area on the west side of the point exposes the colorful shales of the Chinle formation. The Todilto member of the Chinle appears on the slope just below the 6362 contour.

Considering that the geology and topography of the area north

of the road are essentially the same as south of the highway, it was no surprise to find that the quarrying activities noted in the latter area continued north of the highway. The slopes are littered with the same kind of cores, nodules of chert, decortication flakes and shatter as were found to the south. Several quarry blanks were observed one of which was collected. This latter item is a superb example of a uniface, although it was probably not prepared to be used as a tool directly. This uniface came from the northeast slope of the highest part of the point, which was an area especially rich in smaller flakes and shatter. While still quarry debris, this material suggests that more quarry blanks were finished to the degree indicated by the uniface.

A few flakes and cores found in the badland area on the west slope of the point may prove to be of unusual interest. These items were found in and around the basin where the shale outcrops. These pieces of Pedernal chert have shallow zones of white over the areas exposed in their manufacture which appears to be the reformation of patina. Since such repatinated surfaces are almost never observed on Archaic tools (and points), and many of these tools date to ca. 3,000 B.C., these items with indications of patina reformation may be quite old. While no Paleo Indian artifacts have been identified in the Abiquiu District with certainty (e.g. no points) a deeply buried horizon of large chert tools at site AR-413 in the Rio Puerco Valley (Schaafsma 1976:52-53) strongly suggests that there were people present

in the Piedra Lumbre Valley at that time (pre-5500 B.C.). Warren, for example, mentions the use of Pedernal chert during the Clovis period (1974:90; Fig.2). The implication is that these items with patina reformation may be from the pre-Archaic, Paleo-Indian occupation of the valley, and use of the quarry.

The single exception to the primary use of this slope as a quarry occurs on a sloping bench at the far west end of the survey near the point where the Corps fence crosses the 6362 contour (map). On this bench there are many small tools of Polvadera Peak obsidian, the only concentration of this material observed in the survey area. There are small flakes, shatter and similar debitage and several unworked obsidian nodules (these unworked items were probably also brought to the area). Many of these items are used as knives and/or light scrapers. There is no single cluster, but the items are spread widely over the bench. Also there are no hearths, fire-cracked rocks or other indications of a camp. This, like the chipping station on top of the knoll at the east end of the survey area, represents a specialized activity area within the larger site. In addition to the obsidian, the evidence of quarrying continues on the bench and slope in this area.

EVALUATION OF THE SURVEY:

Considering that the entire area surveyed is dominated by the widely scattered indications of quarrying the naturally occurring nodules of Pedernal chert, the whole area is assigned a single site number: AR-603. The use of a single site number should not obscure

the importance of the various components which indicate specialized activities other than quarrying within the overall site. This is especially true of the complex of tools, topography etc., which could be used to reconstruct a hunting area south of the highway. Warren has recently presented a summary of the evidence that Pedernal chert was quarried from the earliest periods of human occupation of New Mexico until quite recently (1974). The repatinated tools mentioned above underscore the long period of time during which quarries such as this were utilized. Thus, in addition to functionally different loci within the site, there are to be expected temporally different loci, or components as well.

Pedregal quarries occur extensively in the valleys of the Rio Puerco and Cañones Creek (Schaafsma 1976:60). These boulder quarries also occur widely on the slopes of Pedernal Peak along with the mines high on the Peak (Warren 1974). Church and Hack further document that talus boulder quarries and mines of in situ Pedernal chert are found up the Rio Puerco to the crest of San Pedro Mountain (1939: Fig. 4). What is the importance of one more quarry in an area where such quarries are so abundant?

In the research design developed for discriminating prehistoric social boundaries from the distribution of lithic materials (Schaafsma 1975;1977) it was made clear that we must be able to recognize distinctive quarries within the areas visited or controlled by particular social groups. For a recent utilization of this research strategy

refer to the study in Nevada by Weide (1974). At this time, there has been little or no effort to determine if there is variability between the different quarries of Pedernal chert. Until it is determined whether or not there is, it is essential to protect, or at least obtain a thoroughly representative sample from each recognizable quarry. In the present case, the nodules of chert are almost certainly not derived from Pedernal Peak. Rather, they would appear to be residuum from the erosion of layers of Abiquiu tuff that formerly extended over this area (Church and Hack 1939), or are present, but hidden on the talus slope of the mesa to the south. The material in this quarry then, could derive from a distinctive range of the Pedernal chert member of the Abiquiu tuff that would serve to differentiate it from other quarries utilized in the Piedra Lumbre Valley.

There can be little question that the quarry was utilized by the inhabitants of the Piedra Lumbre Valley and thus was integrally related to the exploitative patterns of the cultural systems previously recognized in the Abiquiu Reservoir District (Schaafsma 1976). The possibility that the chert of this locality may prove to be recognizably distinctive could serve to make it a significant part of the overall research design quest to discriminate social boundaries in the valley. The quarry is definitely functionally related to the cultures of the District; it may prove to be useful in addressing the research problems related to the analysis of these sites. The site must therefore, be treated in the context of the other sites from the district, and in the same manner.

It was previously recommended that all the sites reported from the Abiquiu Reservoir District be extended protection by being included in a district that should be nominated to the National Register of Historic Places (Schaafsma 1976:227). This recommendation is herewith reiterated, and it is recommended that site AR-603 be included with the previously nominated sites as part of a district to be included on the National Register of Historic Places.

Should it become necessary to disturb in any way the archaeological resources identified as AR-603, it is recommended that the appropriate research program be designed. The information content of the quarry could be recovered by a sampling scheme that obtained a thoroughly representative sample of the material type range as well as the kinds of cores, flakes and so forth that are represented. The potential hunting area identified south of the highway would require the complete recovery of the lithics on the knoll at BM 10D-4 (complete in order to obtain a large enough sample to work with), collection of a representative sample of tools reflecting the hunting tasks that took place on the slope, and a consideration of the distribution of isolated tools and the topography. An effort to obtain as large a sample as possible of the repatinated tools north of the road should accompany any mitigative program. The obsidian area should be adequately sampled, as well as sub-surface tested to seek buried features.

An indirect form of impact that could severely modify the archaeological record of this area could come from rock hounds who would

perceive these artifacts as "agates" and collect them to make bolo ties and other items of this nature. Such collecting is perhaps best countered by not making the area attractive to casual visitors. With the power poles, chained gates, fences, graded road cuts and so forth that are present today, this should be no problem. However, it remains a possible source of attrition of the archaeological resource and should be monitored and controlled if necessary.

SITE AR-102

General: The site is situated on a level terrace on the south side of the confluence of Canõnes Creek and the Chama River (Fig. 1). The area encompassed by the site is approximately 1/8 mile east-west and extends from a bluff above the Chama on the east to a steep arroyo on the west (map). The actual north limit is undetermined because this area was covered by the lake at the time it was surveyed (May 7, 1975) and during the present project. At one place (Area B) artifacts extended to the water level at 6159 elevation. Presumably, the original limit on the north was the beginning of the steep slope into Canõnes Creek -as at Area C (discussed below). The southern limit of the site is marked by the beginning of the steep talus slope leading to the point some 200 feet above. The talus slope begins approximately at elevation 6220, as indicated by driftwood from the 1973 flood.

As indicated by Moberly's site description, the area is clearly divided into several components or areas. The archaeological remains consist almost entirely of lithics, there being no structures, hearths

or ceramics. The survey description identified five discrete lithic areas, to which the labels A,B,C,D and E were assigned. All of these lithic areas were readily relocatable and the original designations have been retained (see map and discussion below). In addition to the five areas observed on survey, a sixth area (Area F) was observed. While the lithic concentrations in the designated areas proved to be quite dense, they are separated by flat to gently sloping areas of very low artifact density. All of the areas are elevated locations, which, with the exception of Area E, are on the terrace margin.

Geologically, the terrace is at least partially quaternary alluvium. The boulder concentrations are dominated by basalt, and some of these might be colluvial in origin, from the slope to the south (area of AR-603). Mixed with these basalt boulders and cobbles are many naturally occurring nodules of Pedernal chert. Again, they seem to be partly alluvial and partly colluvial. The alluvial nodules could thus represent eroded material from the Cañones Creek drainage. As with AR-603, these natural nodules of chert were quarried in place, and most of the lithic areas appear to represent quarrying waste.

Two of the areas (A and B) are in locations which received extensive wave damage. Area A, in particular (Fig. 2) has definite strand lines formed by waves as the lake stood at different levels. Caliche deposits on a number of boulders in Area A (Fig. 3) document the erosion of up to 25 cm. of surface soil from this affected slope.

The purpose of the present project was to collect a sample of the cultural material from the site in order to mitigate the impact to the site that could derive from collecting by visitors and other effects (driving, camping etc.) that relate to the increasing useage of the terrace as a camping and fishing locality (Fig. 4).

Method: In order to control collections at site AR-102, a grid system was established over the entire terrace (Map 2). This grid extended from a true north-south baseline established approximately over Area E. A perpendicular line was extended to the steep arroyo bank on the west. Grid designations began with a point A-1 in the water on the northwest corner. From this system of baselines, local grid systems were staked out as required to collect the areas. As with all the grid systems used at Abiquiu Reservoir, the grids are 3 x 3 meters in size. This allows for ready comparison of density values between sites, as well as being the most convenient size for analysis of most sites of this nature. While all of these grids are potentially divisible into one meter square subdivisions, there was no apparent need to use this finer control.

Inspection of Areas A and B showed that wave action and soil erosion had disrupted any original intra-site spatial distribution. To grid collect such a disturbed area would be meaningless. Accordingly, these two areas were bulk collected with divisions being made only in reference to gross topographic divisions that might still have some provenience information latent in them.

Areas C, E and F, on the other hand, showed no caliche exposure on the boulders (Fig. 3), gravel, strand lines or other indications that they had been disrupted by inundation. Accordingly, it was assumed that the lithics were still essentially in place; certainly within limits of 3 x 3 meter grid square divisions. These three areas were therefore gridded and collected. It was not possible to either grid or bulk collect Area D. In a sense, we traded the newly found Area F for Area D, because the former was richer in lithics and gave no suggestions of disruption. We were ambivalent about the integrity of Area D because of several recent campfires and piles of lithics beside them, which indicated idle collection by visitors. We were also reluctant to collect it without a grid because there were few indications that it had been disturbed by inundation so that most of the remaining lithics are probably in situ.

Overall, 134 grids were surface collected. Approximately, 500 pounds of lithics were obtained. In terms of gross bulk, this probably is close to the amount of material that was recovered during the much more extensive Phase IV excavations in 1975 (Schaafsma 1977). While most of this bulk is attributable to the large size of the recovered items, there nevertheless were many lithics, some of the richer grids yielding well over 100 items each.

Photographs were taken of the areas and drawings were made of each area with grid collections.

Description of Areas:

- 1) Area A: A rocky point of the talus slope comes to the

terrace edge on the east side and meets a bluff above the Chama. The lowest part of this point is an elevated bench whose top is about elevation 6200. The flat top of this bench has been graded in connection with making the conveyor belt cut that brought material to the dam. This cut separates Area A from the talus to the south. The northwest side of the bench is a slope (Fig. 2) that has been eroded by wave action, possibly during the Spring, 1975 flood (elevation 6190 feet).

The lithics are abundant on the northwest slope, where they apparently are weathering out of the gravel of the bench. As mentioned, the fact that this slope had been eroded, as much as 25 cm., indicated that grid control would be meaningless. The lithics were collected with three bulk collections. The first was the lowest slope (approximately column DI of the grid). Much of this material has apparently been washed down from the wave action area. The second collection was from the zone of wave action in the middle of the slope. Most of the lithics came from here, and there are numerous large cores, shatter, decortication flakes and other remains of quarrying. The third collection was from the upper slope and bench top, above the zone of wave action. The lithics in this area tended to be smaller, and there may have been some kind of camping area that was disturbed when the terrace top was graded.

2) Area B: There is a gravel point on the northeast corner of the site terrace (Fig. 4) which has been heavily disturbed by wave action, vehicle traffic and the construction of the ramp for the conveyor belt. Lithics were abundant in this area, right to the water's

edge (contour 6159). The amount of disturbance indicated that grid control would be meaningless.

The lithics were collected by two bulk collections. The first (FS #100) was in the upper area, to the east and west of the site baseline. This sloping area had been heavily affected by wave action and the conveyor belt ramp. The soil had generally been eroded, exposing the gravel of the terrace. Much of the material was quarry debris of various types. The second collection (FS #101) was from the narrow point of land just above water level that was northeast of the conveyor belt ramp. Again, the bulk of this material appears to be quarry debris, from working the naturally occurring nodules in in the terrace gravel.

3) Area C: This is an elevated area on the northern edge of the terrace (map 2). There is a concentration of basalt boulders in this area, with many naturally occurring nodules of chert. There are many cores, decortication flakes and other indications that the lithics occurring in the gravel were quarried here. Additionally, there are a considerable number of smaller utilized tools (flake knives, scrapers etc.) indicating that the area also served as a limited campsite - perhaps while quarrying the chert.

A grid system was extended over Area C. There were no exposed portions on the basalt boulders, and there were no other indications that the area had been disrupted by wave action. It, of course, had been inundated (at least in 1973 and 1975), but there was no effect from

waves, and the lithics were mainly in a flat area on the terrace margin. A total of 22 grids were collected. All of these grids yielded abundant amounts of lithics, over 100 in some of the central grids. There were no finished artifacts, fire-cracked rocks or other signs of hearths. The nature of the lithics indicated that this was mainly a quarry, but the number of small flake tools suggested that the location had also served as a camp.

4) Area D: The northwestern corner of the site terrace is an elevated area with numerous basalt boulders, alluvial gravels and nodules of Pedernal chert. The top and slopes of this area have many lithics. A casual inspection of them indicated that most were large pieces of quarry debris. As mentioned, we did not collect this area, because we were ambivalent about the amount of disturbance that had been caused by modern campers and collectors. The area does not appear to have been disrupted by wave action. It is assumed that it is similar to the nearby and similarly situated Area F, and that in the overall analysis of the total site, Area F will provide an adequate idea of what this kind of locality has to offer.

5) Area E: The central part of the site terrace is a wide, elevated bench that slopes to a wide grassy area to the west which has very few lithics, and slopes to a short drainage basin on the east that separated this bench from the rocky talus slope above Area A. A few isolated lithics are found on the central crest of this bench near the north-south baseline. These isolated lithics were not collect-

ed, but were examined in the field for possible finished artifacts. The main lithic area was in a limited area on the crest of the northern edge of the bench. The bench below slopes rapidly to the north and east onto a wide gentle slope that extends to the terrace edge near Area C and Area B.

This area of maximum lithic density was collected with a grid system. While lithics were found in all 21 grids collected, the maximum concentration was among several basalt boulders in grids BK-45 and BL-45. This was an area where several large boulder nodules of Pedernal chert had been heavily worked resulting in a dense pile of core fragments, flakes and shatter (Fig. 5). There were no fire-cracked rocks and only a few utilized flake tools. Short-term camps may have been made here but the main activity was quarrying the in situ natural nodules of chert.

6) Area F: This area was apparently not noted on the survey, unless it had been included with Area D. Area D lies about 100 meters to the north and is separated from this elevated area by a wide area of nearly sterile sandy soil. However, like Area D, it is an elevated concentration of basalt boulders, gravel and chert nodules on the terrace margin (Fig. 1). There was no indication that the main lithic area had been disturbed by inundation or by modern collectors (aside from the ubiquitous point hunters that probably stripped areas like this 30 years ago).

An area consisting of 90 grids was collected, which covered most of the elevated knoll. All of the original lithic area was

collected except a small area on the north slope. Approximately 300 pounds of lithics were recovered from this area. The main concentration was on the nearly flat top of the knoll, where the basalt boulders, gravel and naturally occurring chert nodules were thickest. The lithics became less dense toward the east, with only a few occurring in the eastern column collected (column U). This eastern slope grades into the area of sandy soil to the east between here and the elevated bench where Area E is located.

The greatest number of lithics are indicative of quarrying activities. On the other hand, as at Area C, there are also many small utilized flake tools indicating that short term camps were made. An Archaic type, one-hand mano was found in grid T-78, on the southern slope, again indicating that camps were made here. No fire-cracked rocks or other hearth indications were noted.

Artifacts: There is no pretense made that the approximately 500 pounds of lithics recovered from AR-102 have been analysed. The observations offered above are based upon field impressions and the inspection of several bags in somewhat more detail. It is assumed that the object of this project was the recovery of these items, and that an appropriate analysis will be conducted at some time in the future.

Evaluation: Overall, site AR-102 primarily was a quarrying area. There are six discrete loci recognized that are correlated with the occurrence of natural deposits of chert nodules. Several of the areas have utilized flakes and other tools, and indicate that short-term

camping accompanied the quarrying activities. The nature of the collecting areas, and the geological nature of the deposits indicate that this locality was distinct from AR-603 on the talus slope above and should continue to be regarded as separate from the latter site. This observation is made even though the talus slope of lower AR-603 probably continues to the southern edge of the AR-102 terrace.

The sampling procedure employed to recover the lithics from AR-102 should provide an adequate sample for any future use. There should be no need to conduct additional surface collections at AR-102. Any items casually picked up by visitors, or otherwise disturbed can be regarded as offering little information beyond the material collected on this project. The only possible work that might be conducted at AR-102 in the future would be a limited amount of sub-surface testing in areas C,E and F to determine if there are buried features (hearths etc.) present and to determine to what depth the lithics and quarry debris extend. Judging by the depth to which some of the lithics extended below the surface (10 to 15 cm.) it is clear that some lithic material is present below the modern surface. Aside from the possibility of subsurface material, the results of the present project can be regarded as adequately recovering the surface data from this site.

When the artifacts are more critically analysed, they can be systematically compared with the other sites analysed in Abiquiu Reservoir. Until this is done, it is concluded that this is only partially a quarrying locality, and one would expect that material from

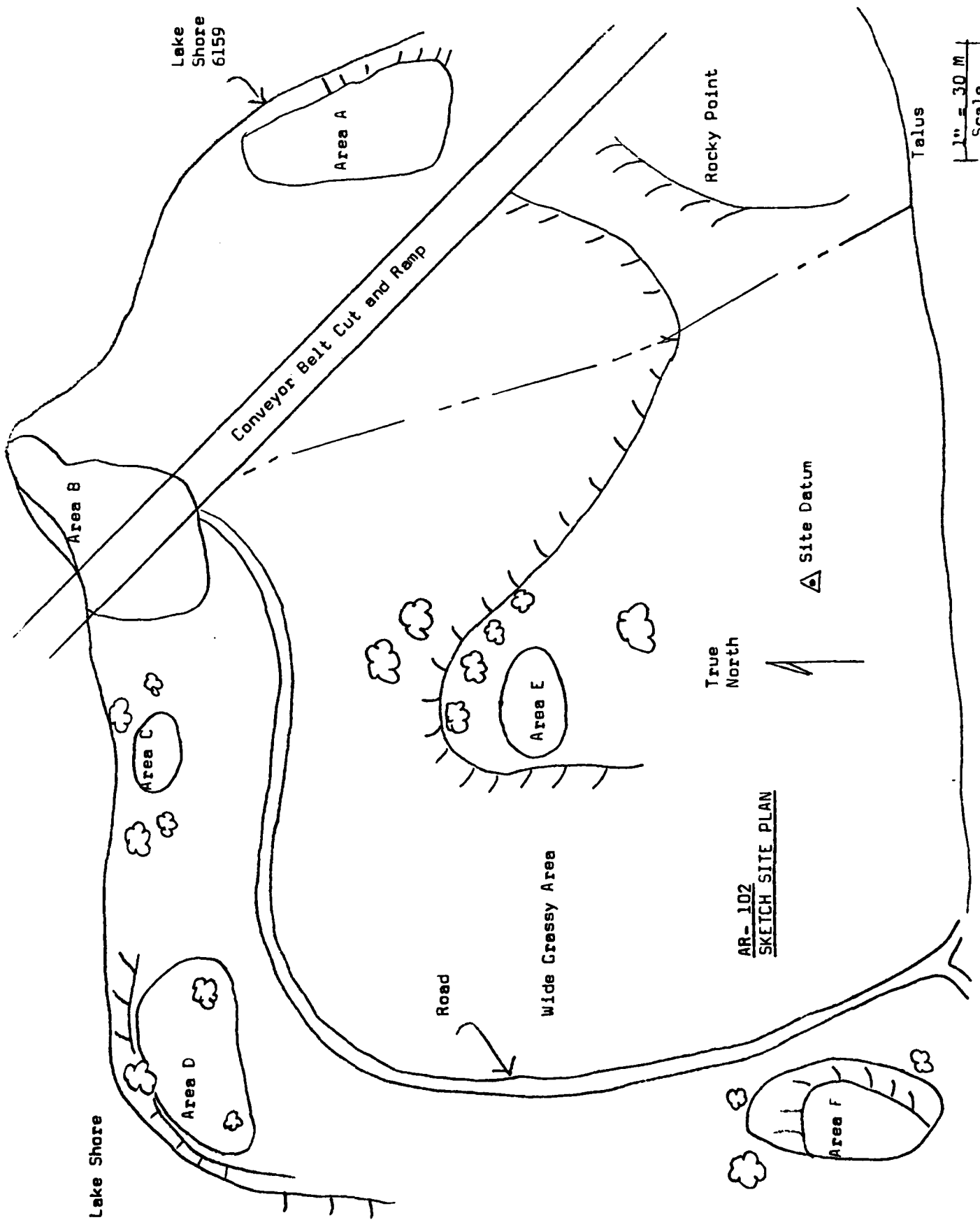
this location would have been carried to habitation sites elsewhere in the district as well as out of the district.

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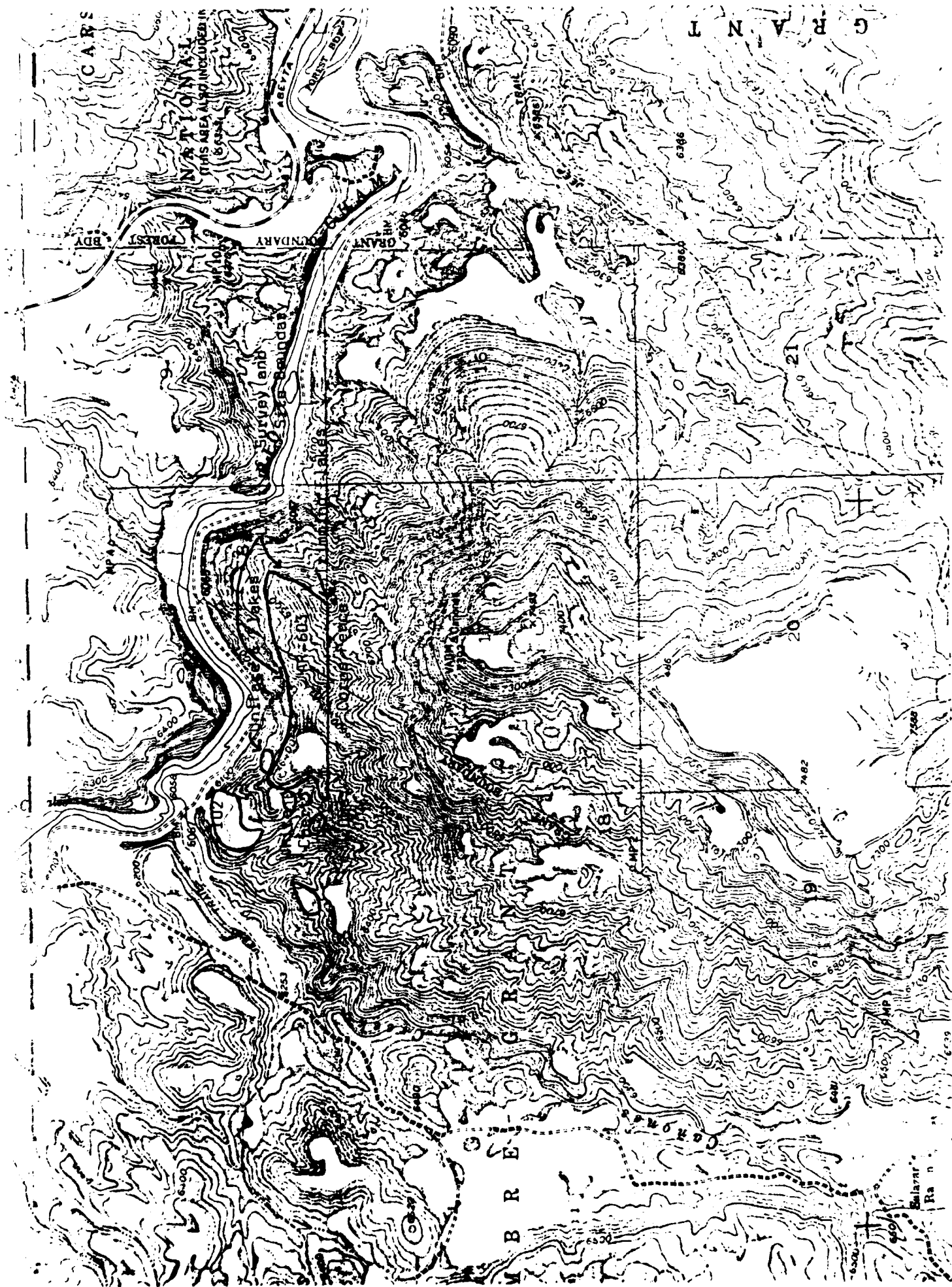
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AR-102
SKETCH SITE PLAN

1" = 30 M
Scale



END

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