ARCHEOLOGICAL SIGNIFICANCE TESTING AT SITES 3NW16 AND 3NW41 NEAR CARVER BRIDGE, NEWTON COUNTY, ARKANSAS, IN THE BUFFALO NATIONAL RIVER

by

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and

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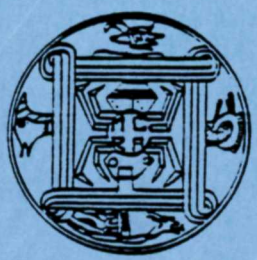

Final Report

Report prepared by Mid-Continental Research Associates,
RR2, Box 270, Lowell, Arkansas, 72745
for the National Park Service, Southwest Division,
Santa Fe, New Mexico
in accordance with purchase order No. PX-7029-6-0484

April 1987

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ABSTRACT

Archeological investigations were conducted at 3NW16 and 3NW41, located along the Buffalo National River, Newton County, Arkansas, by Mid-Continental Research Associates during the summer of 1986. These investigations were initiated in response to planned construction by the National Park Service which would impact these resources. To proceed with this planned activity the National Park Service is required by various federal laws and regulations to determine the National Register of Historic Places significance of the resources to be impacted.

Subsurface investigations at 3NW16 determined that the prehistoric component present is not significant. An informant interview, subsurface testing, and a historical account of the project area all indicated that the historic occupation of 3NW16 is not significant. An analysis of the Historic Carver community structure indicates that it was dispersed on both sides of the Carver River and outside the impact area.

Subsurface investigations at 3NW41 recorded the presence of intact buried cultural deposits. In addition, the artifact analysis indicated this site functioned primarily as a workshop site. 3NW41 is significant and eligible for inclusion on the National Register of Historic Places.

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MANAGEMENT SUMMARY

History and Purpose of the Investigation

In July 1986 the National Park Service, Southwest Region, Santa Fe, New Mexico contracted with Mid-Continental Research Associates to conduct archeological testing of 3NW16 and 3NW41 located in Newton County, Arkansas. Construction of a campground was planned for the area occupied by 3NW16 with possible expansion into the area in which 3NW41 is located at a later date.

The scope-of-work indicated the presence of buried archeological deposits at 3NW16. Testing to determine National Register of Historic Places eligibility was needed. Archeological testing of 3NW41 to determine National Register of Historic Places eligibility was also required. In addition, the site limits for 3NW16 and 3NW41 were to be established during the course of this project.

Survey Conditions and Constraints

Constraints experienced during the present project were a product of the prevailing survey conditions. The area in which 3NW16 is located was overgrown with waist to chest high weeds. Except for a dirt road through the site, surface visibility was 0 per cent. The dirt road was, for the most part, clear of vegetation and offered the only opportunity to inspect the surface of 3NW16.

Excavation of the shovel tests at 3NW16 was extremely difficult due to two factors. First, there had been very little rain in the area for some time, resulting in an extremely hard, compact soil. This situation was amplified by the presence of a dense concentration of indigenous good quality chert in the soil. The chert was especially prevalent at the north and west-northwest sides of the site.

The area encompassing 3NW41 was being leased as a hay field at the time of the investigation. The hay in the field had recently been baled and was only ankle high. Surface visibility was 0 per cent except for the road through the site.

Though the soil was dry and compact at 3NW41 excavation of shovel tests was considerably easier due to the absence of indigenous pieces of chert and the higher concentration of sand.

Methods

Investigation of the areas encompassed by 3NW16 and 3NW41 was conducted in three phases. The first phase was the inspection of the site files at the Office of the State

Archeologist (OSA). The second phase entailed the recording of the ownership history of the parcels of land being investigated. Also, Mrs Ruth Norton, an individual who has lived in the Carver bridge area for approximately 50 years, was interviewed concerning the past owners of the land, land use practices, and what kind of activities occurred in the project area. The third phase of the project was the actual investigation of the archeological deposits present at 3NW16 and 3NW41.

Due to the field conditions present at the time of the project (See Survey Conditions and Constraints) investigations centered around the use of shovel tests, stripped areas, and backhoe trenches. To facilitate this discussion each site is presented separately.

3NW16

A total of 29 shovel tests ranging in depth from 37cm to 50cm below the surface were excavated. The distance between each shovel test was approximately 25m. The soil from each shovel test was carefully inspected for artifacts which were collected.

Ten 5m x 5m stripped areas were excavated by the backhoe. The floor of each stripped area was cleaned and inspected for the presence of features. In addition, the backdirt from the stripped areas was inspected for artifacts, which were collected.

Three backhoe trenches were ecavated at different elevation points on the site. These ranged in size from 3m to 4.92m in length and .78m to 1.24m in depth. One wall of each trench was cleaned and a profile drawn. Information recorded included the Munsell color reading and soil texture of each strata identified. In addition, artifacts below the plowzone were point plotted and bagged according to depth.

3NW41

Techniques employed at 3NW41 were essentially the same as those used at 3NW16. A total of 39 shovel tests were excavated ranging in depth from 30cm to 50cm below the surface. The soil removed in the shovel tests was inspected for artifacts, and those found were collected.

Two backhoe trenches were excavated measuring 7m in length and 1.30m and 1.40m in depth. One wall of each trench was cleaned and a profile drawn. The strata were identified by the Munsell color reading and soil texture. Artifacts below the plowzone were point-plotted and bagged according to depth.

Fifteen stripped areas were excavated across the site by the backhoe. Again, the backdirt from each stripped area was inspected for artifacts. The floor of each stripped area was cleaned and inspected for features.

Results

3NW16

Information retrieved from the OSA was extremely general in nature, dealing with the location, surface visibility and a notation that it could be a rich site due to the density of material on the surface. The sequence of ownership from the time the land was purchased from the U.S. Government to 1977 was obtained from the county courthouse at Jasper, Arkansas.

Preliminary analysis of the subsurface investigations at 3NW16 indicates that this site extends to 25cm below the surface. No artifacts were recovered in the shovel tests below 25cm except for the extreme northeast shovel test where artifacts extended to a maximum depth of 35cm below the surface.

No artifacts were recorded below the plowzone in two of the three backhoe trenches excavated. In the third backhoe trench three flakes were recorded at depths ranging from 37cm to 50cm below the surface. These, however, were positioned in a vertical line and their context was suspect in light of the total absence of additional cultural evidence or anthropocized soils.

The stripped areas (SAs) excavated at 3NW16 failed to expose any features. However, the extreme northwest stripped area uncovered the presence of disturbance to a minimum depth of 30cm in that area. A piece of barb wire was present in the wall of the stripped area at that depth.

No diagnostic artifacts were recovered during the course of the project at 3NW16. The shovel tests, stripped areas, and backhoe trenches indicate that all material recovered was contained in the plowzone which was 25-35cm thick. This site is on a higher and older terrace than 3NW41 which was laid down in pre Homo Tempus. We believe that the low artifact density and lack of integrity due to plow and erosion (the site surface is currently a slope) makes this site ineligible for nomination to the National Register for Historic Places.

3NW41

Information from the OSA concerning 3NW41 was general in nature. The location, condition of the site, and the possibility that it functioned as an Archaic workshop were noted on the site form. The ownership line and past land use practices were the same as those noted for 3NW16.

Shovel tests at 3NW41 recovered artifacts to a minimum depth of 50cm below the surface with an obvious decrease in density and depth between 3NW16 and 3NW41.

No cultural features were recorded in any of the 15 stripped areas excavated.

Two backhoe trenches were excavated at different elevation points on the site. One backhoe trench recorded the presence of artifacts to a minimum depth of one meter below the surface. In addition, two cultural zones were noted based on the linear concentration of artifacts at 42cm and 82cm below the surface. The second backhoe trench had artifacts extending to 68cm below the surface.

Preliminary analysis indicates that temporally diagnostic artifacts were recovered from 3NW41. These include Stone Square Stemmed, San Patrice, Carrolton and Delhi points representative of Early Archaic to Woodland. Other tools recovered include large bifaces, pitted cobbles, grinding stones and a large amount of lithic debris. This site contains intact stratified deposits to a depth of at least a meter. It is likely that in some areas there are deeper deposits. These appear to be isolable components in which a variety of activities were carried out. This site clearly has data which can answer a number of research problems contained in the State Plan (Davis 1982).

3NW16 and 3NW41

Present evidence indicates 3NW16 and 3NW41 are and should be considered separate sites. Each has a separate identifiable main site area. Each is located on a different topographic land form and the geomorphic context is different for 3NW16 and 3NW41. This area will be expanded and discussed in the forthcoming report.

Recommendations

Archeological clearance is recommended for the area encompassed by 3NW16 for the construction of the campground as planned.

Based on observations in the field and a preliminary analysis of the data recovered from 3NW41, nomination to the National Register of Historic Places will be pursued for this site.

CHAPTER 1

INTRODUCTION

An archeological testing program of 3NW16 and 3NW41, located in Newton County, Arkansas (Figure 1), was conducted by Mid-Continental Research Associates (MCRA) for the National Park Service (NPS), Southwest Region, Santa Fe, New Mexico . The investigations were initiated in response to recommendations (see Previous Archeological Research) for the project area based on earlier fieldwork completed by Historic Preservation Associates (Klinger and Hinkle 1986).

The scope-of-work for this project, the campground facilities and canoe launch area presently planned, encompasses approximately 5.5 acres within the area containing 3NW16. Within this area the proposed work consists of: 1) 900 linear feet of right-of-way for access road construction (approximately 30 feet wide), including approximately 900 cubic yards of excavation and 2700 cubic yards of fill, 2) a canoe launch area along the river measuring approximately 200 by 50 feet, 3) a parking area measuring 20 by 200 feet located adjacent to the upper segment of the access road, 4) a five-acre site along the lower segment to be used as a primitive campground, and 5) a pit toilet located within the campground (Appendix B).

Conversation with Mr. Bill Cunningham (NPS employee) concerning the construction of the above facilities indicated that most of the earth moving will be done in connection with building the access road. To control water runoff and direct it away from the campground a shallow ditch will be constructed along the edge of the road. In addition the road will be graded to direct water into that ditch. These activities will be located on the eroding upland terrace and not on the limited alluvial areas of 3NW16. Construction of the parking lot will entail depositing fill and covering it with gravel with no earth excavation anticipated on the archeological sites for this facility.

While no construction was planned for the area occupied by 3NW41, this location was viewed as an area for the potential expansion of the planned campground if the need arose (Bill Cunningham: personal communication).

Prior to beginning the fieldwork, Mr. Bill Cunningham walked over the proposed construction area with Michael Sierzchula (project archeologist) roughly establishing the areas to be impacted and the nature of the disturbance for each area. MCRA personnel Paul Baumann, Michael Chapman, Kathryn King, and

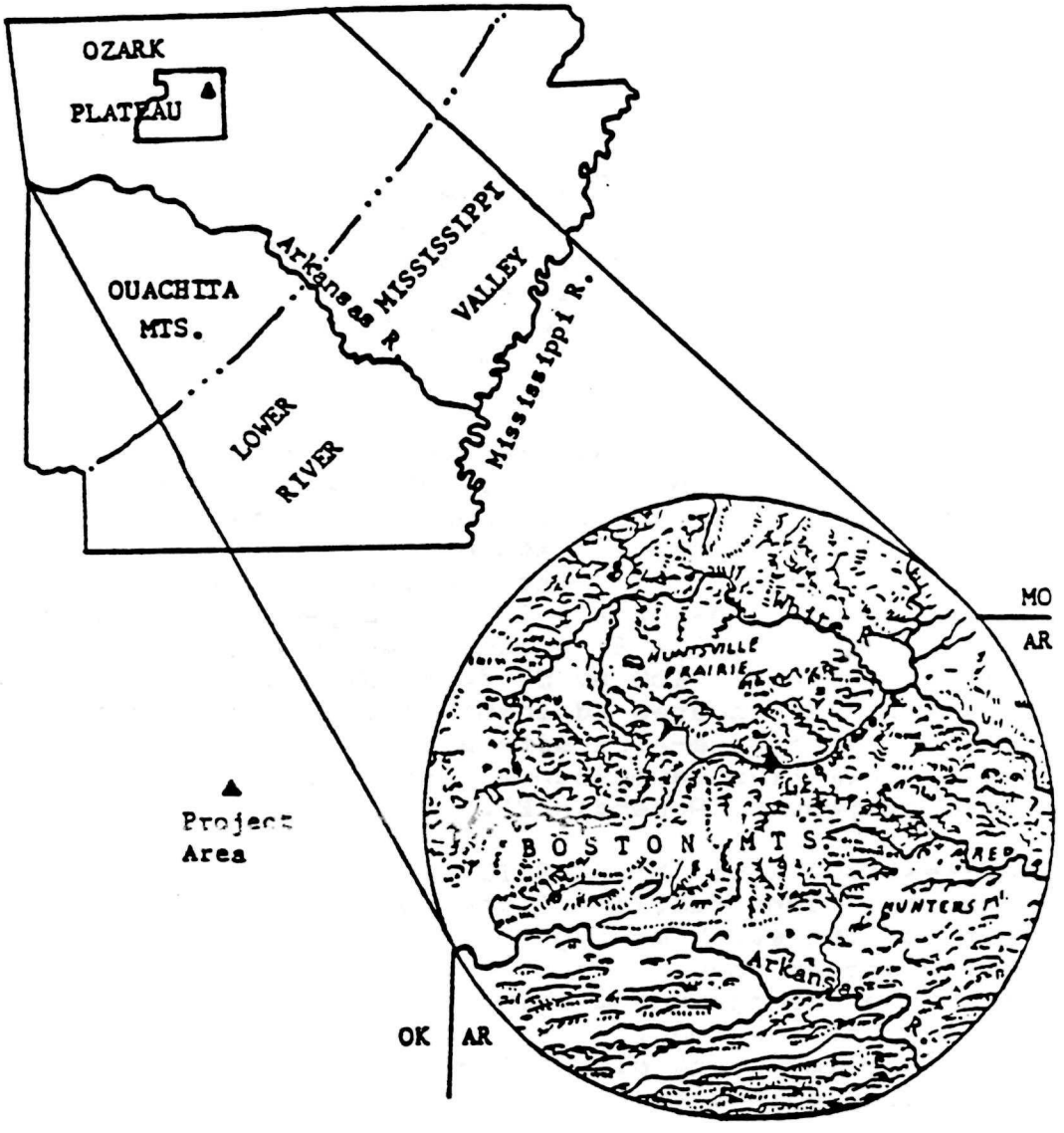

Figure 1. Project area location.

Michael Sierzchula conducted the fieldwork from July 17 to July 19, 1986. The artifacts recovered during the course of this project were returned to the MCRA laboratory facilities in Lowell, Arkansas, where they were processed and analyzed. The artifacts, maps and other data recovered during the testing of 3NW16 and 3NW41 will be curated at National Park Service Headquarters in Harrison, Arkansas.

The purpose of the fieldwork was threefold. First, the ownership history of the project area was to be established with investigation of this land's function and its relationship to the community of Carver. Second, a level of fieldwork adequate to establish the significance of 3NW16 as it relates to the criteria of the National Register of Historic Places was to be conducted. Finally, MCRA investigations were to determine the vertical and horizontal extent of the combined site areas of 3NW16 and 3NW41 and to assess the data collected in terms of National Register eligibility. A report documenting the methods used, findings, interpretations, and recommendations for the project area was to be submitted to the NPS at the conclusion of this project (Appendix B).

This project was to serve as partial fulfillment of the NPS's obligation under the Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act of 1966 (as amended in 1980), P.L. 94-422, Executive Order #11593, NPS guidelines and A State Plan for the Conservation of Archeological Resources in Arkansas (Davis 1982).

Project Area Disturbances

The discussion below briefly points out the areas of disturbance for the project area that were observed by MCRA personnel or noted in other information concerning the project area.

3NW16

The direct observation of disturbed areas was effectively negated by the dense growth of weeds in this portion of the project area. However, five different soil-disturbing activities occurred at or near 3NW16. The area was originally wooded (General Land Office Map 1847), and some disturbance was caused during its subsequent clearing.

First, and most obvious, is the construction of State Highway 123 and Carver Bridge west of 3NW16. The area between the road and a line presently identified as the western site limit is steeply sloping and undulating. No confirmed evidence of borrow pits or other forms of land modification were observed in this location (see below). While evidence of these activities could have been erased, if they had occurred, it is questionable whether or not the soil in this location had the properties necessary to be used in road construction.

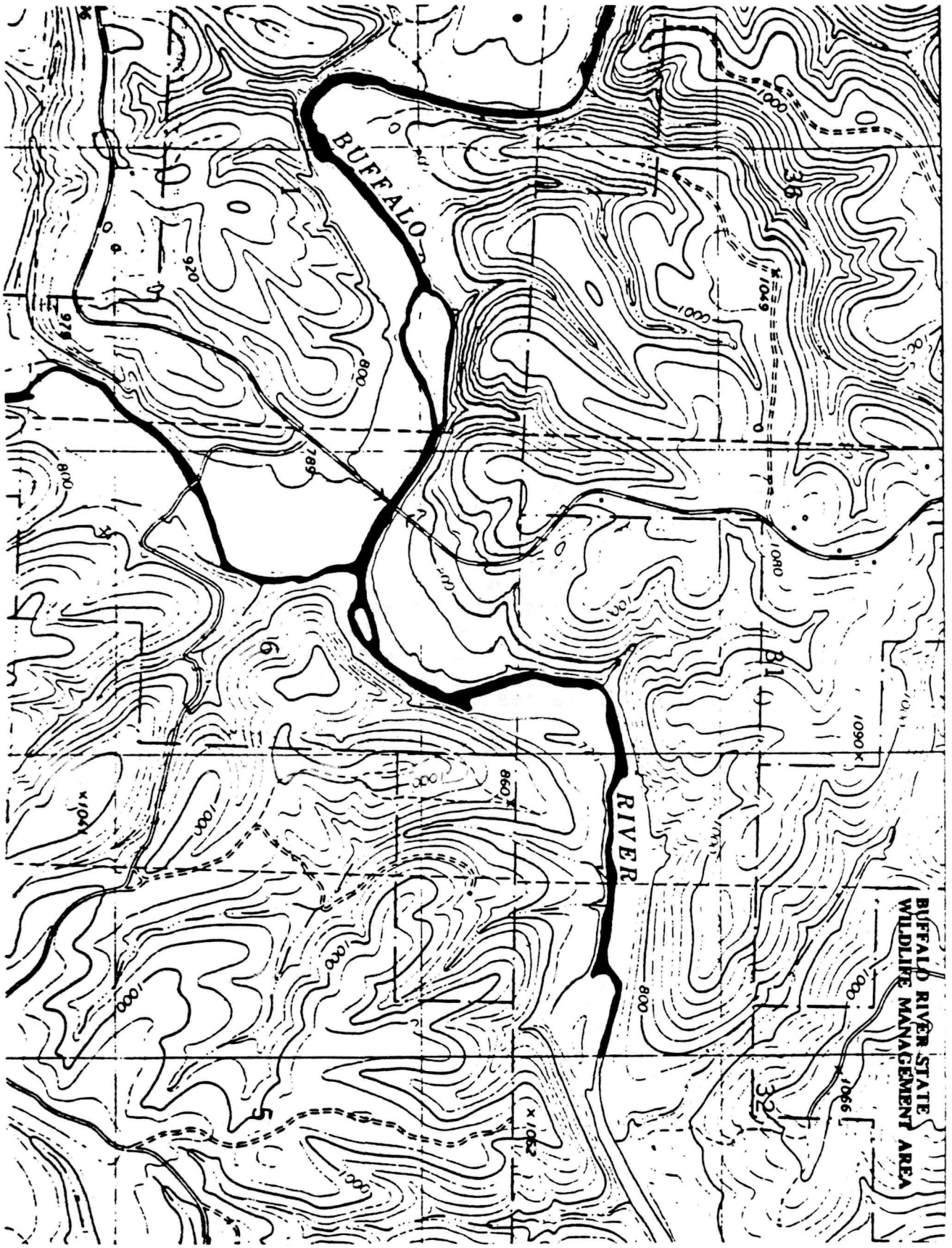

Figure 2. Site areas (After 7.5 Minute Mt. Jucea Quadrangle).

A stock pen and loading area is located north of 3NW16. While shovel tests in this area failed to record the presence of cultural material, it is believed that any activities associated with this area would have caused minimal impact. The impact associated with the stock pen would have been centered around the placement of fence posts, which, based on the dense colluvial deposits present in the soil, would have been shallow.

A saw mill was noted north of 3NW16 on the Arkansas site form. No evidence of its location was observed in the field.

The presence of the general store and Post Office in the project area was identified only through the inspection of the 1933 and 1940 15' quadrangle maps for the project area and an interview with Mrs. Ruth Norton. No evidence of this structure or disturbance which may have occurred during its construction or operation was observed during the course of this project, nor during the one immediately preceding it (Klinger and Hinkle 1986:9).

Farming was conducted within the area occupied by 3NW16. According to the interview with Mrs Ruth Norton, all of the bottomland in the project area was planted in cotton until the 1940's. Plowing was done with mules until the area was switched to pasture, at which time plowing was done with a tractor. HPA noted the presence of a garden in the area of the parking lot and a powerline pole in the project area, each of which would have caused negligible or very localized disturbance.

While it could not be confirmed that disturbance had occurred along the northwest (near shovel test 54 and stripped areas (SA) 4) boundary of this site, it is believed that historical activities have modified this portion of the project area. This low spot is completely surrounded by areas of higher elevation (Figure 7). This situation is unnatural, since the drainage area paralleling the paved road has been effectively cut off by the dirt road. The dirt road essentially functions as a low dam in this instance. It is possible that soil from the low area was used to build up the road. It is not anticipated that a large amount of water would flow through this area given the limited watershed draining into it. A piece of rusted barbed wire was recorded in the wall of SA 4 at 32cm below the surface. In addition, the B horizon was not exposed in shovel test 54, unlike others on this portion of the site.

3NW41

Farming was the only observed disturbance in the area encompassed by 3NW41. Mrs. Ruth Norton pointed out that this field was in cotton (plowed by mules), then pasture (plowed by tractor). During a walkover of the area, evidence was found in a hedgerow along the northwest edge of the site, indicating that soil erosion and/or deflation had lowered the elevation of the field by about 30cm.

Field Conditions

The discussion below details the conditions encountered during the course of the investigations conducted at 3NW16 and 3NW41. Each site is discussed separately because of the different conditions present at each location. However, two weather related situations that were universal to the project area are as follows. Temperatures hovered around the century mark during the entire project. This situation was amplified by the almost total lack of cloud cover. Second, the project area had not received any appreciable amounts of precipitation for some time resulting in a very dry, compact soil in the upper 20cm to 25cm.

3NW16

Surface visibility of the area encompassed by 3NW16 was zero percent due to the presence of waist- to chest-high weeds. In fact, the weeds were sufficiently thick along the north edge of the project area that they were able to support a 4.5 foot long blacksnake two feet off the ground. The only opportunity to inspect the ground surface of this site was located on the dirt road which passes through 3NW16. Surface visibility on this road was 90 to 100 percent. Due to these conditions, shovel tests, stripped back areas (SA), and the topography of the project area were the primary means by which the site boundaries were established.

A good quality, angular, white chert (colluvial deposits), which hindered the excavation of the shovel tests, was found to occur across the area occupied by 3NW16. Shovel tests found the densest concentrations located at the north and west northwest sides of the site. A much lesser concentration of much smaller pieces of this chert was found to exist in the upper 25cm along the base of the slope at the south edge of the site.

3NW41

At the time of the investigation the area occupied by 3NW41 was being leased as a hay field, and the grass was ankle high. Surface visibility was essentially 0 percent. A small number of very restricted areas had a surface visibility of 10 to 30 percent. These, however, were considered insignificant when viewed in the overall context of the acreage being investigated. A dirt road through the site offered the only opportunity to inspect the surface of 3NW41. The surface visibility in this instance was between 90 and 100 percent. Due to these field conditions, shovel tests, SAs, and the topography of the area were primarily used to establish the site boundaries.

The indigenous chert recorded on 3NW16 was found to exist in extremely limited quantities and size in a restricted area along the extreme northwest edge of 3NW41 in the vicinity of SA 1.

CHAPTER 2

ENVIRONMENT

Newton County contains some of the most diverse and extreme topography in the Ozark Mountains. The county is situated on the north slope of the Boston Mountains. Elevations vary between 2578 feet AMSL in the southwest part of the county where the Buffalo River rises and 740 feet in the northeast part of the county where the Buffalo flows into Searcy County to the east. This is the greatest amount of relief in any county in the Ozarks, and the high elevations in the south are the highest in the Boston Mountains. This highland region is one of the best watered areas of the Ozarks, receiving over 50 inches of precipitation each year (Figure 3).

The project area is on the Upper Buffalo River Valley section of the Ozark Plateau. This is one of the most rugged parts of the Boston Mountains, with more than 1000 feet of local relief being common. The geologic deposits in this area are composed of predominantly flat bedded limestones, sandstone, and shales, which have important inclusions of chert, lead and other minerals. Due to several nearby faults, this section of outcrops has been uplifted and has exposed underlying Ordovician (St. Peters sandstone and Everton Limestone) and Siluran strata (Lafferty, St. Clair and Brassfield Limestones) which are only commonly exposed sixty miles farther east. The project area is at the head of the deeply incised Middle section of the Buffalo River, which cuts through the Boone Limestone (Haley et al. 1976; NPS 1985:17). Therefore, this particular section of the river has a diversity of exposed geological formations unparalleled in the Western Arkansas Ozarks. Many of these are known to have been used prehistorically.

The Carver Community is at the head of a bottomland of the Buffalo Valley, with a fairly large meander and creek confluence. The valley floor is at 800 feet (AMSL) and at Carver is about 1/4 mile wide.

The predominant soils of the bottoms are Razort which are well drained soils of the bottoms. Razort soils are generally rock free. Between areas of Razort soil are more poorly drained Pea Ridge soils in swales and Ceda soils on the talus and higher terraces around the valley margins (NPS 1985:21). There are also extensive gravel bars along the Buffalo River. At Site 3NW205 these were an important source of chert for flaking.

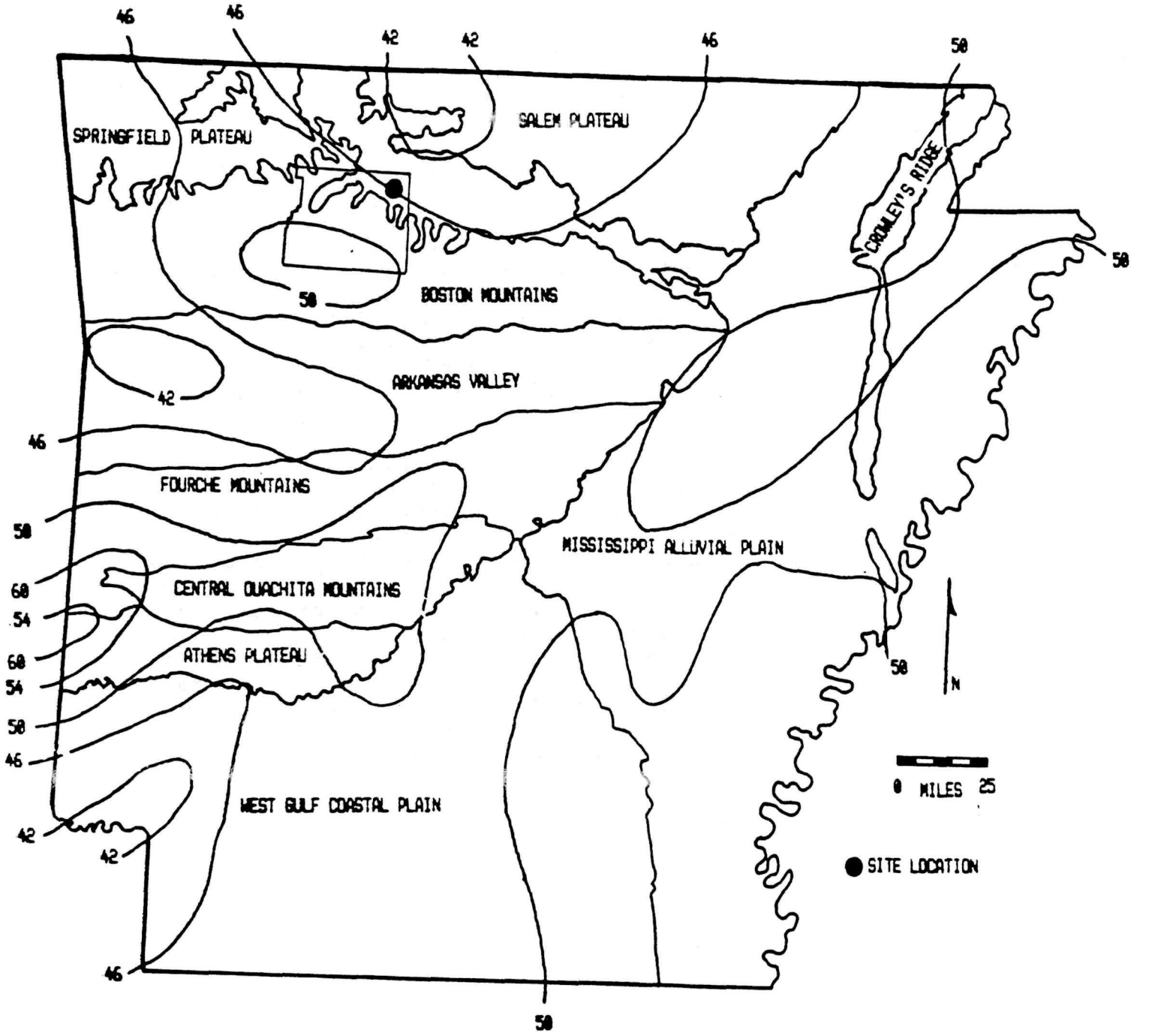

Figure 3. Physiography and precipitation in Arkansas (After Arkansas Department of Planning 1973)

The terrain was formed by the differential erosion of these formations. Today it is composed of remnant ridges, knobs, and incised valleys as much as a mile wide. Between these extremes there are steep slopes (20-90%), which often cover more than 50% of the surface area (Sabo et al. 1982). The flood plains tend to be narrow and constricted except in major river valleys, such as the lower Buffalo and White rivers, where they are a mile or more wide. The vegetation is typical of the Temperate Deciduous Forest biome (Shelford 1963) with upland hardwood forests and lowland beech-hickory forests (Kuchler 1964). These plant communities supported a wide range of fauna. There is evidence that these both have changed considerably over the past 15,000 years (King 1980; Lafferty et al. 1986b). Today the area is covered with upland forests interspersed with pastures which were formerly cultivated. There have also been considerable cultural changes in this and the adjacent regions, which are slowly becoming rather well known through extensive archeological investigations (Raab et al. 1982; Sabo et al. 1982; Morse and Morse 1983, Chapman 1975, 1980; Price and Price 1981; Lafferty et al. 1986a).

CHAPTER 3

PREVIOUS ARCHEOLOGICAL RESEARCH

The Ozark Mountains' archeology is fairly well sketched out in broad patterns, because it has been subjected to nearly a century of investigations, mainly in the many dry bluff shelters present in the region. These contained many perishable artifacts rarely preserved in the eastern United States, which were excavated by museums early in the 20th century (Dellinger 1932; Dellinger and Dickenson 1942; Harrington 1924, 1960; Peabody 1903; Peabody and Moorehead 1904). These excavations formed the corpus of data which has been slowly analyzed over the past 50 years and has been integrated into some more recent work (e.g., Cleland 1965; Gilmore 1931; Payne and Jones 1962; Scholtz 1975, Trubowitz 1980; Fritz 1984).

Beginning in the 1950's a rather large number of Federal construction projects, especially reservoirs, have resulted in a considerable number of archeological projects in and around the Ozark Mountain region. In the White River Basin major work has been conducted in connection with the Table Rock Reservoir (Chapman et al. 1960a-e; Marshall 1956, 1958, 1962, 1963a-d; Marshall et al. 1953; Ware 1963, Wood 1958), Bull Shoals Reservoir (Howard 1951), and Beaver Reservoir (Scholtz 1967; Thomas 1969; Thomas and Davis 1966; Wood 1963). These works, along with extensive important work in several adjacent regions (cf. Ahler 1971; Baerreis 1951, 1953; Cobb 1976; Kay 1980; Spears et al. 1975; Dickson 1982; Price and Price 1978) have recently resulted in several major summaries and syntheses of the regional prehistory (Chapman 1975, 1980, Chapman and Chapman 1983; Sabo et al 1982; Wyckoff 1974) and cultural historic adaptations (Price and Price 1981; Glassie 1968; Rafferty 1980). Many other smaller scale surveys and excavations have been carried out in the region. These are not enumerated here (see: Chapman 1980; Raab et al. 1982; Sabo et al. 1982; Cottier et al. 1973 and AAS 1984 for extensive references to most of this research).

Archeological work in Newton County has increased rapidly in the past several years, mainly due to the development of the Buffalo River and work in the Ozark National Forest. As of December 1985 there were 603 sites recorded in Newton County, the fourth highest number of sites known in an Arkansas county (Davis 1985:9). There has been a rather large number of recent surveys in conjunction with the development of the Buffalo National River (Bradford 1979a, 1979b, 1979c; Klinger and Hinkle 1986; Jones and Abernathy 1979; Klinger 1982; Spears and Lafferty 1985; Wolfman 1974; 1975; 1979). The distribution of archeological sites known in the project area, and in the section of the valley below Ponca, suggests that prehistoric occupation was heavy, with many sites in the bottoms and on the terraces. Interestingly, virtually all of the modern occupation is on the highest terraces above the 100-year flood line (NPS 1985:18-23).

Several testing projects have been carried out (this project; Sierzchula 1981, 1984; Williams et al. 1986; Spears et al. 1986) on the Buffalo River. These projects have consistently identified deeply stratified deposits in the lower terraces. The most extensive of the recent work was the recently completed excavation of 3NW205 and 3NW206 at the Erbie Campground by MCRA. This work has the following implications for the Carver bottoms.

There are 7m high terraces which contain Dalton to Early Archaic components in their oxidized E Horizon soils. Other deposits on these terraces may be expected to span the known prehistoric occupation periods with preserved sub-plowzone features. At 3NW205, which is located on a high terrace, the amount of pottery in the plowzone was very low, however large sherds and bone were recovered in the sub-plowzone features.

Sites are also present in the 1-2m high terraces which comprise the modern flood plain. At site 3NW206 material was recovered to 155cm below surface, with evidence of modern plowing going to 42cm below surface. There was a dense component also recovered at 70cm BS. These implications along with testing in other low terraces on the Buffalo (Sierzchula 1984; Spears et al. 1986) indicate that localized buried deposits are likely to be as much as 2m deep in these terraces. Given the long occupation span and relatively intense occupations reported in the bluff shelters, it is likely that there are some rather intense buried components.

PROJECT AREA HISTORY

To date, archeological investigations for the area encompassed by 3NW16 and 3NW41 have been extremely limited. This situation is reflected by the paucity of information concerning each of the above sites. The following is a brief synopsis of the investigations conducted within the project area.

Archeological sites 3NW16 and 3NW41 were first recorded by an amateur archeologist (Mr. John Newton) in August 1962 and 1967, respectively. Though the area encompassed by both sites was in pasture at the time of discovery, the presence of dense concentrations of cultural material was noted at both locations. Information on the site form specifically noted that 3NW16 could be a rich site and 3NW41 was a possible Archaic workshop. No subsurface investigations were initiated at either location.

The planned construction of a new bridge (Carver Bridge) on Arkansas Highway 123 was believed by Dr. Dan Wolfman, Arkansas Archeological Survey Archeologist at Russellville, to possess the potential for impacting 3NW16. He pointed out this situation in his weekly report (12-16 May 1975) and notes that the District A Highway Engineer states that he was "fairly sure" that the Carver Bridge area had been checked for possible sites. Dr. Wolfman was advised to inspect the site area with Mr. Clell Bond, Arkansas Highway Department Archeologist. No evaluation of the site or report of this work was found by MCRA personnel during the records check for the project area.

On November 7, 1985, Historic Preservation Associates (HPA) (Klinger and Hinkle 1986) conducted a limited testing program of approximately 12 acres encompassing all or parts of sites 3NW16 and 3NW41. These investigations entailed a records search, the surface inspection of areas with adequate visibility, and the excavation of 17 shovel tests, three of which attained a maximum depth of 40cm below the surface. Results from these investigations indicated that cultural material on 3NW16 was primarily restricted to 10cm to 15cm. The integrity of two artifacts found in a shovel test extending 40cm below the surface was questioned by the project archeologist (Klinger and Hinkle 1986:8). The horizontal extent of 3NW16 was not established due, in part, to a perceived boundary conflict with 3NW41.

HPA submitted two recommendations in connection with the work completed on the 12-acre project area (Klinger and Hinkle 1986:9). A recommendation was made to establish 3NW16 and 3NW41 as a single site. This was made based on the apparent continual presence of artifacts in a dirt road that winds through both sites. Second, further testing and archival research was recommended to determine the National Register eligibility of prehistoric and historic components present at 3NW16.

CHAPTER 4

CULTURE HISTORY

The above and other work in adjacent regions have resulted in the definition of the broad pattern of cultural history and prehistory in the Ozark region, which is still very sketchy, with some recent investigators considering it "terra incognita" (Raab et al. 1982:NW-4). There has been a great deal of work done in the bluff shelters. Very few open sites have been excavated, which has seriously constrained our understanding of settlement systems. Therefore, while this may be a fairly well known region in certain respects, much more work needs to be done before the basic contents and definitions of archeological units in space and time are adequate. Presently we have a few key diagnostic types associated with some cultural units; however, the range of the artifact assemblages' variations, and chronological and spatial boundaries are not defined, nor are the ranges of site types known for any of the defined units. The identification of these fundamental questions and problems is an important component of the proposed research, because it is only by making explicit what is known that we can identify what is not known and, therefore, use the data base from a site to contribute to the knowledge of prehistory as required by Criterion D of the NRHP's regulations. The current state of our knowledge of the relevant periods is briefly described below.

Prehistoric Times

The Dalton period (8,500-7,500 B.C.) is fairly well known in the Ozarks with modern controlled excavations from Rogers, Albertson, Tom's Brook, BLM, and Breckenridge Shelters (McMillian 1971, Kay 1980; Dickson 1982; Bartlett 1963, 1964; Lafferty 1984; Wood 1963; Thomas 1969, Price and Kraker 1975). Adjacent areas have also produced some of the better known Dalton components and sites in the central continent, including Graham Cave (Logan 1952), the Sloan site (Morse 1973) and the Brand site (Goodyear 1974). These and other more limited or specialized excavations and analyses have resulted in the identification of a number of important Dalton tools (i.e., Dalton points with a number of resharpening stages, a distinctive adze, spokeshaves, and several varieties of unifacial scrapers, stone abraders, bone awls and needles, mortars, grinding stones and pestles). At least three different site types have been excavated: the bluff shelters, which were seasonal habitation sites, a butchering station (the Brand Site), and a cemetery (Sloan site). The latter two sites are in the lower Mississippi Valley in Northeast Arkansas. Presently we do not have the other part of the seasonal pattern which should be present in the Ozarks, nor have any specialized

activity sites been excavated. Dalton sites are known in a number of locations including high terrace sites. Given the present resource base there are a number of important questions which have been posed concerning this early widespread adaptation to this highland environment.

The Early to Middle Archaic periods (7,500 - 3,000 B.C.) are best known from bluff shelter excavations (Rogers, Jakie's, Calf Creek, Albertson, Breckenridge and Tom's Brook Shelters). During this long period a large number of different projectile point types were produced (i.e. Rice Lobed, Big Sandy, White River Archaic, Hidden Valley, Searcy, Rice Lanceolate, Jakie Stemmed, and Johnson) The Tom's Brook culture is the best known of these and has been defined on the basis of excavations at the Tom's Brook site in the southern Ozarks (Bartlett 1963) and the Paw Paw site (30U22) near Camden. This culture is defined by the presence of Johnson points, hafted end scrapers and notched net sinkers. All of the known sites are bluff shelters and lowland middens (the latter have been excavated only in the Coastal Plain); however the range of site types is still unknown. In summary, the Middle Archaic archeological units are still in their initial stages of definition. We are seriously limited in our understanding of the placement of the units with respect to each other both temporally and spatially. Very little is known of the settlement pattern(s), site types, subsistence, etc. There is also a chronological problem with the termination of what are currently thought of as the Middle Archaic manifestations and the Late Archaic period manifestations. Thus, while we know considerably more than the first half of the archeological record, the information on the Middle Archaic is very biased toward large bluff shelters.

The Late Archaic - Early woodland (3,000 B.C. -A.D. 150) appears to be a continuing adaptation to the wetter conditions in the Ozarks following the dry Hypsithermal. This corresponds to the sub-Boreal climatic episode (Sabo et al 1982). The lithic technologies appear to run without interruption through these periods with ceramics added about the beginning of the present era. Major excavations of these components have taken place at Rogers, Breckenridge, and Albertson shelters and a number of open sites in southern Missouri. A comparatively large number of radiocarbon dates from these manifestations closely date these occupations. Characteristic artifacts include Smith Basal Notched, Stone Square Stemmed, Table Rock Stemmed, Afton Corner Notched, Stone Corner Notched, Langtry, Kings Corner Notched, Pandale, Gary and Uvalde points (Sabo et al. 1982:61-62). Other tools include triangular bifaces, manos, grinding basins, double bitted chipped siltstone axes, atlatl parts and a variety of tools carried over from the earlier periods, such as scrapers, perforators, drills, knives, and spokeshaves. Excavations at the Phillips Spring site have documented the presence of tropical cultigens (squash and gourd) by ~2,200 B.C. (Kay et al. 1980). The assemblages recovered in the bluff shelters from this time period indicate that there was a change in the use from general occupation to specialized hunting/butchering stations (Sabo et

al. 1982:63). At present we have excavated components from the above bluff shelters, and a series of hearths and apparent living floors from Phillips Springs. There are some indications of increasing sedentism in this period; however, the range of site types have not been defined nor do we have an understanding of the details of the relationship of these upland manifestations with their lowland counterparts in the Buffalo and Arkansas river valleys. Late Archaic artifacts are well known from the region, with artifacts usually present on any large multicomponent site. Our understanding of this period in the Ozarks is limited to excavations from a few sites. At present we do not know the spatial limits of any phases (which have not been defined), nor do we have any control over variation in site types and assemblages.

Middle - Late Woodland period (A.D. 150- A.D. 850) was a period of change in the Ozarks. Excavations have recovered components at Albertson, Prall, Rogers, Tom's Brook, Falling Water Falls and Breckenridge shelters (Sabo et al. 1982:64), and at least two settlement pattern studies were conducted (Hoffman et al. 1977; Trubowitz 1980). There is evidence of participation in the "Hopewell Interaction Sphere" (dentate and zone stamped pottery, exotic shell; Sabo et al 1982:64-67) and horticulture is increasing (corn, hoe chips and farmsteads). There is some mound (Hoffman et al. 1977) and cairn construction (Scholtz 1963; Marshall 1956, Charles Nicquette: personal communication), indicating greater social complexity. Typical artifacts include Snyder, Steuben, Dickson, and Waubesa projectile points, and Honey Creek Plain, Cooper Zoned Stamped, and Ozark Zoned ceramics. Most of the dates for the Middle Woodland period come from the adjoining areas of the Missouri Valley (Johnson and Johnson 1975, Kay and Johnson 1977; Chapman 1980) and are consistently between A.D.300 and A.D.700. Albertson Shelter has produced one terminal Late Woodland date of A. D. 850. These dates fit nicely with the later Mississippian period dates which start at ca. A. D. 850 (Sabo et al. 1982:64-70). There is some evidence of architecture in this period as well as mound center construction. A number of large open sites have not been excavated. There appears, therefore, to be a rather large bias in what we know about this important period, again toward the large bluff shelters. There is still a great deal which is not understood about the cultural sequence and changes which came about during this important period. The Late Woodland in this area has been suggested as the underlying precursor to the Mississippian, which came crashing into the area with the introduction (Invention ?; cf. Price and Price 1981) of shell-tempered pottery and the introduction of the bow and arrow around A. D. 850.

The Mississippi period (A.D. 850-1650) is known in the Ozarks from a fairly large number of excavations. These include dated assemblages from the Huntsville mounds, Albertson, Bonke, Loftin, Vaughn, and Jakie Shelters (Kay 1982). There are at least two cultural units defined for the Ozarks, and there is continuing discussion about the identity of these and their connection. These are the Caddo mound centers in Northwest Arkansas and

portions of the adjoining states (cf. Sabo et al. 1982:67-75) and the stratigraphically later but just as controversial Neosho Phase (Freeman 1962; Chapman 1974; Sabo et al. 1982:67-75).

Within the past year excavations at the Erbie Campground have resulted in the identification of a Mississippian house and associated features. While this analysis is still underway, certain points raised by this and the recent salvage of three features at site 3NW539 near Boxley must be considered in any survey and assessment of components. At 3NW205 there was very little pottery on the plowzone (and what there was was concentrated directly above the large features). In fact it was not certain that the house was Mississippian until the mitigation was already underway. While there was some pottery in the plowzone, this was not very profuse and was highly leached. Despite this, the preservation of bone was excellent, as was the preservation of ceramics associated with the features. The preservation of the bone at 3NW539 (Limp 1986) was even more exceptional. Any occurrence of pottery in the Buffalo River Valley needs to be considered seriously. It is likely that sites with arrow points will also have prehistoric pottery.

Historic Times

According to Lackey (1950) details of the early history of Newton County are nearly nonexistent prior to the 1850 census. Because of this, Lackey spent considerable effort in recording oral history with informants over 80 years old and in piecing together what little documentary data he did find. He produced one of the most extensive, detailed, and well written county histories in Arkansas.

Newton County was created in 1842 out of 846 square miles of Carroll County. In 1843 the county seat was established at Jasper, where it has remained. In 1850 there were 1,711 residents in the county. The population peaked in the 1900 census when 12,538 persons were enumerated. The following decades saw a declining population until the past decade, when this beautiful mountainous region was was invaded by land hungry hippies seeking to find peace of mind in the serenity of nature.

Much of the more mountainous southern portion of the county, now included in the Ozark National Forest, never left federal ownership. Most settlements were in the larger river and creek valleys in the northern part of the county where there were more arable bottomlands. The Carver community was one of these centers.

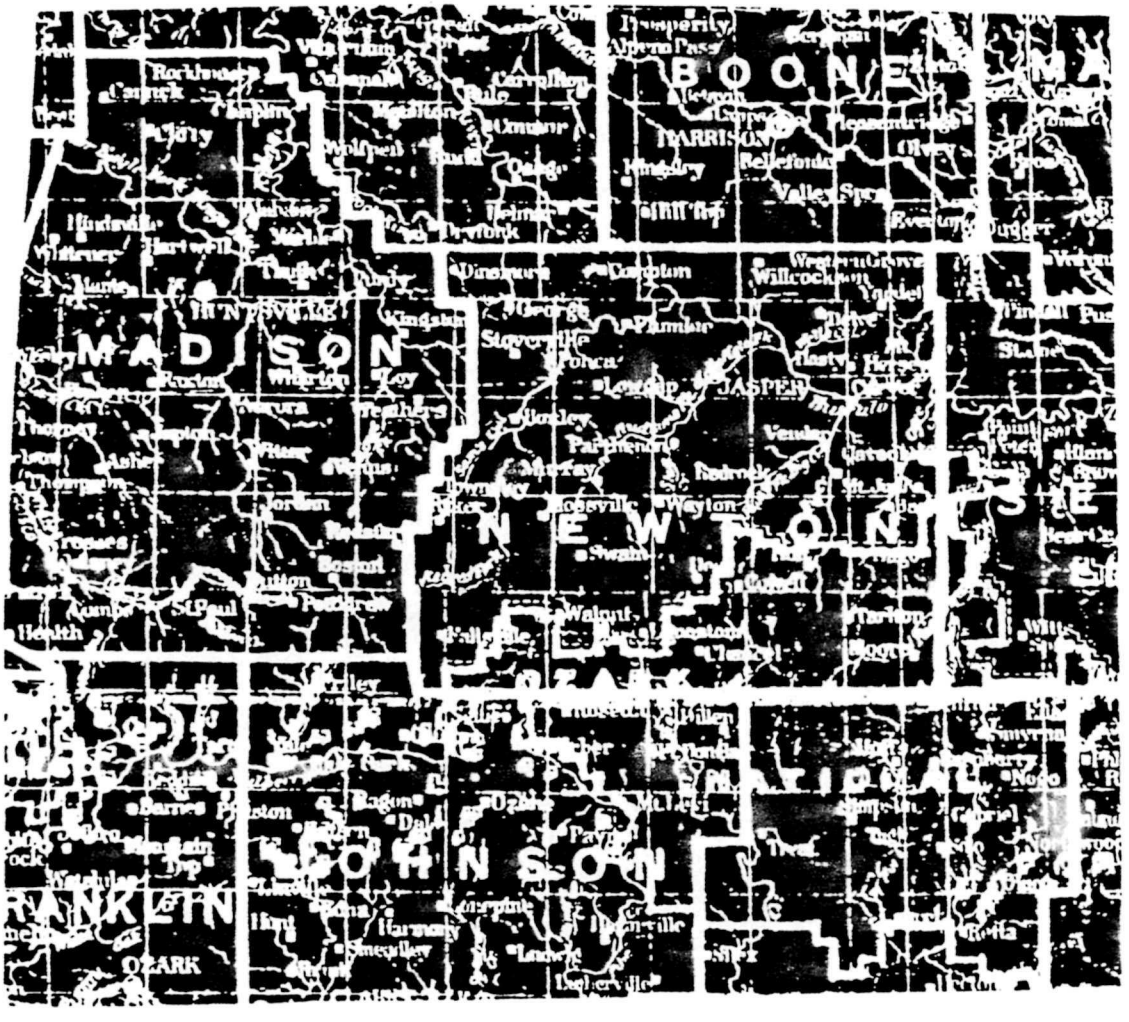

Figure 4. General Land Office map 1914.

CHAPTER 5

PRESENT ARCHEOLOGICAL PROJECT

PROJECT GOALS

The goals of the archeological work conducted at 3NW16 and 3NW41 are essentially outlined by the National Park Service in the scope-of-work (Appendix B). These goals include research into the historical occupation of the project area and its relationship to Carver. Second, archeological testing of 3NW16 was to be conducted to assess its potential for inclusion on the National Register of Historic Places. Third, the horizontal and vertical boundaries of 3NW16 and 3NW41 were to be established with adequate information collected to assess the National Register potential of this larger site area.

PROJECT METHODS

Sources of information inspected and methods used during the investigation of the Carver Community, 3NW16 and 3NW41 were, for the most part, listed by the National Park Service as requirements in the scope-of-work (Appendix B). The discussion below justifies the techniques used during the course of investigation at the two sites tested.

Four separate field techniques were used at 3NW16 and 3NW41. These included surface inspection of areas with adequate visibility, excavation of shovel tests, backhoe trenches (BHTR) and SAs. Of these, the excavation of shovel tests and SAs were listed as requirements in the scope-of-work (Appendix B). The excavation of BHTRs was recommended to test for deeply buried cultural deposits and to aid in establishing the geomorphology of the project area. The excavation of shovel tests was necessary to establish the site boundaries of 3NW16 and 3NW41 or to gather information to aid in justifying consolidation of the two into a single site. Expansion of the shovel test excavations to the south and east of the development area was to be done (Appendix B). The SAs were excavated in an attempt to determine the presence or absence of features and the density one might expect (cf. Williams et al. 1986:19-26) based on the number recorded and overall site dimensions.

Given the National Park Service's request for information concerning the geomorphology and depth of the two site areas, the excavation of BHTRs was viewed as a necessity. Only through the use of this technique would one be able to determine the depositional similarities and/or differences between 3NW16 and 3NW41. Information resulting from this technique was viewed as particularly important in light of HPA's recommendation that the two sites being tested be consolidated into a single site. In addition, BHTRs would allow the possible identification of buried cultural material below depths reached by more conventional archeological methods. The depth of the BHTRs excavated within the project area was limited for safety reasons. The project archeologist had witnessed the total collapse of 2 BHTRs excavated on the first terrace at 2 locations along the Buffalo River.

Justification for surface inspection of areas of sufficient visibility is not needed since it is customary that such a procedure be used on archeological sites if at all possible.

A review of the records on file at the office of the State Archeologist was conducted prior to initiating the fieldwork at 3NW16 and 3NW41. This entailed an inspection of the 1933 and 1940 15' Mt. Judea topographic maps, site records, and a search of the Special Collections in Mullins Library at the University of Arkansas, Fayetteville.

LABORATORY METHODS AND CURATION

The artifacts were returned from the field in sturdy plasticized well sample bags labeled by each identifiable provenience. These were tagged with two tags, one on the inside and one on the outside. The outside tags were sturdy manila laundry tags and the inside tags were 3" x 5" index cards. Both were stamped with the following standard information which was filled out as appropriate: state site number, temporary site number, catalogue number, recorder, date, feature or area, horizontal location, vertical location and remarks. The following was always filled out on this project: state site number, the Field Serial Number part of the catalogue number, recorder, date, horizontal and vertical provenience.

A Field Serial Number (FSN) log was kept on the site. Each provenience from which artifacts were recovered was recorded on this form by sequential number. Data recorded for each provenience included: FSN, horizontal location, vertical location, specimen notes, number of bags per unit, date collected and collector. The FSN log is the basic inventory of what was collected and is used in the lab for inventory and processing

control. The FSN follows all collections through the analysis and is permanently assigned as a part of the catalogue number.

The archeological materials were returned to the laboratory and checked in on the FSN log to assure that all logged artifacts made it to the laboratory. At this time, the accession number was requested from the curating institution. This number usually prefixes the FSN with an analytical suffix (ASN) identifying the artifact categories (e.g. flake, core) within each provenience.

The artifacts are then carefully hand washed in basins with fine soft brushes. If a provenience contains fragile samples, such as leached pottery, bone or carbon, these receive special attention. Each provenience is washed separately and then placed on drying racks. The drying racks are 18" square screens with 1/4 inch hardware cloth in the bottom. Fine screen samples are dried on 1/16 inch mesh window screen. The tags accompany the samples through the entire lab process to maintain provenience. The samples are air dried in the shade to prevent additional destruction from too rapid drying.

When the artifacts, are dried they are boxed sequentially by FSN into standard acid-free museum boxes used by the Arkansas Archeological Survey and the University of Arkansas Museum.

After a sufficient number of proveniences have been washed, we begin analysis and cataloging. The analyst spreads one and only one provenience out on the table and breaks it down by materials and artifact types. The laboratory director spot checks the work for consistency. Each separate category is then numbered with an accession number, FSN and a unique laboratory serial number (ASN) for each identifiable type. Numbering is done with indelible ink. A catalogue is then made for each provenience identifying the type of each ASN. Artifact categories are identified using the DELOS artifact inventory for most categories, supplemented by other published information on projectile points and pottery appropriate to the region of the project. Projectile points were classified based on drawings, pictures and descriptions present in Bell (1958, 1960), Perino (1968), Chapman (1975, 1980), and Kay et al. (1980). After the numbers have been placed on the artifacts, the project archeologist will often refine the identification of point and pottery types and use this for making cultural-historical interpretations.

The catalog is then entered in the MINARK data base for further manipulation. Once it has been entered the printout is checked against the hand-written catalog for accuracy and completeness. The data base can then be manipulated to produce tables for the report, organized by excavation units and depths or for producing sequentially numbered catalogs for curation requirements. If necessary, statistical manipulations and tests can also be made using this system.

After the report is complete the artifacts are packaged for

curation according to the specifications of the curating institution. This usually involves packaging each ASN in polyethylene bags and each FSN in separate trays organized sequentially by FSN. Originals of all generated paperwork, required forms, photograph logs, and photograph negatives are filed with the collections. On most projects copies of forms are filed with the Arkansas Archeological Survey as a separate backup repository as required in the State Plan.

Once the final report has been accepted by the sponsoring agency, the artifacts are transported under armed guard to the curating institution.

The discussion below details the specific techniques, the manner in which they were used, and the data being sought during the investigation of the Carver Community, 3NW16, and 3NW41. Each site is discussed separately.

Carver Community

First among these requirements included the reconstruction of the ownership history of the project area and its relation to the Carver community, based on county records. When it became apparent that this source of information would do little in explaining the importance of the area within the project area to Carver or to the function of the historic buildings present on the 15' 1933 and 1940 Mt. Judea topographic maps and the 1936 highway map (Figures 5 and 6), two additional sources of information were established. Mrs. Ruth Norton, an individual who has lived in the vicinity of the project area for approximately 50 years, was interviewed concerning the function of the building within the project area, farming techniques, land use practices, and any special information concerning the past owners. The second source of information entailed the review of a historical account of Newton County (Lackey 1950). In this book the author, a Newton County native born in the late 1800s, discusses Carver and lists the names of the families present.

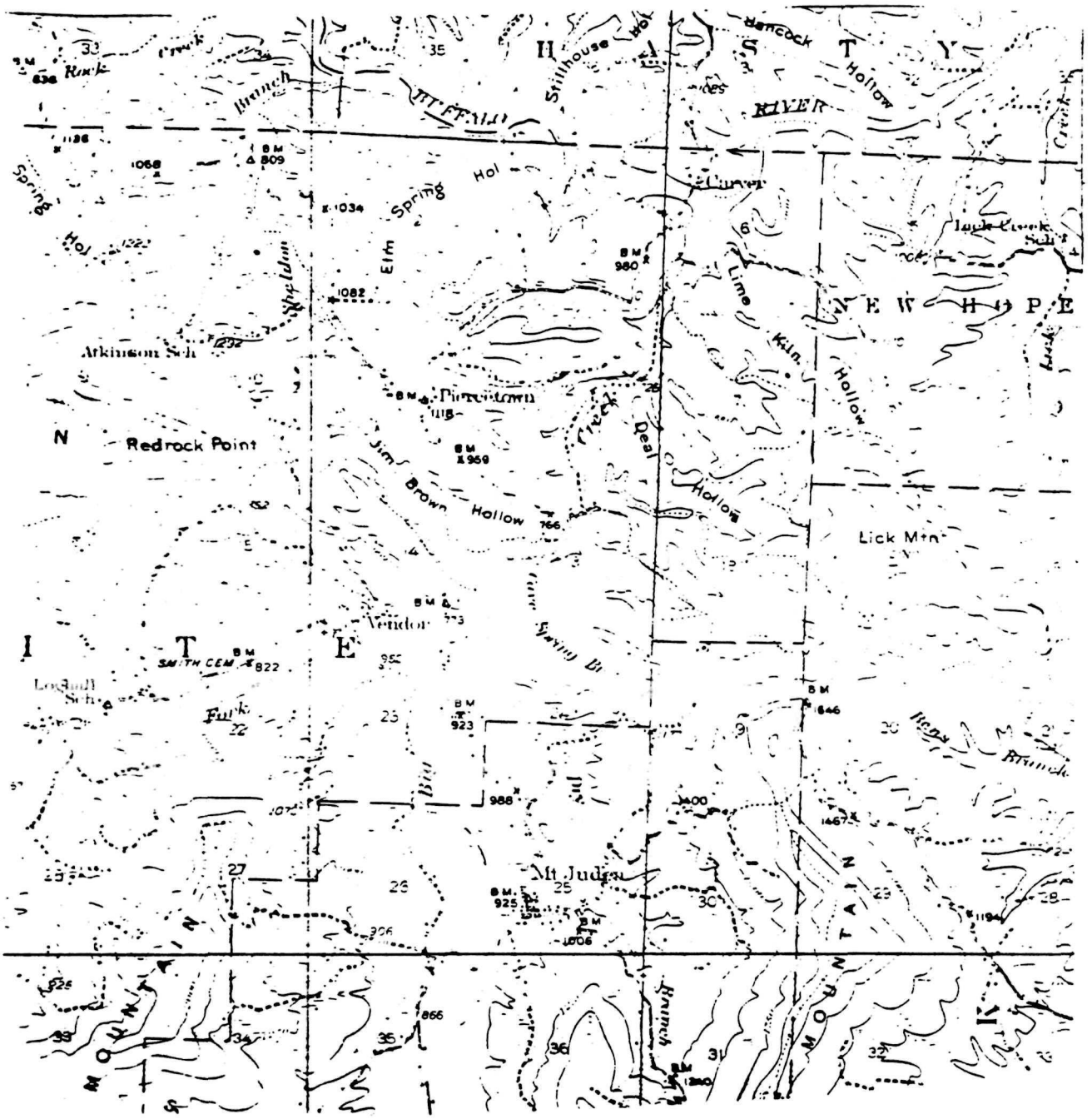

Figure 5. 1933 Mt. Judea 15' Quadrangle Map.

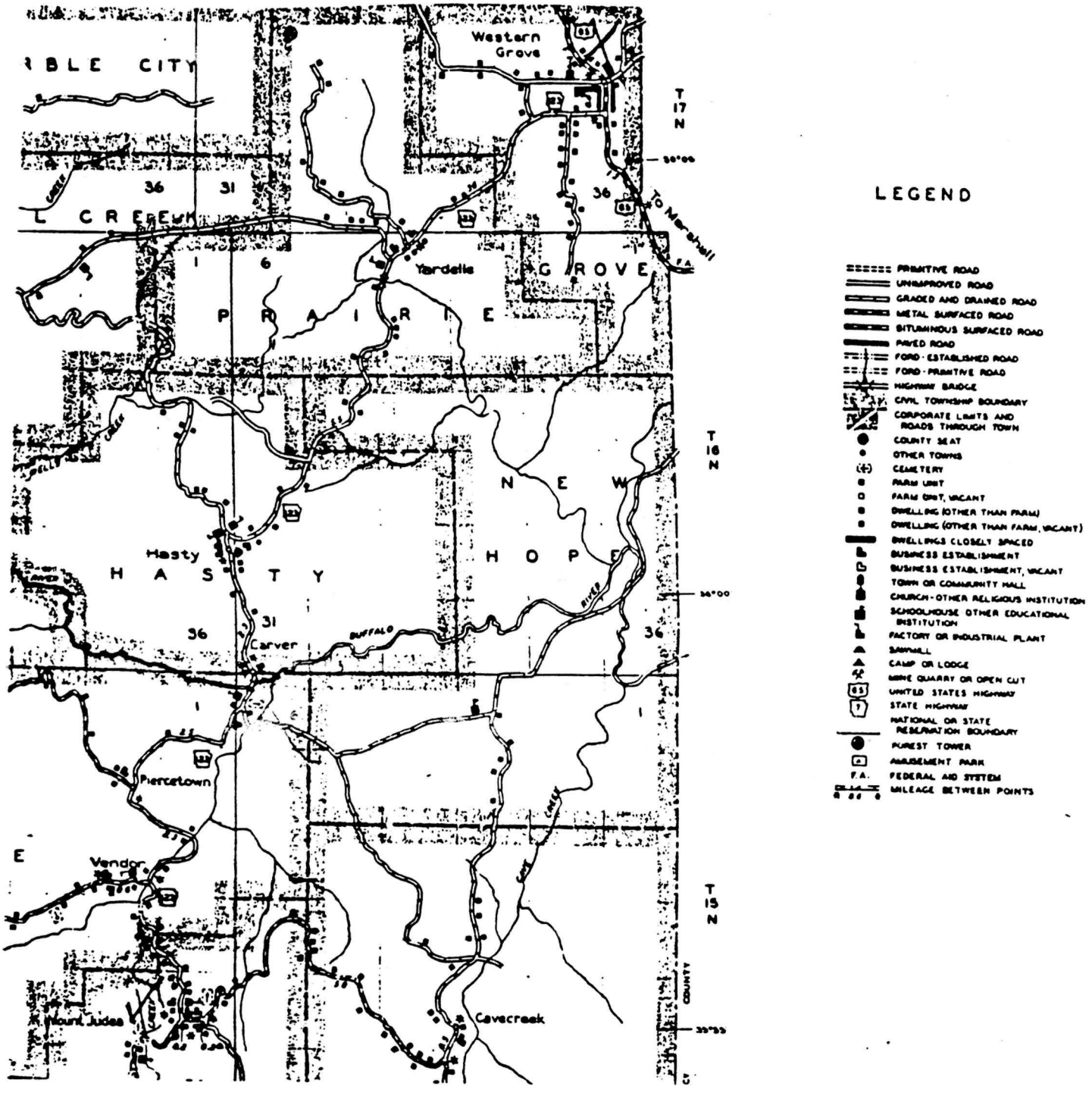

Figure 6. 1936 State Highway Map of project area.

3NW16

Surface inspection of 3NW16 was limited to the dirt road due to the conditions present elsewhere on the site (see Introduction). While the area available for inspection was extremely limited, given the overall size of 3NW16, this procedure was believed to be important given the data recovered by HPA. No artifacts were to be collected from the surface unless they were culturally diagnostic or unique (cores, tools, exotic material, etc.). The main reason for this action centered around the lack of worth of information that could be derived from the collection of flakes and shatter from a dirt road used by area residents to get to the local swimming hole. It was believed that the collection of these classes of artifacts present on the road would not aid in determining the potential significance of this site.

The surface inspection of the road through 3NW16 and flagging of the artifacts present allowed MCRA personnel to establish two points during this project. First, a distinct distribution of cultural material was established. Second, given the presence of good quality indigenous (colluvial deposits) chert on the site, an inspection of the debitage on the road allowed MCRA personnel to determine some of the color variation present and the types of materials being used.

Ten SAs measuring an average of 25 square meters were excavated by a backhoe to an average depth of 25cm below the surface. The floor of each SA was carefully cleaned to a point below that disturbed by the backhoe and inspected for the presence of features. In addition to this, the backdirt from each SA was visually inspected for artifacts. These were collected and assigned a number identifying them with the SA of collection.

The SAs were primarily placed in areas where the planned access road was to be located. It was believed that since the access road was to be the primary location for land moving, it would be advantageous for most of the SA's to be placed in this area. This action would allow for the identification of feature concentrations in this area and enable planners to move the road if mitigation was not required. Other stripped areas were placed near where the post office was believed to have been located.

Three BHTRs were excavated at different elevations within the area occupied by 3NW16 (Figure 7). The BHTRs ranged in length from 3m to 4.9m and in depth from .78m to 1.22m. One wall of each BHTR was cleaned to expose the different strata present. A profile was drawn with the Munsell color and soil texture recorded for each stratum present. All artifacts located below the plowzone were point-plotted on the profile map and bagged individually. The backdirt from each BHTR was visually inspected for artifacts. Those recovered were assigned a number identifying them with the BHTR.

Thirty-one shovel tests were excavated across 3NW16 with depths ranging from 37 to 50cm below the surface (Figure 7). Three transects were established across the southern portion of 3NW16, at approximately 25m intervals. A distance of 25m was paced off between each shovel test in each transect. A series of shovel tests were excavated across the northern portion of the site. Distances between these shovel tests was 25m or less. The crew members were instructed to terminate the excavation of a shovel test once they were sure the B Horizon was uncovered. Archeological investigations in the Buffalo River Valley (Sierzchula 1984: 33, 44) have failed to record the presence of cultural material in the upland derived B Horizon when located on these high terraces. In all recorded instances, cultural material is restricted to alluvially deposited matrix positioned on top of the B Horizon and at the contact of the upland derived B Horizon.

The soil from each shovel test was carefully inspected by hand and troweled for the presence of cultural remains. All artifacts recovered were assigned a single number identifying them with that particular shovel test.

Mapping of 3NW16 was accomplished using a Brunton compass, 50m tape measure, and a plane table.

3NW41

The techniques used during the course of the investigation of 3NW41 were essentially the same as those used at 3NW16, except for a difference in numbers. In addition, the rationale remained the same and will not be restated unless some clarification is needed in describing the reasons for the manner in which these techniques were conducted.

Surface inspection of 3NW41 was essentially confined to the dirt road through the site. Within this area surface artifacts were flagged and concentrations noted. Only culturally diagnostic or unique artifacts were to be collected.

Fifteen SAs measuring an average of 25 square meters were excavated by the backhoe at this site. Three transects with 5 SAs in each were excavated at different elevations (Figure 11). The placement and linear extent of the transects was guided by two factors. First, a probable main site or activity area was established based on cultural material in the road. The second factor affecting the location of the SAs centered around the general topography of the area. The northern transect was located at the base of a steeply sloping area. The southern transect was located at the base of the low terrace on which the main site of 3NW41 was believed to be situated. The center transect was placed across the flat area of the low alluvial terrace.

The SAs were excavated to an average depth of 25cm below the surface. The floor of each one was scraped clean to a point below the disturbance caused by the backhoe and inspected for the presence of features. The backdirt pile of each SA was visually inspected for artifacts. Artifacts recovered were assigned a number identifying it with that particular SA.

Two BHTRs measuring 7m in length and 1.22m and 1.34m in depth were excavated (Figure 11). Each BHTR was excavated at a different elevation. One wall of each BHTR was cleaned and a profile of the strata present was drawn. The Munsell color and soil texture of each stratum present was recorded. Any artifacts present in the profile below the plowzone were point-plotted and bagged individually. In addition to this, the backdirt pile from each trench was visually inspected for artifacts. Those observed were collected and assigned a number identifying them with that particular location.

A total of 41 shovel tests were excavated at 3NW41. Forty of these reached a depth of 40cm to 50cm below the surface. The depth of one shovel test was 30cm. Most of these shovel tests were excavated to delineate the site boundaries of 3NW41. For the most part, these shovel tests were placed around the periphery of the field where 3NW41 is located and in an adjacent field to the east. These shovel tests were located approximately 30m apart with the distances between each being paced off. Soil excavated was carefully inspected by hand and trowel. Artifacts recovered from each shovel test were assigned a number identifying them with that particular shovel test.

When it became apparent that 3NW41 was potentially eligible for the National Register of Historic Places, a series of eight shovel tests were excavated between the SA areas in the center and southern transects. These shovel tests were excavated by levels with artifacts recovered from each level bagged separately. Crew members were instructed to excavate these shovel tests based on the following levels: 0-20cm; 20cm-35cm; and 35cm-50cm below the surface. However, modification of these levels could be made, if during the excavation of these shovel tests a break in the artifact density was recorded. This action was taken to aid in the possible computation of artifact density at 3NW41.

The mapping of 3NW41 was done using a Brunton compass, 50m measuring tape, and plane table.

PROJECT RESULTS

Archeological investigations conducted at 3NW16 and 3NW41 were concerned with gathering information and data relevant to three problem areas. These areas included a determination of whether or not these two sites should remain separate entities or be consolidated. Second, a determination of potential significance was to be made. Third, investigations into the

community of Carver and its relationship to the project area was to be conducted.

The following discussion outlines the results of the present investigation in which the above questions were addressed.

Carver Community

Firth (1970:41) defines a community as ". . . a body of people sharing in common activities and bound by multiple relationships in such a way the aims of any individual can be achieved only by participation in actions with others." In relating this definition to the project area two important points need to be addressed. First, no spatial restrictions are necessary to be considered a community. In other words, a community may be represented by a compact settlement whose sites could be measured in acres or one that is highly dispersed over several square miles. Second, while definite requirements are needed to be considered a community, the manner in which the definition is stated allows these components to vary depending upon the location of the community in question. Obviously, these requirements would be different if the community was located in the Ozark Mountains as opposed to an ethnic grouping in Buffalo, N.Y.

A discussion of the integral components of a mid-1800s to 1900s Newton County community would be incomplete considering the paucity of information concerning this topic. However, information in a general publication concerning the history of Newton County (Lackey 1950) does allow one to potentially isolate some of the necessary elements needed to produce a viable community. In Lackey's (1950) discussion of Newton County he describes, among other things, the various communities that dotted this area, the postal routes and post offices. In general, one activity appears to form the foundation by which others (post offices, stores, smiths, a place for social gatherings) were encouraged to become established in the general vicinity. This activity is the presence and operation of a mill to grind various grains into flour.

It must be realized that early residents of Newton County were very independent, supplying most of their daily and yearly needs from resources available from the land or producing them. However, the efficient grinding of grains into flour was often beyond the abilities of most families. The building of a mill required the expenditure of capital, a rare commodity in Newton County during this time, to purchase the necessary items (nails, dimensional lumber, backsmith operations, etc.).

The importance of a mill to an area is evident when one inspects the ratio of post offices that remained open when one was in the vicinity as opposed to when a mill was not present (Table 1). There was not a mill in the Carver area. A mill and cotton gin were located north in Western Grove (Marshall Prairie) and a mill to the southeast at Cave Creek.

In addition to the absence of a mill in the Carver area, the short-lived nature of the Carver post office may be attributed to one additional point. First, post offices were often established by an individual in an area as " . . . a favor to their friends and a service to the community (Lackey 1950:166)." For this service the wages were extremely low, even by Newton County standards. The salary of the first postmaster of Jasper, Arkansas, was less than 2 cents per day. For this he was entirely responsible for all of the duties associated with the post office, including being available when the mail arrived from Harrison, which was often at night.

Table 1

First Ten Post Offices Established in Newton County and in Existence at Time of Lackey 1950.

Name	Est.	Discont'd.	Mill/ Cotton Gin	Notes
Jasper	1843		Yes	
Walnut Fork	1849		No	
Borland	1849	1867	No	
Mt. Parthenon	1851		Yes	
Whiteley	1851		Yes	Name changed to Boxley
Denton	1851	Yes	No	No info on town or post office- assumed it was discontinued
Forest Home	1852	1856	No	
Marshall Prairie	1854		Yes	Name changed to Western Grove
Cave Creek	1855		Yes	
Mt. Judea	1856		Yes	

No information beyond that present on the 1933 and 1940 15' Mt. Judea quad, a brief discussion of the Carver area by Lackey (1950), and that gathered from an informant interview, was recorded concerning the historic occupation at 3NW16. Eight shovel tests and 4 SAs were excavated in or near the area believed to be the location of the Carver post office. In addition, the area was visited during construction of the campground and ground disturbance in the same area was inspected. At no time were any historical artifacts observed.

Carver Post Office

The post office at Carver was established November 25, 1913 with Mr. Pembrook Carver serving as the postmaster. He was replaced by Mr. William Garner on January 2, 1924, who received an official appointment of February 26, 1924 (Lackey 1950:177). The post office, which was named for Mr. Pembrook Carver, was discontinued prior to 1949 (date unknown).

The Carver post office was located on Route 47151. The mail from this route was picked up in Harrison daily (except Sunday) at 8 a.m. The mail carrier traveled through Valley Springs, Western Grove, Yardelle, Hasty, Carver, Vendor, and arrived at Mount Judea approximately 2.5 hours later. The return trip to Harrison was made as soon as the mail had been exchanged at Mount Judea. Route 47151 was 38 miles (one way) in length and paid $1000.00 per year. A $700.00 bond was required of the carrier which was Mr. J. L. Dickey.

It should be noted that the Carver post office was established relatively late when compared to others in Newton County. Most post offices in Newton County were established prior to 1900 and had a life span that exceeded the one at Carver (Lackey 1950).

Ownership History

History of land ownership for the project area was provided by Ozark Abstracts of Jasper, Arkansas.

Land Bought From	Land Sold To	Date
United States of America	Elizabeth Hefley	5-10-1882
Shed Overly	Jr. C. Cooper	2-13-1882
M.T. Armstrong	Jr. J. Waters	2-01-1887
Simon Jones	Jas. W. Eddings	10-02-1969
W.S. Garner	P.T. Carver	3-28-1911
R.J. Eddings	L.T. Eddings	7-14-1896
T.A. Starr and W.J. Starr	M.E. Eddings	7-14-1896
Rebecca J. Eddings et al.	William S. Garner	12-04-1900
Simon Jones	Geo. W. Maberry	10-02-1869
J.N. Maberry	William S. Garner	4-19-1900
D.M. Maberry	William S. Garner	5-11-1900
A.B. Maberry	William S. Garner	5-21-1900
P.T. Carver	School Dist. 7	3-26-1935
Nettie C. Greenhaw	Walter Eddings	6-25-1947
Rosa Carver et al.	Walter Eddings	10-22-1947
Verla Wallian	Walter Eddings	10-22-1947
Tennessee Eddings	Ross Robley(lease)	3-12-1954

Land Bought From	Land Sold To	Date
Tennessee Eddings	James Eddings	3-30-1930
Howard Norton	G.L. Huchingson	9-07-1962
Guffery Carver	Rosa Carver	9-24-1964
Ralph Carver	Rosa Carver	9-24-1964
Archie Carver	Rosa Carver	9-24-1964
Archie Carver	Rosa Carver	9-24-1964
G.L. Huchingson	Walter Eddings	9-29-1964
Martha Eddings	Earl Eddings	1-12-1968
Darrell Eddings and wife	Earl Eddings	12-02-1968
Tressie Reynolds	Earl Eddings	11-07-1968
Doyal Eddings	Earl Eddings	11-20-1968
Lottie Eddings	Earl Eddings	11-08-1968
Wilma Waters	Earl Eddings	11-02-1968
Arizona Eddings et al.	Ray Eddings, Trustee	11-02-1968
Cecil Eddings et al.	Ray Eddings, Trustee	11-02-1968
Earl and Ola Eddings	Carver Cemetery, Trustees	10-26-1977

Interview

Michael C. Sierzchula had the opportunity to interview Mrs. Ruth Norton during the course of this project. The interview took place at her hobby shop, located at the junction of State Highways 74 and 123. The interview lasted approximately one hour and centered around the history of the project area. Mrs. Norton has lived in the area for about 50 years and knew both Mr. Troy Carver and Mr. "Tenn" Eddings.

Mrs. Norton initiated the conversation by noting that the individual who could have given us a complete history of the area (Mr. Troy Carver) had died in the last couple of years. Presently, Mr. Walter Eddings is the oldest member of a native family still in the area.

When questioned concerning the general land use of the project area, Mrs. Norton noted that the area had been planted in cotton right up to the time it was put in pasture. Cotton was the money crop taken to the cotton gin in Western Grove to be processed and sold. The only location not planted within the project area was the immediate area on which the General Store and Post Office (one building) was located. This building is present on the 1933 and 1940 15' quadrangle maps for the project area. No evidence of this structure was recorded in the SA's and shovel tests excavated.

While the area was in row crops, the fields were being plowed with mules, which lasted to the 1940s. Tractors were used to put the field in pasture during the late 1940s, at which time cattle were placed on the land.

Carver received its name from Mr. Troy Carver. Mrs. Norton was not sure whether Mr. Troy Carver or another member of his family owned the general store.

This interview brought one important fact to light concerning the history of the area. Many of the people that can shed some light on the life styles present at the turn of the century and how things have changed are either deceased or getting up in years. It is hard to imagine a generation of people living through the changes in all aspects of life people of this age have witnessed. If the information and knowledge these people possess is to be preserved and the NPS truly wishes to establish a history of the area other than through records checks at the county courthouse, a concentrated effort needs to be made to somehow record this data or it will very soon be gone forever.

3NW16

Surface Inspection

The surface inspection of the dirt road through 3NW16 did not result in the collection of any artifacts. A sparse continuous scattering of debitage made of Pitkin and Boone cherts was present with no diagnostic artifacts or tools observed. This scatter extended from a point on the dirt road south of the southwest corner of the stock pen east, a distance of approximately 85m to the base of the terrace (Figure 7).

Shovel Tests

A total of 31 shovel tests ranging in depth from 37cm to 50cm below the surface were excavated during the investigations at 3NW16. The shallow shovel tests (<40cm) are located on the terrace in the northern portion of the site. This area of the site is characterized by a shallow B Horizon and crew members were instructed to terminate the shovel test once they were sure it had been reached (See Methods).

Of the 31 shovel tests, negative results were obtained in 16 (Figure 7). For the most part, these were positioned around the periphery of 3NW16 and established the site boundaries. In two instances transects were terminated with positive shovel tests. At the eastern edge of the site, shovel test three was positive. This shovel test was actually the first one in the transect which was determined in part by the dropoff in artifact density in the dirt road (north) and a hedgerow/natural drainage area (east). Shovel tests were located on the east side of the hedgerow during the investigations (Figure 7). The second instance occurred at the northwest corner of the site. Shovel testing ceased with

Figure 7. 3NW16, site map.

Map removed in an effort to protect sensitive cultural resources.

KEY	
Site Limits	
Stripped Area	
Backhoe Trench	#
Positive Shovel Test	
Negative Shovel Test	
Fence Line	
Base Upland Slope	
Datum	
Artifacts in Road	

MN

0 10
METERS

shovel tests 21 and 54 for several reasons. First, the area west of 54 dropped into a low area believed to be caused by the pushing of soil to form a low levee-type formation along the north side of the road and/or to, in part, build up the road. This would explain why the B Horizon was not exposed in shovel test 54. In the case of shovel test 21 the slope of the ground increased considerably. In addition, the B Horizon was again not exposed which, given the location of the shovel test, the slope of the ground, and information from other areas, could be explained only by some disturbance (road maintenance or bank stabilization) factor.

The shovel tests recorded a plowzone that had a variable depth across the site, which was later confirmed by data collected from the BHTRs. The plowzone ranged from 18cm (on the terrace) below the surface to a maximum of 30cm (at the base of the terrace) below the surface.

Artifacts recovered as a result of the excavation of the shovel tests exhibited a fairly uniform low density across the site (Appendix A:Table A-1). Of the 15 positive shovel tests nine had five or fewer artifacts, five had nine to 11 artifacts, and one had 20 artifacts. Of the six shovel tests that had nine or more artifacts, four are located in the transect south of the dirt road that cuts through the site. This area of the terrace exhibits a less severe slope than is present elsewhere.

Artifacts recovered from the shovel tests tended to be recovered between 0 to 10cm below the surface. This finding would confirm that recorded by HPA (Klinger and Hinkle 1986:8) in which case they pointed out that the cultural material was confined to the first 15cm.

Very few artifact classes were recorded during the analysis of the cultural material recovered from the shovel tests. These classes included flakes, bifaces, hammerstones, and shatter (Appendix A:Table A-1). Small interior flakes of varying colors of Boone chert was the dominant class represented. Only 6 decortication flakes were present. One biface fragment was recovered.

Stripped Areas

Ten SAs were excavated during the course of investigations conducted at 3NW16. In SAs 1, 2, and 3 the B Horizon was exposed in all areas of the unit. If an intrusion into this stratum had occurred in the form of a prehistoric or historic feature, it would have been obvious given the different color and texture of the A Horizon. The B horizon was not exposed in SA 4, which contradicts the findings present in SA 1-3. Since these 4 SAs were excavated to similar depths and are located near one another, it is believed the area around SA 4 has been disturbed (see Project Area Disturbances). The absence of a developed midden, the B Horizon, or other subsoil in the area of SA 5-10 required the identification of a feature's presence by some other means (artifact concentrations, differential compacting of the matrix,

etc.).

In each instance, no features were exposed. Three possible explanations exist for this occurrence. First and most obvious is that they do not exist due to the manner in which this area was used by the inhabitants. Second is the fact that while some may exist, they are present in sufficiently few numbers that they were missed or are located in areas not investigated using SAs. Last is the possibility that all tangible traces of the feature above the B Horizon have disappeared. This situation recently occurred at a site (3WA58) mitigated by MCRA where the point of origin of a feature could not be determined in a number of cases. Only when the B Horizon was exposed did the feature outline become apparent (Lafferty et al. n.d.).

The artifact classes recorded as a result of the excavation of the SAs essentially mirrored those present in the shovel tests (Appendix A:Table A-2). Interior flakes was the dominant class of artifact present. Bifaces were present in 5 of the ten SAs excavated. These, however, were fragmented with no whole ones recovered.

Backhoe Trenches

Three BHTR's were excavated as part of the investigations conducted at 3NW16 (Figure 7). Data centering around two areas of concern regarding this site was sought. The first area dealt with the depositional history of this location (see Geomorphology). The second area of interest dealt with the potential presence of buried cultural deposits. The scope-of-work for the project area stated, "The amount of prior disturbance to these buried archeological resources should be considered in this assessment (Appendix B)." Since shovel tests extending to 50cm below the surface failed to record cultural deposits, BHTR's were excavated at various locations and elevations at 3NW16. The discussion below details the data collected from this technique.

BHTR 1, located just south of the dirt road through the site, is at the highest elevation of the three BHTRs excavated. In addition, it is situated on the flattest area of the terrace near the shovel test that recovered the greatest number of artifacts (shovel test 12). This trench measured approximately 4.9m in length and .78m in depth (Figure 8).

Two strata were recorded in the profile of this trench. The first stratum extended to approximately 20cm below the surface and had a Munsell color of 10YR5/6 (yellowish brown). The soil was determined to be a silt with a very low density of sand present. Alluvial and colluvial deposits were represented in the form of sand and small gravels and pieces of angular white chert, respectively. No artifacts were noted as occurring in this stratum.

Stratum 2, interpreted to be the B Horizon, extended to the bottom of the trench indicating a minimum thickness of approximately .58m. The slope of this stratum followed that of the ground surface. Two Munsell readings were recorded in this instance, since there was a slight color variation from one end of the trench to the other. These readings are 5YR5/8 (yellowish red) and 5YR4/8 (yellowish red). The soil texture was determined to be a clayey silt, though this decision is tenuous. The clay content of the soil, in this instance, is high and a classification of silty clay could be argued. Colluvial deposits were again represented in the form of an extremely dense concentration of angular white chert, much larger than the preceding stratum. No artifacts were recorded in this stratum.

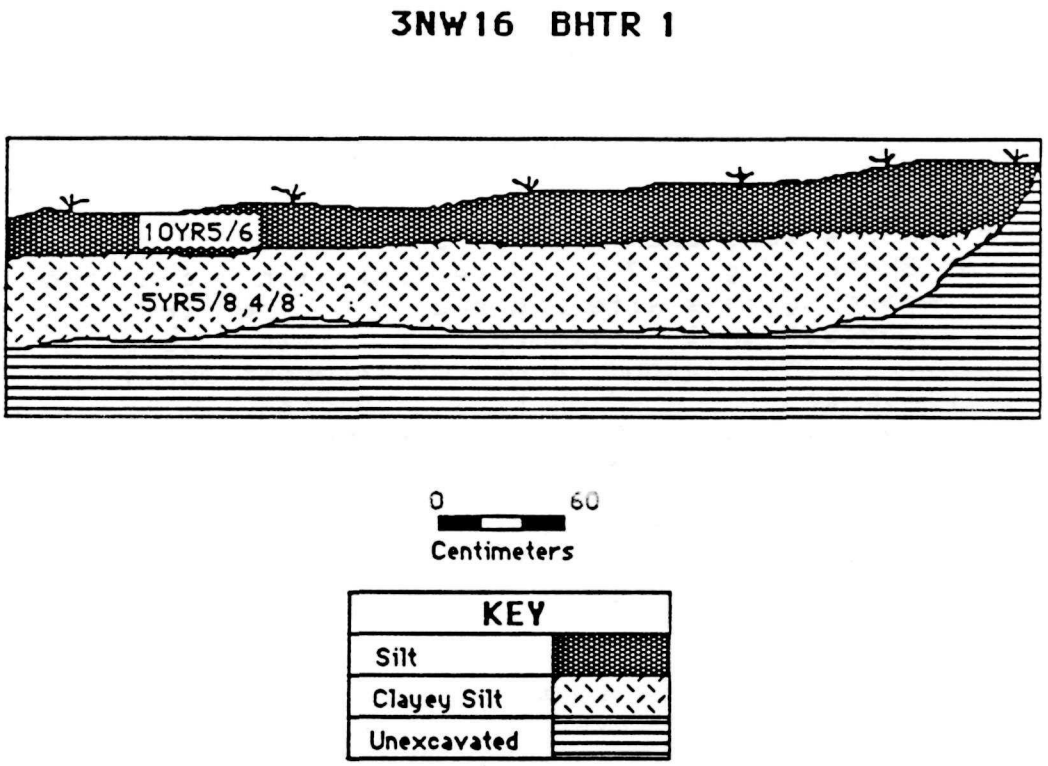

Figure 8. 3NW16, Backhoe Trench 1.

All the artifacts recovered as a result of the excavation of BHTR 1 were recovered from the surface of the backdirt pile. Four flakes were collected, two of which were decortication flakes.

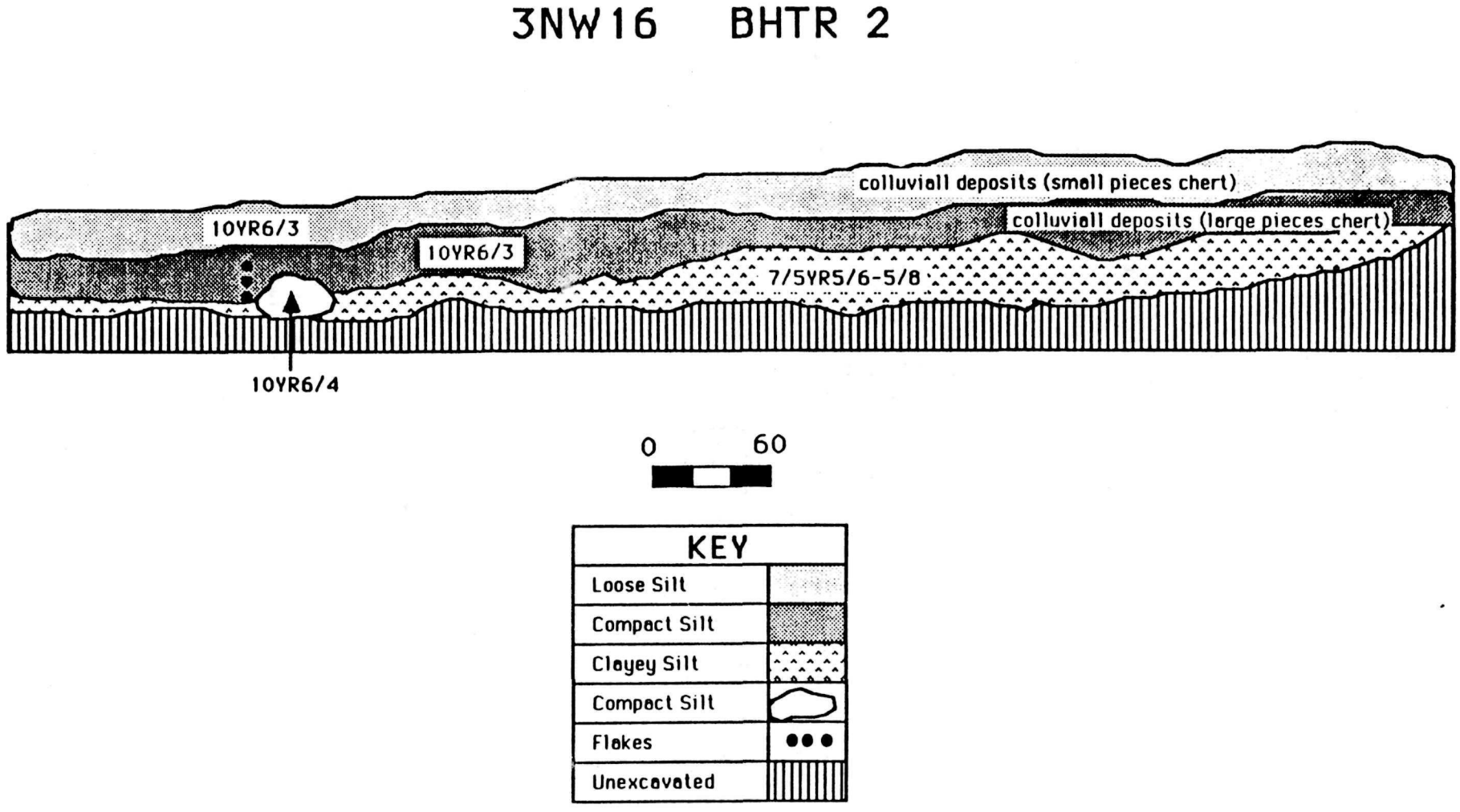

Figure 9. 3NW16, Backhoe Trench 2.

BHTR 2 was located east of BHTR 1 approximately 35m. The trench was positioned in a flat area near the base of the terrace (west) and the natural drainage area (east) between 3NW16 and 3NW41. BHTR 2 measured approximately 7.4m in length and .74m in depth (Figure 9).

Stratum 1 extended to approximately 26cm below the surface and had a Munsell color of 10YR6/3 (pale brown). The soil present in this stratum was determined to be a sandy silt. Interestingly, an increase in the density and grain size of the sand present in this location over that in BHTR 1 was noted. Small subrounded gravels and angular pieces of chert were present in lesser quantities than was recorded in Stratum 1 in BHTR 1.

The second stratum extends from 26cm to 55cm below the surface. The soil was determined to be a sandy silt and had a Munsell color of 10YR6/3 (pale brown). Two characteristics separate this stratum from the overlying one. First, the soil present in Stratum 2 is much more compact and a cleavage plane exists between the two layers allowing immediate identification. Second, the colluvial deposits (angular white chert) were much lower in density in Stratum 2.

Three flakes were recorded in Stratum 2 ranging in depth from 36cm to 50cm below the surface (Figure 9). The integrity of the location of these flakes is questionable given their proximity to one another and the manner in which they were recorded. The flakes were recorded prior to the cleaning of the wall profile in a vertical line. No soil discoloration indicating possible alignment due to disturbance (roots, rodent holes) was observed after the wall was cleaned. Additional cultural material or other evidence that would support their location was not observed in either of the trench walls at similar depths. Since other subsurface tests in the general area of this BHTR failed to produce artifacts at comparable depths and supporting evidence was not present in BHTR 2, this situation was considered a backhoe-induced anomaly.

The third stratum is potentially a less developed B Horizon than was recorded in BHTR 1. It was a clayey silt and had a Munsell color reading of 7.5YR5/8 (strong brown). The soil in this stratum had a lower clay content than that of the B horizon in BHTR One. A sparse concentration of tiny concretions was present. No artifacts were recorded as occurring in this stratum.

The greatest number of artifacts, resulting from the subsurface testing of 3NW16 were recovered from the backdirt pile of BHTR 2 (Appendix A:Table A-3). Twenty interior flakes were recovered, 7 of which exhibited some form of edge damage (RUM flake). A single core originating from an upland source was recovered. One pitted cobble fragment was also recovered.

BHTR 3 was positioned at the base of the terrace and represents the lowest elevation at which a BHTR was excavated. This trench measured approximately 3 m in length and 1.28m in depth (Figure 10).

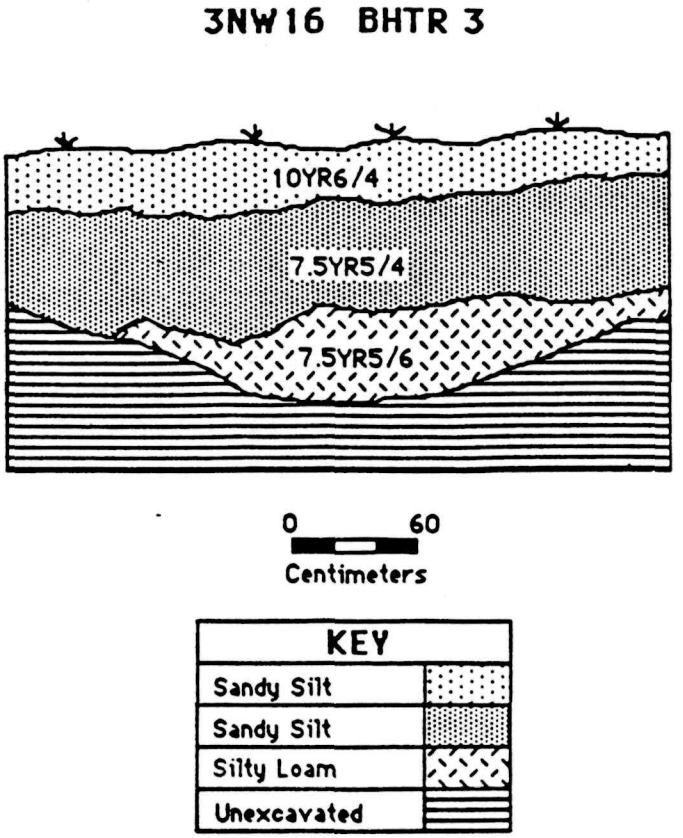

Figure 10. 3NW16, Backhoe Trench 3.

Three separate strata were recorded. Stratum 1 had a Munsell color of 10YR6/4 (light yellowish brown) and was a sandy silt. The grain size of the sand in this instance was much more varied and denser than recorded in the previous two BHTRs. This stratum extended to approximately 30cm below the surface. A sparse occurrence of angular chert and gravels was present with a drop in density from north to south.

Stratum 2 had a Munsell color reading of 7.5YR5/4 (brown) and was also a sandy silt. No gravels or chert were present. This stratum was present from 30cm to 98cm below the surface.

Stratum 3 had a Munsell color reading of 7.5YR5/6 (strong brown) and was a silty loam. The color variation from the preceding stratum was extremely slight, but clay content was

obvious. Tiny concretions were present in this stratum.

All the artifacts from BHTR 3 were recovered from the backdirt pile with none being from the wall profile (Appendix A: Table A-3). The artifacts recovered at this location consisted of 4 flakes, 1 pitted sandstone cobble, 1 core from an upland source, 1 projectile point fragment (untypable), and 1 nutting stone.

Site Function and Size

Site location in the Arkansas Ozarks is primarily based on the presence of culturally modified raw material such as chert. The obvious reasons for this are that stone is generally not altered or destroyed by environmental factors, it is the most abundant indicator of past human occupation, and it is easily recognized in the field by the archeologist. The resulting collections from the initial discoveries are primarily comprised of flakes and perhaps some tools and projectile points. Establishing the function of the site often requires the systematic subsurface investigation of the area in an attempt to isolate activity areas and sample deposits not subject to collector behavior.

An analysis of the artifacts recovered during the investigation at 3NW16 did not produce the data necessary to establish a primary site function. Data from the analysis offered glimpses of what had occurred in this instance. The recovery of bifaces and biface fragments indicated that bifacial reduction was occurring here. However, this activity was limited in scope and in the degree of modification that was occurring. Indicators of a workshop site were not present. Decortication flakes and shatter were scarce, and those that were present were small, indicating most stages of bifacial manufacture were occurring elsewhere. No function-specific tool classes, other than nutting stones, were identified that might indicate activities occurring at 3NW16. Three nutting stones were recovered. Presence of this type of artifact would indicate the processing of various types of nuts (cf. Spears 1976). This, however, is a limited occurrence and cannot be considered a dominant activity at 3NW16. Due to the paucity of information available as a result of the nature of the general artifact collection from 3NW16, a site function assignment beyond that of a short term campsite or specialized site of unknown function would be tenuous at best.

Site 3NW16 measures approximately 95m north/south by 130m east/west (Figure 7). This determination is based on the excavation of negative shovel tests and topographic circumscription.

Surface Inspection

The surface inspection of the dirt road through 3NW41 did not result in the collection of any artifacts. A sparse continuous scattering of Pitkin and Boone chert debitage was present with no diagnostic artifacts or tools observed. The presence of artifacts in the dirt road was first established at the base of the low terrace (Figures 11 & 12). The density of artifacts increased slightly from southwest to northeast as long as one remained on the terrace. A drop in density was observed when one was completely off the terrace to the northeast.

Shovel Tests

A total of 41 shovel tests were excavated during testing of 3NW41 (Figures 11 & 12). The depths of these shovel tests ranged from 30cm to 50cm below the surface. The shallow (<40cm) shovel tests (A-F) are primarily located outside the northwest boundary of the site. This area is characterized by a shallow B Horizon and an extreme slope that is not readily apparent on the topographic map due to the 40-foot contour interval. The excavation of shovel test 3 was terminated at 30cm below the surface due to the presence of a large tree root.

Except in two instances (shovel test 1 and 1c) cultural material was found to extend to the bottom of every shovel test excavated along the southern boundary of 3NW41 (Appendix A:Table A-3). While under normal topographic conditions shovel tests would have been continued in this direction, a distinct elevation break was encountered just inside the wood line. An immediate dropoff (>= 20') into the floodplain of the Buffalo River was present. Assuming that cultural material was present in this instance (which is highly unlikely) it would have to be considered a separate site given the nature of the topographic break present. Investigation of such a site would have been beyond the scope of the present project.

Of the 41 shovel tests located at 3NW41, 33 were excavated to determine the site boundaries. Shovel tests (nos. 1a,1,2,3,1b,1c) along the west and southwest side (toward 3NW16) were among those that produced the fewest number of artifacts. The number of artifacts recovered in this instance ranged from 0 to 5. This compares with up to 145 artifacts being recovered from a single shovel test elsewhere on 3NW41. Shovel test 1a, from which six artifacts were recovered, was in the general line

Map removed in an effort to protect sensitive cultural resources.

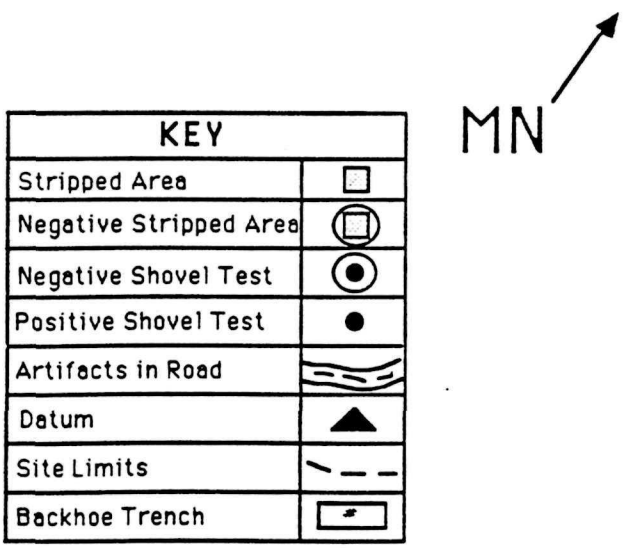

Figure 11. 3NW41, Site map, southwest two-thirds.

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sensitive cultural resources.

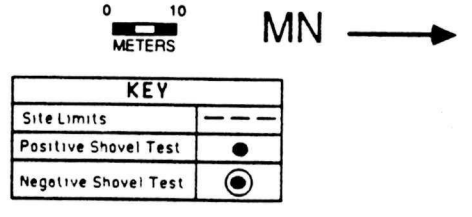

Figure 12. 3NW41, site map, northeast one-third.

Table 2. 3NW41, Projected Artifact Densities Per Cubic Meter.

	SHOVEL TEST							
DEPTH	1B	2B	3B	4B	1C	2C	3C	4C
0-20			1111	3444	0			
20-35			2222	2074	0			
35-50			666	1037	0			
0-22	111							
22-36	79							
36-50	158							
0-23		1352						
23-39		2777						
39-50		2323						
0-20						4333		
20-32						3518		
32-45						2478		
0-23							386	
23-34							555	
34-43							416	
0-17								588
12-30								476
30-50								444

*Artifact densities were calculated by the following formula: number of artifacts in provience / provience width (0.3m) x provience width (0.3m) x thickness of provience (m) = number of artifacts per cubic meter.

of those shovel tests (nos. 3,6,9,12) on 3NW16 that produced the greatest number of artifacts. In instances where the number of artifacts was low (less than 10), the recovered material was generally concentrated within 20cm of the surface. Shovel tests A-F were all negative, supporting the finding recorded in the SAs to the south.

Artifacts recovered from shovel tests around the periphery of 3NW41 consisted primarily of interior flakes, RUM flakes, and decortication flakes. A single projectile point fragment (Figure 13d) identified as a Carrollton was recovered approximately 10cm below the surface in shovel test 6.

Eight shovel tests were excavated between the central and southern SA transects when it became apparent that 3NW41 was potentially significant (Figure 11). These shovel tests were excavated by levels to aid in computing artifact density by level across the site. Based on the excavation of these shovel tests, the artifact density within each level was highly variable across the site (Appendix A:Table A-4). However, a probable main occupation area is readily apparent when one considers the difference in artifact density within each level of each shovel test. Computations indicate that a 1083.6 percent increase in artifact content between shovel tests on the terrace can be expected from southwest to northeast. A much greater difference exists if shovel test 4B is disregarded and shovel tests 1B-3B are compared.

This same condition is reflected in the shovel tests located at the base of the low terrace where the greatest concentration of artifacts is located from the area of shovel test 2C northeast to shovel test 4C. A 684.9 percent increase in artifact content between shovel tests from southwest to northeast was recorded.

Extrapolating from the quantities of artifacts recovered from these shovel tests, one can expect 3000+ artifacts per cubic meter of excavated matrix (Table 2). This extremely high density of cultural material indicates a substantial amount of flintknapping occurring in this area. To aid in computing these densities and to make the depths more uniform some levels (generally <10cm thick) were combined. In addition, material such as small pebbles were not included in the calculations.

Stripped Areas

A total of 15 SAs were excavated during the investigations conducted at 3NW41 in an attempt to document the projected density of features. Yet, despite the exposure of approximately 375 square meters of subplowzone soil, no features were discovered. Possible reasons for this condition have been briefly discussed elsewhere in this report (See 3NW16 SA).

Though it was not possible to control for the quantity of soil excavated in the SAs, a definite decrease in the number of artifacts recovered in the western SA's is apparent (Appendix A:Table A-5). Twelve and 6 artifacts were recovered from the western most SAs (SAs 14 and 15) on the terrace and at its base. In the SA's immediately to the east 43 and 68 artifacts were recovered. This increase continues to the next SAs where 110 and 115 artifacts were recovered. These numbers are reflected in the shovel tests in the area.

The excavation of the SAs at 3NW41 resulted in the numerical increase of certain classes of artifacts and the recovery of 5 of the 8 projectile points or projectile point fragments. These included the recovery of a San Patrice from SA 8 (Figure 14a), a Bulverde (Figure 13c) from SA 6, and a Rice Side Notched (Figure 13f) from SA 10. The remaining 3 projectile points lacked the

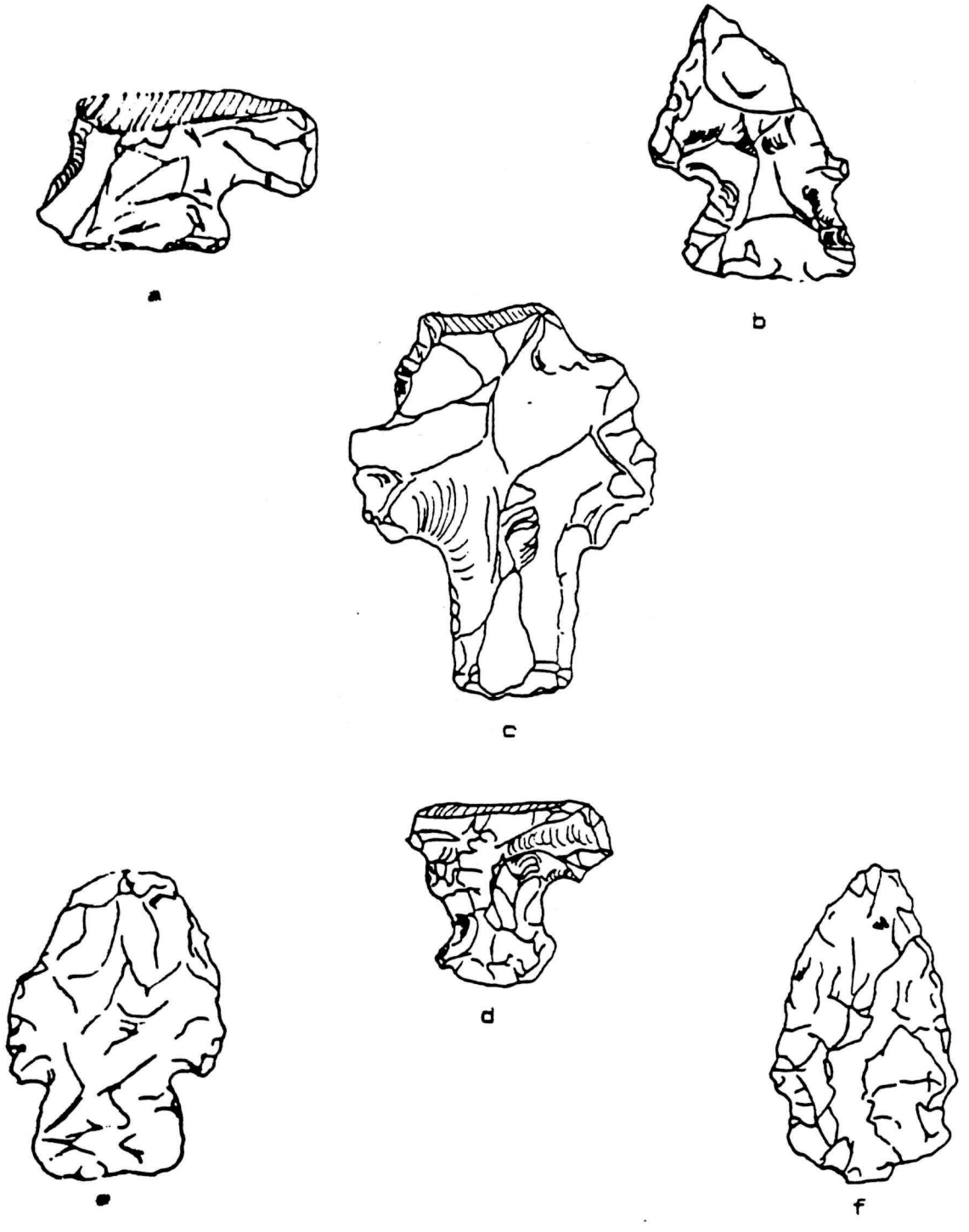

Figure 1.6. 3NW41, Projectile Points. a & b. Unidentified; c. Bulverde; d. Carrollton; e. Stone Square Stemmed; f. Rice Side Notched. (Scale 1:1)

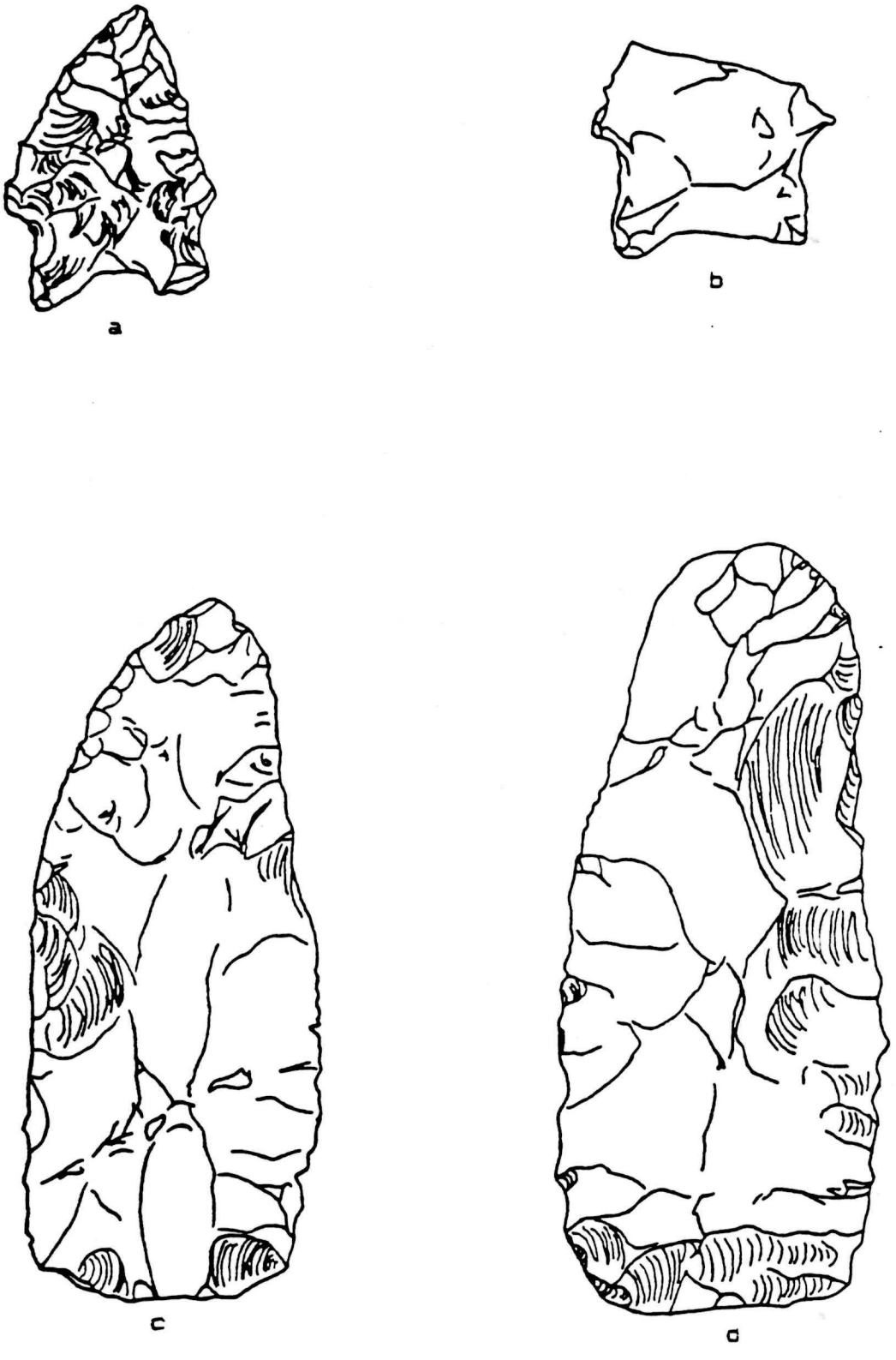

Figure 14. 3NW41, Projectile Points and Bifaces. a. San Patrice; b. Johnson; c & d. bifaces. (Scale 1:1)

diagnostic elements needed to determine the type or it represented an unnamed type.

Given the fact that only the surface area of the backdirt pile from the stripped areas was inspected for artifacts, an unusually large number of bifaces were recovered. In addition, the bifaces and biface fragments represented various stages in the reduction sequence, indicating that 3NW41 functioned, in part, as a workshop site.

Backhoe Trenches

Two BHTR's were excavated at different elevations within the site area of 3NW41. The rationale for the excavation of these trenches was essentially the same as that for 3NW16. Information concerning the geomorphology of the area was being sought (See Geomorphology). In addition, in most shovel tests cultural material was found extending to a minimum depth of 50cm below the surface. The excavation of the BHTR's to a point below this depth was needed to determine the vertical extent of these deposits. The discussion below details the observations made and data gathered from this source.

BHTR 1 was located on the flat area of the low alluvial terrace between SAs 10 and 13 and shovel tests 2B and 3B. This area of the site exhibited the densest concentration of artifacts and was believed to possess the greatest potential for containing buried cultural material. BHTR 1 measured 7m in length and 1.34m in depth (Figure 15). Four strata were recorded.

Stratum 1 extended to approximately 30cm below the surface and was determined to be a fine sandy silt. It had a Munsell color of 10YR6/4 (pale brown). The soil present in this stratum was extremely crumbly and was easily separated from identically colored soil beneath it. Gravels and angular pieces of white chert, prevalent on 3NW16, were not recorded in this stratum.

The soil in stratum 2 was identical to that in stratum 1 in all aspects except one. This soil was extremely compact, which given the nature of stratum 1, allowed for a cleavage plane to exist. This stratum ranged from approximately 30cm to 79cm below the surface. A linear concentration of cultural material was recorded at 45cm (average) below the surface (Figure 15). This concentration consisted of 8 small interior flakes (nos. 1, 2, 4, 6, 8, 11, 14, 15) and 1 decortication flake (no. 5). These artifacts were spread out over a distance of approximately 4.2m and their linear nature was not apparent until they had been plotted on the profile map.

Stratum 3 extended to a depth of approximately 1.1m below the surface. It was a sandy silt and had a Munsell color of 10YR5/6 (yellowish brown). A sparse concentration of tiny concretions was present. Within this a cluster of artifacts was recorded at 95cm below the surface (average).

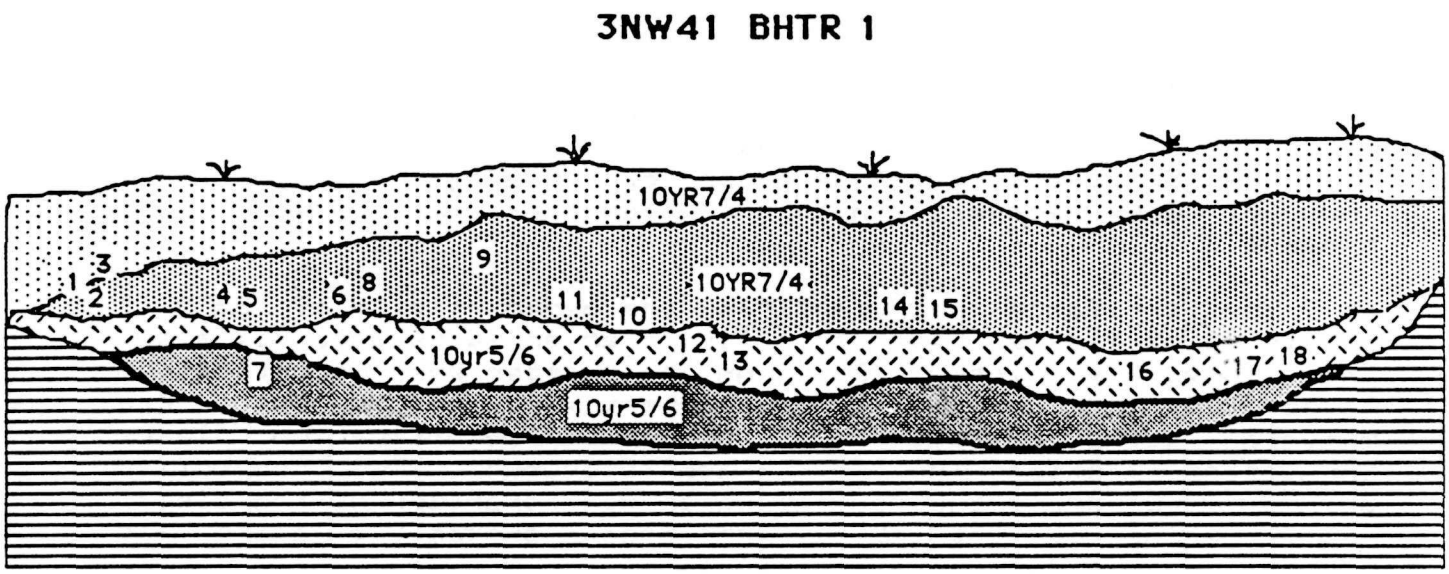

Figure 15. 3NW41, Backhoe Trench 1.

Maximum linear dispersion of these artifacts is approximately .7m. These artifacts are 2 small interior flakes (nos. 16, 17) and 1 unknown flake (no. 18) type (lost). Additional artifacts recovered in this stratum include a single interior flake (no. 9), a decortication flake (no. 10), and a piece of unmodified dark blue Boone chert, a color found to be prevalent.

Stratum 4 extended to the bottom of the BHTR. It also had a Munsell color of 10YR5/6 (yellowish brown). This stratum, however, was easily distinguished from the the overlying one based on the presence of clay in the soil. The soil was a silt loam. In addition, an increase in the density of concretions from the previous stratum was recorded. A single interior flake (no. 7) was recovered in this stratum near the contact with stratum 3.

The artifacts recovered from the backdirt pile of BHTR 1 consisted of flakes, shatter, fire-cracked sandstone, bifaces, and projectile points. Based on the shatter and decortication flakes, upland sources of Boone chert were the dominant raw material being exploited. A couple of decortication flakes exhibiting a water-worn cortex were recovered. Two projectile points were recovered, one of which was comprised of the distal half, making it untypable. The second projectile point was classified as a Johnson (Figure14b).

BHTR 2 was located southeast of BHTR 1 at the base of the alluvial terrace. It is located at a lower elevation than BHTR 1 and is closer to the Buffalo River. This trench measured 7m in length and 1.22m in depth (Figure 16). Four distinct strata were identified.

The first stratum extended to 20cm below the surface and had a Munsell color of 10YR7/3 (very pale brown). It was a sandy silt and was extremely loose and crumbly in nature.

Stratum 2 was a sandy silt and possessed a Munsell color of 10YR7/3 (very pale brown). The distinction between strata 1 and 2 was the compact nature of stratum 2. The loose nature of stratum 1 established a cleavage between the two strata. The bottom depth of stratum 2 was highly variable ranging from 52cm to 98cm below the surface. Two linear concentrations of artifacts were recorded in this stratum (Figure 16). The first linear concentration of artifacts occurred at 40cm below the surface (average). Six Boone chert flakes were point plotted (nos. 1, 3, 6, 7, 8, 10). One of these was a decortication flake from a river cobble. A biface fragment (no. 11) was also recovered 44cm below the surface. It was located flush with a tree root which may have influenced its location to some degree. The second linear concentration of artifacts is more tenuous considering it is comprised of 3 small interior flakes (nos. 2, 4, 9) spread out over approximately 3.6m. A sparse scattering of wood charcoal was recorded approximately 65cm below the surface at the northwest end of BHTR 2. The charcoal was located at the

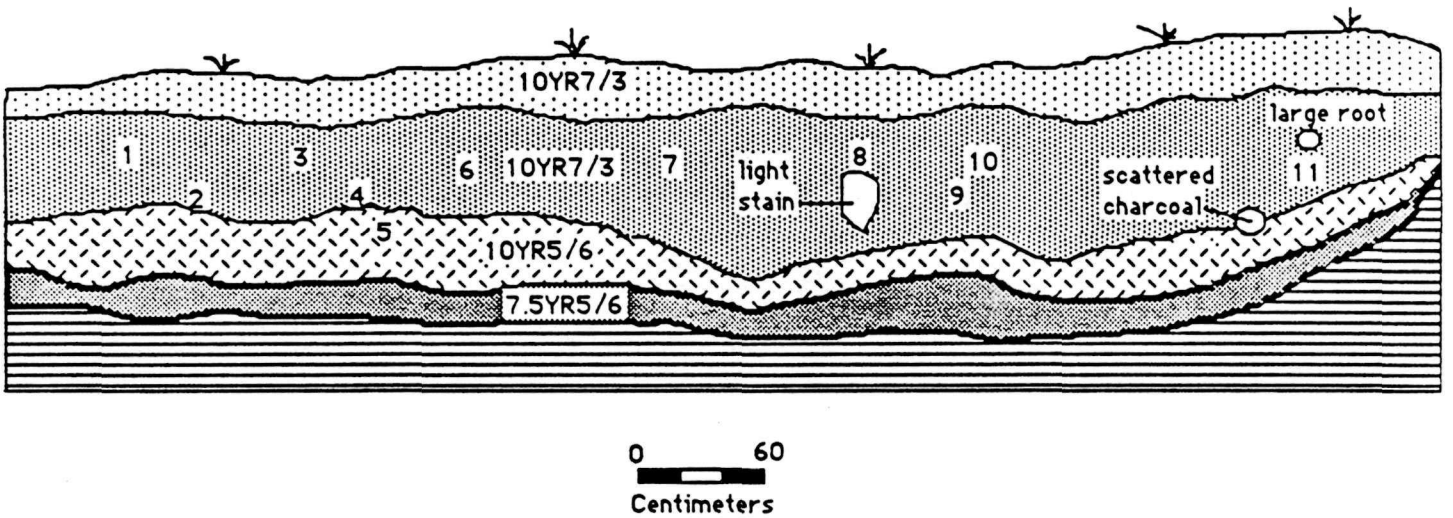

Figure 16. 3NW41, Backhoe Trench 2.

contact of strata 2 and 3 and was present in each of these strata. The area surrounding the charcoal was carefully cleaned and inspected for indications of a feature outline or firing. None were observed, and this was determined to be a natural occurrence.

Stratum 3 extended to approximately 1m below the surface. The soil texture was determined to be a sandy silt and possessed a Munsell color of 10YR5/6 (yellowish brown). A single small interior flake (no. 5) was point plotted at 68cm below the surface and subsequently lost. This artifact represents the deepest point at which cultural material was recovered in this BHTR.

Stratum 4 extended to the bottom of BHTR 2. It had a Munsell color of 7.5YR5/6 (strong brown) and was a silty sand.

Artifacts collected from the backdirt pile of BHTR 2 included flakes, shatter, projectile points, bifaces, and sandstone cobbles (Appendix A:Table A-6). The bifaces and biface fragments present represented varying stages of reduction. Some of the bifaces in the initial stages of reduction were discarded due to imperfections in the raw material or the presence of hinge or step fractures beyond which the flintknapper could not proceed. Additional bifaces are at or approaching the preform stage at which point, if the data base was adequate, they could be identified with a particular projectile point type (cf. Coe 1964). Two projectile points were recovered. These include a Stone Square Stemmed (Figure 13e) and an untyped corner notched projectile point (Figure 13b).

Site Function and Size

Given the topographic setting of 3NW41 (low alluvial terrace), the large area encompassed, and the time span represented by the diagnostic artifacts recovered (Woodland-Early Archaic), it is probable that a diverse range of activities is represented at this site. However, analysis of the cultural material recovered during the investigations conducted indicated that the primary function of 3NW41 was as a workshop site. More specifically, based on the presence of bifaces and biface fragments representing different stages of manufacture, it is believed that 3NW41 represents an important area for producing projectile points or reducing the raw material to a preform stage thereby making transportation easier. While a low density of cores and unmodified pieces of raw material does exist at this site, the artifact analysis indicates that the initial reduction of the raw material into usable, more easily transportable pieces was occurring elsewhere. This point is supported by the low occurrence and/or absence of large decortication flakes, large pieces of shatter, and of artifacts discarded before completion because of imperfections in the raw material.

Indications of additional activities occurring at 3NW41 is supported by the presence of numerous RUM flakes. Four spoke-shaves were also recovered.

Site 3NW41 measures approximately 88m northwest/southeast by 362m southwest/northeast (Figures 11 & 12).

CHAPTER 6

GEOMORPHOLOGY

The importance of establishing the depositional history of different sites is becoming evident with the increased deep testing of areas through the use of backhoes (Sierzchula 1984; Chapman 1981; Lafferty et al. 1986a; Spears et al. 1986). This procedure is establishing the presence of cultural material below depths reached by more conventional forms of archeological investigation. In addition, the potential for buried cultural material along the Buffalo River below depths attainable by a backhoe is being established (Spears et al. 1986).

In terms of the present project, establishing the geomorphologic history is important for two reasons. First, beginning to establish the depositional history for this area will aid future investigators in a similar topographic situation within the Buffalo National River in determining the potential for buried cultural deposits. The importance of this point becomes readily apparent when one familiarizes himself with the topography of this section of the Buffalo River. Floodplain and terrace areas along the river suitable for occupation are areally restricted, and the factors affecting the presence or absence of buried cultural deposits are unknown. Earlier investigations of archeological sites within the floodplain of the Buffalo River indicated that no buried deposits were present. Therefore, because a site is in the floodplain does not necessarily mean there are deeper deposits present (Sierzchula, 1981, 1984). This situation was also reflected in sites along he White River prior to its damming to form Beaver Lake. Many sites in this location were found to be entirely disturbed by plowing due to the shallow nature of the deposits (Scholtz 1967: Golden 1962). The second reason centers around HPA's recommendation that 3NW16 and 3NW41 be considered one site . Below, we demonstrate that these two sites are on different geomorphic formations which, when considered with additional information (See Site Definition), indicates that they should be identified as separate sites.

The geomorphic history of the project area was investigated by the excavation of five backhoe trenches (BHTR) at various elevations on 3NW16 and 3NW41. One wall of each BHTR was profiled and the strata present inspected and described. The data collected from each BHTR were compared to determine the history. The interpretation of the data collected is subject to the normal limitations of visual field inspection. Each of the BHTR's excavated has been described in detail in Chapter 5.

3NW16

Within the site boundaries of 3NW16 two fluvial landforms exist. The first is the modern floodplain (T1) associated with the present course of the Buffalo River. The second, located north of the first, is an eroding terrace (T2) apparently associated with an earlier channel of the Buffalo River. BHTR 3 was situated within the area identified as the floodplain and BHTR 1 was located on the terrace.

The soils present in each of the BHTRs document, in part, the processes which have been occurring in this area. The strata present in BHTR 1 indicated that this area has experienced very little alluviation as a result of the modern course of the Buffalo River. Stratum 1 possessed evidence of both alluvial and colluvial deposition. Alluvial deposition in this area was based on the presence of a very low density of fine sand. Flooding episodes to which this presence could be attributed had been destroyed by plowing, and it is doubtful that they could have been recognized given the low density of the sand. Colluvial deposits were present in the form of angular pieces of chert transported by erosion from a higher elevation.

The absence of active alluviation of the terrace is supported further by the presence of a shallow (20cm) developed upland derived B Horizon (stratum 2).

Colluvial deposits constituted a major component within stratum 2. These deposits were comprised of angular pieces of chert with a wider size range and in much denser quantities than were present in stratum 1.

The strata present in BHTR 3 indicate that active alluviation is occurring in this area of the site. In stratum 1, a much higher density of sand was present than was recorded elsewhere on 3NW16. A sparse density of colluvial deposits was present in the form of small angular pieces of chert near the surface of this BHTR. In addition, there was an apparent decrease in density of these deposits from north to south. The presence of the angular pieces of chert can most likely be attributed to farming when the fields were planted in cotton and erosion from the terrace slope caused, in part, by the plowing activities.

The next two strata in BHTR 3 indicate deposition as a

result of flooding. The soil in stratum 2 is a sandy silt. No colluvial deposits were recorded in this stratum. A very slight color change and presence of clay separates stratum 3 from the one above. The presence of water laid clay in this instance may be attributed to a lower-energy flood than was required to deposit the succeeding strata.

3NW41

Based on data collected from the two BHTRs excavated at 3NW41, it is believed that the sediments present can be attributed to alluviation. The soils present in each stratum of the two BHTRs are primarily comprised of varying percentages of silt and sand. In addition, the sand was denser in BHTR 2 which is at a lower elevation and closest to the Buffalo River. This condition is consistent with the known fluvial processes.

CHAPTER 7

SITE DEFINITIONS

One of two recommendations made by HPA concerning the archeological sites at the proposed primitive campground and canoe launch at Carver was that 3NW16 and 3NW41 be consolidated into a single site (Klinger and Hinkle 1986:9). This recommendation was based primarily on the presence of a "continual" scatter of lithics on the dirt road through both sites and the belief that the area occupied by both sites represents a single terrace (Klinger and Hinkle 1986:4). In addition, two of the three shovel tests excavated between 3NW16 and 3NW41 produced cultural material.

It is obvious that the potential for some degree of site overlap exists between 3NW16 and 3NW41 given their proximity to one another and the low availability of flat inhabitable space in the project area. If one wants to consider the presence of a very low density of cultural material between two much greater concentrations as the sole basis for considering the area as one site, then 3NW16 and 3NW41 should be consolidated. However, archeology is just one factor to be considered by individuals managing public lands and it is their job to maximize the use of these lands to the fullest potential. As such, when a problem such as the one presently being addressed arises, several points need to be evaluated. In relation to this project, these include subsurface testing for buried cultural deposits to determine potential significance, evaluation of the topographic setting, establishing the geomorphologic history, observation of surface remains where possible, and site function.

Based on the data collected by MCRA during its investigation of 3NW16 and 3NW41, it is recommended that each site be considered a separate entity. The discussion below details the information collected and the interpretations drawn which we believe support this recommendation. Some of the information discussed below has been detailed elsewhere in this report. However, a separate section addressing HPA's recommendation was needed in light of the presence of significant deposits at 3NW41 and the absence of significant deposits at 3NW16.

Initial investigations concerning HPA's recommendation centered around the surface investigation of the dirt road through 3NW16 and 3NW41. Admittedly, this is a narrow sample area, but it is axiomatic that areas with adequate surface visibility on a site be investigated. Unfortunately, the dirt road constituted the only ground surface free of vegetation within the project area. During the surface inspection of the dirt road two distinct concentrations of artifacts were recorded. The first area was located on the terrace on which the main site area of 3NW16 is situated (Figure 7). This scatter began due south of the southwest corner of the stock pen and remained consistent down the east slope of the terrace until the dirt road flattened out as it approached the natural drainage area between 3NW16 and 3NW41. The second concentration of cultural material became evident as the southwest slope to the low alluvial terrace began to rise (Figure 11). The artifact density across the alluvial terrace remained consistent until the northeast slope leveled off at the base. A total of four flakes was observed in the dirt road between the two artifact concentrations. These flakes were dispersed over a distance of approximately 52m.

Klinger and Hinkle (1986:4) note that a general collection of artifacts was made from the dirt road through 3NW16 and 3NW41. It is believed, however, that the collection was sufficiently restricted in size (six artifacts collected) so as not to skew the concentrations observed by MCRA personnel.

The second area of discussion centers around the artifact density and distribution at each site based on the excavation of shovel tests and stripped areas (SA)s. Klinger and Hinkle (1986:5,8) note that two of three shovel tests excavated between 3NW16 and 3NW41 were positive. Based on the HPA project maps (Klinger and Hinkle 1986:6) these shovel tests are located in or very near the natural drainage area. A total of two artifacts were recovered from these shovel tests.

Shovel tests conducted by MCRA at 3NW16 and 3NW41 indicate a very sparse occurrence of artifacts along the natural drainage area. Five shovel tests were excavated in this vicinity with three being negative. The two positive shovel tests are located on an east-west line and 15 artifacts were recovered. The greatest concentration of artifacts recovered from shovel tests (nos. 6,9,12) on 3NW16 is located west of the two positive shovel tests. Two of the three shovel tests within this concentration are on a slope, and artifact displacement due to farming practices and erosion is believed to have occurred in this instance. The negative shovel tests along the natural drainage area are reflected in additional shovel tests to the west in which one flake was recovered.

The extremely light density of artifacts is also evident when one considers the number and weight of artifacts recovered from the SAs excavated on 3NW16 and 3NW41. There is a definite decrease in those SA's nearest the natural drainage area with those on 3NW41 being the most marked (Appendix A).

The BHTRs excavated at 3NW16 and 3NW41 showed that while the lower elevations of these two sites have a similar if not identical geomorphic history, the main site areas are completely different. BHTR 1 at 3NW16 indicated that the area in which it is located possesses characteristics of an upland eroding terrace. Colluvial deposits are present throughout the strata recorded and a developed B Horizon is extremely shallow (20cm below the surface). BHTR 1, located on the low terrace at 3NW41, indicated that this feature is completely alluvial in nature (to the depth trenched). BHTR 2 at 3NW41 and BHTR 3 at 3NW16 possess similar soil characteristics, and visual inspection indicates they are located at approximately the same elevation. While it may be argued that since these areas have similar depositional histories, consolidation of the two sites should be considered. However, one must also take into account that BHTR 2 recorded cultural material 68cm below the surface and shovel tests in the area consistently recovered material to 50cm below the surface. No cultural material was present below the plowzone in BHTR 3 at 3NW16, and most shovel tests and SAs near it recovered few if any artifacts.

In terms of establishing the presence of buried cultural deposits the excavation of BHTRs at each site adequately demonstrated this occurrence at 3NW41 and not at 3NW16. In BHTR 1 and BHTR 2 at 3NW41 artifacts were recorded as deep as 95cm and 68cm below the surface, respectively. In BHTRs 1 and 3 at3NW16 no artifacts were recorded below the plowzone. The 3 flakes recorded below the plowzone in BHTR 2 were considered a backhoe-induced anomaly. The excavation of shovel tests at each of the two sites essentially reflected the information recorded in the BHTRs. That is, cultural material at 3NW16 was generally confined to the first 10cm and artifacts were present to at least 50cm below the surface at 3NW41.

In discussing the topographic setting of each site, it should be understood that the quad map for the project area does not allow one to visualize adequately the project area. This is entirely due to the use of a 40 foot contour interval on the topographic map. Based on visual observations made of both sites, 3NW16 is 5m to 7m higher in elevation than the main site area of 3NW41.

The final area to be discussed centers around the potential site functions of 3NW16 and 3NW41. It has been discussed elsewhere that evidence to suggest that 3NW16 was used for something other than a short term campsite or specialized activity area does not exist or was not recorded. The artifacts recovered from 3NW41 indicate the use of this area as a workshop site. The presence of large quantities of reduction debris of various sizes, and of bifaces at various stages of manufacture supports this classification. In addition, a small number of spokeshaves (4), indicating some woodworking, were recovered.

CHAPTER 8

SITE SIGNIFICANCE AND RECOMMENDATIONS

In this section the significance of the cultural resources tested is assessed in terms of the National Register of Historic Places (NRHP) criteria. Significance in terms of these criteria has developed over the past century and is legally embedded in the laws and regulations of the Federal Government (Federal Register 1976,1977). The development of this concept has been extensively discussed (cf. extensive summary in Lafferty et al. 1984:133-137) and will not be recapitulated here. Below I briefly define these criteria as currently used. The temporal span of the resource base is then discussed and pertinent research questions are specified from the State Plan (Davis 1982) for the sites which have NRHP quality deposits and the eligibility of each site group is discussed. Finally the impact to each potentially significant site is summarized.

Federal Regulation 36CFR60.4 outlines the qualities which make cultural properties significant and eligible for nomination to the National Register of Historic Places (NRHP). These regulations state:

> National Register criteria for evaluation.
>
> The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects of State and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> (a) That are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> (b) That are associated with the lives of persons significant in our past; or
>
> (c) That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction;

or

(d) That have yielded, or may be likely to yield, information important in prehistory or history. (Federal Register 1976:1595)

In order for sites to be significant and eligible for NRHP nomination they should have intact deposits and a high degree of integrity of location, setting, feeling and association. While this is not a criterion for significance it is a general precondition defined in the regulations (Federal Register 1976:1595). In some instances it can be waived if intact deposits of a particular study unit (cf. Davis 1982 for the specific ones currently recognized in this part of Arkansas) are not known or known to be almost nonexistent. For example, in the Ozarks Sabo et al. (1982) explicitly included disturbed assemblages from the Archaic, Mississippian and Woodland periods and virtually any Paleo-Indian/Dalton site as potentially significant suggesting just how rare these undisturbed sites are in that region. Other highly disturbed sites which are known to be representative of classes of sites with known undisturbed deposits are likely to be non-significant; however specific arguments might also waive this.

The temporal cut off for significance is legally set at more than 50 years old. Again this requirement can be waived if the resource is associated with someone of note or importance, and is otherwise eligible under Criteria a, b and/or c.

For a site to be archeologically significant (Criterion d) it must be shown to have data relevant to current research questions in an archeological region such as the Ozark Mountains (cf. Tainter and Lucas 1983 for comment and extensive reference of this discussion). At the present time, some of the basic study units which form the cultural, chronological and spatial units that are manipulated in more sophisticated processual analyses have not been defined. Therefore, chronology construction and assemblage/phase definition are high priority activities and form relevant research questions.

Significance of Carver

In a letter reviewing the draft of this report the state archeologist noted that a historical site is potentially significant regardless if no artifacts or other evidence of occupation remains. Significance in this instance depends on the role the area played in the lives of the local inhabitants.

MCRA believes that the historical occupation in the project area is not significant. This determination is predicated on the fact that numerous post offices came and went in Newton County. In addition, at no time was Carver considered by the area population to be a major activity area nor was it an important component necessary to maintain their lifestyles.

3NW16

This site is predominantly located on an eroding slope which has been subjected to considerable historic disturbances. This has included plowing by both draft animal and tractor and concomitant erosion. The present data based on MCRA's and HPA's excavations of 47 shovel tests involving over 1.5 cubic meters of matrix indicate that the site is totally contained in the plowzone. This finding is further confirmed by the lack of intact cultural deposits below the plowzone in the 3 BHTRs excavated at 3NW16 during the present investigation. No features were found in any of the shovel tests nor the more than 250 square meters of the site which were stripped of plowzone.

There was a uniformly low density of artifacts present at 3NW16 considering the amount of matrix excavated by the various techniques used at the site. While this may have been significant if the analysis had isolated a class of artifact(s) which might have indicated potential site function, this was not the case (Lafferty et al. 1986a). The quantities and classes of artifacts recovered indicate very little concerning site function beyond the general activities that occur at most archeological sites in the Arkansas Ozarks. These include the maintenance of stone implements as evidenced by debitage and the limited manufacture of bifaces. To further testify to the low intensity use of the area is the general lack of temporally sensitive diagnostic artifacts. HPA investigations recovered 2 projectile points which were too fragmentary to be identified. MCRA recovered 1 projectile point which was also untypable.

3NW16 lacks the integrity of intact cultural deposits, cannot be assigned a time frame during which occupation occurred, and assignment of site function is tentative at best due to the generality of the artifacts present. Therefore, we believe that the prehistoric element present at 3NW16 does not meet criterion D of the NRHP's criteria.

3NW41

In contrast with 3NW16, site 3NW41 produced a high density of artifacts from below the plowzone. Shovel tests within the site boundaries produced cultural material to 50cm below the surface and linear concentrations of artifacts were recorded at depths of 40cm, 45cm, 65cm, and 95cm below the surface in the 2 BHTRs excavated at 3NW41. In addition, projectile points suggesting an occupation or use of this area extending from the Early Archaic into the Woodland period were recovered. In discussing the importance of buried stratified stream terrace sites in northwest Arkansas Raab et al. (1982:NW6-NW7) point out that:

> Sites of this type offer the prospect of developing regional culture chronologies based on artifact styles because they probably afford less disturbed stratigraphic sequences than those typically found in bluff shelters. The prospect also exists of determining whether floodplain sites tended to be functionally differentiated from sites in other physiographic settings.

The very fact that a regional chronology based on artifact styles does not exist for the Arkansas Ozarks, unlike other areas (cf. Coe 1964; Schambach 1982; Jenkins and Krause 1986), should indicate the importance of an archeological site encompassing most of the time frame during which prehistoric man was present in this area.

The fact that 3NW41 is stratified and functioned primarily as a workshop area offers archeologists a unique opportunity to determine the reduction sequence of bifaces to projectile points of a particular technology. The importance of this point becomes readily apparent when one considers the large number of sites in which bifaces and no typeable projectile points are recovered. It has been shown elsewhere (Coe 1964; cf. Klinger et al. 1981: 159) that bifaces used to produce a particular type of projectile point within a region are often morphologically and technologically different from those used to produce other types of points within that region. If these sequences can be identified and isolated, archeologists will be able to assign a temporal span to sites in other physiographic regions, thereby increasing one's understanding of past settlement-subsistence patterns (cf. Raab et al. 1982:NW18). The potential for addressing this question is evident in the large number of bifaces present at 3NW41. In discussing the need for documentation of open habitation and specialized sites Sabo (1986: x-xi) points out the following:

> There is still a desperate need for archeological data from open habitation and special purpose sites in the Ozarks. Some excellent reports on sites of this kind exist in the literature for the Missouri and Oklahoma portions of the Ozarks but for northwest Arkansas this class of site is known primarily on the basis of surface collections (e.g., Mapes 1965). Although a large number of open sites was identified in the Beaver Lake survey project during the early 1960s, only a small amount of testing was conducted (Scholtz 1967) so few data were obtained on subsurface content and structure. Some more recent efforts have been made to evaluate more intensively and systematically open sites in both riverine and upland settings (e.g., Trubowitz 1980; Kay and Sabo 1983), but data derived from careful excavation is still impoverished making difficult if not impossible attempts to reconstruct this aspect of prehistoric Ozark settlement systems.

Due to the presence of intact buried cultural deposits entailing a temporal span from Early Archaic to Woodland we believe 3NW41 possesses information which will be important in the understanding of prehistoric adaptations to the Upper Buffalo River Valley. Therefore, this site is significant in terms of the National Register of Historic Places Criteria.

RECOMMENDATIONS

1. Archeological clearance should be given to proceed with the construction of the campground, road, parking area, canoe launching beach and latrine on 3NW16. Present evidence indicates that this site is not significant in terms of the NRHP criteria.

2. Site 3NW41 will not be adversely affected by the present project as planned. If this area is designated to be used for other purposes then we recommend appropriate mitigative measures be taken or plans developed in the ongoing interpretive living site project. We also recommend that the site be nominated to the National Register of Historic Places.

3. Our investigations indicated that there is a rapidly decreasing population of older people who remember the Buffalo River in its bucolic pre-park days. We believe that some of this information is of importance to the future interpretation of the park. Therefore, we recommend that systematic oral history be collected from all of the presently surviving people who once owned land in and around the Buffalo National River to be preserved for the people of the United States forever.

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APPENDIX A

ARTIFACT TABLES KEY

BASENT = Basal Notched
BAT = Battered
BIFK = Biface/Knife
BTHIN = Bifacial Thinning Flake
CHNK = Chunk
CL = Chipped Lithic
COBL = Cobble
CON = Concave Base
CORNT = Corner Notched
CRT = Chert
DART = Dart Point
DECORT = Decortication Flake
DS = Distal Fragment
EXHAUST = Exhausted Core
EXPNST = Expanding Stem
FC = Fire-Cracked
FLA = Flake
FR = Fragment
GRIP = Grinding/Pounding Tool
GRL = Groundstone Lithic
HEM = Hematite
HT = Heated
IND = Indeterminate
MDIR = Multi-Directional Core
NOTCH = Notched
NUTS = Nutting Stone
PEBL = Pebble
PITKIN = Pitkin Chert
PITS = Pitted Stone
POLISH = Polished
PPK = Projectile Point/Knife
PX = Proximal Fragment
RUM = Retouched/Utilized/Modified
SCR = Scraper
SFTLP = Soft-Hammer Lip
SHAT = Shatter
SPOKS = Spokeshave
SS = Sandstone
STRAST = Straight Stemmed
STRI = Striated
ST1 = Early Reduction Stage of Biface
ST2 = Middle Reduction Stage of Biface
ST3 = Late Reduction Stage of Biface
Tested = Tested for Quality
URM = Unmodified Raw Material

ARTIFACT DEFINITIONS

Most of the basic artifact definitions used in this project were directly from the DELOS manual (Kaczor et al 1983). The basic lithic tool definitions are morphological types with no known cultural historical ascriptions (cf. Lafferty et al. 1981 for a discussion of types of types). These elegant definitions are quoted verbatum from the manual. Where we have used cultural historical types (diagnostics) we have identified the literature where definitions and discussion of those types can be found.

Projectile Point

Morphologically defined artifact class that includes all symmetrically shaped, pointed chipped stone bifaces and unifaces and recognizable fragments thereof, with some form of preparation (i.e. notching, constricting, lateral grinding, thinning, etc.) to facilitate hafting. Lateral margins are characterized by an acute to moderately angled working edge and bifacial retouch, the extent of which varies considerably and, on unifacial (arrow point) specimens, is often confined to the edge margins and point of the tool. Basal preparation for hafting may not be distinct on certain arrowpoint forms.

Arrow Point

A subdivision of the large projectile point class that is more generally symmetrically but sometimes assymetrically shaped and sharply pointed biface or uniface with an acute edge angle (less than 45 degrees along the blade edges. Maximum thickness is 5mm and weight rarely exceeds 2.5 grams. Basal preparation for hafting may not be present or distinctive in some established types, such as Maud, Nodena, Madison, and Kaskaskia. Inferred function is a projectile tip on an arrow (Kaczor et al. 1983:4).

Dart Point

A more generally symmetrical but sometimes assymetrically shaped, pointed biface that exhibits some form of basal preparation for hafting. Minimum thickness is greater than 5 mm and weight exceeds 5.0 grams. Typical named types include Big Sandy, Cache River, Palmer, Graham Cave, etc. (Kaczor et al. 1983:5).

Scraper

Beveled tools made from a flake, blade, or core that exhibits morphological shaping through extensive steep (greater than 49 degrees but some angled greater than 45 degrees) retouch or flaking of one or more margins or faces. Working edges are straight to convex in section and are formed by a continous line of fine unifacial retouch and/or use-wear. A haft facility and/or backing may be present. Subordinate elements of this superclass includes spokeshaves and drawshaves, and includes small flakes with the defined edge alteration (Kaczor et al. 1983:6).

Spokeshave

A special class of scraping tool that is characterized by a pronounced concave edge with moderate to steep angled unifacial retouch suitable for the shaving of narrow convex surfaces. This size and shape of the concave working edge(s) is variable. A haft facility and/or backing may be present on recycled projectile points and bifacial knives, although they are most commonly made on a fairly thick blade or flake (Kaczor et al. 1983:7)

Biface

Bifaces are the earliest stage of reduction recognizable in this analysis. It is characterized by a bifacial edge defining the coronal plain (See Futato 1983: Appendix A for definitions of primitives employed here). There are three general stages recognized here: Stage I with incomplete margins, often with cortex remaining, with large broad flake scars. Stage II possesses more or less complete margins, flake scars are generally smaller, with little or no cortex remaining.

Stage III bifaces are characteristically more finished than the early stage bifaces, with smooth margins and a pear shaped coronal plane. Very little reduction is needed to move from a stage III biface to the finished product.

Pitted Stone

A hand sized or slightly larger ovoid stone characterized by one or more small circular wear depressions on one or more faces of the tool. In general, they occur as a convenient utilization of a natural (cobble) form. Function as anvils, nutcrackers, and milling stone, and may also show occasional multipurpose use as an abrader or hammerstone.

Flake

A piece of lithic material, removed during the chipping process, that exhibits at least two of the following characteristics: (1) a bulb of applied force; (2) a platform or point of impact and (3) depending on the material type, a bulbar scar, and conchoidal ripple marks or radial fracture lines along the ventral or detached surface. Includes decortication, secondary, thinning, detritus, and retouch/resharpening flake forms (Kaczor et al. 1983:14-24).

Decortication Flake

A subdivision of the unmodified flakes with 10% or more of the dorsal surface covered with cortex.

Blades

Blades are flakes with parallel lateral margins whose length exceeds their width by a ratio of 2:1 or greater.

Bifacial Flakes

These are flakes with a thin, curved form usually characterized by the presence of shallow expanding flake scars on the dorsal surface. The platform (if present) frequently exhibits bifacial flaking (since it is a portion of a bifacial edge), an acute platform angle, and heavily ground edges from platform preparation.

Soft-hammer Flake

These flakes exhibit a lenticular lip above the bulb of percussion at the platform. This is caused by use of a soft hammer (e.g. wooden baton, hammerstone with limestone cortex)

Core

A mass of lithic material exhibiting one or more negative bulb scars or striking platforms from the intentional removal of a flake(s) or spall(s). Size is variable, depending on the manufacturing stage, and can range from large cobbles and angular chunks to very small, multifaceted bifacial nuclei (exhausted cores). Preparation of a striking platform or platforms for the removal of flakes may or may not be present, and if present, may show highly stylized (regular) flake scars. This large super class is a singularly amorphous grouping which can best be defined as subsuming the following subsidiary classes. Cores differ from choppers in that the latter commonly exhibit an irregular sensuscidal profile with evidence of use. In the absence of the

working edge choppers and cores are essentially similar. (Kaczor et al 1983:11).

Tested Cobble

Tested cobbles exhibit removal of one or two flakes.

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TABLE A-1

Shell Artifacts from Shovel Tests

****

UNIT	#	BDEP	TDEP	FSN	ASN	QT	WT	DESCRIPTION					
ST	3	0.0	48.0	4	1	6	6.7	DL	FLA			DRT	
ST	3	0.0	48.0	4	2	1	0.5	DL	FLA		DECORT	DRT	
ST	3	0.0	48.0	4	3	1	0.4	DL	FLA		ETHIN	DRT	
ST	3	0.0	48.0	4	4	1	2.9	DL	FLA		DECORT RUM	DRT	
ST	3	0.0	48.0	4	5	1	1.2	DL	FLA		RUM	DRT	
ST	5	0.0	50.0	9		1	0.4	DL	FLA		RUM	DRT	
ST	6	0.0	50.0	10		9	12.3	DL	FLA			DRT	
ST	8	0.0	49.0	12		5	8.3	DL	FLA			DRT	
ST	9	0.0	39.0	11		11	13.6	DL	FLA			DRT	
ST	11	0.0	50.0	15	1	1	1244.5	UNM				BB	
ST	11	0.0	50.0	15	2	1	3.9	DL	FLA		ETHIN	DRT	
ST	11	0.0	50.0	15	3	1	111.7	DL	SHRT			DRT	
ST	12	0.0	39.0	16	2	1	3.4	DL	SHRT			DRT	FCR
ST	12	0.0	39.0	16	1	19	14.3	DL	FLA			DRT	
ST	14	0.0	46.0	29	1	4	9.0	DL	FLA			DRT	
ST	14	0.0	46.0	29	2	2	15.2	DL	FLA		RUM	DRT	
ST	14	0.0	46.0	29	3	1	3.2	DL	FLA		DECORT RUM	DRT	
ST	14	0.0	46.0	29	4	1	22.6	DL	FLA		RUM	DRT	
ST	14	0.0	46.0	29	5	3	2.0	DL	FLA		DECORT	DRT	
ST	14	0.0	46.0	29	6	2	316.8	BRL	GRIP	BITE		BB	FR
ST	15	0.0	37.0	20	2	3	8.5	DL	FLA			DRT	FCR
ST	15	0.0	50.0	18	1	3	2.8	DL	FLA			DRT	
ST	15	0.0	50.0	18	2	1	2.0	DL	FLA		RUM	DRT	
ST	17	0.0	43.0	19	1	7	6.0	DL	FLA			DRT	
ST	17	0.0	43.0	19	2	1	4.2	DL	FLA		RUM	DRT	
ST	17	0.0	43.0	19	3	1	58.7	BRL	GRIP			BB	FR
ST	21	0.0	50.0	21		5	6.3	DL	FLA			DRT	
ST	51	0.0	45.0	30	1	3	3.8	DL	FLA			DRT	
ST	51	0.0	45.0	30	2	1	11.3	DL	FLA		RUM	DRT	
ST	51	0.0	45.0	30	3	1	25.1	DL	BIFA			DRT	FR
ST	52	0.0	45.0	25		4	5.3	DL	FLA			DRT	
ST	53	0.0	39.0	28		1	2.9	DL	FLA			DRT	
ST	54	0.0	50.0	22	1	5	4.6	DL	FLA			DRT	
ST	54	0.0	50.0	22	2	1	5.0	DL	FLA		RUM	DRT	

TABLE 4-2

DNAIS ARTIFACTS FROM STRIPPED AREAS

****

UNIT	#	FSN	ASN	QT	WT	DESCRIPTION					
STRIPAR	1	27	1	1	18.2	CL	FLR		ROM	ORT	
STRIPAR	1	27	2	1	0.8	CL	FLR			ORT	
STRIPAR	1	27	3	1	26.2	CL	BIFK	ST2		ORT	
STRIPAR	2	26	1	7	12.7	CL	FLR			ORT	
STRIPAR	2	26	2	1	6.3	CL	FLR			PITMIX	
STRIPAR	2	26	3	2	25.9	CL	FLR		ROM	ORT	
STRIPAR	2	26	4	2	57.7	CL	SHAT			ORT	
STRIPAR	2	26	5	2	17.2	CL	BIFK			ORT	FR
STRIPAR	2	26	6	1	12.7	CL	PFK	DART	IND	ORT	FR
STRIPAR	2	26	7	1	1536.5	GRL	GRIP		BAT	SS	
STRIPAR	3	24	1	1	2.8	CL	FLR			ORT	
STRIPAR	3	24	2	1	7.3	CL	FLR		ROM	ORT	
STRIPAR	3	24	3	1	412.9	GRL	GRIP	NUTS		SS	
STRIPAR	4	23		2	2.1	CL	FLR			ORT	
STRIPAR	5	17	1	10	25.7	CL	FLR			ORT	
STRIPAR	5	17	2	1	14.5	CL	BIFK	ST3		ORT	
STRIPAR	5	17	3	1	56.9	CL	BIFK	ST1		ORT	
STRIPAR	5	17	4	1	1010.4	GRL		GRIP		SS	
STRIPAR	6	14	1	1	296.5	GRL		NUTS		SS	
STRIPAR	6	14	2	1	81.1	CL	CORE		EXHAUST	ORT	
STRIPAR	6	14	3	7	15.1	CL	FLR			ORT	
STRIPAR	6	14	4	4	9.8	CL	FLR		ROM	ORT	
STRIPAR	6	14	5	1	31.3	CL	UNIF		EXHAUST	ORT	
STRIPAR	7	13	2	4	45.1	CL	FLR		ROM	ORT	
STRIPAR	7	13	3	1	75.8	CL	BIFK	ST1		PITMIN	
STRIPAR	7	13	4	1	14.3	CL	BIFK			ORT	FR
STRIPAR	8	8	1	2	1.7	CL	FLR			ORT	
STRIPAR	8	8	2	1	2.5	CL	FLR		ROM	ORT	
STRIPAR	9	6		4	9.2	CL	FLR			ORT	
STRIPAR	10	5	1	5	4.8	CL	FLR			ORT	
STRIPAR	10	5	2	1	1.6	CL	BIFK	IND		ORT	

TABLE A-3

3N16 ARTIFACTS FROM BACKHOE TRENCH

****

UNIT	#	FSN	RSN	QT	WT	DESCRIPTIONS						
BATR	1	1	1	2	11.6	CL	FLA				CRT	
BATR	1	1	2	2	39.2	CL	FLA		DECORT		CRT	
BATR	2	2	2	1	1.5	CL	FLA				CRT	
BATR	2	2	3	1	1.0	CL	FLA				CRT	
BATR	2	2	4	1	178.4	GRL			PITS	BAT	SS	
BATR	2	31	1	13	20.5	CL	FLA				CRT	
BATR	2	31	2	7	33.8	CL	FLA		RUM		CRT	
BATR	2	31	3	1	8.3	CL	FLA		BTHIN		CRT	
BATR	2	31	4	1	150.7	CL	CORE				CRT	
BATR	2	31	5	1	3.6	CL	SHAT				CRT	
BATR	2	31	6	1	603.1	SRL	GRIP		PITS		SS	
BATR	3	3	1	1	2233.0	GRL		NUTS	NOTCH		SS	
BATR	3	3	2	1	234.0	SRL	GRIP				SS	
BATR	3	3	3	3	9.1	CL	FLA				CRT	
BATR	3	3	4	1	2.0	CL	FLA		BTHIN		CRT	
BATR	3	3	5	1	4.2	CL	PPK	DART			CRT	PX IND
BATR	3	3	6	1	135.2	CL	CORE		TESTED		CRT	

TABLE A-4

DNW41 ARTIFACTS FROM SHOVEL TESTS

****

UNIT	LEVEL	BDEP	TDEP	FSN	ASN	QT	WT	DESCRIPTION						
ST	2	0.0	45.0	27	1	3	0.3	DL	FLA				ORT	
ST	3	30.0	38.0	26	1	1	0.7	DL	FLA		DECORT		ORT	
ST	4	0.0	40.0	21	1	1	0.9	DL	FLA		DECORT		ORT	
ST	4	0.0	40.0	21	2	14	7.4	DL	FLA				ORT	
ST	4	0.0	40.0	21	3	1	2.2	DL	FLA		SFTLP		ORT	
ST	4	0.0	40.0	21	4	1	1.0	DL	FLA				ORT	HT
ST	5	0.0	50.0	20	1	3	2.8	DL	FLA				ORT	
ST	5	0.0	50.0	20	2	1	4.4	URM	PEBL					
ST	6	0.0	45.0	17	1	29	30.3	DL	FLA				ORT	
ST	6	0.0	45.0	17	2	1	0.4	DL	FLA		BTHIN		ORT	
ST	6	0.0	45.0	17	3	1	0.6	DL	FLA		SFTLP		PITMIN	
ST	6	0.0	45.0	17	4	7	34.3	DL	SHAT				ORT	
ST	6	0.0	45.0	17	5	1	5.4	DL		DART	CORNT	EXPNST	ORT	CORRELTON
ST	7	0.0	50.0	16	1	3	1.5	DL	FLA		DECORT		ORT	
ST	7	0.0	50.0	16	2	6	10.1	DL	FLA				ORT	
ST	7	0.0	50.0	16	3	2	3.0	DL	FLA				ORT	HT
ST	7	0.0	50.0	16	4	1	2.2	DL	FLA		BTHIN		ORT	
ST	7	0.0	50.0	16	5	1	39.3	DL	BIFM	ST2			ORT	
ST	7	0.0	50.0	16	6	1	15.0	DL	FLA	SCR	RUM		ORT	
ST	8	0.0	50.0	13	1	3	10.0	DL	FLA		DECORT		ORT	
ST	8	0.0	50.0	13	2	1	1.5	DL	FLA		DECORT		ORT	HT
ST	8	0.0	50.0	13	3	1	5.9	DL	FLA		BIFL	RUM	ORT	
ST	8	0.0	50.0	13	4	1	0.2	DL	FLA		SFTLP		ORT	
ST	8	0.0	50.0	13	5	11	13.6	DL	FLA				ORT	
ST	8	0.0	50.0	13	6	1	1.2	DL	FLA				PITMIN	
ST	9	0.0	47.0	12	1	4	22.2	DL	FLA		DECORT		ORT	
ST	9	0.0	47.0	12	2	1	0.2	DL	FLA		DECORT	SFTLP	ORT	
ST	9	0.0	47.0	12	3	1	0.8	DL	FLA		BTHIN		ORT	
ST	9	0.0	47.0	12	4	2	7.3	DL	SHAT				ORT	
ST	9	0.0	47.0	12	5	1	2.2	DL	FLA		RUM		ORT	
ST	9	0.0	47.0	12	6	1	0.2	DL	FLA		SFTLP		AAD	
ST	9	0.0	47.0	12	7	4	2.7	DL	FLA				ORT	HT
ST	9	0.0	47.0	12	8	11	18.5	DL	FLA				ORT	
ST	9	0.0	47.0	12	9	1	2.2	DL	FLA				PITMIN	
ST	10	0.0	50.0	9	1	4	7.5	DL	FLA		RUM		ORT	
ST	10	0.0	50.0	9	2	1	25.9	DL	BIFM	ST2			ORT	
ST	10	0.0	50.0	9	3	29	17.7	DL	FLA				ORT	
ST	11	0.0	50.0	8	1	1	1.7	DL	FLA		DECORT		ORT	
ST	11	0.0	50.0	8	2	5	6.1	DL	FLA				ORT	
ST	11	0.0	50.0	8	3	1	1.1	DL	FLA				ORT	HT
ST	11	0.0	50.0	8	4	1	9.4	DL	SHAT				ORT	
ST	11	0.0	50.0	8	5	1	1.8	DL	PPH		CON	IND	PITMIN	PA
ST	12	0.0	40.0	28	1	1	11.5	DL	FLA		BTHIN	RUM	ORT	CTX
ST	12	0.0	40.0	28	2	1	4.3	DL	FLA		RUM		ORT	
ST	12	0.0	40.0	28	3	8	4.6	DL	FLA				ORT	
ST	12	0.0	40.0	28	4	1	0.3	DL	FLA				PITMIN	
ST	12	0.0	40.0	28	5	1	0.4	DL	FLA				ORT	HT

TABLE A-4

3NW41 ARTIFACTS FROM SHOVEL TESTS

****

UNIT	S	BDEP	TDEP	FSN	REN	QT	WT	DESCRIPTION						
ST	13	0.0	50.0	29	1	1	1.9	CL	FLA				ORT	
ST	13	0.0	50.0	29	2	1	5.2	GRL	MISD		POLISH	STRI	HEM	FR
ST	13	0.0	50.0	29	3	2	2.5	UNM	CHNK				HEM	
ST	15	0.0	50.0	30		2	0.1	CL	FLA				ORT	
ST	16	0.0	47.0	33	1	3	10.7	CL	FLA				ORT	
ST	17	0.0	49.0	34		1	0.5	CL	FLA				ORT	
ST	18	0.0	50.0	31	1	1	52.4	CL	BIFK	ST1			ORT	
ST	18	0.0	50.0	31	2	1	0.5	CL	FLA				ORT	HT
ST	18	0.0	50.0	31	3	1	0.1	CL	FLA				ORT	
ST	20	0.0	50.0	32	1	2	1.9	CL	FLA				ORT	
ST	1a	0.0	20.0	35	2	1	0.4	CL	FLA				ORT	
ST	1a	1.0	20.0	35	1	1	1.1	CL	FLA				ORT	
ST	1a	20.0	35.0	36	2	2	3.6	CL	FLA				ORT	HT
ST	1a	20.0	35.0	36	3	1	0.8	CL	FLA		DECORT		ORT	DTX
ST	1a	35.0	50.0	37	1	1	1.3	CL	FLA				ORT	
ST	1a	35.0	50.0	37	2	2	2.5	UNM	PEBL				ORT	
ST	1b	0.0	22.0	38	1	1	17.8	UNM	CHNK				ORT	
ST	1b	0.0	22.0	38	2	1	0.1	CL	FLA				ORT	
ST	1b	22.0	36.0	39		1	1.0	UNM	PEBL				ORT	FD
ST	1b	36.0	50.0	40	1	1	0.5	CL	FLA		BTHIN		ORT	
ST	1b	36.0	50.0	40	2	1	1.6	CL	FLA				ORT	FD
ST	2b	0.0	23.0	44	1	1	9.8	CL	BIFA	IND			ORT	WD
ST	2b	0.0	23.0	44	2	22	9.4	CL	FLA				ORT	
ST	2b	0.0	23.0	44	3	2	2.5	CL	FLA		DECORT		ORT	
ST	2b	0.0	23.0	44	4	3	3.2	CL	SHAT				ORT	
ST	2b	0.0	23.0	44	5	1	1.2	CL	FLA		SFTLP		ORT	
ST	2b	23.0	39.0	45	1	36	29.9	CL	FLA				ORT	
ST	2b	23.0	39.0	45	2	1	0.1	CL	FLA		SFTLP		ORT	
ST	2b	23.0	39.0	45	3	1	1.3	CL	FLA				PITRIN	
ST	2b	23.0	39.0	45	4	1	1.0	CL	FLA		BTHIN		ORT	
ST	2b	23.0	39.0	45	5	1	1.7	CL	FLA		RUM		ORT	
ST	2b	39.0	50.0	46	1	1	0.3	CL	FLA		DECORT		ORT	HT
ST	2b	39.0	50.0	46	2	3	1.6	CL	FLA				ORT	HT
ST	2b	39.0	50.0	46	3	16	6.5	CL	FLA				ORT	
ST	2b	39.0	50.0	46	4	1	0.1	CL	FLA				PITRIN	
ST	2b	39.0	50.0	46	5	2	0.4	CL	FLA		DECORT	SFTLP	ORT	
ST	3b	0.0	20.0	41	1	1	5.1	CL	FLA		BTHIN		ORT	
ST	3b	0.0	23.0	41	2	19	12.6	CL	FLA				ORT	
ST	3b	20.0	35.0	42	1	26	18.2	CL	FLA				ORT	

TABLE A-4

3Nw41 ARTIFACTS FROM SHOVEL TESTS

****

UNIT	S	BDEP	TDEP	FSN	ASN	QT	WT	DESCRIPTION						
ST	3b	20.0	35.0	42	2	2	4.1	CL	SHAT				CRT	
ST	3b	20.0	35.0	42	3	1	1.6	CL	FLA	RUM			CRT	
ST	3b	20.0	35.0	42	4	1	5.5	CL	PPK		IND		CRT	DS
ST	3b	35.0	50.0	43	1	8	3.1	CL	FLA				CRT	
ST	3b	35.0	50.0	43	2	1	0.3	CL	FLA	BTHIN			CRT	
ST	4b	0.0	20.0	47	1	35	21.1	CL	FLA				CRT	
ST	4b	0.0	20.0	47	2	12	10.4	CL	SHAT				CRT	
ST	4b	0.0	20.0	47	3	6	7.2	CL	FLA	DECORT			CRT	
ST	4b	0.0	20.0	47	4	2	15.7	CL	BIFK				CRT	FR
ST	4b	0.0	20.0	47	5	3	0.9	CL	FLA	SFTLP			CRT	
ST	4b	0.0	20.0	47	6	3	0.3	CL	FLA				CRT		HT
ST	4b	0.0	20.0	47	7	1	2.5	CL	FLA	RUM			CRT	
ST	4b	20.0	35.0	48	1	3	1.0	CL	FLA	SFTLP			CRT	
ST	4b	20.0	35.0	48	2	13	6.8	CL	FLA				CRT	
ST	4b	20.0	35.0	48	3	3	0.8	CL	FLA				CRT		HT
ST	4b	20.0	35.0	48	4	1	4.1	CL	FLA	DECORT	SFTLP		CRT	
ST	4b	20.0	35.0	48	5	1	1.8	CL	FLA	DECORT	RUM		CRT	
ST	4b	20.0	35.0	48	6	2	0.6	CL	SHAT				CRT		HT
ST	4b	20.0	35.0	48	7	4	6.2	CL	FLA	DECORT			CRT	
ST	4b	20.0	35.0	48	8	1	0.1	CL	FLA				PITRCN	
ST	4b	35.0	50.0	49		14	3.2	CL	FLA				CRT	
ST	2c	0.0	20.0	50	1	57	46.0	CL	FLA				CRT	
ST	2c	0.0	20.0	50	2	12	3.0	CL	FLA	SFTLP			CRT	
ST	2c	0.0	20.0	50	3	3	17.3	CL	FLA	RUM			CRT	
ST	2c	0.0	20.0	50	4	1	41.9	CL	CORE	RUM			CRT	
ST	2c	0.0	20.0	50	5	4	18.7	CL	SHAT				CRT	
ST	2c	0.0	20.0	50	6	1	14.3	GRM	PEBL				LS	
ST	2c	20.0	32.0	51	1	32	16.1	CL	FLA				CRT	
ST	2c	20.0	32.0	51	2	1	2.1	CL	SHAT				CRT	
ST	2c	20.0	32.0	51	3	1	0.3	CL	FLA	BTHIN			CRT	
ST	2c	20.0	32.0	51	4	3	11.1	CL	FLA	RUM			CRT	
ST	2c	20.0	32.0	51	5	1	2.2	CL	BIFK				CRT	FR
ST	2c	32.0	45.0	52	1	1	167.0	CL	CORE				CRT	
ST	2c	32.0	45.0	52	2	1	3.5	CL	FLA	RUM			CRT	
ST	2c	32.0	45.0	52	3	27	16.3	CL	FLA				CRT	
ST	3c	0.0	23.0	53	1	1	7.4	CL	FLA				CRT		CTX
ST	3c	0.0	23.0	53	2	2	3.2	CL	FLA	DECORT			CRT	
ST	3c	0.0	23.0	53	3	3	7.8	CL	FLA				CRT	
ST	3c	0.0	23.0	53	4	1	2.8	CL	FLA	BTHIN			CRT	

TABLE A-4

3NW41 ARTIFACTS FROM SHOVEL TESTS

UNIT	S	BDEP	TDEP	FSN	ASN	QT	WT	DESCRIPTION					
ST	3c	0.0	23.0	53	5	1	13.8	CL	BIFK			CRT	FR
ST	3c	23.0	30.0	54		3	2.3	CL	FLA			CRT	
ST	3c	30.0	31.0	55		1	0.1	CL	FLA			CRT	
ST	3c	31.0	34.0	56	1	1	0.4	CL	FLA			CRT	
ST	3c	31.0	34.0	56	2	1	1.9	CL	FLA		DECORT	CRT	
ST	3c	34.0	37.0	57	1	1	0.1	CL	FLA			CRT	
ST	3c	37.0	43.0	58	1	2	1.0	CL	FLA			CRT	
ST	3c	37.0	43.0	58	2	1	1.2	GRM	PEBL			CRT	
ST	4c	0.0	10.0	59	1	1	256.7	GRM	COBL			SS	
ST	4c	0.0	10.0	59	2	1	75.9	CL	COBL		TESTED	CRT	
ST	4c	0.0	10.0	59	3	1	39.8	CL	BIFK	ST1		CRT	
ST	4c	0.0	10.0	59	4	1	2.3	CL	SHAT			CRT	
ST	4c	0.0	10.0	59	5	1	0.3	CL	FLA			PITRIN	
ST	4c	0.0	10.0	59	6	2	1.5	CL	FLA			CRT	
ST	4c	16.0	17.0	60	1	1	0.4	CL	FLA			CRT	
ST	4c	16.0	17.0	60	2	1	12.3	GRM	PEBL			CRT	
ST	4c	17.0	23.0	61	1	1	295.6	GRM	COBL			SS	FC
ST	4c	17.0	23.0	61	2	1	238.2	GRM	CHNK			SS	FC
ST	4c	23.0	30.0	62	1	1	6.3	CL	FLA			CRT	
ST	4c	30.0	50.0	63	1	1	16.4	GRM	PEBL			CRT	
ST	4c	30.0	50.0	63	2	2	2.2	CL	FLA		DECORT	CRT	
ST	4c	30.0	50.0	63	3	6	7.6	CL	FLA			CRT	

TABLE A-5

DNA1 ARTIFACTS FROM STRIPPED AREAS

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ART	#	FSN	ASN	CT	WT	DESCRIPTION								
STRIPAR	1	5	1	4	8.3	CL	FLR						PITRIM	
STRIPAR	1	5	2	1	8.3	CL	FLR						CRT	
STRIPAR	1	5	3	1	23.6	CL	SHRT						CRT	
STRIPAR	3	6	1	2	1.6	CL	FLR						CRT	FC
STRIPAR	3	6	2	1	71.9	CL	BIFK	ST1					CRT	
STRIPAR	5	7	1	1	57.6	URM	CHNK						CRT	
STRIPAR	5	7	2	1	6.0	CL	FLR			RUM			CRT	
STRIPAR	5	7	3	1	1.9	CL	FLR						CRT	FT
STRIPAR	5	7	5	1	8.3	CL	FLR						PITRIM	
STRIPAR	5	7	6	1	5.2	CL	PPK	DART				IND	CRT	DS FT
STRIPAR	5	10	16	1	50.5	CL	CORE	SCR					CRT	FR
STRIPAR	6	10	1	3	9.4	CL	FLR			DECORT			CRT	
STRIPAR	6	10	2	58	121.5	CL	FLR						CRT	
STRIPAR	6	10	3	2	18.5	CL	SHRT			RUM			CRT	
STRIPAR	6	10	4	1	8.6	CL	FLR			BTHIN			CRT	
STRIPAR	6	10	5	3	10.3	CL	FLR			BTHIN	RUM		CRT	
STRIPAR	6	10	6	15	110.5	CL	FLR			RUM			CRT	
STRIPAR	6	10	7	2	1.3	CL	FLR			DECORT	RUM		CRT	
STRIPAR	6	10	8	19	265.4	CL	SHRT						CRT	
STRIPAR	6	10	9	1	224.8	CL	CORE						CRT	
STRIPAR	6	10	10	1	503.5	GRL		GRIP	HRM				BS	
STRIPAR	6	10	11	2	576.5	URM	CHNK						BS	
STRIPAR	6	10	12	1	21.4	CL	BIFK						CRT	FR
STRIPAR	6	10	13	3	121.3	CL	BIFK	ST2					CRT	FR
STRIPAR	6	10	14	1	9.0	CL		PPK	EXPAST	DORNT	RUM		CRT	FR IND
STRIPAR	6	10	15	1	28.6	CL	PPK			STRAST	BLIVERDE		CRT	
STRIPAR	7	11	1	32	51.0	CL	FLR						CRT	
STRIPAR	7	11	2	4	9.3	CL	FLR			DECORT			CRT	
STRIPAR	7	11	3	5	10.4	CL	SHRT						CRT	
STRIPAR	7	11	4	5	10.4	CL	FLR			RUM			CRT	
STRIPAR	7	11	5	1	2.9	CL	FLR			DECORT	RUM		CRT	
STRIPAR	7	11	6	3	23.3	CL	FLR			BTHIN			CRT	
STRIPAR	7	11	7	3	2.9	CL	FLR			SFTLP			CRT	
STRIPAR	7	11	8	1	89.1	CL	BIFK	ST1					CRT	
STRIPAR	7	11	9	2	14.0	CL	BIFK	ST3					CRT	FR
STRIPAR	7	11	10	2	37.2	CL	BIFK						CRT	FR
STRIPAR	8	14	1	2	98.4	CL	CORE						CRT	
STRIPAR	8	14	2	2	408.7	CL	COBL			TESTED			CRT	
STRIPAR	8	14	3	5	87.5	CL	SHRT						CRT	
STRIPAR	8	14	4	1	5.8	CL	FLR	SPOKS		DECORT	RUM		CRT	
STRIPAR	8	14	5	2	16.5	CL	FLR			DECORT	RUM		CRT	
STRIPAR	8	14	6	1	5.5	CL	FLR	SCR		RUM			PITRIM	
STRIPAR	8	14	7	1	4.4	CL	FLR	SPOKS		RUM			CRT	
STRIPAR	8	14	8	3	7.9	CL	FLR			BTHIN			CRT	
STRIPAR	8	14	9	5	29.8	CL	FLR						CRT	CTX
STRIPAR	8	14	10	13	50.5	CL	FLR			DECORT			CRT	

TABLE A-5

3N941 ARTIFACTS FROM STRIPPED AREAS

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UNIT	#	FSN	ASN	QT	WT	DESCRIPTION								
STRIPAR	8	14	11	2	1.8	DL	FLA			DEDORT	SFTLP		ORT	
STRIPAR	8	14	12	5	8.5	DL	FLA						ORT	HT
STRIPAR	8	14	13	21	85.2	DL	FLA						ORT	
STRIPAR	8	14	14	8	18.3	DL	FLA			SFTLP			ORT	
STRIPAR	8	14	15	2	3.2	DL	FLA						PITKIN	
STRIPAR	8	14	16	2	71.2	DL	BIFK	ST2					ORT	FR
STRIPAR	8	14	17	1	12.2	DL	BIFK	ST3					PITKIN	FR
STRIPAR	8	14	18	1	70.1	DL	BIFK	ST3					ORT	
STRIPAR	8	14	19	1	8.4	DL	PPK	DART		DDRNT	SAN PATRICE		ORT	
STRIPAR	8	14	20	1	83.4	DL	BIFK	ST3					ORT	
STRIPAR	8	14	21	1	2.2	DL	BIFK						ORT	FR
STRIPAR	9	15	1	54	38.1	DL	FLA						ORT	
STRIPAR	9	15	2	3	28.8	DL	FLA			DEDORT			ORT	
STRIPAR	9	15	3	9	113.4	DL	SHRT						ORT	
STRIPAR	9	15	4	10	76.8	DL	FLA			RUM			ORT	
STRIPAR	9	15	5	1	12.6	DL	FLA			RUM	DEDORT		ORT	
STRIPAR	9	15	6	1	3.8	DL	FLA			BTHIN	RUM		ORT	
STRIPAR	9	15	7	1	4.8	DL	FLA			SFTLP			ORT	FR
STRIPAR	9	15	8	3	15.4	DL	BIFK						ORT	FR
STRIPAR	9	15	9	2	41.4	DL	BIFK	ST2					ORT	FR
STRIPAR	9	15	10	1	106.1	URM	CHAK						SS	FC
STRIPAR	9	15	11	1	312.2	GRL		GRIP					SS	FC
STRIPAR	9	15	12	1	269.2	DL	CORE						ORT	
STRIPAR	9	15	13	2	66.5	DL	SHRT			RUM			ORT	
STRIPAR	9	15	14	1	166.8	URM	COBL						SS	
STRIPAR	10	19	1	8	273.5	DL	SHRT						ORT	
STRIPAR	10	19	2	1	58.7	DL	CORE						ORT	
STRIPAR	10	19	3	76	128.9	DL	FLA						ORT	
STRIPAR	10	19	4	1	28.4	DL	FLA	SPOKE					ORT	
STRIPAR	10	19	5	3	13.1	DL	FLA			DEDORT			ORT	
STRIPAR	10	19	6	1	5.2	DL	FLA			RUM			ORT	FC
STRIPAR	10	19	7	5	24.5	DL	FLA			RUM			ORT	
STRIPAR	10	19	8	3	3.2	DL	FLA			BTHIN			ORT	
STRIPAR	10	19	9	4	6.1	DL	FLA			SFTLP			ORT	
STRIPAR	10	19	10	1	32.7	DL	BIFK	ST2					ORT	FC
STRIPAR	10	19	11	1	17.5	DL	BIFK	ST3					ORT	FR
STRIPAR	10	19	12	1	1.2	DL	BIFK						ORT	FR
STRIPAR	10	19	13	1	1.2	DL		PPK			IND		ORT	FR
STRIPAR	10	19	14	1	1.3	DL		PPK			IND		COL	FR
STRIPAR	10	19	15	1	12.8	DL		DART	EXPNST	RIDE	SIDE-NOTCHED		ORT	
STRIPAR	10	19	16	2	1818.8	URM	COBL						SS	FC
STRIPAR	11	18	1	13	78.7	DL	FLA			RUM			ORT	
STRIPAR	11	18	2	1	4.8	DL	FLA			RUM	DEDORT		ORT	
STRIPAR	11	18	3	7	21.5	DL	FLA			SFTLP			ORT	
STRIPAR	11	18	4	1	1.8	DL	FLA			BTHIN			ORT	
STRIPAR	11	18	5	3	4.8	DL	FLA			BTHIN	RUM		ORT	

TABLE A-5

DNA1 ARTIFACTS FROM STRIPPED AREAS

****

UNIT	#	FSN	ASN	QT	WT	DESCRIPTION						
STRIPAR	11	18	6	3	24.9	DL	BIFA				ORT	FR
STRIPAR	11	18	7	3	6.0	DL	FLA				PITAIN	
STRIPAR	11	18	8	2	2.0	DL	FLA		DECORT		ORT	
STRIPAR	11	18	9	7	98.3	DL	SHAT				ORT	
STRIPAR	11	19	10	75	120.5	DL	FLA				ORT	
STRIPAR	12	22	2	2	0.9	DL	SHAT				ORT	HT
STRIPAR	12	22	3	2	3.1	DL	FLA		DECORT		ORT	
STRIPAR	12	22	4	3	6.5	DL	FLA		DECORT	SFTLP	ORT	
STRIPAR	12	22	5	37	35.3	DL	FLA				ORT	
STRIPAR	12	22	6	10	10.3	DL	FLA		SFTLP		ORT	
STRIPAR	12	22	7	2	6.5	DL	FLA		RUM		ORT	
STRIPAR	12	22	8	2	1.4	DL	FLA				ORT	HT
STRIPAR	12	22	9	2	1.4	DL	FLA				PITAIN	
STRIPAR	12	22	10	1	0.7	DL	FLA				PITAIN	HT
STRIPAR	12	22	11	1	38.7	DL	BIFA	ST2			ORT	
STRIPAR	13	23	1	1	1.7	DL	FLA		BTHIN		ORT	
STRIPAR	13	23	2	2	125.7	DL	CORE				ORT	
STRIPAR	13	23	3	30	25.6	DL	FLA				ORT	
STRIPAR	13	23	4	4	28.4	DL	FLA		RUM		ORT	
STRIPAR	13	23	5	1	0.5	DL	FLA		DECORT		ORT	
STRIPAR	13	23	6	1	1.1	DL	BIFA				ORT	FR
STRIPAR	13	23	7	3	12.6	DL	SHAT				ORT	
STRIPAR	13	23	8	1	1297.1	GRL	GRIP				SS	
STRIPAR	14	24	1	1	3.8	DL	FLA		DECORT	RUM	ORT	
STRIPAR	14	24	2	7	8.7	DL	FLA				ORT	
STRIPAR	14	24	3	2	6.9	DL	FLA				ORT	HT
STRIPAR	14	24	4	1	9.5	DL	BIFA	ST3			ORT	FR
STRIPAR	14	24	5	1	4.6	URM	CHAM				ORT	FD
STRIPAR	15	25	1	1	167.0	URM					ORT	
STRIPAR	15	25	2	1	78.3	DL	CORE		MDIR		ORT	
STRIPAR	15	25	3	1	8.3	DL	FLA	SPOKS	RUM		ORT	
STRIPAR	15	25	4	3	1.0	DL	FLA				ORT	

TABLE A-5

3NA41 ARTIFACTS FROM BACKHOE TRENCH

****

UNIT	#	FSN	ASN	QT	WT	DESCRIPTIONS								
BATR	1	1	1	21	85.0	CL	FLA			UNMOD			ORT		
BATR	1	1	2	12	132.8	CL				DECORT			ORT		
BATR	1	1	3	6	118.0	CL	SHAT						ORT		
BATR	1	1	4	2	3.3	CL				SFTLP			ORT		
BATR	1	1	5	1	18.2	CL				DECORT	RUM		ORT		
BATR	1	1	6	1	2.2	CL	FLA			RUM			ORT		
BATR	1	1	7	1	77.7	CL	BIFK	ST1					ORT		
BATR	1	1	8	1	4.5	CL	PPK	DART		STRAST	CON	JOHNSON	ORT	PX	FD
BATR	1	1	9	1	20.0	CL	BIFK	ST3		RUM			ORT		
BATR	1	1	10	1	7.6	CL	PPK					IND	ORT	DS	
BATR	1	1	11	4	1205.4	GRL	GRIP						SS		
BATR	1	2	1	1	0.6	CL	FLA						ORT		
BATR	1	2	2	1	1.2	CL	FLA						ORT		
BATR	1	2	3		73.2	GRN	CHNK						ORT		
BATR	1	2	4	1	0.2	CL	FLA						ORT		
BATR	1	2	5	1	1.2	CL				DECORT			ORT		
BATR	1	2	6	1	0.4	CL	FLA						ORT		
BATR	1	2	7	1	5.5	CL	FLA						ORT		
BATR	1	2	8	1	4.3	CL	FLA						ORT		
BATR	1	2	9	1	6.5	CL	FLA						ORT		
BATR	1	2	10	1	12.1	CL				DECORT			ORT		
BATR	1	2	11	1	3.8	CL	FLA			RUM			ORT		
BATR	1	2	12	1	1.8	CL	FLA						ORT		
BATR	1	2	13	1	0.5	CL	FLA						ORT		
BATR	1	2	14	1	0.2	CL	FLA						ORT		
BATR	1	2	15	1	2.5	CL	FLA						ORT		
BATR	1	2	16	1	0.4	CL	FLA						ORT		
BATR	1	2	17	1	1.2	CL	FLA						ORT		
BATR	1	2	18	1	252.0	GRL		GRIP					SS		
BATR	2	3	2	1	8.8	CL		PPK		EXPAST	CORNT	IND	ORT		
BATR	2	3	3	4	298.5	CL	BIFK	ST1					ORT		
BATR	2	3	4	3	143.1	CL	BIFK	ST2					ORT		
BATR	2	3	5	4	94.9	CL	BIFK	ST3					ORT		
BATR	2	3	6	1	31.8	CL	BIFK	IND					ORT		FD
BATR	2	3	7	4	79.1	CL	BIFK	IND					ORT	FR	
BATR	2	3	8	9	82.0	CL	FLA			DECORT			ORT		
BATR	2	3	9	8	34.4	CL	FLA			SFTLP			ORT		
BATR	2	3	10	45	113.6	CL	FLA						ORT		
BATR	2	3	11	15	572.3	CL	SHAT						ORT		
BATR	2	3	13	2	160.7	GRL		GRIP		PITS			SS		
BATR	2	3	12	1	20.4	CL	FLA						ORT		FD
BATR	2	4	1	1	0.2	CL	FLA						ORT		
BATR	2	4	2	1	0.9	CL	FLA						ORT		
BATR	2	4	3	1	1.7	CL	FLA			DECORT			ORT		

TABLE P-E

SMALL ARTIFACTS FROM BACKHOE TRENCH

****

UNIT	#	FSN	ASN	QT	WT	DESCRIPTIONS				
BATR	2	4	6	1	1.9	OL	FLA		ORT	
BATR	2	4	7	1	17.0	OL	FLA		ORT	
BATR	2	4	8	1	3.3	OL	FLA		ORT	
BATR	2	4	9	1	2.2	OL	FLA		ORT	
BATR	2	4	10	1	3.2	OL	FLA		ORT	
BATR	2	4	11	1	22.0	OL	BIFA	IND	ORT	FR

APPENDIX B

SCOPE OF WORKS

SCOPE OF WORK

ARCHEOLOGICAL TEST EXCAVATIONS
AT THE CARVER BRIDGE CAMPGROUND AND CANOE LAUNCH AREA
BUFFALO NATIONAL RIVER
NEWTON COUNTY, ARKANSAS

1. INTRODUCTION

The National Park Service (NPS), acting through the Southwest Regional Office, is proposing to have archeological testing conducted at a proposed canoe launch and campground facility near Carver Bridge in Newton County, Arkansas. This action is necessary in order to determine the significance of cultural resources contained within the proposed development area and to better define the boundaries of archeological sites 3NW16 and 3NW41.

The archeological investigations will consist of an archival search for information on the historical occupation of the development area and its relationship to the location of the community of Carver, and the field investigations of both prehistoric sites listed above. This work will be followed by a letter report describing the preliminary field results regarding the prehistoric and historic components of the site areas and include recommendations on the significance of the two sites and a statement pertaining to archeological clearance.

A final report describing these investigations, methods used, results obtained and recommendations offered will be submitted following analysis of the recovered data.

The work defined herein is to be performed in accordance with this Scope of Work under the authorities of the Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act of 1966 (as amended in 1980), P.L. 94-422, and in conformance with approved policies and standards of the National Park Service and the State Plan for the Conservation of Archeological Resources in Arkansas.

2. BACKGROUND

As part of a continuing program to provide adequate and safe facilities for public use at Buffalo National River, the NPS has proposed to construct a canoe launch site with access road and associated campground facilities near Carver Bridge. The access road will require approximately 900 feet of right-of-way from its junction with Highway 123 to the its terminus at the proposed canoe launch area. In addition, a small parking areas will abut the road right-of-way, as will a primitive campground (Fig. 2). Construction of these facilities will involve the following: 1) 900 linear feet of right-of-way (approximately 30 feet wide), including an estimated 900 cubic yards of excavation and 2700 cubic yards of fill, for access road construction, 2) a canoe launch area constructed along the river bank and measuring approximately 200 by 50 feet, 3) a parking area measuring 20 by 200 feet and located adjacent to the upper segment of the access road, and 4) a five acre site set aside as a primitive campground and located along the lower segment of the access road. The parking and campground areas will be used as is; no earth moving disturbances are planned, save for a pit toilet located within the campground and gravel laid down to delineate the parking area. In all, the planned developments will encompass about 5.5 acres.

However, these facilities would be located within the area recorded as prehistoric site 3MR16. Limited investigations by Historic Preservation Associates (HPA) of Fayetteville, Arkansas, indicate that prehistoric and modern materials occur within the development boundaries and that archeological testing to determine the significance of these cultural resources is needed. Additionally, HPA recommends that, due to the distribution of prehistoric artifactual materials across these field areas, sites 3MR16 and 3MR41 be combined into one prehistoric site locality (Fig. 3).

HPA dug 17 shovel tests in the general area of the proposed developments, of which 11 yielded lithic artifactual material (Fig. 3). Information recorded during this survey indicates that soils across the area are characteristically shallow (varying from 5 cm to 40 cm in depth), composed of sandy clays, and contain a high amount of naturally occurring chert stones. Archeological testing also suggests that the prehistoric materials occur within the upper 15 cm of soil, although some artifacts may have migrated downward in the deeper soils.

3. SCOPE OF WORK

The archeological investigations proposed by this work will include a four phased approach: 1) conduct archival research into the historical occupation of the general project area and its relationship to the community of Carver, 2) conduct archeological testing of the project area in order to obtain adequate

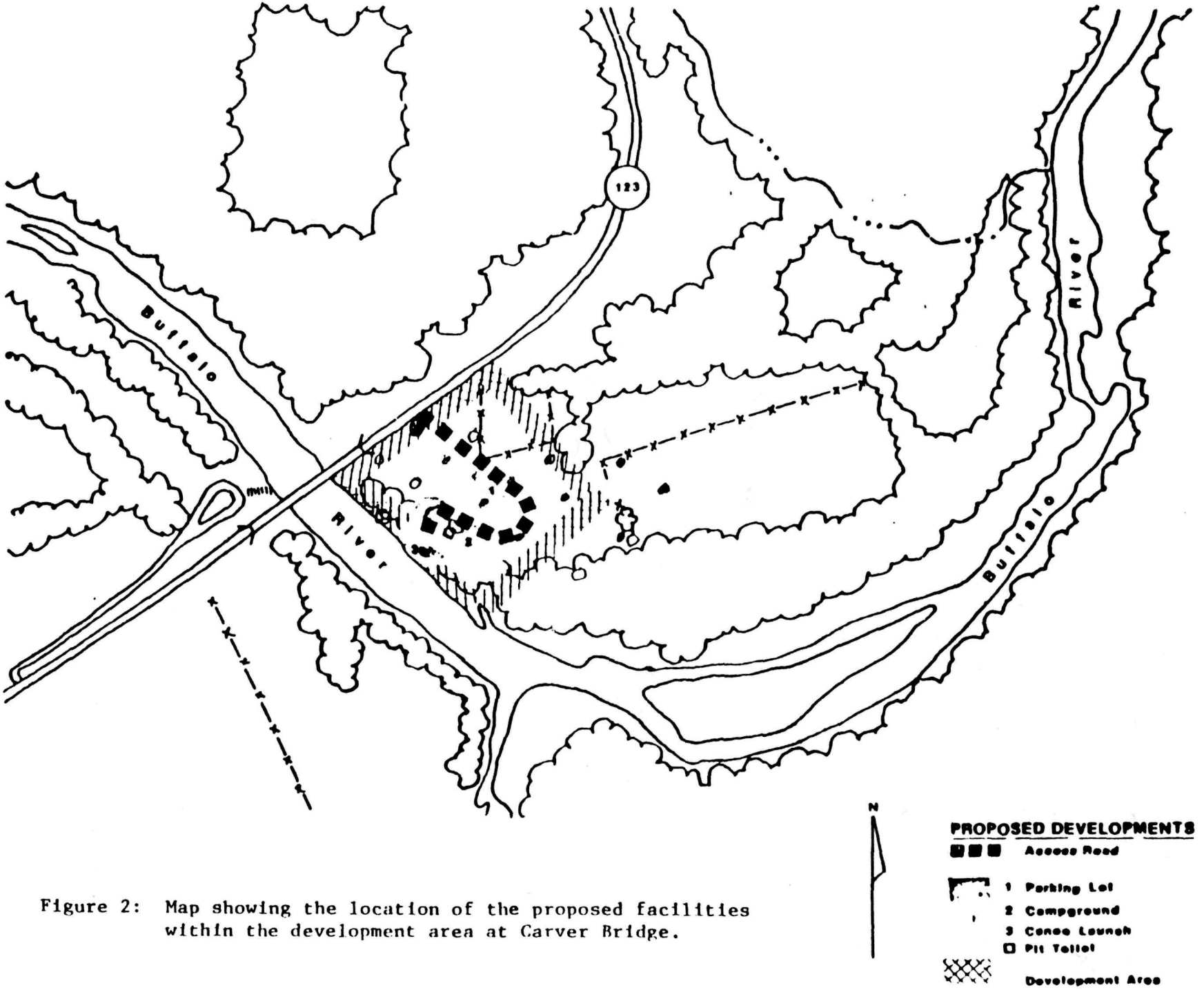

Figure 2: Map showing the location of the proposed facilities within the development area at Carver Bridge.

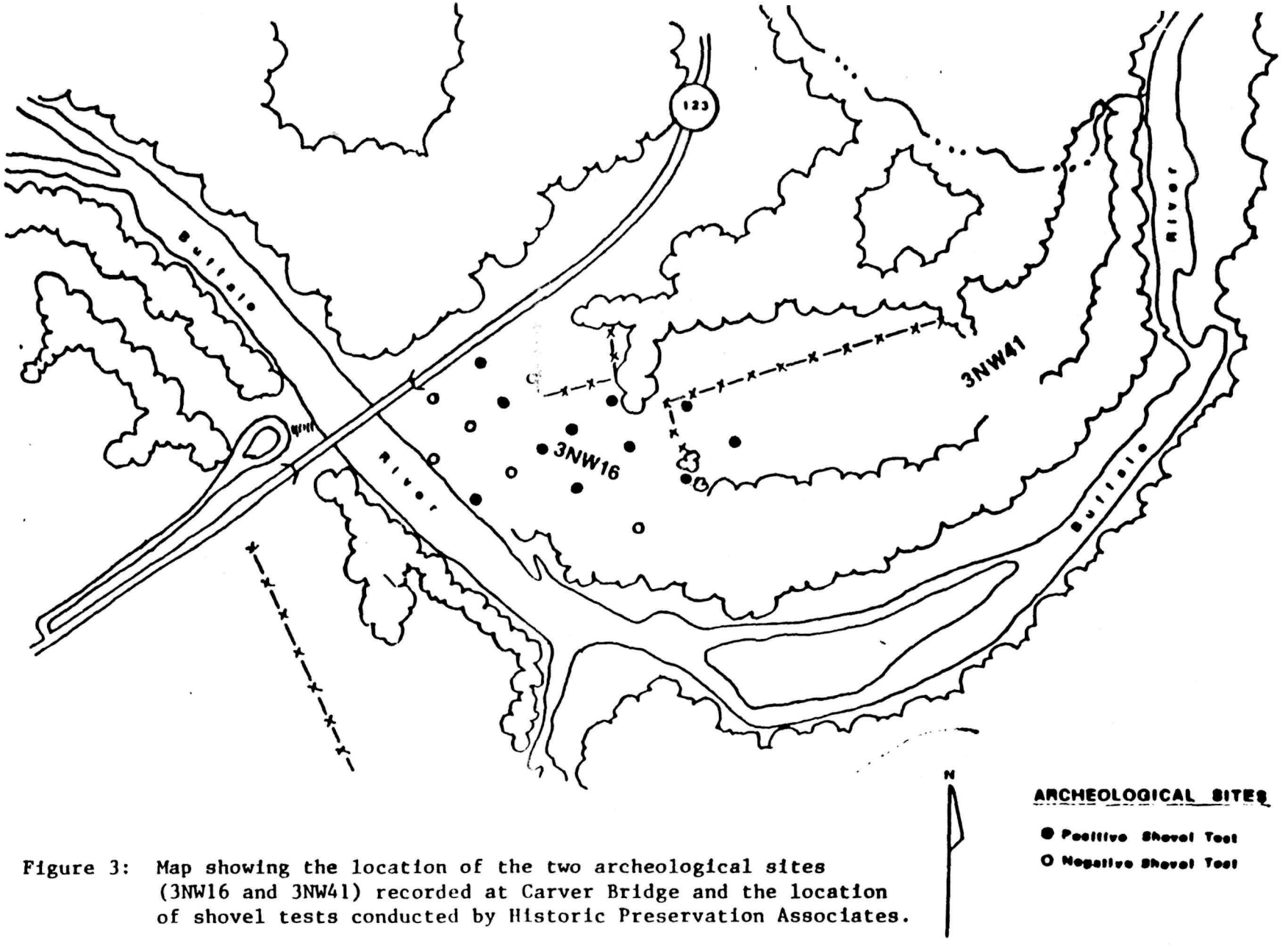

Figure 3: Map showing the location of the two archeological sites (3NW16 and 3NW41) recorded at Carver Bridge and the location of shovel tests conducted by Historic Preservation Associates.

information to assess the significance of prehistoric site 3NW16 relative to the criteria of the National Register of Historic Places, 3) expand on the survey/testing pattern conducted by HPA in order to define the horizontal and vertical boundaries of the combined sites 3NW16/3NW41 and provide adequate information on this larger site area to evaluate its significance in terms of the National Register of Historic Places, and 4) prepare a report on the findings, methodologies, interpretations and recommendations of this work.

1. HPA consulted the files of the Arkansas Archeological Survey and the Office of the State Historic Preservation Officer (SHPO) for information on historic sites in the project vicinity. No information was obtained. However, files on Newton County contained within the county courthouse should be researched in order to reconstruct a history of land ownership in the project area and its relationship to the community of Carver.

2. Based on the previous testing pattern established by HPA, a series of shovel and/or auger holes will be placed over the development area (Figs. 2-3) at 25 m intervals in order to refine the 3NW16 site boundaries in relation to the proposed access road and other planned facilities. In addition, a series of at least 10 strip-back areas measuring 5 m by 5 m shall be placed within the site boundaries and concentrated within the proposed access road, parking lot, campground, and canoe launch areas in order to acquire information on the nature and significance of site 3NW16. Use of mechanized equipment to expose these strip-back areas is recommended, as well as for any trenching that may need to be done in order to study the geomorphology of the site.

3. Expanding the shovel test pattern to the south and east of the development area is necessary in order to define the boundaries of both sites 3NW16 and 3NW41. Again, this should be accomplished through a grid system of shovel and/or auger tests placed every 25 m to 30 m until the boundaries of these sites are determined. In addition, at least 15 strip-backs shall be placed across the area located outside the development area boundaries but which contains prehistoric materials (Figs. 2-3). If possible, at least four backhoe trenches should be placed in key locations within this portion of the site in order to acquire information on depth of the site and geomorphological processes associated with the site. The data accumulated from these investigations will be used to assess the significance of the overall 3NW16/3NW41 site area in terms of the National Register of Historic Places. The amount of prior disturbance to these buried archeological resources should be considered in this assessment.

4. A letter report on the initial results of the field investigations shall be submitted to the NPS within one week of completion of that work. This report shall include a description of cultural resources encountered during the field investigations and recommendations on the management of these

resources. It shall also contain a statement regarding archeological clearance for the proposed development area (Fig. 2). Following analysis of the recovered artifactual and non-artifactual materials, two copies of a draft report shall be submitted for review by the NPS. This report shall contain information on the investigations as outlined in Appendix B (Testing Reports) of the State Plan for the Conservation of Archeological Resources in Arkansas. If additional data recovery is recommended for either site area (3NW16/3NW41), then a data recovery plan designed to mitigate any adverse effects on these sites should be included in the report. Following review of this draft report, all comments submitted by the NPS and the Arkansas SHPO shall be addressed and incorporated into a final report. Five copies of this final report shall be submitted to NPS for distribution.

4. SCHEDULE

The work described above is expected to begin on or before July 7, 1986, with the fieldwork completed by July 19, 1986. The letter report shall be due by July 28, 1986, and the draft report for review submitted by September 12, 1986. The NPS will require 30 calendar days for review and comment. The final report will be due on or before October 24, 1986.

5. PAYMENTS

Payment for this contract will be made in two increments: one half of the total amount payable upon completion of the fieldwork and receipt of the letter report; and payment of the second half of the total upon receipt of the final accepted report and all collections and documentation generated by the project.

6. COLLECTIONS

All collections (defined as including all artifacts, specimens, material samples plus all documentation in the form of notes, photographs, maps, plans diagrams, computer tapes, disks, etc.) remain the property of the Federal Government. Upon the commencement of fieldwork that will produce collections, the field supervisor should obtain an accession number from the Park Curator and all containers of specimens should be labeled with that number. When leaving the field, all collections taken from the park should be place on loan by the park. The archeologist in charge should provide the park with at least a simple box inventory, or a more complete inventory of materials if possible. After the materials are processed, a detailed inventory should be provided to the park. Collection materials must be kept in secure conditions in space that meets National Park Service standards (as described in Special Directive 80-1,

revised), during the period of analysis. Once study has been completed, they must be placed in a permanent repository that meets National Park Service standards and to which the Park Superintendent agrees. Methods of storage,. cataloging and inventory must also meet National Park Service standards.

All conservation work of specimens that goes beyond standard archeological cleaning should be approved by the National Park Service Regional Office, as is true of any destructive or consumptive methods of analysis that are not routine or already called for in the scope of work, contract or research design.