

AD-R149 494

AN ARCHEOLOGICAL OVERVIEW AND MANAGEMENT PLAN FOR THE

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ANNISTON ARMY DEPOT CALHOUN COUNTY ALABAMA(U)

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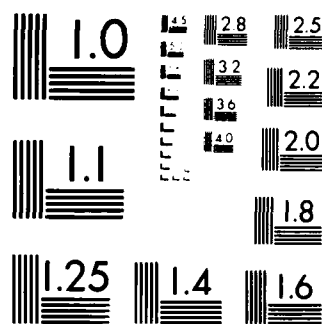
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**An Archeological Overview and
Management Plan for the
Anniston Army Depot,
Calhoun County, Alabama**

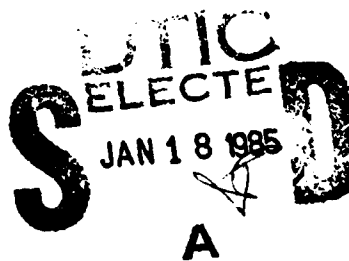
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**National Park Service
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Atlanta, GA 30303

for the
U.S. Army Materiel Development and
Readiness Command

by

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15. Supplementary Notes This report was prepared as part of the DARCOM Historical/Archeological Survey (DHAS), an inter-agency technical services program to develop facility-specific archeological overviews and management plans for the U. S. Army Materiel Development and Readiness Command (DARCOM).				
16. Abstract (Limit: 200 words) The Anniston Army Depot, located in east central Alabama, in Calhoun County, is comprised of 15,214 acres. The Depot is a government-owned operation under the jurisdiction of the U. S. Army Depot System Command (DESCOM, a DARCOM sub-command). Its primary mission is the overhaul of tracked combat vehicles and the storage, maintenance, and issue of ammunition, small arms, and electronic missile components. The facility occupies well drained upland terrain composed of rolling land, low hills, and valleys within the Ridge and Valley province of the Appalachian Highlands. The topography ranges from narrow flood-plains and associated terraces along tributary streams to ridges and steep slopes. The area today lies within the oak-pine forest. A review of the known and potential archeological resources of the Depot indicates that there is little likelihood that significant prehistoric or historic materials will be found in the higher elevations and within the strongly acid soils, but may be associated with some of the lower river terraces. There have been no previous archeological surveys on the facility, and there are no sites on the Depot that are not listed on or determined eligible for the National Register of Historic Places. It is recommended that more intensive archival and archeological field inventory be completed for the facility, for the development of any needed historic preservation plan, or any ground-disturbing project-specific compliance with the National Historic Preservation Act and related statutes.				
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MANAGEMENT SUMMARY

The Anniston Army Depot, slightly more than 15,000 acres in extent, is located near the Coosa River in east central Alabama and near the city of Anniston. It is in a region of considerable prehistoric and historic archeological interest. No archeological sites are currently known to exist on the facility.

Evaluation of the plant's immediate archeological needs have been based on a tour of the facility, discussions with key personnel, and a study of the regional landforms and cultural sequence in order to assess the plant's potential archeological resource base. There is every reason to believe that such a resource base exists and that it may possess unusual integrity because of plant security, but that it is currently endangered by excavation of borrow and refuse pits and by minor construction activities. No long-term planning document scheduling future construction, leasing, or other ground-disturbing activities exists at the facility.

Given the potential archeological resource base probably retained on the Anniston Army Depot, and the federal requirements for historic preservation planning and resource protection, recommendations have been provided for both short- and long-term archeological resource management on the facility. In light of the long-term needs, a program for the stratified survey of the relatively undisturbed portions of the facility has been recommended, with a scope of work, milestones, and recommended unloaded baseline cost of \$73,260 to \$91,160 in FY84 dollars. Further, the uncosted recommendation has been made that DARCOM immediately initiate consultation with the Alabama State Historic Preservation Officer about the Anniston Army Depot cultural resource management needs,

and that they direct their efforts toward the eventual integration of architectural and archeological information in a facility Historic Preservation Plan.



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PREPARERS AND QUALIFICATIONS

David H. Dye is the principal author of this report. He holds a B.A., M.A., and Ph.D. in Anthropology with emphasis in Archeology. He has participated in archeological excavations in many parts of the United States during the past 15 years and has published approximately 30 articles, reviews, and reports. During the past three years he has concentrated on cultural resource studies in the southeastern United States. At present he is Assistant Professor of Anthropology at Memphis State University.

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We are most grateful to Mr. Ronald Grant (Environmental Planner) and Mr. Paul Harper (Master Planner), Anniston Army Depot, for their courtesy and cooperation with this project. Mr. Grant provided requested documents at our disposal, and Mr. Harper aided in the archival search. Mr. Randy Wiggins (Civil Engineer) presented a particularly informative tour of the facility.

Mr. Bascom Mack Brooms (Alabama Historical Commission), Mr. Eugene M. Futato (Office of Archaeological Research, University of Alabama), and Dr. Harry O. Holstein (Jacksonville State University) have been most helpful in providing information and access to the site records and documents of their respective institutions.

Additional thanks go to Dr. Mark R. Barnes, SERO, NPS; Ms. Mary Lee Jefferson, WASO, NPS, who reviewed the first draft; and Ms. Susan Cleveland, Contracting Officer, SERO, NPS.

Final report production, including graphics, has been completed by Woodward-Clyde Consultants, with editorial review (particularly of management recommendations) and text preparation completed by Dr. Ruthann Knudson and Ms. Betty Schmucker.

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FOREWORD

As a federal agency with large public land holdings, the U. S. Army is responsible for the stewardship of a variety of natural and cultural resources that are part of its installations' landscapes. The Army's Materiel Development and Readiness Command (DARCOM) presently manages a nationwide network of 65 installations and 101 subinstallations and separate units, which range in size from one acre to over one million acres. As part of its programs of environmental and property management, DARCOM has requested that the U. S. Department of the Interior's National Park Service provide technical guidance to develop programs for managing installation cultural resources.

NPS is thus conducting the DARCOM Historical/Archeological Survey (DHAS), which has two major disciplinary elements. The architectural review and planning function is being directed by the Service's Historic American Buildings Survey (HABS), while the prehistoric and historic archeological resource assessment and planning function is the responsibility of the Service's Interagency Resource Division (IRD). IRD has contracted with Woodward-Clyde Consultants (WCC) for the development of guidelines for the DARCOM archeological management planning effort, and for the completion of over 40 overviews and plans throughout the United States. WCC has in turn subcontracted the technical studies to several regional subcontractors, with final editorial review of reports and preparation of text and illustrations handled by WCC.

This overview and recommended management plan for the archeological resources of the Anniston Army Depot was prepared by Memphis State

University, Memphis, Tennessee, under subcontract to WCC. It follows the guidance of "A Work Plan for the Development of Archeological Overviews and Management Plans for Selected U. S. Department of the Army DARCOM Facilities," prepared by Ruthann Knudson, David J. Fee, and Steven E. James as Report No. 1 under the WCC DARCOM contract. A complete list of DHAS project reports is available from the National Park Service, Washington, DC.

The DHAS program marks a significant threshold in American cultural resource management. It provides guidance that is nationally applicable, is appropriately directed to meeting DARCOM resource management needs within the context of the Army's military mission, and is developed in complement to the state and regional Resource Protection Planning Process (the RP3 process, through State Historic Preservation Offices). All of us participating in this effort, particularly in the development of this report, are pleased to have had this opportunity. Woodward Clyde Consultants appreciates the technical and contractual guidance provided by the National Park Service in this effort, from the Atlanta and Washington DC offices and also from other specialists in NPS regional offices in Philadelphia, Denver, and San Francisco.

Woodward Clyde Consultants

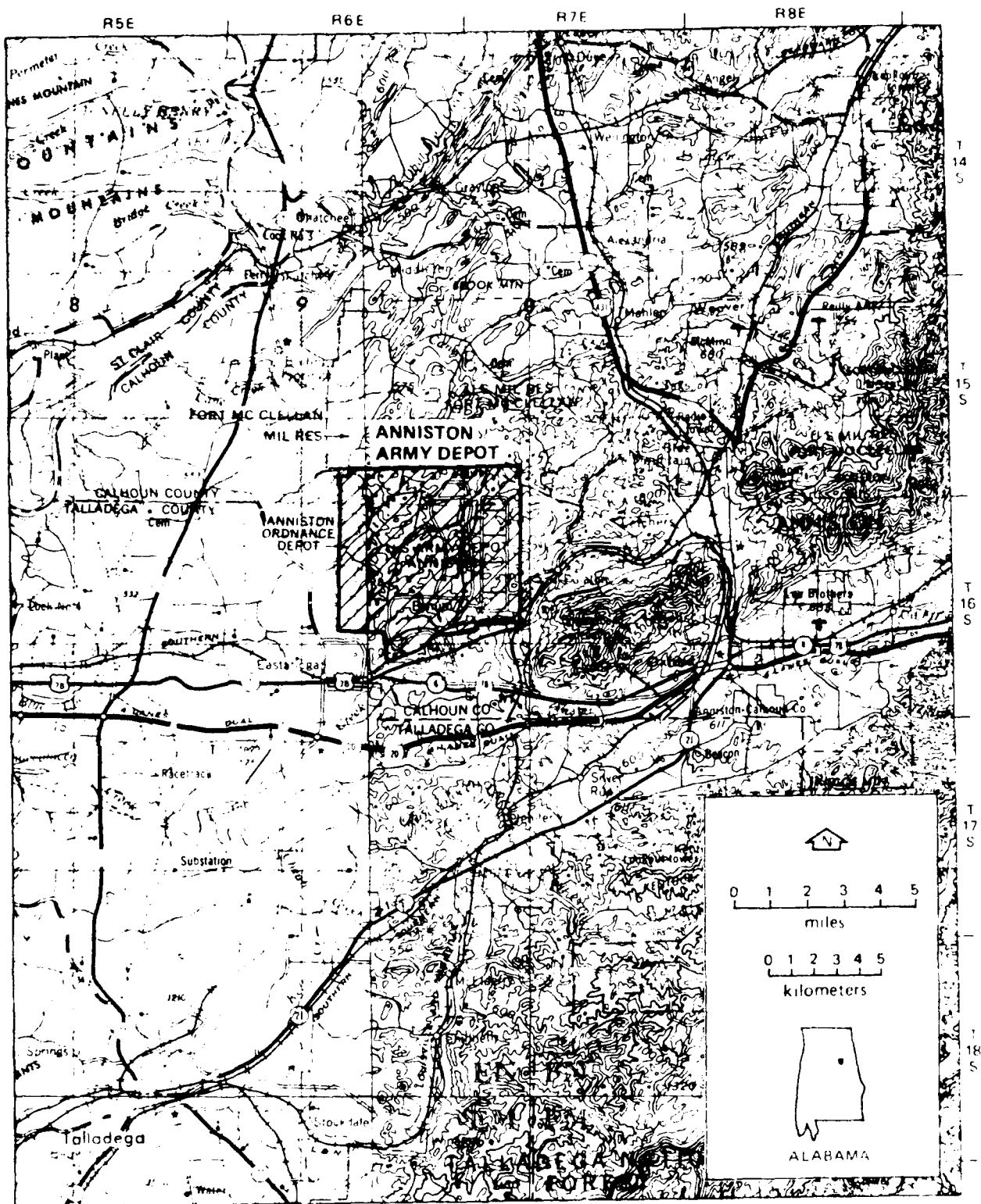
Ruthann Knudson

INTRODUCTION

The following report is an overview of and recommended management plan for the prehistoric and historic archeological resources that are presently known or likely to occur on the Anniston Army Depot (ANAD) in Calhoun County, Alabama (Figure 1-1). This facility is an installation of the U. S. Department of the Army DARCOM (Materiel Development and Readiness Command), which as a reservation of public land has responsibilities for the stewardship of the cultural resources that are located on it. The assessments and recommendations reported here are part of a larger command-wide cultural resource management program (the DARCOM Historical/Archeological Survey, or DHAS), which is being conducted for DARCOM by the U. S. Department of the Interior's National Park Service. The following is that portion of the facility-specific survey that is focused on the prehistoric and historic resource base of the Anniston Army Depot, and was developed in accordance with the Level B requirements as set forth in the archeological project Work Plan (Knudson, Fee, and James 1983). A companion historic architectural study is in preparation by the National Park Service's Historic American Buildings Survey (HABS), but is not yet available (William Brenner, personal communication 1984).

1.1 PURPOSE AND NEED

A corpus of Federal laws and regulations mandate cultural resources management on DARCOM facilities. Briefly these are:



Note: Base maps are USGS Atlanta, GA AL (1953 revised 1970) and Birmingham, AL (1953 revised 1969) 1:250,000 sheets.

Figure 1.1. MAP OF THE GENERAL VICINITY OF THE ANNISTON ARMY DEPOT

- The National Historic Preservation Act of 1966 as amended (80 Stat. 915, 94 Stat. 2987; 16 USC 470), with requirements to,
 - inventory, evaluate, and where appropriate nominate to the National Register of Historic Places all archeological properties under agency ownership or control (Sec. 110(a)(2))
 - prior to the approval of any ground-disturbing undertaking, take into account the project's effect on any National Register-listed or eligible property; afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on the proposed project (Sec. 106)
 - complete an appropriate data recovery program on an eligible or listed National Register archeological site prior to its being heavily damaged or destroyed (Sec. 110(b), as reported by the House Committee on Interior and Insular Affairs [96th Congress, 2nd Session, House Report No. 96-1457, p. 36-37])
- Executive Order 11593 (36 FR 8921), whose requirements for inventory, evaluation, and nomination, and for the recovery of property information before site demolition, are codified in the 1980 amended National Historic Preservation Act
- The Archeological and Historic Preservation Act of 1974 (88 Stat. 174, 16 USC 469), which requires that notice of an agency project that will destroy a significant archeological site be provided to the Secretary of the Interior; either the Secretary or the notifying agency may support survey or data recovery programs to preserve the resource's information values
- The Archeological Resources Protection Act of 1979 (93 Stat. 721, 16 USC 470aa; this supersedes the Antiquities Act of 1906 [93 Stat. 225, 16 USC 432-43]), with provisions that effectively mean that

- The Secretary of the Army may issue excavation permits for archeological resources on DARCOM lands (Sec. 4)
- No one can damage an archeological resource on DARCOM lands without a permit, or suffer criminal (Sec. 6) or civil penalties (Sec. 7)
- 36 CFR 800, "Protection of Historic and Cultural Properties" (44 FR 6068, as amended in May 1982); these regulations from the Advisory Council on Historic Preservation set forth procedures for compliance with Section 106 of the National Historic Preservation Act
- Regulations from the Department of the Interior for determining site eligibility for the National Register of Historic Places (36 CFR 60, 36 CFR 63), and standards for data recovery (proposed 36 CFR 66)
- United States Department of the Army procedures and standards for the preservation of historic properties (32 CFR 650.181-650.193; Technical Manual 5-801-1; Technical Note 78-17: Army Regulation 420-40); and procedures for implementing the Archaeological Resources Protection Act (32 CFR 229).

These procedures should be integrated with planning and management to insure continuous compliance during operations and management at each facility. This can best be achieved by an understanding of the procedures implied by the regulations and an awareness of the cultural resources potential at each facility.

1.2 THE ANNISTON ARMY DEPOT (ANAD)

In June 1940, steps were taken to establish an Army depot in the Anniston area, approximately 50 miles east of Birmingham (Figure 1-2), on

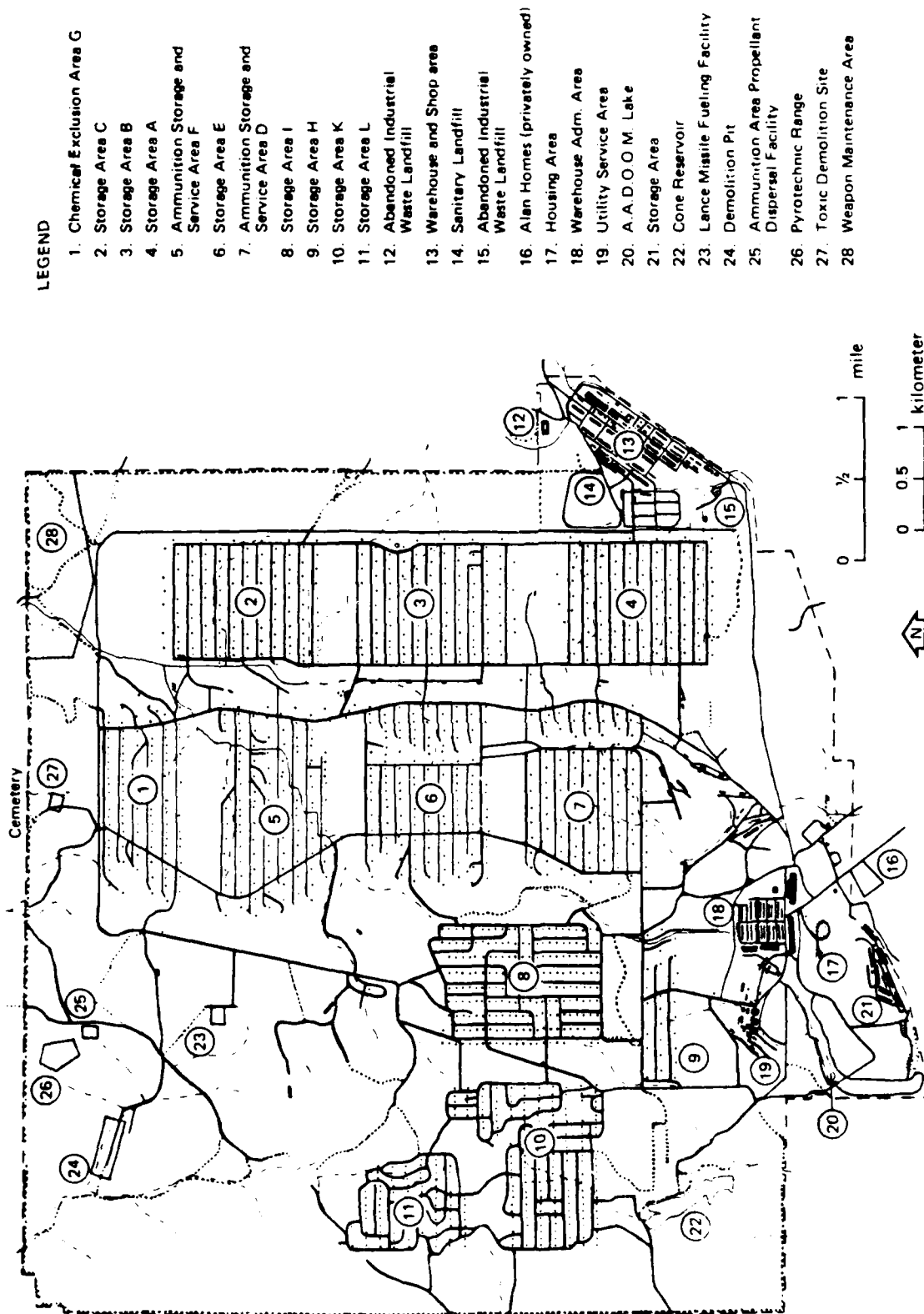


Figure 1-2. MASTER BASE MAP OF THE ANNISTON ARMY DEPOT

an initial 10,640 acre tract that was purchased in November 1940. Construction of the depot was formally inaugurated in February 1941, and construction of ammunition storage magazines, warehouses, shops, heating plants, and other facilities was completed in December 1942. Some areas of major significance constructed since that time include 468 Stradley Magazines, additional ammunition transform platforms, an ammunition renovation building, ammunition holding yard facilities, combat vehicle overhaul shop, additional general supply warehouses, combat vehicle test tract facilities, the provision of controlled humidity in 40 existing general supply warehouses, and various miscellaneous structures.

During the first 20 years of operation, the depot was known as Anniston Ordnance Maintenance Depot which was under the United States Army Supply and Maintenance Command, but was operated for the first two years, 1941-1942, by the Ordnance department of the Army. In October 1943, the Chrysler Corporation assumed management of the depot as a subsidiary known as the Anniston Warehouse Corporation. In January 1946, the depot was assigned the mission for distribution of ordnance of general supplies for the Third Army area and the New Orleans Port of Embarkation. In the latter part of 1946 the accountability of Coosa River Sub-depot was assigned to Anniston Ordnance Depot.

In July 1966, with the merging of higher headquarters, the depot was placed under the U. S. Army Materiel Command. The Lance Missile Fueling Facility was completed in February 1969 and consisted of buildings for offices, shipping, and receiving, shop, storage, propellant loading, welding, and three concrete catchments. The facility was operated by Ling Temco-Vought Aerospace Corporation until April 1973 when the depot assumed operational responsibility and it again became a government operated facility. In January 1976, the Army Materiel Command was redesignated the Army Materiel Development and Readiness Command (DARCOM). Later that year a new major subordinate command, Depot System Command (DESCOM) was created, which has command responsibilities for all the DARCOM depots.

1.3 SUMMARY OF PREVIOUS ARCHEOLOGICAL WORK CONDUCTED ON THE ANNISTON ARMY DEPOT

A considerable amount of archeological research has been conducted in the Upper and Lower Coosa Valleys, but the Middle Coosa Valley is not as well known. These previous regional endeavors are summarized in Section 2.2.1 and the relevant literature is presented in Section 8.2.

In 1983, a brief reconnaissance survey was conducted on the ANAD by the U. S. Army Corps of Engineers, Mobile District. No archeological sites were recorded in the four proposed areas surveyed (U. S. Army Corps of Engineers 1984; a copy of the survey report is included here as Appendix A). In addition, a grant has been awarded to the University of Alabama, Office of Archaeological Research, and the Arts Center of Sylacauga, for a seven county archeological search in the Coosa Basin, including Calhoun County (Eugene M. Futato, personal communication 1983).

1.4 THE SOCIOCULTURAL CONTEXT OF ARCHEOLOGICAL RESOURCES ON THE ANNISTON ARMY DEPOT

A number of individuals are interested in prehistoric and historic cultural resources, but archeologists and cultural historians, in particular, regard archeological sites as important sources of information about past human cultures. Thus, a primary value of any prehistoric or historic archeological resource is its ability to yield scientific data about human behavior. Scientific researchers, then, will be those individuals most concerned with the preservation and interpretation of archeological resources.

Studies of extinct cultural systems are crucial for incorporating local areas, such as the Middle Coosa Valley, into broader regional interpretations of prehistory and history. Such studies may provide knowledge and information about how humans have adjusted or adapted to changing social and natural environments. Studying the hunting and

gathering adaptation or the change late in prehistory from this hunting and gathering lifestyle to one with an increasing emphasis on intensive gardening or horticulture, may not seem important to immediate local concerns, but indeed may be critical and significant for understanding cultural change and stability in societies where acculturation is proceeding at a rapid and devastating rate.

Local avocational archeologists, with interests in prehistoric and historic cultures, often aid professional archeologists in their research. Many of these individuals are well-trained in specific research areas, while others support scientific endeavors through monetary donations or by providing their labor. Some local enthusiasts are not concerned with the pursuit of scientific goals, but rather try to accumulate artifacts for their personal collections or to further their own finances.

These collectors, often called pot hunters or looters, are of a considerable and significant threat to archeological resources. Once prehistoric and historic cultural resources have been destroyed, the information cannot be regained. Thus, an archeological site is a nonrenewable resource, and as such, it can be evaluated scientifically for information only once. After its destruction, either through uncontrolled looting or through controlled scientific excavation, the context of the material is irrevocably lost unless it has been recorded and made available to the scientific community. These issues, of necessity, should be of continuous concern to those responsible for archeological resources and their management.

In recent years Indian descendants of the Creek Confederacy have begun to express interest in and concern over their ancestral lands which embody much of their cultural heritage. Many of the Coosa Valley archeological sites represent this cultural and ethnic past of the historic Creek Native Americans. The destruction of known and historically identifiable Creek villages by looters is a serious threat,

not only to the archeological resource, but also to the heritage of the Creek Native Americans. This issue is an important and significant concern to archeological resource managers and to those Native Americans who claim these resources as part of their cultural ancestry. However, not all archeological sites may be associated directly with known, ethnically identifiable Native American groups. Beyond approximately 1000 years ago, the ability to identify contemporary Native American groups with past cultures diminishes considerably.

Many government agencies have noted that archeological resources have high public interest and value. Through proper management and stewardship, various "high profile" interest groups may be impressed and consequently contribute funds for additional scientific excavation or towards publication of the research results. Such public relations efforts contribute to an overall favorable impression upon the general public and enhances community relations.

AN OVERVIEW OF THE CULTURAL AND RELEVANT NATURAL
HISTORY OF THE ANNISTON ARMY DEPOT

2.1 THE PHYSICAL ENVIRONMENT

2.1.1 Earth Resources

Most of Calhoun county is located in the Ridge and Valley province of the Appalachian Highlands (Warman and Causey 1962a:2). An extension of the Blue Ridge Province, known locally as the Talladega Mountains, is represented in the extreme eastern part of the county (Fenneman 1938:165). The Anniston Army Depot is located on the interface between these two provinces.

The Ridge and Valley province, composed of a series of northeastwardly trending synclinal and anticlinal folds, is bordered in Alabama by the Cumberland Plateau to the west and by the Talladega Mountains and adjacent Piedmont province to the east (Lineback 1973:6). Thrust faulting in the Ridge and Valley province in Alabama has shifted some deposits horizontally for long distances. This has exposed the ridge building deposits of the Mississippian Fort Payne chert and the Parkwood formation, and the Precambrian and Cambrian Weisner quartzites along with the older Talladega shales. The valleys are formed on Cambrian and Ordovician limestones and dolomites.

The highest elevations (up to 2100 ft) in the county are locations on mountains that are structurally part of the Blue Ridge province and are formed of the Cambrian Weisner formation quartzites and conglomerates. Coldwater Peak, two miles east of the ANAD, has an elevation of 1700

feet. The Weisner formation typically includes blue or bluish grey, hard quartzites and conglomerates interbedded with shale.

Mountains of the Ridge and Valley province range in elevation from 800 feet to 1200 feet. They are made up of the Red Mountain sandstone formation (brown ferruginous sandstone interbedded with shale) that in some areas is overlain by resistant Fort Payne cherts.

Ridges of intermediate height (700-1000 feet) are formed by Rome formation shales. The shales range from red to purple, brown, green, and yellow and contain silt or fine grained sand inclusions. These shales are interbedded with fine grain sandstones that are grey to dark reddish brown to red.

The lower ridges (600-800 feet) are formed from either shales or cherts. The shale ridges developed from Floyd shales, which are green or dark grey and are interbedded with sandstone, limestone, or cherty limestone. The cherty ridges formed from the Copper Ridge and Chapultepec dolomites and Fort Payne cherts. Copper Ridge dolomites are thinly bedded grey siliceous rocks that eventually weather to chert. Chapultepec dolomite is light grey to blue, thickly bedded, and often contains fossil gastropods. Low ridges are also formed by the Mississippian Fort Payne formation, consisting of solid, thick chert beds that are usually grey with black or dark brown spots.

The Conasauga formation, Shady dolomite, Little Oak limestone, and Athens shale outcrop in the valleys at 485 feet to 800 feet above sea level. The Conasauga formation is interbedded bluish limestones, dolomites, and greenish fossiliferous shale. Shady dolomite is blue to yellowish grey, fine grained, and thickly bedded. Little Oak limestone is coarsely crystalline, in thick beds with chert nodules. Athens shale is black, calcareous, and interbedded with dark limestone.

The Ordovician and Cambrian rock units cover the entire ANAD (Warman and Causey 1962b). These have a maximum isopach thickness of about

2,000 feet, with a basal contact along the Cambrian Conasauga limestone, and have abundant amounts of chert. The great thickness and nonporous character of the rock units form a poor aquifer except where fractures permit some movement of groundwater.

The soil associations found on the Anniston Army Depot can be divided into three major groups dependent on topographic position, slope, parent material and soil patterns (Harlin and Perry 1961:2-5). These soil groups have variable agricultural potential.

Group 1 soils are deep, well drained, and on level to moderately steep slopes in valleys underlain by limestone and shale. They primarily include the Anniston, Allen, Decatur and Cumberland soil associations. The Anniston and Allen soils developed from local alluvium washed from sandstone and shale and range from gravelly loam to soil loam, silty clay loam, and stony loam. These soils are generally highly productive, requiring minimal management, and are currently used in corn and cotton production and as pasturage; however, they are subject to erosion which must be effectively controlled. Natural vegetation, in this area, consists of oak, pine, and hickory.

Group 2 soils are well to moderately well drained, stony or cherty, and are located on ridge tops or steep slopes and in local alluvium on lower slopes or in draws. The dominant soils are those of the Clarksville and Fullerton associations, developed from decayed cherty limestones, and range from stony loams to cherty silt loams, silt loams, and gravelly fine sandy loams. These soils are generally unsuited for agriculture, though there is some corn and cotton produced on them; they are primarily used as pasturage and in tree farming. Natural vegetation consists of several varieties of oak, hickory, short leaf and loblolly pine.

Group 3 soils are moderately deep or shallow, and are located on ridge tops or on steep slopes and in local alluvium in draws. Dominant

soil associations are Rarden, Montevallo, and Lehigh, formed from shales, sandstones and limestones. Soils of this group are not well suited for agriculture, and most of their cultivated acreage is either in pasture, is fallow, or is in second growth pines. Natural vegetation consists of pine oak, hickory and gum.

2.1.2 WATER RESOURCES

Calhoun County is drained by the Coosa River which flows in a southwesterly direction, forming the western boundary of the county; it lies about five miles west of the ANAD. The Depot is in the upper drainage of creeks (Cane, Coldwater) that drain into the Coosa River. Surface water is not readily available on the Depot and shallow wells in the limestone valleys go dry during periods of drought. However, fresh water springs are located along thrust faults that act both as reservoirs and as channels which lead water from deep underground up to the surface. Coldwater Spring, located a mile southeast of the Depot, is located on the Jacksonville Fault. This spring has a daily flow of 24-36 million gallons of water per day and provides water for Anniston, Oxford, Blue Mountain, Hobson City, Anniston Army Depot, and Fort McClellan (Warman and Causey 1962a:49).

2.1.3 Modern Climate

The Anniston Army Depot has a moist subtropical climate. Summer air is from the Gulf and the Atlantic Ocean; in the winter, mild moist, maritime air alternates with cool, dry continental air, bringing many mild wet days. The average annual rainfall is 53.39 inches, with the driest month averaging 2.66 inches and the wettest month averaging 6.31 inches. A trace of snow is observed two or three times during the average winter, with the heavier snowfalls usually melting in two or three days. The average annual temperature is 62.3°F. The prevailing wind direction is from the southwest.

2.1.4 Plant Resources

Forests in the area of Calhoun County, Alabama can be divided into sub-areas on the basis of physiography (Harper 1943): the Coosa Valley and the Blue Ridge, each of which contains variations in types of trees and other flora represented and in the overall importance of the various species in each area. Braun (1950:271-176) places this area in the Gulf Slope section of the oak-pine forest region.

The Coosa Valley region contains a variety of flora. Some of these are more typical of the Coastal Plains, including stands of long leaf pine (P. palustris) on gravelly or sandy soils typical of the sandstone ridges and chert hills. Spruce pine (P. virginiana) and short leaf pine (P. taeda, P. echinata) are common on rocky ridges. Cedar (J. virginiana) is found on limestone outcrops. A variety of oaks is common in this region dominating with other trees such as sweet gum (L. styraciflua), poplar (L. tulipifera), red maple (A. rubrum), elm (U. alata), beech (F. grandifolia), and sycamore (P. occidentalis). Smaller trees represented are dogwood (C. florida), willow (S. nigra), bay (M. glauca), sassafrass (S. variifolium), red bud (C. canadensis).

The major tree associations of the Alabama Blue Ridge region consist primarily of pine with an intermingling of a variety of oaks. The most common pine is the long leaf pine (P. palustris), a species more typical of the Coastal Plain setting. Swampy areas provide habitat for other flora common to the Coastal Plain such as bay (M. glaucus). Other important trees are short leaf pine (P. taeda, P. echinata), several varieties of oak (Quercus), sweet gum (Liquidamber), and beech (Fagus). Many of these trees would have provided an exploitable resource for aboriginal and historic exploitation.

2.1.5 Animal Resources

Calhoun County falls within the southern region of the Temperate Forest Biome (Shelford 1963:59), a habitat for a wide variety of animals important to prehistoric subsistence. Aquatic animals probably provided

a substantial amount of dietary protein during the late spring, summer, and early fall. Important species were bass (Micropterus), bream (Lepomis), buffalo fish (Ictiobus), catfish (Ictalurus), crappie (Pomoxis), freshwater drum (Aplodinotus) and perch (Stizostedion). Frogs, mussels, snakes and turtles may have also provided food during the warm months. Turkey (Meleagris gallopavo) and other fowl such as the passenger pigeon (Ectopistes migratorius) were also important food sources. White tailed deer (Odocoileus virginianus) and black bear (Ursus americana) were hunted year around. Modern animal resources on the facility are limited by facility barrier fences.

2.1.6 Paleoenvironment

Delcourt and Delcourt (1981; Table 2-1) document a sequence of changes in southeastern forest composition over the last 40,000 years. While no pollen data are available from Calhoun County, the ANAD paleoenvironment can be inferred from data obtained from Green, Quicksand, and Bob Black ponds in Bartow County, Georgia (Watts 1970, 1973). These are all sag ponds in an area physiographically similar to the ANAD, and are located less than 100 miles from the project area.

During the Altonian sub-age (75,000-28,000 years ago) of the Wisconsin glaciation, the Laurentide ice sheet extended down into the Great Lakes area causing a reduction in sea level and a general cooling throughout the southeastern United States. Locally, in the Ridge and Valley in Georgia and presumably in Alabama, forests were dominated by oak (Quercus), hickory (Carya), and southern pine (Pinus). The climate is thought to have been cool and dry (Watts 1973:261). Subsequently, during the Farmdalian glacial retreat (28,000-23,000 years ago) oak and hickory became dominant and pine became much less important as the climate became more warm and moist (Delcourt and Delcourt 1981:141-142; Watts 1973:261). The Laurentide ice sheet reached its maximal extent 23,000-16,500 years ago. Sea level was lowered substantially, and the climate throughout the Southeastern United States became much cooler. The forests in the project area were probably dominated by jack pine

Table 2-1. A SUMMARY OF THE ENVIRONMENTAL HISTORY OF THE AREA OF ANNISTON
ARMY DEPOT - Delcourt and Delcourt 1981 (Area Synthesis)
Pollen and Macrofossils

Date	Inferred Climate
200 BP - Present	Late Holocene Interval Modern Climate Oak-Hickory-Southern Pine
5,000 - 200 BP	Mid-Holocene Interval Modern Climate Oak-Hickory-Southern Pine
10,000 - 5,000 BP	Early Holocene Cool, Moist Mixed Hardwood/Oak-Hickory-Southern Pine
14,000 - 10,000 BP	Woodfordian Subage Late Glacial Retreat Mixed Conifer-Northern Hardwoods/ Oak-Hickory-Southern Pine
18,000 - 14,000 BP	Woodfordian/Full Glacial Much Cooler Jack Pine-Spruce/Oak-Hickory-Southern Pine
25,000 - 18,000 BP	Farmadalian Retreat Cool, Temperate, more moist than preceding period Oak-Hickory
40,000 - 25,000 BP	Altonian Glaciation Cool Dry Climate Oak-Hickory-Southern Pine

(Pinus banksiana) with lesser amounts of spruce and oak (Watts 1970:25). The subsequent glacial retreat, 16,500-12,500 years ago, caused a general warming trend and the pine and spruce forests were replaced by forests dominated by mixed conifers and northern hardwoods (Delcourt and Delcourt 1981:147). Gradual warming marked the end of the Wisconsin glaciation and the advent of the Holocene. Sea levels rose to present day levels. Ridge and Valley province forests were dominated by oak, hickory, and pine as they are today.

2.2 THE CULTURAL ENVIRONMENT

2.2.1 Prehistory

The cultural history of the project area is outlined in Table 2.2.

Paleo-Indian Era (12,000-8,000 BC). This era is postulated as the time people first entered North America. The projectile point/knife types (Clovis, Cumberland, Beaver Lake, and Quad) are limited to surface finds whose temporal positions have been determined elsewhere in the Southeast (Waselkov 1980:28). The settlement and subsistence pattern appears to have been based upon small family bands. Regional exchange of chert and other resources was probably conducted through kin interaction between neighboring bands. Food was obtained by hunting and gathering and; although Paleo-Indians may have exploited megafauna, Walthall (1980:35-36) suggests that they subsisted primarily on small and medium sized game in addition to available plant foods. After the advent of the Holocene, subsistence necessarily devolved upon small and medium sized game and vegetable resources.

The likelihood of finding such remains on the facility is considered low given the geomorphical setting and distance from permanent water sources. Also, the sites would lack stratigraphic integrity because of the nature of the soils of the facility and thus be limited in the quantity and quality of information they might yield.

Table 2-2. A SUMMARY OF THE CULTURAL CHRONOLOGY OF THE AREA OF THE ANNISTON ARMY DEPOT

Cultural Unit					Kinds of Archeological Remains Representative of Period	
Tradition	Period or Phase	Date	General Settlement Patterns	General Subsistence Systems		
Historic		AD 1750 to present	Development of towns and cities, exploitation of mineral resources and water for transportation	Agriculture; iron, coal, and marble mining	American and European manufactured goods	
Ethnohistoric		AD 1500 to 1835	Groups of confederated principal towns surrounded by lesser villages and farmsteads, located on the floodplains of rivers and major streams	Horticulture, hunting and gathering, trade for European goods	Chipped stone and pottery, English, French and Spanish trade goods, i.e., beads, guns, bottles, jewelry	
Mississippian		AD 900 to 1500	Large, permanent villages with ceremonial complexes surrounded by smaller villages and farmsteads, located on floodplains of rivers and major streams	Horticulture, hunting and gathering, trade with peoples of Moundville, Etowah, and other areas	Substructure earthen mounds, ditches, and earthen enclosures, sand and shell tempered pottery, chipped stone tools	
Woodland		300 BC to AD 900	Permanent or semipermanent villages located on river floodplains	Hunting and gathering, some horticulture, long distance trade for exotic cult related items	Sand and limestone tempered pottery with paddle stamped and check stamped designs, chipped stone tools, green stone axes, medium sized triangular projectile, conical burial mounds, earthen enclosures	
Gulf		300 to 1500 BC	Large seasonally occupied sites in river valleys, small upland camps	Hunting and gathering, some horticulture	Fiber and sand tempered pottery, stemmed projectile points	
Archaic	Middle to Late	1500 to 3000 BC	Large shell middens in river valleys, smaller upland camps, seasonal occupation	Hunting and gathering, shell fish are an archeologically conspicuous part of the diet, incipient horticulture	Stemmed and notched projectile points, ground stone tools	
Archaic	Early to Middle	3000 to 8000 BC	Both open air and rock shelter camp sites located in river valleys and upland areas	Hunting and gathering	Projectile points with side or corner notching, or bifurcated bases and other lithic tools	
Paleo-Indian		8000 to 12,000 BC	Open air sites in river valleys and uplands	Hunting and gathering, exploitation of primarily medium and small game with some exploitation of megafauna	Fluted and non-fluted, lanceolate projectile points and other lithic tools	

Eastern Archaic Era (8000-1500 BC). Cultural material of this era in the Mid-South is well known, with numerous excavations conducted throughout northern Alabama (Walthall 1980:36-76). A hunting and gathering adaptation is posited for much of the era with an emphasis on whitetailed deer and seeds. People were dependent upon smaller game animals and data from excavated sites indicate a selection for a greater variety of fauna than the Paleo-Indians. Settlements seem to have been seasonally occupied, although increasing territoriality is evidenced in the distribution of specific artifact types. Site location seems to have been determined largely as a result of the location of adequate plants, animals, water, and raw materials for tool manufacture.

The Archaic has been divided into three periods. The Early Archaic (8,000-6,000 BC) was a time of gradual climatic alteration at the end of the Pleistocene and subsequent culture change. Four cultural themes are identified during this period: Dalton, Big Sandy, Kirk, and Bifurcate horizons (Walthall 1980:45-57). The Middle Archaic (6,000-3000 BC) is poorly known in the Coosa Valley (Waselkov 1980:28) but seems to have witnessed a trend toward increasing regional adaptation based on increased territorialism and regional diversity. New technological developments appear involving groundstone, bone, and antler implements. Warmer and drier climates mark this period (Walthall 1980:57-67). The Middle Archaic period may include Eva, Morrow Mountain, and some side notched types (Waselkov 1980:28).

The Late Archaic (3000-1500 BC) witnessed the arrival of modern climates and environments, marked increase in population growth, and new technological innovations included pottery. A pan-eastern trade network and burial ceremonialism came into being (Walthall 1980:67-76). A variety of long stemmed projectile point/knives are the primary diagnostic types (Cotaco Creek, Elora, Kays, Little Bear Creek, McIntire, Pickwick, Savannah River, and Wade (Waselkov 1980:29). The Late Archaic settlement pattern appears to have included both small, briefly occupied, upland camps, and large, generally permanent, floodplain camps.

Gulf Formational Era (1500-300 BC). The Gulf Formational stage represents a continuation of the Archaic lifeway with the addition of ceramic technology. The initial ceramics are fiber tempered, but are later tempered with sand (Alexander) and decorated by incising and punctating (Walthall 1980:77-103). The associated projectile point/knife types include Flint Creek, and other stemmed types.

Woodland Era (300 BC-AD 900) is typified by an elaboration of ceramic technology and material culture in general. In some areas horticulture may have played an important role in subsistence. Settlement became sedentary, or seasonally so, and habitation shifted to river floodplains. Social organization intensified with the development of status positions. Exchange of exotic raw materials and ceremonial items was enacted over a broad area in the eastern United States (Walthall 1980:141-147).

During this time period the cultural continuity in the Coosa Valley dissolved as the material culture of the northern Coosa valley began to resemble that of the Tennessee Valley Copena culture and the material culture of the Lower Coosa Valley began to resemble that of the Gulf Coastal Plain Weeden Island culture of the Chattahoochee Valley and northern Florida (Waselkov 1980:34). Three phases have been defined in the Upper Coosa Valley (Weiss Reservoir) area: the Cedar Bluff phase (Early Middle Woodland, 300 BC-AD 100), which closely resembles the Colbert phase in the Tennessee Valley; the Yancy's Bend phase (Late Middle Woodland, AD 100-500), which is related to the Copena culture of the Tennessee Valley; and the Coker Ford phase (Late Woodland, AD 500-900), which also shares affinity with cultures existing in the Tennessee Valley. There generally is a lack of information about the Middle Coosa Valley and no phases have been designated; however, two anomolous sites have been recorded in the area. These sites, 1TA9 and Kymulga cave, are isolated Copena related components (Walthall and DeJarnette 1974:34-45) which fall into Larson's (1959:54-8) Greenville complex. Walthall and DeJarnett explain the presence of these sites by

emphasizing their proximity to the nearby Hillabee schist and steatite outcrops. These materials were frequently used in the manufacture of Copena artifacts. The Late Woodland stage in the Lower Coosa Valley has been divided into four phases (Waselkov 1980:34-5). The Calloway phase is a Weeden Island manifestation, the subsequent Dead River phase (AD 500-700), Hope Hull phase (AD 700-900), and Autauga (AD 900-1000) are, presumably, also influenced by Weeden Island.

Mississippian Era (AD 900-1500). The material culture of the Mississippian era is characterized by the presence of shell tempered pottery and small triangular projectile points. Horticulture, emphasizing corn, beans, squash, and sunflower became an important means of subsistence and gave rise to a complex ceremonial system. Social organization became more complex with the rise of chiefdoms. Long distance trade, territoriality, and warfare were also significant developments. Settlement consisted of ranked ceremonial centers, containing earthen, platform mounds and associated plazas, surrounded by smaller villages and farmsteads, all of which are commonly located on the floodplains (Walthall 1980:185-245).

Mississippian is not well understood in the Coosa Valley (Waselkov 1980:35-36). Current evidence suggests that settlement was sparse and villages were small. Ceramics from Moundville, located near Tuscaloosa, and Etowah, situated in northwestern Georgia, have been recovered in the Coosa Valley suggesting that the inhabitants of the valley were interacting with people associated with these centers.

2.2.2 Ethnohistory

The Anniston Army Depot is located in an area that was inhabited ethnohistorically by the Creek Indians, and numerous Creek sites are reported in the Coosa Valley.

Historic Indian Stage (AD 1500-1835). The Protohistoric period in the Coosa Valley begins with the De Soto's entrada into the Southeast.

It is difficult to correlate the various Indian groups which De Soto encountered with those reported by the English in the following century because of population movements brought about by shifts in the balance of power among the various Indian groups and by their response to Spanish and English settlement in Florida and Virginia. Linguistic evidence however, suggests that the Creeks, at the time of the first English contact, were living in the same area as they had been living at the time of De Soto (Russell 1975:59). In addition, the actual route taken by De Soto remains a source of conjecture despite the efforts of the De Soto Commission and the contributions of more recent researchers (Swanton 1939; Brewing 1975; Smith 1976). Assuming that the De Soto Commission is correct, De Soto may have come through the project area via the Coosa River to Coosa Town (Coca), located between the confluences of Tallaseehatchee and Talladega Creeks with the Coosa River (32 miles southwest of the ANAD). He then would have continued down the Coosa to its juncture with the Tallapoosa River and down the Alabama River to Mabila, north of present day Mobile (Swanton 1939:209), and thence out of our present sphere of interest.

De Soto was followed by another Spaniard, Tristan de Luna, in 1559. De Luna traveled inland from the Gulf coast to Coosa Town and found it much reduced from the great town that De Soto reported. In 1567 Juan Pardo set out from Santa Elena, near present day Beauford, South Carolina, crossed the Appalachians and descended a short way down the Coosa River. Pardo sent a single emissary to Coosa which reportedly had been further reduced to 150 inhabitants (Swanton 1922:240; Fairbanks 1974:32 4).

The Indians of the Coosa Valley remained isolated from European contact until shortly after 1670 when the British established Charleston and made trade agreements with the Lower Creeks. The Creeks were divided into Upper and Lower Towns. The Lower towns, primarily Coweta and Cusseta, were located on the Chattahoochee River. The Upper towns were divided into the Abeikas, or Coosa River Towns, and Tallapoosas, whose

villages were located on the river of the same name. Glover's 1725 census (Feest 1974:361-75) reports 12 major towns located on the Tallapoosa River and eight major towns on the Coosa River, excluding the Alabama who lived at the confluence of the two rivers and with whom the Creeks were confederated. The Coosa River towns are 32 miles southwest of the ANAD. In 1686 the English reached the Upper Towns and initiated the deerskin trade. In the same year a Spanish Emissary, Marcus Del Gado (Boyd 1937:2-28) visited the Upper Towns and entreated the Creeks to align themselves with the Spanish and to move their towns closer to the missions at Appalachee; however, the Creeks rejected the Spanish overtures and moved into central Georgia to be closer to Charleston. Between 1690 and 1700 the Creeks conducted exclusive trade with the British and became largely dependent upon English goods.

The year 1702 marked the beginning of Queen Anne's War pitting the English against the French and Spanish in both Europe and America. The Charleston traders encouraged the Creeks to aid the war effort by raiding Spanish missions and settlements in northern Florida. The Creeks applied themselves to the war so assiduously that in 1704 they requested and received assistance from colonial troops. Col. James Moore was dispatched to aid the Creeks and together they destroyed the Spanish mission system. English relations with the Creeks soon deteriorated and by 1712 abuses by traders left the Creeks so disillusioned with the British that they abandoned the English coalition and allied themselves with the French who had established a colony under Bienville at Mobile Bay (Giraud 1974:204). Unfortunately, the French were not able to supply the Creeks with goods of either the quality or quantity of English trade items and so the Indians continued trading with the Charleston colony. Abuses by the English traders continued to be a source of enmity among the Creeks until 1715 when the Yamasee Indians rose in protest against the traders and the Creeks readily joined them. During this conflict the Creeks moved their towns back to their former locations on the Chattahoochee, Tallapoosa, and Coosa Rivers and shortly thereafter authorized the construction of the French Fort Toulouse at the confluence of the Coosa and Tallapoosa Rivers (Waselkov et al. 1980).

In the years following the Yamasee War the Creeks maintained a neutral position by pitting the French and Spanish against the English, upon whose trade they were totally dependent. In reality the Creeks were politically divided into pro-French, pro-English and nativist factions and could only avoid civil war through a neutral stance. Creek neutrality was accompanied by increasing political separation of the Upper and Lower towns which included a shift in leadership away from the Lower Towns. In 1763, following the French and Indian War, through which the Creeks officially maintained their neutrality, the French ceded Fort Toulouse and Mobile to the English as did the Spanish with their holdings in Florida. English holdings now encircled the Creek lands and the Crown did not hesitate to use the situation to gain cession of more Creek territory to the Georgia colony.

During the American Revolution the Creeks were essentially loyalist; they fought in various border skirmishes and at the Battle of Fort August and the siege of Savannah; although, the Indians did receive overtures from the Americans. After the war the Federal government demanded the cession of more Creek lands as reparation for their British alliance and to settle trading debts incurred by numerous Creek individuals.

In 1811 Tecumseh, who was inciting a nativist movement among Indians in the Northwest Territory, visited the Creeks and invited them to join in his war against the Americans. The Creek effort, called the Red Stick War of 1813-1814, began with the massacre of 367 men, women, and children at Fort Mims, Alabama and ended with the complete demoralization of the Creek nation after their defeat by Andrew Jackson at Horseshoe Bend on the Tallapoosa River. In the years following the war, the Creeks were forced to cede additional lands to Georgia and by 1827 they had lost all of their holding in that state. In 1829, legislation was enacted to remove the Creeks to lands west of the Mississippi River, leaving Alabama open for settlement. Creek removal from Alabama was completed by 1837.

2.2.3 History

Colonial Era (1540-1798). The first Europeans to set foot in Alabama were members of the unsuccessful coastal colony established by the Spaniard Narvaez in 1528-1536. In 1540 De Soto passed through the Coosa River Valley, his march was succeeded by those of the De Luna and Pardo expeditions of 1559 and 1567. The English established Charleston in 1670 and began sending traders into the interior shortly thereafter. In 1686 the English traders reached the Upper Creek Indians who were the living in east central Alabama. In the same year the Spanish sent Marcus Del Gado into the same area, ostensibly to look for La Salle's coastal settlement, but more probably to determine the nature of the English penetration into the interior. The French were the first Europeans to establish a successful, permanent settlement in Alabama. Mobile was first located on the Alabama River and was founded in 1702. The French used Mobile as a base for excursions into the interior. In 1715, Charleston was attacked by the Yamasees and Creeks. The French used Creek alienation from the English to their advantage and won permission from the Creeks to build a fort near the confluence of the Coosa and Tallapoosa Rivers. Fort Toulouse provided the French with a base to conduct anti-English intrigue on the frontier until the end of the French and Indian war.

Settlement Era (1798-present). The Coosa Valley remained the province of Indians and traders, although the area was included in the Mississippi Territory, formed in 1798-1802, which incorporated present day Mississippi and Alabama. Settlers in the newly formed territory encroached on Indian lands which lead to repeated hostilities on the parts of both the Indians and the settlers. In 1813 the Creeks massacred the Fort Mims garrison and the settlers there. This Indian victory lead to an intensification of the Red Stick War. In 1814 Andrew Jackson was ordered to put down the Creeks. His line of march brought him down the Coosa River where he established Fort Strother from which he supplied battles fought at Tallaseehatchee and at Fort Lashley, located in the present city of Talladega. Jackson then moved south and established Fort

Williams from which he fought the decisive battle at Horseshoe Bend on the Tallapoosa. He then rebuilt the French Fort Toulouse and renamed it Fort Jackson, where he negotiated the Treaty of Fort Jackson in which the Creeks ceded all of their lands west of the Coosa and south of the falls of that same river.

In 1817 Alabama became a separate territory and two years later was admitted to statehood. In 1832 Talladega and Calhoun counties were formed by the state legislature. Calhoun County was originally named Benton County but was renamed after John C. Calhoun in 1858. Initial industrial efforts in the primarily agricultural area began with the construction of cotton gins and grist and saw mills. The Coosa coal fields were first mined in the 1820's and shortly thereafter the iron mining operations began. Marble also was mined in the Coosa Valley.

Iron mining became a major industry during the Civil War and made the Coosa Valley the object of several raids during the latter part of the war. In 1863 Col. Able Streight struck at Gadden but shortly thereafter surrendered to Nathan Bedford Forrest at Cedar Bluff. Lovell Rousseau fought successful skirmishes at Greensport and Ten Islands Ford on the Coosa River and then destroyed the iron works in Calhoun County and supplies stored in the city of Talladega in Talladega county in 1864. In 1865 Gen. Croxton destroyed what was left of industry and military supplies in Talladega and left the area economically demoralized until well into the reconstruction period. It was not until the 1880's that the mining industry in the Coosa Valley began to recover; although, the area primarily remained agricultural.

During the early twentieth century, the introduction of the boll weevil resulted in diversification of crops and the emphasis shifted away from cotton, although it remains an important source of income for the farmers of the area. Mining has remained an important industry, as has the manufacture of textiles. During the 1940s the Army established Fort McClellan and the Anniston Ordnance Depot which provided civilian

employment opportunities and additional economic advantages for the area's inhabitants.

2.3 ARCHEOLOGICAL RESEARCH DIRECTIONS

2.3.1 Regional Concerns

Regional archeological research concerns and directions in east central Alabama may be subsumed under the three broad objectives: cultural chronology, lifestyles, and processual studies. Both specific and general research questions may be addressed in terms of these areas; however, future research directions have not been formally structured within a state preservation plan, although Waselkov (1980) has proposed several research directions for cultural resource studies.

Constructing a regional cultural sequence is a primary goal and should be initiated early in the research plan. Determining the stratigraphic relationship of archeological remains and their absolute ages should be based on limited investigations within the region as part of a systematic site survey and testing program. This will enable the researchers to determine the type of historic and prehistoric occupations present and their location or distribution within the region.

Although several site surveys have been conducted within the region, few test excavations, upon which a comprehensive, regional chronology may be made, have been attempted. Specific, detailed chronological information is needed from the region on all archeological periods. In particular, the intensity, distribution, and nature of these prehistoric and historic cultures will enable researchers to determine what archeological remains are represented and when they were part of a functioning cultural system.

An intermediate archeological objective, reconstructing extinct lifestyles, may be addressed through an examination of subsistence practices, settlement patterns, and the social and ideological

organization. The recovery and study of plant and animal remains will provide a great deal of information concerning what these folk ate, how and when they obtained their food, how they utilized the fauna and flora elements for tools, and the nature of food preparation techniques. Settlement pattern studies are critical for assessing where and how these people lived, the nature of their housing, and the extent of their articulation with the biophysical environment. Reconstructing the social and ideological organization, is perhaps the most difficult objective, but also is a major research goal if we are to understand the overall adaptation and general lifestyle of the prehistoric and historic people who lived in the region. This type of information requires detailed, and extensive excavation and intensive analysis, and, unfortunately, is lacking from the region at the present time.

At this time we do not have the necessary information from which to derive specific research questions. Based upon the distribution of pottery, projectile point/knives, and other items which may have been traded, we know that to some degree regional interaction took place throughout the prehistoric and historic period. In addition to the reconstruction of the prehistoric and historic adaptive strategy, distributional data may provide information for researchers in neighboring regions.

The final goal of archeological research, and often the last to be resolved, includes the study of cultural and natural processes. This includes those processes that create the archeological record and those that aid in answering general anthropological questions concerning technological, sociopolitical, and ideational change and stability.

Waselkov (1980) has suggested several cultural resource research directions for prehistoric and historic eras in the Coosa Valley. Three research areas are mentioned for the prehistoric period: cultural chronology, phase definition, and specific topics. The sequence of cultures is relatively undocumented; especially vague are those aspects

of the chronology such as Middle Archaic, Early Woodland (Gulf Formational), Late Woodland, and Protohistoric periods. In addition, the sequence and interrelationships of ceramic and projectile point/knife types require greater study and elaboration.

There is a need to define phases, particularly in the Middle Coosa Valley, and emphasize the nature of the subsistence, settlement, and social patterns through time and space. This will enable researchers to investigate the dynamics of cultural systems with emphasis on continuity and change.

A series of specific research questions are listed: Why was the Mississippian occupation so sparse? What was the nature of the soapstone and greenstone trade? Can the prehistoric ancestors of the Creek Indians be recognized, and if so, when was their first appearance in the archeological record?

The historic period is divided into three research areas based on temporal differences: early, ante bellum, recent. The early historic period brings emphasis on the sequence of changes in Creek culture produced by the presence of Spanish, French, British, and American soldiers, traders, and settlers. These changes must be understood in terms of adaptive behaviors that grew from a frontier situation. This in turn, leads to questions about the relationship between the Creek Indians and the first American settlers and the possibility of distinguishing between these two adaptive stances with respect to settlement and subsistence patterns. The role of enslaved, freed, and escaped blacks in intercultural relations is important and relevant. What was the nature of the initial American settlement of the recently vacated Creek lands?

The economic and social lifestyle of blacks in the upland south is a significant research pursuit during the ante bellum period. What was the nature of the local commercial and industrial ventures? How did they articulate with the plantation system?

Research focusing on the recent period, Civil War through modern times, would entail studies of industrial growth and the changing ethnic pattern as a result of the unstable political, economic, and social climate. The period from 1930 is in critical need of research and specific research questions should be generated to cover this topic.

2.3.2 Installation-Specific Archeological Research Directions

While the Anniston Army Depot is relatively limited in space and natural resources, particularly water and minerals known to have been utilized by prehistoric groups, some archeological information may still be recorded from the facility. In particular, its location away from the larger rivers and streams would provide important data on the aboriginal and immigrant adaptation to the upland environments.

The interpretive potential of local cultural resources has been aided by Waselkov's (1980) recent work in the Coosa Valley. He has presented several regional research topics that have been cited above. The identification of specific cultural periods is needed at the facility and an assessment of each site type is of critical importance. A site inventory is basic for future research endeavors and would allow the generation of additional research objectives.

The Anniston Army Depot is located in an upland environment and, as such, may have sites resulting from a hunting and gathering adaptation (Paleo-Indian, Archaic, Gulf Formational, and Woodland), rather than horticultural/agricultural based groups. It is unlikely that Mississippian and historic sites of significance would exist on the facility, with the exception of the two known historic cemeteries (one in the southeast portion of the facility and one near the southern ANAD boundary).

The potential for a fairly broad range of research questions exists at ANAD, but until a basic site inventory is established, these research directions will remain speculative and unstructured.

AN ASSESSMENT OF ARCHEOLOGICAL RESOURCE PRESERVATION
AND SURVEY ADEQUACY

3.1 ENVIRONMENTAL CONSTRAINTS TO SITE PRESERVATION

The primary environmental factors used in assessing the potential for site preservation in any area are the effects of erosion and soil deposition. If deposition has been an on-going process, as is usually the case on stream terraces and floodplains then sealed, in situ, cultural remains may be expected. Ridge tops and slopes are generally subject to varying degrees of erosion. The process of erosion may leave artifacts more or less in place but redeposited at lower elevations than those of the levels in which they were initially deposited. Additionally, features that extended into erosion resistant subsoils may be preserved. Other factors influencing site preservation are soil chemistry, which affects the preservation of organic materials, and soil permeability.

Anniston Army Depot is located in the rolling to hilly uplands between the Choccolocco and Cane Creeks drainages with elevations of 630 feet AMSL to 997 feet AMSL. As a result of the topography, water erosion would be the major environmental constraint affecting site preservation. Other conditions would include sedimentation, soil acidity, frost action, earth movement, animal activity, and treefalls. Each of these factors will have specific effects on particular archeological sites given the particular site history and environmental setting.

The rolling topography of the Anniston Army Depot allows ample opportunity for moderate to severe erosion on slopes; however, the ridge

tops are relatively level and broad and may contain shallow deposits of in situ cultural material. Stream valleys tend to be narrow and entrenched but in areas where floodplains have formed the potential for deeply buried sites is very good. In areas where cultivation was conducted for some time, erosion will have been particularly severe.

Soil acidity will have had a major impact upon certain artifactual and ecofactual categories. Ceramics and faunal elements will be less likely to have been preserved, as a result of the high soil acidity, than lithics and plant remains, which are not subject to soil acidity.

3.2 HISTORIC AND RECENT LAND USE PATTERNS

The site chosen for the construction of the Anniston Army Depot largely was undeveloped, and seems to have been comprised of small farmsteads, cleared fields, and uncleared uplands. The construction of the facility had a negative impact upon any cultural resources that may have existed in the area. Thirty ground disturbance areas (GDA's) resulted from a variety of construction activities. These GDAs are summarized in Table 3-1 and mapped in Figure 3-1. Of the 15,214 acres comprising the facility, a total of approximately 6,500 acres (40%) has been disturbed.

Seven major ground disturbance areas have been identified that resulted from facility construction activities and impacted the area to a depth greater than six feet. These include a demolition pit (GDA 24), a toxic demolition site (GDA 27), Cone Reservoir (GDA 22), Anniston Army Depot O.O.M. Lake (GDA 20), an abandoned industrial waste landfill (GDA 15), a sanitary landfill (GDA 14), and an abandoned industrial waste site (GDA 12). These major ground disturbance areas comprise approximately 125 acres and have been assessed at a disturbance level of 100 percent.

The remaining GDAs are estimated to have been impacted to a depth of between six inches and three feet. These include 4,820 acres of storage

Table 3 1 A SUMMARY OF HISTORIC AND MODERN GROUND DISTURBANCE THAT MIGHT LIMIT THE PRESENT ARCHEOLOGICAL RESOURCE BASE ON THE ANNISTON ARMY DEPOT

CDA No	Type of Disturbance	Date Conducted (yr)	Reference	Area Disturbed (acres)	Estimated Depth Below Surface (ft)	Ratio of Disturbed to Total Area	Location of Disturbed Area			USGS Quad Map#	Coincidental Sites
							Town	Ship	Section		
1	Chemical Exclusion Area G	1942 1953	Facility Plan (Anonymous 1983)	585	6" - 3'	1.5:10	15S	6E	36	E56	None
2	Storage Area C	1942 1953	Facility Plan (Anonymous 1983)	490	6" - 3'	1.5:10	15S 16S	7E 7E	31 6	E56	None
3	Storage Area B	1942 1953	Facility Plan (Anonymous 1983)	460	6" - 3'	1.5:10	16S	7E	7	E56	None
4	Storage Area A	1942	Facility Plan (Anonymous 1983)	380	6" - 3'	1.5:10	16S	7E	18	E56	None
5	Ammunition Storage & Service Area F	1942 1953	Facility Plan (Anonymous 1983)	545	6" - 3'	1.5:10	16S 16S	6E 7E	1 6	E56	None
6	Storage Area E	1942 1953	Facility Plan (Anonymous 1983)	520	6" - 3'	1.5:10	16S 16S	6E 7E	12 7	E56	None
7	Ammunition Storage & Service Area D	1942	Facility Plan (Anonymous 1983)	505	6" - 3'	1.5:10	16S 16S	6E 7E	13 18	E56	None
8	Storage Area I	1942 1958	Facility Plan (Anonymous 1983)	465	6" - 3'	1.5:10	16S	6E	1,14	E56	None
9	Storage Area H	1942	Facility Plan (Anonymous 1983)	155	6" - 3'	1.5:10	16S	6E	14,15	E56	None
10	Storage Area K	1942	Facility Plan (Anonymous 1983)	450	6" - 3'	1.5:10	16S	6E	10,15	E56, FMA7	None
11	Storage Area L	1942	Facility Plan (Anonymous 1983)	265	6" - 3'	1.5:10	16S	6E	3,9,10	E56, FMA7	None
12	Abandoned Industrial Waste Landfill	1941	Facility Plan (Anonymous 1983)	40	6+	10:10	16S	7E	17	E56	None
13	Warehouse and Shop Area	1976	Facility Plan (Anonymous 1983)	220	6" - 3'	10:10	16S	7E	17,20	E56	None
14	Sanitary Landfill	1941	Facility Plan (Anonymous 1983)	10	6+	10:10	16S	7E	17	E56	None

Table 3 1. A SUMMARY OF HISTORIC AND MODERN GROUND DISTURBANCE THAT MIGHT LIMIT THE PRESENT ARCHEOLOGICAL RESOURCE BASE ON THE ANNISTON ARMY DEPOT
(continued)

GDA No.	Type of Disturbance	Date Conducted (yr)	Reference	Area Disturbed (acres)	Estimated Depth Below Surface (ft)	Ratio of Disturbed Total Area	Location of Disturbed Area			USGS Quad Mapd	Coinci- dental Sites
							Town- ship	Range	Section		
15	Abandoned Industrial Waste Landfill	1941	Facility Plan (Anonymous 1983)	10	6+	10:10	16S	7E	17,20	E56	None
16	Alan Homes (Privately Owned)	1969	Facility Plan (Anonymous 1983)	15	6" - 3'	5:10	16S	6E	25	M56	None
17	Housing Area	1969	Facility Plan (Anonymous 1983)	20	6" - 3'	5:10	16S	6E	23	M56	None
18	Warehouse Adminis- tration Area	1969	Facility Plan (Anonymous 1983)	135	6" - 3'	10:10	16S	6E	23,24	E56, M56	None
19	Utility Service Area	1969	Facility Plan (Anonymous 1983)	50	6" - 3'	7.5:10	16S	6E	23	E56, M56	None
20	A.A.D.O.M. Lake	1969	Facility Plan (Anonymous 1983)	5	6+	10:10	16S	6E	23	M56	None
21	Storage Area	1969	Facility Plan (Anonymous 1983)	80	6" - 3'	5:10	16S	6E	23,26,27	M56	None
22	Cone Reservoir	1941	Facility Plan (Anonymous 1983)	30	6+	10:10	16S	6E	15,22	E56, FMA7	None
23	Lance Missile Fueling Facility	1971	Facility Plan (Anonymous 1983)	15	6" - 3'	1.5:10	16S	6E	2	E56	None
24	Demolition Pit	1969	Facility Plan (Anonymous 1983)	25	6+	10:10	15S	6E	34	FMA7	None
25	Ammunition Area Propellant Dispersal Facility	1969	Facility Plan (Anonymous 1983)	15	6" - 3'	1.5:10	15S	6E	35	E56	None
26	Pyrotechnic Range	1969	Facility Plan (Anonymous 1983)	25	6" - 3'	1.5:10	15S	6E	35	E56	None
27	Toxic Demolition Site	1973	Facility Plan (Anonymous 1983)	5	6+	10:10	15S	6E	36	E56	None
28	Weapon Maintenance Area	1967	Facility Plan (Anonymous 1983)	235	6" - 3'	1.5:10	15S	7E	31,32	E56	None

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Table 3.1 A SUMMARY OF HISTORIC AND MODERN GROUND DISTURBANCE THAT MIGHT LIMIT THE PRESENT ARCHEOLOGICAL RESOURCE BASE ON THE ANNISTON ARMY DEPOT (concluded)

GOA No.	Type of Disturbance	Date Conducted (yr)	Reference	Area Disturbed (acres)	Estimated Depth Below Surface (ft)	Ratio of Disturbed Total Area	Location of Disturbed Area			USGS Quad Map ^d	Coincidental Sites
							Township	Range	Section		
24	Paved Surfaces	1941		595	6" - 3'	10:10		(various)		E56, M56, FM47	None
30	Railroad Right of Way	1941	Facility Plan (Anonymous 1983)	110	6" - 3'	10:10		(various)		E56, M56, FM47, E47	None

a Ground Disturbance Areas (GOAs) as mapped in Figure 3.1.

b UTM = Universal Transverse Mercator coordinates, Zone 16.

c Base meridian is the Huntsville Meridian.

d E56 = Eualton, AL, 7.5 min. sheet (1956, photorevised 1972); FM47 = Francis Mill, AL, 7.5 min. sheet (1947, photorevised 1972); M56 = Munford, AL, 7.5 min. sheet (1956, photorevised 1972); E47 = Estaboga, AL, 7.5 min. sheet (1947, photorevised 1972).

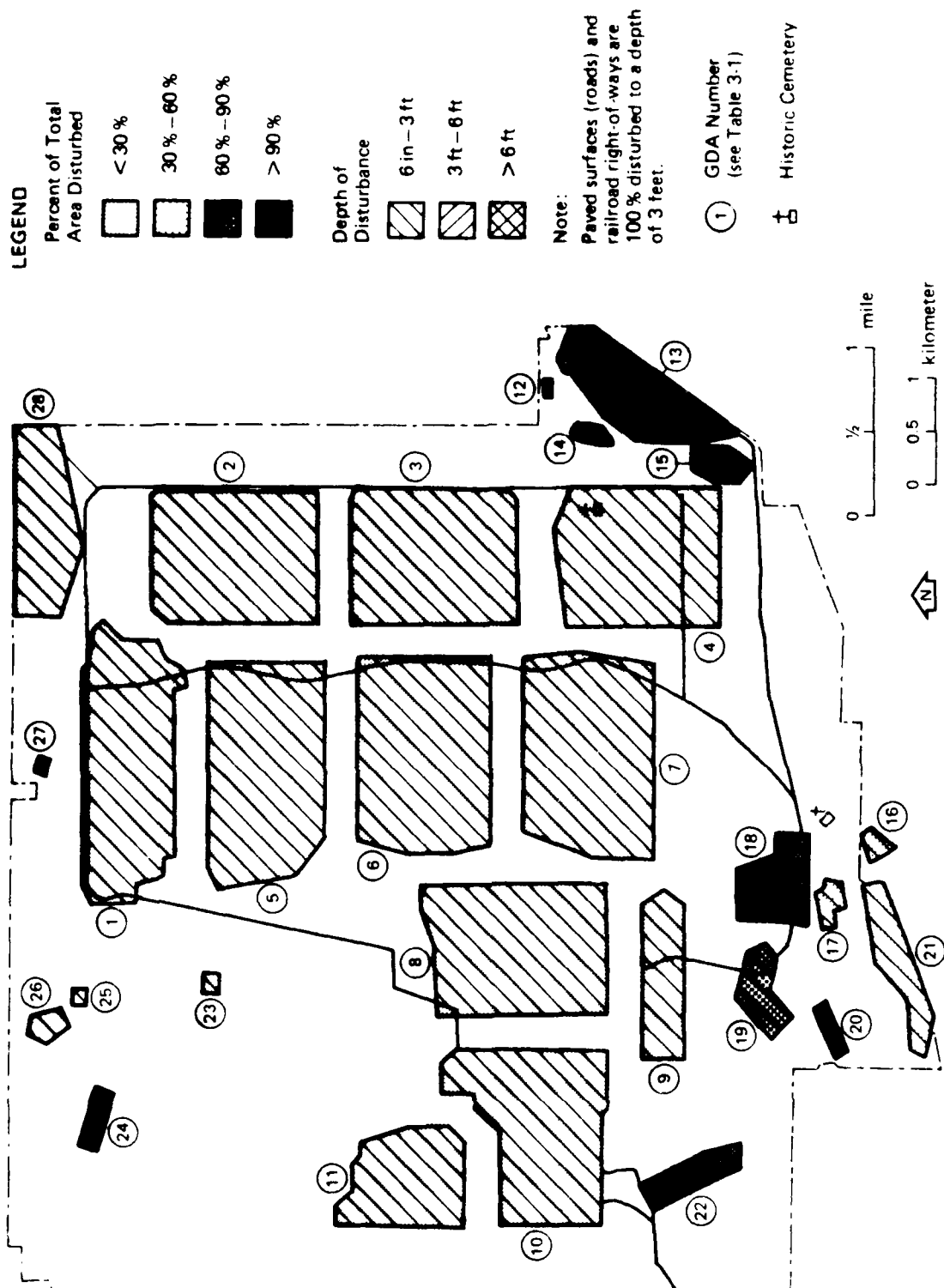


Figure 3-1. MAP OF AREAS OF HISTORIC AND MODERN GROUND DISTURBANCE THAT MIGHT LIMIT THE PRESENT ARCHEOLOGICAL RESOURCE BASE ON THE ANNISTON ARMY DEPOT

area, particularly concrete bunkers in areas A through L (GDA 1-11). The construction of these storage areas did not involve deep foundations, but did entail some leveling in order to pour concrete pads for the bunkers. The natural contours of the land were employed to isolate and insulate individual bunkers. An additional 290 acres have been moderately disturbed: the pyrotechnic range (GDA 26), the ammunition area propellant dispersal facility (GDA 25), the Lance Missile fueling facility (GDA 23), and the weapon maintenance area (GDA 28). It is estimated that no more than 15 percent of these land surfaces have been disturbed.

Some 115 acres have been disturbed to a depth of between 6 inches and 3 feet to a degree of 50 percent. These include a storage area (GDA 21), a housing area (GDA 17), and the privately owned Alan Homes (GDA 16). The utility service area (GDA 19) is estimated to have been impacted to a degree of 75 percent for its 50 acres.

The remaining 6 inch to 3 feet deep ground disturbance areas are estimated to have been disturbed to a level of 100 percent. They include the warehouse administration area (GDA 18), the warehouse and shop area (GDA 13), the paved surfaces within the facility (GDA 29), and the railroad right-of-way (GDA 30). These areas combined total some 1060 acres.

It is difficult to evaluate the impact of the ANAD timbering operations on its cultural resources. Much of the tree harvesting requires heavy equipment, and this inevitably creates a certain degree of ground disturbance. Because most of the prehistoric sites on the ANAD are expected to be small, seasonally occupied camps, even slight disturbances from timber harvesting may have had a major and deleterious impact on cultural resources.

Chemical contamination, although not contributing directly to major ground disturbance, has had a negative impact upon cultural resources

through contamination of potential radiocarbon determinations, destruction of plant and animal remains, and alteration of soil chemistry.

In concluding this section, it should be noted that continuing maintenance of plant security has had a beneficial effect upon the facility's archeological resources, in that it serves to protect cultural remains from vandalism and relic hunters.

3.3 PREVIOUS CULTURAL RESOURCE INVESTIGATION: COVERAGE AND INTENSITY

A brief cultural resource investigation of four small parcels was conducted on the Anniston Army Depot by the U. S. Army Corps of Engineers (1984). These included three potential M-55 missile demilitarization plant sites and one water tank site; shovel testing was employed in addition to field survey, but no cultural resources were found (see Appendix A). The majority of Anniston Army Depot lands, however, have not been surveyed.

3.4 SUMMARY ASSESSMENT OF DATA ADEQUACY, GAPS

At present the facility is unknown for all cultural periods; further information is required for planning and management needs.

4.0

KNOWN ARCHEOLOGICAL RESOURCES ON THE
ANNISTON ARMY DEPOT

4.1 KNOWN ARCHEOLOGICAL RESOURCES

There have been no prehistoric or historical cultural resources (with the exception of the cemeteries) recorded on the facility. The potential for locating unrecorded prehistoric cultural resources on the facility is considered to be low. No information regarding early settlement or structures on the facility has been located and it is unlikely that evidence of such will be present.

4.2 POTENTIAL ARCHEOLOGICAL RESOURCES

Two historic cemeteries are known to occur on the facility and are identified on the facility master plan map (included within the Anniston master plan)(Table 4-1, Figure 3-1). Historic cemeteries often contain significant cultural information, though the U. S. Department of the Interior regulations 36 CFR 60.4 exclude them from eligibility for the National Register of Historic Places.

There are two categories of potential archeological resources on the facility: historic sites with known locations, and resources anticipated on the basis of archeological investigations in the vicinity.

Sites whose known locations are shown on the 1956 Munford and Eualton USGS quadrangle sheets for the area have been identified in this report as "potential" archeological sites since they may be 50 or more years

Table 4-1. POTENTIALLY IDENTIFIABLE BUT NOT PRESENTLY RECORDED
ARCHEOLOGICAL RESOURCES ON THE ANNISTON ARMY DEPOT

Site Number Name ^a	Reference ^b	Description	Research Value ^c
A-1	MAL56	Cemetery	1
A-2	EAL56	Cemetery	1

^aSites have been given "potential site register numbers" only within the context of this overview and planning effort, and are numbered sequentially across the facility.

^bMAL56 = USGS Munford, AL 7.5 min. quad (1956); EAL56 = Eulaton, AL, 7.5 min. quad (1956).

^cThe Confidence Rating (CR) of the potential resource base's research value is a general assessment (based on available data) of the author's confidence in the site's physical integrity and value (e.g., representation of activity diversity or uniqueness, temporal distinctiveness or reflection of diachronic relationships, representativeness). The CR is a ranked assessment: 1 = the site is likely to have little value or the information about it is too unreliable for making a value judgment; 2 = the resource may have research value and the authors are moderately confident that the information about it is reliable; 3 = the resource is likely to have high research value and the authors are quite confident that the information about it is reliable.

old. Because these sites may thus be eligible for the National Register of Historic Places, they should be investigated and evaluated. They presently do not have National Register, state, or local status, nor are they presently recorded as archeological sites. They are summarized in Table 4-1.

4.3 PRESENTLY KNOWN ARTIFACT, ECOFACT, OR DOCUMENTARY COLLECTIONS FROM ARCHEOLOGICAL RESOURCES

Initial queries addressed to individuals knowledgeable about the archeology of the Anniston area (Harry Holstein, personal communication 1983) and the Depot history (Paul Harper, personal communication 1983) have failed to produce any evidence of artifact, ecofact, or documentary collections from archeological resources on the Anniston Army Depot.

5.0

AN ASSESSMENT OF THE SIGNIFICANCE OF THE
ARCHEOLOGICAL RESOURCE BASE ON THE ANNISTON ARMY DEPOT

5.1 THE SIGNIFICANT RESOURCE BASE

The archeological resource base of the Anniston Army Depot is very poorly documented at present. However, data presented in previous sections indicate that it is likely that intact historic and prehistoric cultural deposits with integrity and scientific or humanistic value may exist along the floodplains and undisturbed uplands of the ANAD (Table 5-1).

The anticipated archeological resources on the Anniston Army Depot can be deduced from the summary sections on the physical environment (Section 2.1), the cultural environment (Section 2.2), and the known and potential archeological sites (Section 4.0). The depot possesses two major attributes that greatly enhance its potential for retaining significant archeological resources: (1) its wide variety of landforms, extending from mountain to floodplain; and (2) its recent history of security, which has served to protect its resources from collectors and vandalism.

It is possible that a part or even all of the total prehistoric archeological sequence for east central Alabama may be represented on the facility, and some historic structures are likely to have archeological remnants there. Although there has been considerable construction and farming disturbance on the ANAD, parts of the facility remain undeveloped. Prehistoric gathering and horticultural sites may be found

Table 5.1. SUMMARY OF SIGNIFICANT ARCHEOLOGICAL RESOURCES ON THE ANNISTON ARMY DEPOT

Temporal Unit	Thematic Unit	Resource Type	Type Occurrence ^a			Sociocultural Association	Landform Association	Physical Integrity	Research Value ^b	RV CR ^c	Socio-cultural Value ^d	SCV CR ^c
			Known Occurrences (no.)	Potential Occurrences (no.)	Other Likely Occurrences							
Industrial tradition	Socioeconomic history	Dumps, foundations with associated artifacts	0	3	+	Euroamerican	Variable	Unknown	1	2	2	2
Ethno-historic Frontier	Frontier cross cultural interactions	Village, perhaps palisaded	0	0	++	Native American	Floodplain or terrace	Unknown	5	3	5	3
Middle or Late Woodland	Settlement subsistence patterns	Village, perhaps agricultural fields, cemeteries	0	0	+	Native American	Floodplain or terrace	Likely to be good	5	3	5	3
Archaic	Settlement and subsistence patterns	Small camps or seasonal habitation sites	0	0	+	Native American	Floodplain or terrace	Likely to be good	4	3	4	3
Paleo-Indian	Settlement and subsistence patterns	Small camps, kill and/or butchering sites, isolated projectile points	0	0	+	Native American	Variable	Likely to be good	5	3	5	3

^a The number of presently known or potential archeological resources of this type is specified here. In addition a judgement has been made as to the likelihood that other members of this resource occur within the facility, based on an analysis of the ethnohistoric or historic land use patterns and/or a review of the landform patterning of prehistoric materials. The probability of these additional occurrences has been noted as negative (), positive (+), or highly positive (++).

^b This is a subjective summary assessment of the overall research value (RV) of the resource class. It is an evaluation of the class' quality of preservation, representation of activity diversity or uniqueness, and temporal distinctiveness or reflection of diachronic relationships. It incorporates the need to avoid triviality, but to acquire what may be redundant data so as to discern patterns among those data. Based on these research values, the resource classes under discussion are ranked from 0 (no value) to 5 (highest value), including "NA" if such an evaluation is believed to be impossible given the available information.

^c The Confidence Rating (CR) is a further evaluation of the perceived reliability of the research (RV) or sociocultural (SCV) values of the resource class. 1 - the judgement is more guess than science, and likely not to be reliable; 2 - the judgement is moderately reliable; 3 - the judgement is most likely reliable.

^d This is a subjective summary assessment of the overall sociocultural value (SCV) of the resource class. It is an evaluation of the social, religious, or political importance of the resource to a contemporary community, from 0 (no value) to 5 (highest value).

on the mountain slopes, uplands, and along ANAD floodplains. Hunting stations (more difficult to locate) may be found on virtually any landform. The prehistoric resources may represent periods from Paleo-Indian to Late Woodland. Any sites dating to the earlier periods, if they have sufficient integrity, would be valuable in enhancing the understanding of early human occupations in east central Alabama.

5.2 IDEAL GOALS AND OBJECTIVES

Given the assumption that significant (and presently unidentified) archeological resources are located within the Anniston Army Depot, the following is an outline of a desirable program to manage these resources for the best preservation or use of their research and sociocultural values. An ideal archeological resource management program would encompass identification, evaluation, conservation, excavation and analysis, and interpretation activities. It would emphasize the conservation of significant resources, and their excavation or "use" only to mitigate any unavoidable destruction or damaging activities, or when in search of important information that is being collected for studies within a well designed research project.

A major element in developing a management plan for the Anniston Army Depot is identifying what is there. Because no archeological resource surveys have been conducted on the Anniston Army Depot, the first step is field identification of the sites predicted to be there. Such an identification program should begin with a more intensive and extensive review of oral and archival historic information. The focus of this preliminary review would be to evaluate the historical information base presently available without recourse to any historical archeological investigations, and through consultation with professional historians and people with personal ties to the pre-1940 occupants to evaluate the historic significance of any materials that might be left on the depot. This would complement the more extensive evaluations of natural resource

distributions presented within this report as the basis of evaluating the distribution and potential significance of any prehistoric archeological resources there.

The second stage of the identification program would be the field inventory of the undisturbed portions of the ANAD to identify the surface evidence of any historic or prehistoric archeological sites. Such an identification project would include the pedestrian survey of the depot, with close-interval spacing of survey transects. Large scale aerial photographs and detailed topographic maps should be used for field reference. Standard forms for recording the surface characteristics of identified prehistoric and historic resources should be completed as part of the inventory procedures and the area and methods of the survey should be well documented. The preferred survey policy for most contemporary projects is to make only minimal collections of artifacts off of site surfaces, retaining only those that are diagnostic of particular styles and/or technologies or are immediately vulnerable to uncontrolled collection or damages. Any collected materials should be fully described and appropriately curated.

In addition to a description of the surface evidence of these sites, the ideal inventory would include subsurface investigations (e.g., augering, test excavation, remote sensing) to evaluate the contents, extent, and integrity of the identified resources. Finally, this stage should include an identification of the important research or other values inherent in the inventoried sites, both as a basis for the development of future research designs as well as for the evaluation of management options should the resource be threatened with damage or destruction by non-archeological-research activities. For purposes of future research development, the identification and evaluation of the resources needs to be well documented and available to the research community. For future resource management purposes, it needs to be appropriately stated within the U. S. Department of the Interior's terminology and concepts of resource significance.

The prevailing professional approach to archeological resources for the past decade has been one of conservation (Lipe 1977:21)-- "Our goal . . . is to see that archeological resources everywhere are identified, protected, and managed for maximum longevity." Thus, the ideal objective is to develop a "bank" of significant sites that may be investigated through a variety of techniques, including destructive excavation, only as part of well designed research projects that are scheduled within a regional research program that seeks to maintain the overall range of undisturbed sites for future use. A corollary to this is that the sites should be allowed to be investigated by scientists in a non-reactive situation (i.e., not threatened with immediate destruction of the resource). Such basic investigation of resources on the public lands should be conducted only within research designs that are appropriate to the contemporary regional or broader study questions. It should also be conducted only within a program that includes long term protection of the information collected from the resources, and a commitment to the public dissemination of that information.

If an archeological site evaluated as being of research or sociocultural significance is going to be damaged or destroyed, the ideal objective would be to preserve its included materials and information values through a data recovery program. Such a program would be little different from the non-reactive investigations discussed above, but is likely to be conducted in conjunction with requirements for facility development. Again, an important element in such a research oriented program would be the adequate analysis, curation, and publication of the recovered information.

Thus, in summary the ideal goals for the management of the Anniston Army Depot archeological resources are to:

- Inventory and evaluate all the archeological resources on the facility

- Conserve the significant sites, allowing their research use only within a regional research design
- Recover the contents and information from any significant resources threatened by damage or destruction
- Provide the public with the substance of the information values that are inherent within or collected from the Depot's archeological resource base.

6.0

A RECOMMENDED ARCHEOLOGICAL MANAGEMENT PLAN FOR
THE ANNISTON ARMY DEPOT

6.1 FACILITY MASTER PLANS AND PROPOSED IMPACTS

There is no long-term planning document for the Anniston Army Depot for any additional major construction activities, in the near future. Continued operation of the depot essentially within existing parameters is anticipated. From the standpoint of effect on archeological resources, the primary sources of adverse impact will be: (1) excavation for fill dirt and for refuse pits; (2) minor construction and road relocation activities; (3) logging; and possibly (4) land transfer and/or acquisition. At the present time the ANAD contact people with whom we spoke (Ronald Grant and Paul Harper, personal communication 1983) could not identify any planned ground-disturbing activities with enough specificity to tabulate or map.

6.2 APPROPRIATE ARCHEOLOGICAL MANAGEMENT GOALS WITHIN THE ANNISTON ARMY DEPOT'S MASTER PLAN

6.2.1 General Facility Planning

Army Regulations 420-40, drafted pursuant to the National Historic Preservation Act and 36 CFR 800 (Section 1.1), require that each DARCOM installation have a Historic Preservation Plan or have documentation on file indicating that there are no installation resources appropriate to such management planning. At present, there is no such negative declaration for the Anniston Army Depot. Therefore, the present report is organized so as to provide a basis for such a Plan to be developed and implemented on the facility.

A review of the information provided in Section 3.0 indicates that of the ANAD's 15,214 acres, 1060 acres have been subject to total disturbance to a depth of three feet within the past 40 years. Fifty acres are estimated to have been 75 percent disturbed to a depth of three feet, 115 acres have been 50 percent disturbed to a depth of three feet, and 5110 acres have been 15 percent disturbed to a depth of three feet. Some 125 acres have been 100 percent disturbed to a depth of more than six feet. Thus, it appears that there are some 9000 acres of the Anniston Army Depot that merit archeological field inventory and evaluation.

Department of the Army AR 420-40 regulations prescribe Army policy procedures and responsibilities for compliance with the National Historic Preservation Act of 1966, as amended; for the maintenance of state-of-the-art standards for preservation, personnel and projects; and for accomplishment of the historic preservation program (Figure 6-1). The Historic Preservation Plan has the following objectives:

- Provision of historic and archeological data for the installation's information systems
- An outline of priorities for acquiring additional information to determine if there may be additional projects not yet located or identified
- Establishment of a procedure for the evaluation of historic properties
- Provision of guidelines for the management of historic properties
- Integration of historic preservation requirements with the planning and execution of military undertakings such as training, construction, and real property or land use decisions

- Ranking of facility projects by their potential to damage historic properties
- Identification of funding, staffing and milestones needed to implement the plan.

The identification and evaluation of historic and prehistoric resources on the ANAD has been initiated by the completion of this overview and plan. This needs to be followed by a full identification and evaluation program as outlined in Section 5.2: more extensive oral and archival historic review; field surface and subsurface inventory of all undisturbed Depot lands; and evaluations of resource significance in terms of U. S. Department of Interior criteria. Some or all of this recommended work could be postponed until there is a specific ground-disturbing project that requires compliance with the National Historic Preservation Act (see Sections 1.1, 6.2.2), if development of a historic preservation plan more specific than this document is also to be postponed and if such scheduling has been accepted by the Alabama State Historic Preservation Office (SHPO).

Under any schedule, until the determination has been made that identified prehistoric or historic sites are not significant they must be managed as if they were, for compliance with Section 110(a)(2) of the National Historic Preservation Act:

(2) With the advice of the Secretary [of the Interior] and in cooperation with the State Historic Preservation Officer for the State involved, each Federal agency shall established a program to locate, inventory, and nominate to the Secretary all properties under the agency's ownership or control by the agency, that appear to qualify for inclusion on the National Register in accordance with the regulations promulgated under section 101(a)(2)(A). Each Federal agency shall exercise caution to assure that any such property that might qualify for inclusion is not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly [underlining added].

As outlined in the previous discussion of ideal archeological management goals (Section 5.2), a recommended next stage in the assessment of the importance of the facility's historic archeological resources is an intensive review of archival material and evaluation of regional historic research objectives. The archival review might focus on information stored in the National Archives and Records Service (Record Group 156, Records of the Office of the Chief of Ordnance; Record Group 338, Records of the U. S. Army Commands), as well as more intensive review of Calhoun counties land records, wills, and other pertinent documents and interviews of pre-1940's residents of depot lands. This review and evaluation should include consultation with the Alabama SHPO to identify and prioritize regional historic research questions to which the historic archeological information from identified sites might contribute. The goal of this research would be to define the historic significance that any of the identified sites might have if it had contextual integrity and was to be archeologically investigated.

As discussed in Section 5.2 and required by the National Historic Preservation Act (NHPA), the next step in the identification stage of archeological resource management should be field investigation to locate sites and determine their boundaries, contents, and integrity. NHPA Section 110(a)(2) requires that all federally owned or controlled lands be surveyed to identify all significant archeological properties on them. A strict adherence to this would support the immediate intensive archeological inventory of all Anniston Army Depot lands not previously surveyed or not clearly documented as having deep and extensive modern ground disturbance (some 9000 acres). The current prevailing federal policy about the implementation of this requirement is that it should be a "reasonable" program consistent with the overall schedules, budget, and multiple objectives of the land-managing agency. Given (1) the apparently large percentage of the ANAD that has not been subjected to keep ground disturbance within the past 40 years, (2) the probability that there will be some land transfers or fill dirt excavations in the near future, and (3) the likelihood that significant prehistoric and

historic archeological materials may exist on the ANAD, it is recommended that it would be most cost-effective to complete the archeological inventory of a sample of the undisturbed lands on the facility as soon as it is fiscally possible.

A recommended survey program would address both the potential historic sites identified archivally, and the possible prehistoric sites whose locations are more frequently differentially distributed across the facility landforms. The two identified potential historic resources should be field checked. In complement, a stratified sample survey should be completed to identify prehistoric sites or evaluate their likelihood of being found with integrity on the facility. It is recommended that the survey (referred to here as Phase I) include intensive coverage of all relatively undisturbed bottomlands, terraces, and ridges that might still contain intact sites; this is estimated to include some 9000 acres.

Phase I field reconnaissance should include some limited subsurface investigations, such as augering or shovel tests, to attempt to evaluate the integrity and depth of any identified sites. However, evaluations of site significance may require Phase II limited test excavations. The amount of work required during these tests cannot be addressed realistically until completion of Phase I, although usually the significance of a site can be determined on the basis of 3-10 days of fieldwork by a six person field crew and subsequent description, analysis, and reporting.

Based on the historic and field inventory, and perhaps test data, the significance of all identified sites should be evaluated following criteria set forth in 36 CFR 60.6 and in accordance with guidelines from the Alabama SHPO. If sites are judged to be significant, a plan for their long term management should be developed in the context of overall property management (including the management of any identified ethnohistoric or historic architectural/engineering resources). Such

management activities might include resource conservation in place, biannual field review of site condition, public interpretation of resource values, scientific investigation of the sites, and/or planned site destruction by military activities. If significant sites are identified, it is recommended that the DARCOM officer responsible for the Anniston Army Depot (or the appropriate contract manager for the facility) provide the Alabama SHPO with the opportunity to review and comment on the proposed management plan. If the evaluation is made that none of the sites on the AAP is significant, filing of a report to that effect with the SHPO would complete the facility's compliance requirements for preservation planning for those areas surveyed.

6.2.2 Project-Specific Resource Protection or Treatment Options

As outlined in Section 6.2.1, it appears that approximately 40 percent of the Anniston Army Depot has been impacted by modern construction, and any future ground-disturbing activities in those areas are unlikely to need pre construction review of their potential adverse impacts to significant archeological resources (the exception might be deep new excavation into previously undisturbed deposits beneath modern buildings or structures). However, new ground-disturbing construction on, or leasing of, ANAD land would be a federal undertaking requiring compliance with Section 106 of the National Historic Preservation Act (see Section 1.1 of this report). Section 106 requires that DARCOM consult with the Alabama SHPO and the Federal Advisory Council on Historic Preservation about the effects of such an undertaking on significant archeological sites. Without a SHPO-accepted facility preservation plan, it is DARCOM's responsibility to either complete such an evaluation and consultation program for each new undertaking or to have on file documentation of the completion of adequate survey and evaluation so as to confirm the absence of or lack of significance of any archeological site that might be affected by the proposed activity.

Because the portions of the ANAD that are relatively undisturbed (estimated to include 60 percent of the area) have not been subjected to

intensive archeological survey, construction or ground-disturbance in areas currently unsurveyed could impact archeological resources. Consequently, if such impacts were planned, survey, evaluation, and perhaps required mitigative data recovery (scientific archeological investigation of a significant site) could be necessary on a project-specific basis prior to initiating the ground disturbing activity. Such evaluation and preservation programs require consultation with several federal agencies. However, such a project specific program can usually be expedited if the appropriate preservation planning has been completed and reviewed by the State Historic Preservation Officer.

If it is found during the planning stage of a project that an archeological resource is endangered, several options exist. First it is sometimes possible to relocate the project slightly to avoid damaging the site. This is frequently possible in the case of borrow and refuse pit excavations and some minor construction projects. From a resource protection standpoint, this may be the best resolution of potential threats to the archeological data base. However, it may not be feasible for other reasons. The alternative is to evaluate and treat the archeological resource as outlined in Section 6.2.1 above. This is most easily done when the evaluation of resource significance and appropriate treatment can be made within the context of a facility Historic Preservation Plan.

6.2.3 A Summary of Recommended Management Direction and Priorities for Effective Compliance and Program Development

Based on the fact that a significant prehistoric archeological site is known to have existed (and may remain in part) on the facility, and there is a large amount of relatively undisturbed ANAD acreage that retain other prehistoric and historic sites, Section 6.2 has outlined some short and long term management directions for the Anniston Army Depot. These include, in order of their recommended priority from first to last:

- Consultation with Alabama SHPO about this set of recommendations, and agreement as to scheduled compliance program for the ANAD
- Professional inventory and evaluation of the prehistoric and historic archeological resources that may remain in the relatively undisturbed 9000 acres of the facility
- Integration of historic architectural and archeological data and management needs into a facility Historic Preservation Plan, if the previous activities indicate that there are resources on the ANAD requiring long-term management.

6.3 ESTIMATED SCOPE OF WORK AND COST LEVELS FOR PRESENTLY IDENTIFIABLE MANAGEMENT NEEDS

This section provides a scope of work and milestones for recommended short-term archeological management activities: Phase I inventory and preliminary evaluation of archeological resources on a sample of ANAD lands. This recommendation is based on the assumption that this implementation will be preceded by consultation between DARCOM and the Alabama SHPO.

Phase I operations are essentially locational in nature, although additional data regarding time of location, function, and general significance of historic resources should also be obtained as an archival and/or oral historical component of the inventory. A stratified sample survey such as described in Section 6.2.1 would cover approximately 9000 acres. In addition, the two potential historical resources identified in Section 4.0 merit field review.

Such survey should be preceded by a more intensive archival and oral historical review project, which is estimated to require 10 work days. The archeological field inventory should be conducted by archeological professionals who meet the qualifications and performance guidelines of

the U. S. Department of the Interior (1983) and who hold a federal antiquities permit. The conduct of the inventory should generally involve survey at close intervals, augering or shovel tests at selected locations, recordation of cultural resource information on SHPO-acceptable inventory forms, and collection of only diagnostic items or items in danger of immediate loss. All archeological resources should be mapped so as to have their likely boundaries well defined, and their subsurface depth and integrity should be ascertained at first review as much as is possible. Each identified resource should be evaluated for its research and sociocultural significance, and recommendations should be made concerning its eligibility for the National Register and its appropriate management.

At a rate of 75 acres per work-day (assuming 5 sites per square mile and time spent with shovel testing and moving among sample parcels), field operations are estimated to require at least 120 work-days to survey 9000 acres. If a higher density of cultural resources is encountered, additional field time may be required. The assumption does not include extensive subsurface investigations. Field review of the identified potential historic resources is recommended to require an additional 10 work-days. Analysis of recorded information, preparation of site forms, and the completion of the final report will take approximately 310 work-days. This is a total estimated archival and field effort of 450 work days, or 3600 work hours.

Costs of this technical field review and evaluation program, including all necessary travel (using local expertise), reference telecommunications, data management, and report preparation costs (but no general and administrative or departmental costs or fee or profit) generally average between \$20 and \$25 per work hour across the country. Because of relatively greater use of senior expertise, archival programs (with similar assumptions) average between \$25 and \$30 per work hour. These rates are unloaded base costs, with no fee, general and administrative cost included within the estimate that is presented in FY83 dollars. Thus, given the potential cost of field activities,

laboratory and special analyses costs, and the costs of report preparation, the unloaded cost of this optional management recommendation is between \$73,260 and \$91,260 in 1984 dollars. This cost is assumed to cover only involvement of the consultant with any state or federal review process.

The milestones for the recommended work would be, in sequence:

- Completion of Part A, a brief preliminary draft report on the archival and oral historic research documenting the potential relative importance of the potential historic archeological resources that might remain on the ANAD
- Completion of the archeological inventory and preliminary evaluation of identified archeological resources; completion of additional subsurface investigation of selected sites if necessary to support the evaluations
- Completion of Part B, a preliminary draft report on the field investigations and recommended evaluations and management program, for DARCOM review
- Completion of DARCOM review of the preliminary draft Parts A and B, as documented by a letter accepting them as appropriate for interagency consultation
- Completion of consultation (including both DARCOM representatives and the historical/archeological consultants) with the Alabama SHPO about the evaluations and recommended management, as documented in a letter of concurrence from the SHPO

Completion of review of the DARCOM submitted evaluations by the U. S. Department of the Interior's Keeper of the National Register, as documented in a letter of concurrence from the Keeper.

The Anniston Army Depot (ANAD) in east central Alabama, is a DARCOM (Department of the Army Materiel Development and Readiness Command) facility, with responsibilities for the management of prehistoric and historic archeological resources on installation lands. This report is a summary of the cultural and environmental history of the area and provides a context for the interpretation and evaluation of facility archeological resources. The report includes an assessment of the total archeological resource base that potentially exists on the facility and recommends how these resources may be managed within the overall context of DARCOM missions, federal legislation, and public responsibilities.

The Anniston Army Depot is located in east central Alabama, 50 miles east of Birmingham and 110 miles west of Atlanta, in Calhoun County. The facility is comprised of 15,214 acres. ANAD is a government-owned operation under the jurisdiction of the U. S. Army Depot System Command (DESCOM, a DARCOM sub-command). Its primary mission is the overhaul of tracked combat vehicles and the storage, maintenance, and issue of ammunitions, small arms, and electronic missile components.

The facility occupies well drained upland terrain composed of rolling land, low hills, and valleys within the Ridge and Valley province of the Appalachian Highlands. No major rivers drain the installation, but tributaries of the Coosa River, Choccolocco Creek, and Cane Creek, provide sufficient flowage to the north and south. The topography ranges from narrow floodplains and associated terraces along the tributary streams to ridges and steep slopes. Elevations range from approximately

630 feet AMSL at the southern boundary to 997 feet AMSL at the highest point. Cambrian and Ordovician dolomites have given rise to strongly acid, well drained soils.

Significant changes in flora and fauna have taken place within the past 40,000 years, but only moderate changes have occurred during the last 8,000 years. The area today lies within the oak-pine forest of the Ridge and Valley province and provides for a varied and abundant plant and animal assemblage.

Environmental constraints to archeological site preservation consist of erosion at higher elevations and strongly acid soils. Preservation of human and non-human remains will be poor under these conditions. Culturally imposed constraints to archeological resource preservation include the original facility construction and continuing excavations.

There have been no extensive cultural resource surveys on the facility and there are no known sites on the installation that are presently eligible for nomination to the National Register of Historic Places. However, it is likely that significant prehistoric and historic sites exist within the facility. As a result, DARCOM has mandated responsibilities for the identification, evaluation, and protection of public land resources. The development of an installation cultural resources management plan, therefore, is recommended. Such a plan would focus upon the guidance set forth in Army regulation AR 420-40. This report sets forth the means for initiating these historic preservation plans which should outline ANAD's management procedures for prehistoric and historic archeological, architectural, and engineering resources, and have the concurrence of the Alabama State Historic Preservation Officer.

BIBLIOGRAPHY

8.1 PRIMARY SOURCES AND REFERENCES CITED

- Boyd, Mark F. 1937. Expedition of Marcus Delgade from Apalachee to the Upper Creek country in 1686. Florida Historical Quarterly 16-17:8-26.
- Brain, Jeffrey P. 1975. Artifacts of the Adelantado. Conference on Historic Site Archeology Papers 8:129-138.
- Brenner, William B. 1984. Personal communication. Principal Investigator, DARCOM HABS Survey, Building Conservation Technology, Inc., Silver Spring, MD.
- Corkran, David H. 1967. The Creek Frontier, 1540-1783. Norman: University of Oklahoma Press.
- Debo, Angie. 1941. The Road to Disappearance. Norman: University of Oklahoma Press.
- Delcourt, Paul A., and Hazel R. Delcourt. 1981. Vegetation Maps for Eastern North America; 40,000 yr B.P. to the Present. Geobotany 2:123-165.
- Fairbanks, Charles H. 1974. Ethnographic Report on Royce Area 79 Docket 275: Chickasaw, Cherokee, Creek. In Cherokee and Creek Indians, edited by David Agee Horr, pp. 31-286. New York: Garland Publishing.
- Feest, Christian F. 1974. Creek towns in 1725. Ethno Logische Zeitschrift 1:161-175.
- Fenneman, Nevin M. 1938. Physiography of Eastern United States. New York: McGraw-Hill.
- Futato, Eugene M. 1983. Personal communication. Office of Archaeological research, University of Alabama, University, AL.
- Giraud, Marcel. 1974. A History of French Louisiana, Vol. 1. Baton Rouge: Louisiana State University.
- Harlin, William V. and E. A. Perry. 1961. Soil Survey of Calhoun County, Alabama. Washington DC: U. S. Department of Agriculture, Soil Conservation Service.

- Harper, Paul. 1983. Personal communication. Master Planner, Anniston Army Depot, Calhoun County, AL.
- Harper, Roland M. 1943. Forests of Alabama. Geological Survey of Alabama, Monograph 10.
- Holstein, Harry O. 1983. Personal communication. Department of Sociology, Jacksonville State University, Jacksonville, AL.
- Knudson, Ruthann, David J. Fee, and Steven E. James. 1983. A Work Plan for the Development of Archeological Overviews and Management Plans for Selected U. S. Department of the Army DARCOM Facilities. Walnut Creek, CA: Woodward-Clyde Consultants [available through the U. S. Department of the Interior, National Park Service, Atlanta].
- Larson, Lewis. 1959. Middle Woodland Manifestations in North Georgia. Southeastern Archaeological Conference, Newsletter 6:54-58.
- Lineback, Neal G. 1973. Atlas of Alabama. University: University of Alabama Press.
- Lipe, William D. 1977. A Conservation Model for American Archeology. In Conservation Archeology: A Guide for Cultural Resource Management Studies, edited by Michael B. Schiffer and George J. Gumerman, pp. 19-42. New York: Academic Press.
- Russell, Margaret C. 1975. Lamar and the Creeks: an Old Controversy Revisited. Early Georgia 3:53-67.
- Shelford, Victor E. 1963. The Ecology of North America. Urbana: University of Illinois Press.
- Smith, Marvin T. 1976. The Route of De Soto Through Tennessee, Georgia, and Alabama: The Evidence from Material Culture. Early Georgia 4:27-48.
- Swanton, John R. 1922. Early history of the Creek Indians and their neighbors. Smithsonian Institution, Bureau of American Ethnology, Bulletin 42.
- U. S. Department of the Interior. 1982. Guidelines for the Disposition of Archeological and Historic Human Remains. Ms., Departmental Consulting Archeologist, National Park Service, U. S. Department of the Interior, Washington, DC.
- _____. 1983. Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation: Professional Qualifications Standards. Federal Register 48(190):44716-44740.
- Walthall, John A. 1980. Prehistoric Indians of the Southeast: Archaeology of Alabama and the Middle South. University: University of Alabama Press.

- Walthall, John A., and David L. DeJarnette. 1974. Copena Burial Caves. Journal of Alabama Archaeology 20:1-59.
- Warman, J. C. and L. V. Causey. 1962a. Geology and ground-water resources of Calhoun county, Alabama. Geological Survey of Alabama, County Report 7. University, AL.
- _____. 1962b. Geologic Map of Calhoun County, Alabama. Geological Survey of Alabama Special Maps 17. University, AL.
- Waselkov, Gregory A. 1980. Coosa River Valley Archaeology. Auburn University, Archaeological Monograph 2.
- Waselkov, Gregory A., Brian M. Wood, and Joseph M. Herbert. 1982. Colonization and Conquest: The 1980 Archaeological Excavations at Fort Toulouse and Fort Jackson, Alabama. Auburn University, Archaeological Monograph 4.
- Watts, W. A. 1970. The Full Glacial Vegetation of Northwestern Georgia. Ecology 51:17-33.
- _____. 1973. The Vegetation Record of a Mid-Wisconsin Interstadial in Northwest Georgia. Quarterly Research 3:257-258.
- 8.2 OTHER PERTINENT LITERATURE
- Abernathy, Thomas P. 1965. The Formative Period in Alabama, 1815-1828. University: University of Alabama Press.
- Chapman, Jefferson. 1977. Archaic Period Research in the Lower Little Tennessee River Valley. University of Tennessee, Department of Anthropology, Report of Investigations No. 18.
- _____. 1978. The Bacon Farm Site and a Buried Site Reconnaissance. University of Tennessee, Department of Anthropology, Report of Investigations No. 23.
- Chase, David W. 1976. A Tentative Chronology for Central Alabama: Part 1 - Proto-Archaic Through Woodland. Manuscript on file, Archaeology Laboratory, Auburn University, Auburn, AL.
- _____. n.d. A Brief Synopsis of Central Alabama Prehistory. Manuscript on file, Archaeology Laboratory, Auburn University, Auburn, AL.
- Chomko, Stephen A., and Gary W. Crawford. 1978. Plant Husbandry in Prehistoric Eastern North America. American Antiquity 43(3):405-408.
- Coe, Joffre L. 1964. The Formative Cultures of the Carolina Piedmont. American Philosophical Society Transactions 54(4).

- DeJarnette, David L. 1952. Alabama Archeology: A Summary. In Archaeology of Eastern United States, edited by James B. Griffin, pp. 272-284. Chicago: University of Chicago Press.
- DeLeon, Mark F. 1976. Archaeological Investigations in the Rother L. Harris Reservoir. Manuscript on file, Alabama Power Company.
- Dodd, Donald B. 1974. Historical Atlas of Alabama. University: University of Alabama Press.
- Edwards, Augustine D. 1941. Economic and Social History of Benton (Calhoun) County, Alabama. Master's thesis, University of Alabama, University.
- Garrow, Patrick H. 1975. The Mouse Creek "Focus": A Reevaluation. Southeastern Archaeological Conference, Bulletin 18:76-85.
- Hally, David J. 1975. Archaeology of the King Site, an Early Historic Indian Town in Northwest Georgia -- Introduction. Southeastern Archaeological Conference Bulletin 18:48-54.
- Hamilton, Virginia Van der Veer. 1977. Alabama: A Bicentennial History. New York: W. W. Norton.
- Hawk, Emory Q. 1934. Economic History of the South. New York: Prentice Hall.
- Lewis, Thomas M. N., and Madeline Kneberg. 1946. Hiwassee Island: An Archaeological Account of Four Tennessee Indian Peoples. Knoxville: University of Tennessee Press.
- Mason, Carol I. 1963. Eighteenth Century Culture Change Among the Lower Creeks. Florida Anthropologist 16(3):65-80.
- Sheldon, Craig T. 1974. The Mississippian-Historic Transition in Central Alabama. Doctoral dissertation, University of Oregon, Eugene. Ann Arbor: University Microfilms.
- Society of Professional Archeologists. 1983. The Directory of Professional Archeologists. Tampa: Society of Professional Archeologists.
- Walthall, John A. 1973. Copena: A Tennessee Valley Middle Woodland Culture. Doctoral dissertation, University of North Carolina, Chapel Hill. Ann Arbor: University Microfilms.
- Wauchope, Robert. 1966. Archaeological Survey of Northern Georgia. Society for American Archaeology, Memoir 21.
- Webb, William S., and Charles G. Wilder. 1951. An Archaeological Survey of Guntersville Basin on the Tennessee River in Northern Alabama. Lexington: University of Kentucky Press.

APPENDIX A
USACE CULTURAL RESOURCE SURVEY REPORT

A CULTURAL RESOURCE SURVEY OF THE
M-55 ROCKET DEMILITARIZATION PLANT
OF THE ANNISTON ARMY DEPOT
CALHOUN COUNTY, ALABAMA

Prepared by:
U.S. Army Engineers District, Mobile, Alabama
Corps of Engineers

17 January 1984

Under several historic preservation laws and Executive Order 11593, dated 13 May 1971, the Department of the Army has the responsibility to identify and preserve cultural resources, or mitigate losses thereto, on lands under its jurisdiction. The pertinent authorities for this responsibility include the Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act of 1906 as amended including the National Historic Preservation Act Amendments of 1980, the Reservoir Salvage Act of 1960 as amended by the Archeological and Historical Preservation Act of 1974, Executive Order 11593, the Archeological Resources Protection Act of 1979, the National Environmental Policy Act, and AR 200-1.

In compliance with these authorities, a cultural resource survey was performed for the project area of the M-55 Rocket Demilitarization plant on the Anniston Army Depot, Calhoun County, Alabama.

Project Description

The Anniston Army Depot is proposing to build a new M-55 Rocket Demilitarization plant on their base. The proposed M-55 site locations were surveyed for cultural resources by a Mobile District Corps of Engineers archeologist on 20 and 21 July 1983. Three potential plant locations and a site for a water tank were examined. Survey methodology consisted of physically walking transects over the proposed areas and examining the ground surface. Judgemental shovel tests were excavated at all three locations.

Literature and Records Search

The State site files at Moundville, Alabama were consulted to determine whether any archeological sites had been located on or near the Anniston Depot by previous cultural resources surveys. None were recorded. The nearest cultural resource survey work was done on Pelham Range by McEachern et al. (1980) and Holstein and Little (1982). There are no National Register properties situated within or adjacent to the study areas.

Survey Results

Alternative Site A, the first proposed site location, is situated at the northwesternmost corner of the fence surrounding the G block complex. This area is situated on a relatively steep hillside, there is approximately a 40-foot drop in elevation between the top and bottom of the proposed site. There are no permanent water sources near this area. The Hillside is covered with a hardwood forest. Fort Paine chert outcrops are common in the area, but all are badly eroded and none show evidence of having been mined for raw materials by Indians. Shovel test pits showed that soils in the area consisted of a thin humus layer overlying a cherty clay. No cultural materials were found within the Alternative Site A survey area. Based upon the steepness of the hillside and lack of nearby water sources it is doubtful that any past occupations occurred within this area.

Alternative Site B is located on a hilltop approximately 2,000 feet south and west of the northwesternmost corner of the fence surrounding the G block complex. An open hardwood forest covers most of the area. Eroded Fort Paine chert outcrops were common in the area, but none displayed evidence of having been mined by the Indians. The area soil profile consisted of a thin humus layer overlying a cherty clay. There are no permanent water sources near this area. No cultural resource materials were found during the walkover of the area nor in the shovel test pits excavated there. Based upon the lay of the land and the lack of a nearby permanent water source it is doubtful that past settlements existed within Alternative Site B.

Alternative Site C is situated near the intersection of two roads approximately 1,800 feet due north of the northwest corner of the C block complex fence. This area is on a hillside and floodplain adjacent to a permanent creek, which is approximately 20 feet wide at this site. The woods covering the site are made up of mixed pines and hardwoods. Eroded Fort Paine chert outcrops are common on the hillside, none displayed evidence of aboriginal mining. Hillside soils consisted of a thin humus overlying a cherty clay. Soils in the floodplain of the creek are made up of silty deposits and contain little chert. Although this area would appear to be optimal for possessing cultural resources, none were noted during the walkover nor in the shovel test pits excavated there.

It has been proposed to locate a water storage tank on a hilltop adjacent to the fence on the west side of the G block complex. This hilltop is rather open with only a few pine and hardwood trees. The ground surface is covered with weathered and eroded Fort Paine chert, none of which appeared to have been mined for material. There are no permanent water sources nearby. No cultural resource materials were found on the site.

Summary and Recommendations

The proposed M-55 site locations were surveyed for cultural resources on 20 and 21 July 1983 by a Mobile District archeologist. No cultural resource materials were found at any of the locations. The State site files at Moundville, Alabama had no record of any archeological sites being located within the proposed M-55 locations. There are no National Register properties situated within or adjacent to the study areas. Construction of the proposed M-55 facility at any of the surveyed locations should not affect any cultural resources.

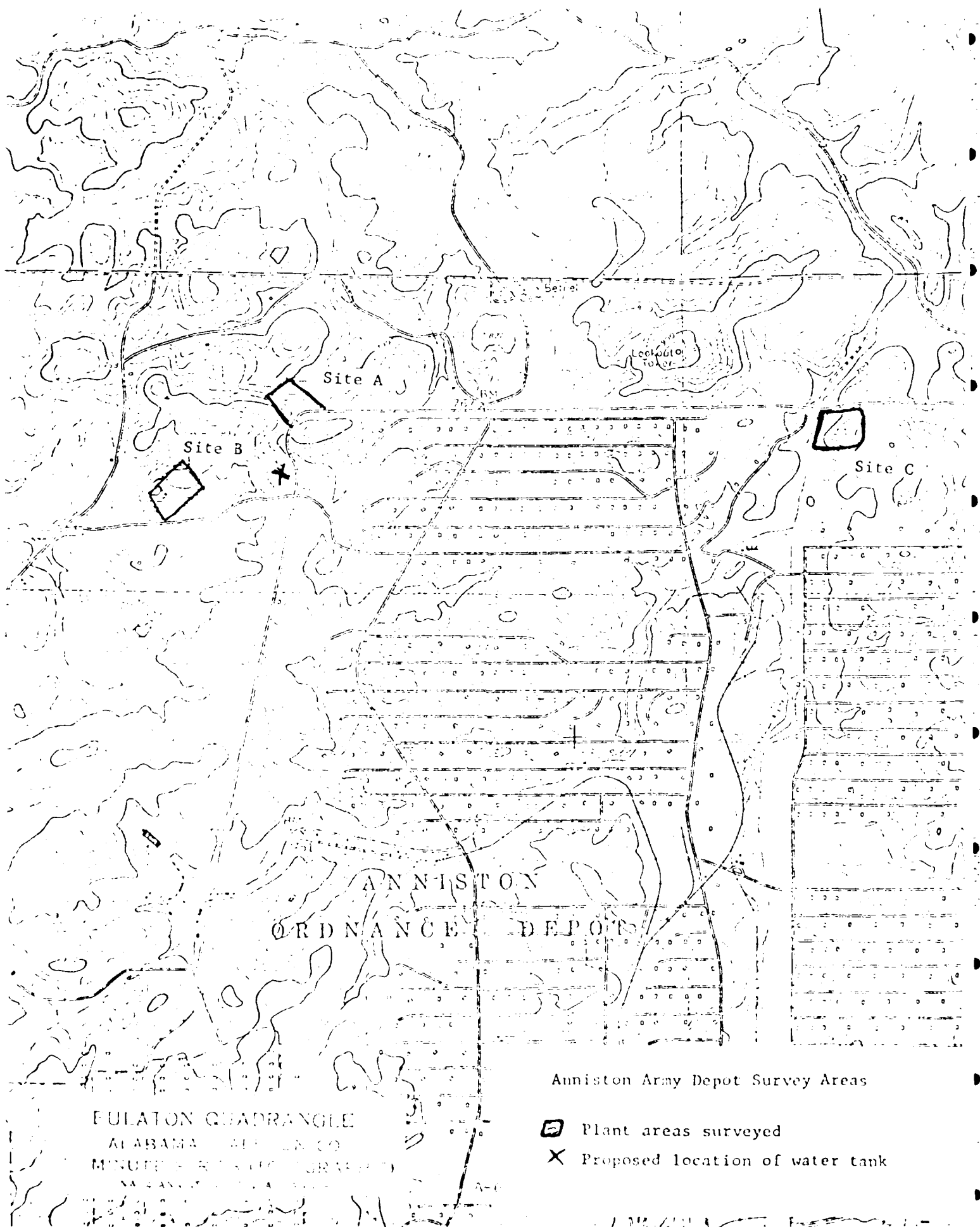
References

Holstein, Harry O. and Keith J. Little

1982 Validity Test of the 1980 McEachern Archaeological Predictive Model of Fort McClellan, Alabama. Jacksonville State University, Jacksonville. Report submitted to the U.S. Army Corps of Engineers, Mobile District.

McEachern, Michael, Nancy Boice, David C. Hurst and C. Roger Nance

1982 Statistical Evaluation and Predictive Study of the Cultural Resources at Fort McClellan, Alabama. University of Alabama in Birmingham, Birmingham. Report submitted to Department of the Army, U.S. Army Military Police School/Training Center and Fort McClellan, Alabama.



Site A

Site B

Site C

ANNISTON
ORDNANCE DEPOT

FULTON QUADRANGLE
ALABAMA
MINUTE 6 NORTH 10 WEST

Anniston Army Depot Survey Areas

- Plant areas surveyed
- Proposed location of water tank

END

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