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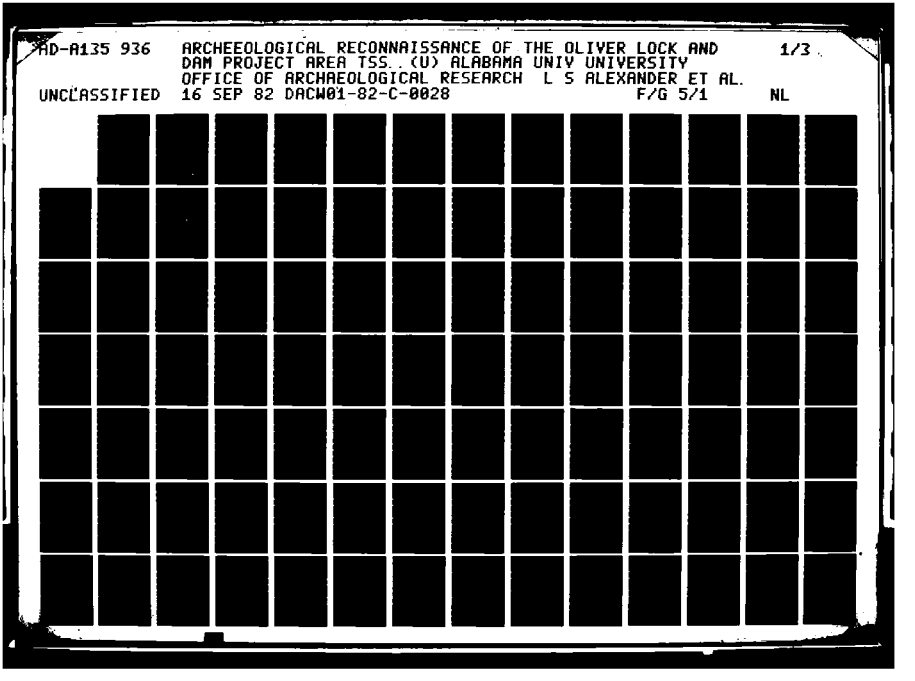

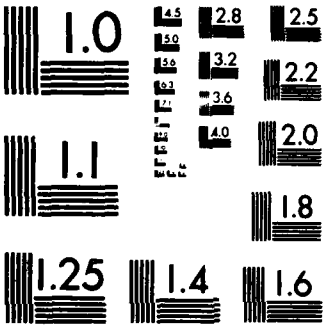

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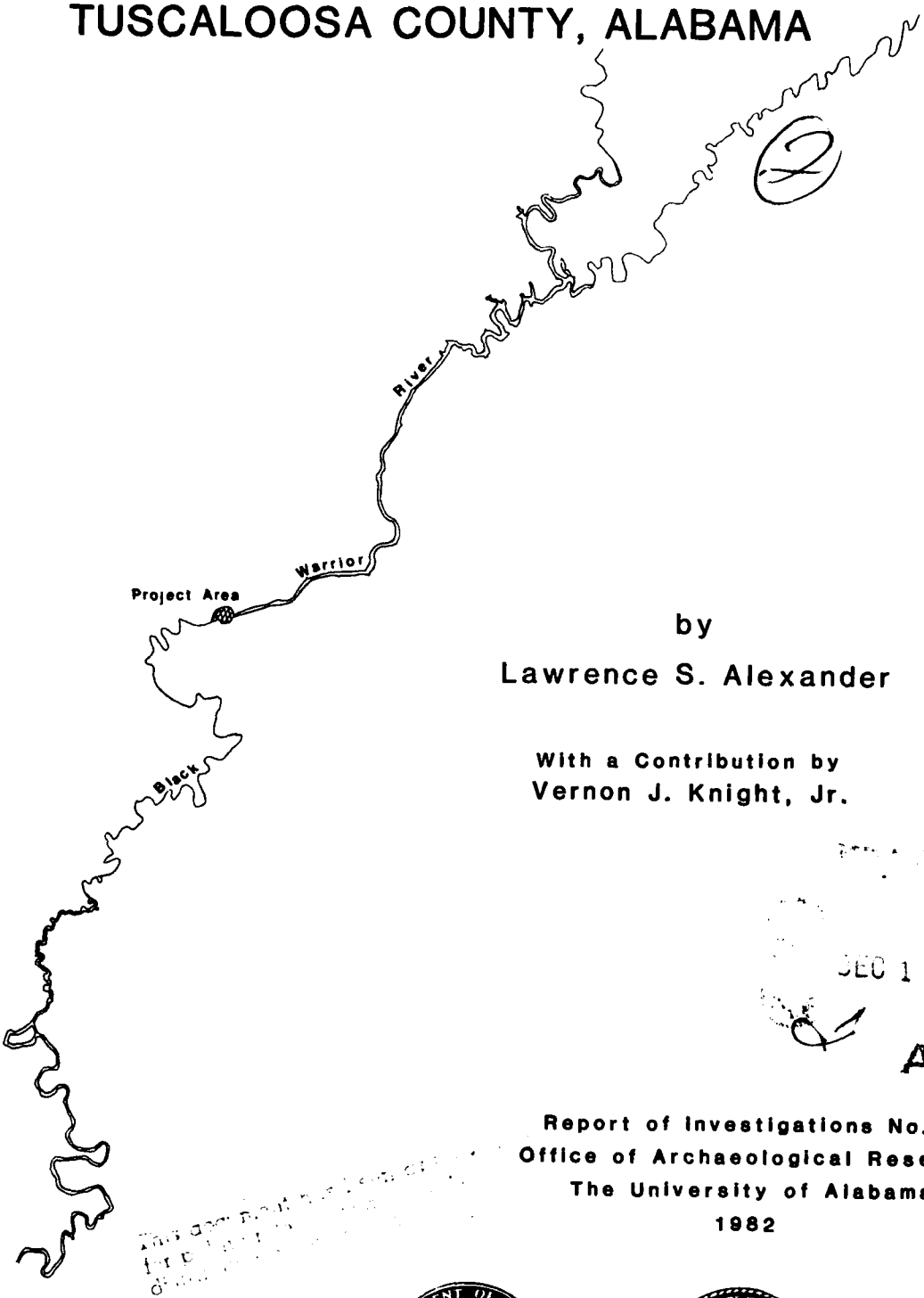
PHASE I ARCHAEOLOGICAL RECONNAISSANCE OF THE OLIVER LOCK AND DAM PROJECT AREA TUSCALOOSA COUNTY, ALABAMA



by
Lawrence S. Alexander

With a Contribution by
Vernon J. Knight, Jr.

Report of Investigations No. 33
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1982

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The U.S. Army Corps of Engineers,
Mobile District

SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

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A documentary and literature search and archaeological reconnaissance of 1,100 acres on the Black Warrior River located in Alabama. This document summarizes the prehistory, ethnohistory, and history of the region and includes a consideration of the particular historical importance of the survey area. A model of the Holocene terraces geomorphology was developed to duscuss settlement patterns. Forty-nine archaeological sites were discovered thirty-nine of which required no further investigations.

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PHASE I ARCHAEOLOGICAL RECONNAISSANCE OF THE OLIVER LOCK AND DAM PROJECT AREA TUSCALOOSA COUNTY, ALABAMA

by

Lawrence S. Alexander

With a Contribution by

Vernon J. Knight, Jr.

Office of Archaeological Research
The University of Alabama
Report of Investigations 33

Prepared under the Supervision of

Carey B. Oakley
Principal Investigator

Submitted to:

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Mobile District
P.O. Box 2288
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September 16, 1982

ABSTRACT

A documentary and literature search and archaeological reconnaissance of 1100 acres on the Black Warrior River floodplain west of Tuscaloosa, Alabama, was performed as Phase I of an environmental assessment, prior to the initiation of possible relocation of William B. Oliver Lock and Dam by the U.S. Army Corps of Engineers.

The documentary and literature search summarizes the prehistory, ethnohistory and history of the region and includes a consideration of the particular historical importance of the survey area. An additional section is devoted to the issue of the location of Black Warrior Town, an aboriginal settlement of the Creek War (1813-1814) period.

A model of the Holocene terrace geomorphology was developed to discuss settlement patterns. A strategy for deep testing to locate buried floodplain sites was designed from this geomorphological model.

Forty-nine archaeological sites were located and preliminarily evaluated. These sites range from small Middle Archaic and Gulf Formational artifact scatters to several large Late Woodland-Mississippian middens. Nineteenth century industrial and domestic sites and twentieth century tenant house locations were also identified.

Thirty-nine of these sites will not require any further consideration. A total of 10 sites has been recommended for further investigation. These sites contain well developed archaeological deposits with good research potential. These sites will require a Phase II intensive testing to determine their eligibility for nomination to the National Register of Historic Places (NRHP).

ACKNOWLEDGEMENTS

The cultural resources survey of the Oliver Lock and Dam Relocation project is a product of an integrated effort of the staff and management of the Office of Archaeological Research. Carey B. Oakley, Director of the Office of Archaeological Research, served as Principal Investigator for the project. Lawrence S. Alexander directed the field investigation and wrote sections of the report. Vernon J. Knight, Jr. did the background research and wrote the prehistoric and historic sections of this report. David Zeanah wrote the site descriptions. Gloria G. Cole and Vernon J. Knight, Jr. edited the report.

David Zeanah served as field assistant on this project. The field crew consisted of Beth Brandon, Bonnie Boyd, Tim Elmore, Kathryn King, Van King, Bob Skrivan, Lorraine Stevens, and Jeff Thomson. Bob Skrivan, Lorraine Stevens, and Polly Futato did the laboratory analysis. Maps and figures were prepared by Rick Walling. Jackie Redding and Kemp White typed the report on the IBM System 6.

Eugene M. Wilson, of the University of South Alabama, served as consultant for both the historic architecture and geomorphology of this project. Charles W. Moorehead, Archaeologist for the U.S. Army Corps of Engineers Mobile District was the contract manager and made significant suggestions for the field work. All of these people have contributed to the management of data recovered and deserve our recognition.

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Staff Archaeologist
Office of Archaeological Research

Carey B. Oakley, Director
Office of Archaeological Research
Principal Investigator

FOREWORD

This report of the cultural resources survey of the Oliver Lock and Dam Relocation Project, Tuscaloosa, Alabama, was prepared by the Office of Archaeological Research for the U.S. Army Corps of Engineers, Mobile District. The following report is presented in four major sections; (1) the management summary, (2) the geographic and cultural background of the project area, (3) data recovery and information analysis, and (4) the site inventory. Chapter I, the management summary, is a brief abstract of the entire report and presents the cultural resource management recommendations for the project area. Chapter II describes the biophysical background of the project area. Chapter III presents the cultural background of the project area. Chapter IV describes the data recovery, site analysis, cultural resource evaluation, and a brief research design. Chapter V is an inventory of the cultural resources recorded within the 1100 acre survey area. Cultural resources that have preserved deposits and are considered potentially eligible to be nominated to the National Register of Historic Places under Criterion A, in that the site is undisturbed and has potential to yield important information, have been recommended for further work.

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CHAPTER I

OVERVIEW AND MANAGEMENT SUMMARY

INTRODUCTION

At the request of the Mobile District Corps of Engineers a documentary and literature search and a cultural resources reconnaissance of 1100 acres (442.9 ha) (Figure 1) within the boundaries of the proposed relocation of the William Bacon Oliver Lock and Dam, Tuscaloosa, was conducted by The University of Alabama, Office of Archaeological Research (OAR) between February 1 and March 5, 1982. Cultural resources located within the project area ranged from Middle Archaic campsites to a middle twentieth century tenant farm house. The cultural resources survey located 49 sites within the project area. Ten sites were recommended for further evaluation. The site inventory is listed in Table 1.

This summary includes a review of the literature search, field investigation procedures, site evaluation criteria, and an inventory of the sites located within the project area. The site summary section includes recommendations for further resource management of the located sites.

PROJECT AREA

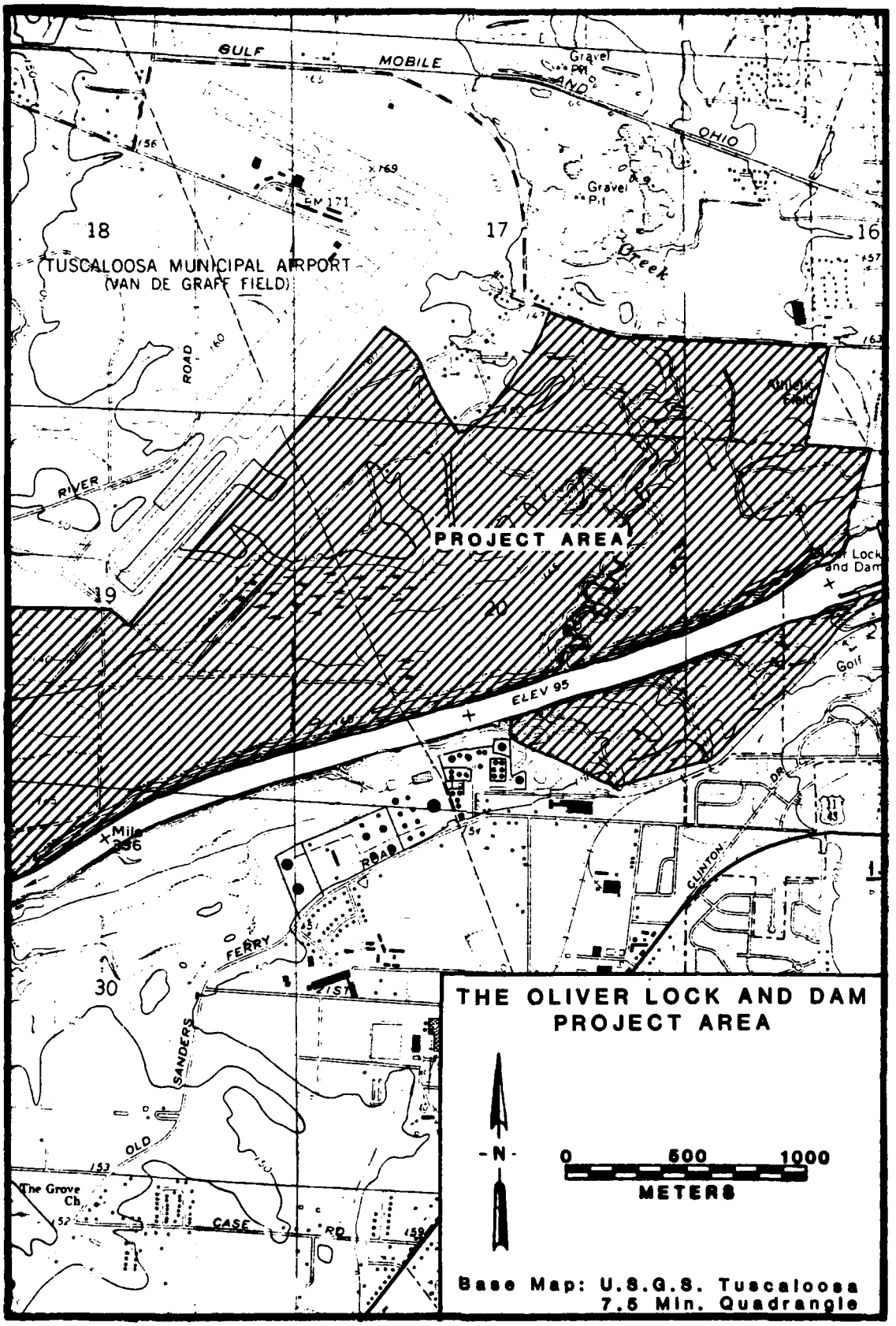
The Oliver Lock and Dam project area is located in central Tuscaloosa County on the western edge of Tuscaloosa, Alabama (Figure 1). The project area covers 1100 acres (442.9 ha) which is divided into a northern and southern portion by the Black Warrior River. The northern portion consists of 989 acres (400.4 ha) and the southern portion consists of 105 acres (42.5 ha).

The project area is immediately downstream from the Fall Line at Tuscaloosa. Above the Fall Line, the river is entrenched in Paleozoic sandstones and shales. Below the Fall Line the river meanders through unconsolidated Cretaceous deposits of sand, clay, and gravel. This geological break represents a significant transition in ecology and in the sedimentation pattern of the Black Warrior River.

INVESTIGATION PROCEDURES

Documentary and Literature Review

A documentary and literature review for the project area and surrounding region was conducted by Vernon J. Knight, Jr. After a brief preliminary document search during the initial phase of investigations, relevant archives, manuscripts, and published works were examined in greater detail. The findings, with appended chronologies, bibliographies, or source materials, are presented in Chapter III of this report.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(VAN DE GRAFF FIELD)
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THE OLIVER LOCK AND DAM
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Base Map: U.S.G.S. Tuscaloosa
7.5 Min. Quadrangle

Figure 1.

Table 1. Oliver Lock and Dam Site Inventory.

	Topographic Location	Level of Investigation	Site Type	Component Present	Intact Deposits	Potential NRHP Eligibility	Recommendations
1Tu264	T-1RCL	CH,TP,CA	4F	LW,M,H	SD	Yes	PhII;CSC,DT,ST,TP
1Tu265	T-1RCL	SC,CH,TE	5B	GF,LW	SPF	Yes	PhII;CSC,DT,ST,TP
1Tu266	T-1RCL	SC,TE	5F	LA,GF, LW,M,H	SPF	Yes	PhII;CSC,DT,ST,TP
1Tu308	T-2	SC	3D	MA,LA,GF, MW,LW,M,H	DEC	No	N
1Tu421	T-1RCL	SC,TE	5E	MA,GF,LW,M	SPF,SD	Yes	PhII;CSC,DT,TP
1Tu422	T-1RCL	SC	3D	M	DEC	No	N
1Tu423	T-1RCL	SC,TE	4D	LA,GF,LW, M,H	SD	Yes	PhII;CSC,DT,ST,TP
1Tu426	T-1RCL	SC,CH,TP	5C	MW,LW,M,H	SPF	Yes	PhII;CSC,DT,ST,TP
1Tu427	T-1RCL	SC,TE	6F	LW,M	UP,SPF	Yes	PhII;CSC,DT,TP
1Tu428	T-1M	SC,TE	1F	MA,LA,GF, MW,LW,H	Undet.	Undet.	N
1Tu429	T-1M	SC	4C	LW,H	DEC	No	N
1Tu430	T-1L	SC,TE	2C	LW,H	Undet.	No	N
1Tu431	T-1L	SC	2F	LA,LW,M,H	Undet.	No	N
1Tu432	T-1L	SC,TE	4D	LW,M,H	SD	Yes	N
1Tu433	T-1L	SC,TE	2D	LA,GF,LW M,H	Undet.	No	N
1Tu434	T-1L	SC,TE	3C	LW,M,H	SD	No	N
1Tu435	T-1M	SC	3C	X	DEC	No	N
1Tu436	T-1M	SC,TE	5E	LA,GF,MW, LW,M,H	SPF	Yes	PhII;CSC,DT,ST
1Tu437	T-1M	SC	1D	X,H	DEC	No	N
1Tu438	T-2	SC,TE	4C	EA,MW,LW,H	SPF	No	N
1Tu439	T-2	SC	2C	X,H	DEC	No	N
1Tu440	T-2	SC	3B	X,H	DEC	No	N
1Tu441	T-2	SC,M,PH,HD	5B	X,H	Undet.	Undet.	PhII;ST,TP
1Tu442	T-2	SC	2C	MA,LA,LW	DEC	No	N
1Tu443	AF-1	SC	2C	EA	DEC	No	N
1Tu444	T-2	CH,TE	4F	X	UP	Yes	PhII;TP
1Tu445	AF-1	SC	2C	X	DEC	No	N
1Tu446	AF-1	SC	1C	LW	DEC	No	N
1Tu447	AF-1	SC,CH	5C	X,H	DEC	No	N
1Tu448	AF-1	SC,CH	1C	X,H	DEC	No	N
1Tu449	T-2	SC	1B	LW,H	DEC	No	N
1Tu450	AF-1a	CH,TE	3F	GF	SD	No	N
1Tu451	T-1M	SC	3E	X	DEC	No	N
1Tu452	T-2	SC	2D	X	DEC	No	N
1Tu453	T-1M	CH,TE	2B	X	DEC	No	N
1Tu454	AF-1a	CH,TE	2A	GF,LW	UP	No	N
1Tu455	T-2	SC	1B	X,H	DEC	No	N
1Tu456	T-2	PH,HD	3B	H	DEC	No	N
1Tu457	T-1RCL	SC,HD	4C	X,H	DEC	No	N
1Tu458	T-1RCL	SC	4C	LA,LW	DEC	No	N
1Tu459	T-2	SC,TE	4C	LW,M,H	DEC	No	N
1Tu460	T-1RCL	SC	2B	LW	DEC	No	N
1Tu461	T-2	SC	3C	LW	DEC	No	N
1Tu462	T-2	SC,HD	3D	MW,H	DEC	No	N
1Tu463	T-2	SC,HD	5C	LA,H	DEC	No	N
1Tu464	T-2	PH,HD	5D	H	SS	No	N
1Tu465	T-1RCL	PH,HD	—	H	SS	No	N
1Tu466	T-1RCL	PH,HD,TE	2C	H	DEC	No	N
1Tu467	T-1RCL	CH,TE	2C	LW	UP	No	N

Key:
Topographic Location: T-0 Active floodplain; T-1M Middle Holocene Terrace; T-1L Late Holocene Terrace; T-1RCL Holocene River Channel Levee; T-2 Pleistocene Terrace; AF-Alluvial Fan; C-Colluvium.
Level of Investigation: SC-Surface collection; CH-Shovel test; TE-test excavation; CA-core augering; M-mapped; PH-photographed; HD-historic documentation.
Site Type: The number refers to the artifact density. 1-Isolated finds; 2-Multiple isolated finds; 3-Minimal Artifact Concentration; 4-Moderate Artifact Concenration; 5-Dense Artifact Concentration; 6-Midden. The letter refers to the site size. A-0 to 625 square meters; B-625 to 2,500 square meters; C-2,500 to 10,000 square meters; D-10,000 to 20,000 square meters; E-20,000 to 30,000 square meters; F-30,000 to 50,000 square meters.
Components Present: E-early; M-middle; L-late; A-Archaic; GF-Gulf Formational; W-Woodland; M-Mississippian; H-Historic; X-trace or unidentified prehistoric.
Intact Deposits: DEC-Destroyed by erosion-cultivation; UP-unplowed; SPF-Subplowzone feature; SD-stratified or subplowzone deposits; SS-Standing Structure; Undet.-Undetermined.
NRHP Eligibility: Yes-Conforms to NRHP eligibility criteria; No-Does not conform to NRHP eligibility criteria; Undet.-Site Status Undetermined.
Recommendations: N-None; Undet.-Resource not evaluated; PhII-Phase II Evaluation; DT-Deep testing; CSC-Controlled Surface Collection; ST-Surface Stripping; TP-Test Pit Excavation.

Examination of the Alabama State Site Files housed at Moundville, Alabama revealed seven previously recorded archaeological sites within the project area (1Tu264, 1Tu265, 1Tu266, 1Tu308, 1Tu421, 1Tu422, 1Tu423). These sites were recorded at various times. Investigations were limited to surface collections and a preliminary determination of site components. Components dating to the Middle Archaic, Late Woodland, Mississippian, and protohistoric periods were tentatively identified at that time. In no case was there sufficient information to determine potential eligibility of these sites for the National Register of Historic Places.

The National Register of Historic Places was consulted and a representative of the Alabama Historical Commission was contacted about the possibility of National Register nominations in progress or potentially eligible properties known to that office. No National Register properties had been previously identified within the survey area.

The documentary and literature search was directed to four topics: (1) the prehistory of the lower Black Warrior region, (2) the ethnohistory of the lower Black Warrior region, (3) a particular investigation into the location and historical circumstances of Black Warrior Town, a Creek War settlement of 1813-1814, and (4) the history of settlement of the Tuscaloosa County area and the survey area in particular.

The archaeological literature of the region was reviewed and a comprehensive bibliography of published and unpublished source materials was compiled. Documentary research for the ethnohistorical overview, the historical overview, and the consideration of Black Warrior Town entailed the use of several sources. Among these were official records for Tuscaloosa County, archival repositories, and libraries in Tuscaloosa, Birmingham, and Montgomery, Alabama. Knowledgeable local informants were also interviewed.

The results of the documentary and literature review were employed to guide the assessment of the historical material remains recovered or located during the survey.

Field Reconnaissance

The field reconnaissance procedures employed within the project area were adapted to specific surface conditions encountered during the fieldwork. Generally, four types of field conditions were encountered; (1) cultivated fields, (2) areas of dense brush and timber, (3) pasture, golf course, and fallow fields, (4) areas covered by industrial trash or riprap along the river banks associated with Oliver Lock and Dam.

In cultivated fields, pedestrian transects were spaced at 20 to 25 m (65.6 to 82 ft) intervals. A representative sample of artifacts was collected and the perimeter of each site was defined. Woodlots and dense brush were shovel tested. The shovel tests were placed in transects 10 to 15 m (32.8 to 49.2 ft) apart, with special emphasis placed on testing high site probability areas. Any area not seasonally inundated throughout the project area was considered as a potential site location. These areas included pastures, fallow fields, and woodlots. Because of the limited

effectiveness of shovel testing for locating sites of low to moderate artifact density, a series of 50 by 50 cm (1.64 by 1.64 ft) test units was excavated. These units were located in areas of high probability site location where the surface could not be readily observed, and where shovel testing had located cultural deposits. Areas along the Black Warrior River where erosion exposed bank profiles were inspected for any evidence of cultural deposits. These field techniques resulted in 100 percent coverage of the project area.

Following the surface reconnaissance, the boundaries of each cultural deposit were determined and the site was surface collected. The site boundaries were determined by a consistant 10 m (32.8 ft) gap in the artifact concentrations. During the surface collection, emphasis was placed on collecting culturally diagnostic artifacts, but a sample of the entire range of artifacts present was obtained.

Testing and Evaluation

The selection of sites for further testing and evaluation was determined from the quantity and types of artifacts recovered and specific geomorphological conditions. A series of 50 by 50 cm (1.64 by 1.64 ft) test units was excavated in order to evaluate each deposit. Each test excavation was removed in 20 cm (7.9 in) levels.

The initial evaluation of a cultural resource as potentially significant and eligible for nomination to the National Register of Historic Places (NRHP) is based on the presence of undisturbed features, unplowed cultural deposits, or subplowzone cultural deposits. These sites contain undisturbed deposits and have potential to yield important information for the area history and prehistory. The sites listed in Table 1 as potentially NRHP significant possess one or more of these attributes.

There are, however, a few sites where limited testing did not locate any cultural features or undisturbed deposits. These sites exhibit evidence of special purpose activities. One is a single component farmstead. Testing of such sites represents less than a 0.01 percent sample of the site area. Further testing by removal of a sample of the plowzone of sufficient size to provide NRHP determination of eligibility is recommended.

A model of local topography and alluviation was used to develop a research design for a deep testing program to be implemented during the next stage of investigation on the Oliver Lock and Dam project area. The project area, located on the floodplain immediately down stream from the Fall Line on the Black Warrior River at Tuscaloosa, is susceptible to rapid alluviation. Deeply buried prehistoric occupational surfaces are expected. A river cutoff channel and point bar levee near the northwestern end of the project area is one location where buried cultural deposits may be present. This model of floodplain alluviation is the basis for delimiting that portion of the floodplain within the impact area which will require deep testing.

SITE SUMMARY

A total of 49 cultural resources was located and initially evaluated during this survey. Nineteen sites contained prehistoric components, twenty-six sites contained both prehistoric and historic components, and four sites contained only historic components. Two of these historic sites are standing structures, the remainder are archaeological sites. Ten of these sites have been evaluated as potentially eligible for inclusion in the NRHP. The site which contains an unplowed deposit is 1Tu444. Sites which contain subplowzone features include 1Tu265, 1Tu266, 1Tu421, 1Tu426, 1Tu427 and 1Tu436. Sites which contain stratified or subplowzone cultural deposits include 1Tu264, 1Tu421, 1Tu423, and 1Tu427.

MANAGEMENT RECOMMENDATIONS

The recommendations for the Phase II testing of ten cultural resources are based upon the NRHP evaluation of research potential for these sites. The scientific evaluation of these sites has been described in terms of the components represented, the integrity of these deposits, and the physiographic setting for each site. The sites recommended for Phase II testing include 1Tu264, 1Tu265, 1Tu266, 1Tu421, 1Tu423, 1Tu426, 1Tu427, 1Tu436, 1Tu441, and 1Tu444. These sites range from unplowed Middle and Late Archaic sites, Late Woodland-Mississippian farmsteads, to nineteenth century homesteads.

The Phase II fieldwork recommendations have been formulated with the goal of determining the NRHP significance of each site and obtaining sufficient information to facilitate the NRHP nomination, and, if necessary, recommendations for impact mitigation for these sites. Four site evaluation techniques have been suggested according to the specific situation of each site. These are a 20 percent controlled surface collection from each site, deep testing employing a backhoe under the direction of a geomorphologist, stripping of the plowzone to examine the subsoil for intact deposits, or features, and the excavation a series of 1 m test units. Each of these four techniques will be employed to evaluate the archaeological sites recommended for further testing.

CHAPTER II

THE PROJECT AREA

INTRODUCTION

In late 1981, the Office of Archaeological Research at the request of the Mobile District Corps of Engineers contracted for a cultural resources survey of 1100 acres within the potential impact area of the proposed William Bacon Oliver Lock and Dam, Tuscaloosa, Alabama (Contract Number DACW01-82-C-0028). The survey was conducted between February 1 and March 5, 1982. A total of 49 cultural resources was located within the project area.

This cultural resource investigation was mandated under Federal legislation: the Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act of 1966 (as amended), the National Environmental Policy Act of 1969, the Historic and Archaeological Preservation Act (amended Public Law 86-532), the Reservoir Salvage Act of 1960, and the Archaeological Resources Protection Act of 1979. This legislation charges all Federal agencies with initiating procedures to mitigate the impact of construction upon prehistoric and historic cultural resources found to be significant by National Register of Historic Places (NRHP) criteria.

The Mobile District Corps of Engineers has proposed to relocate the William Bacon Oliver Lock and Dam on the Black Warrior River at Tuscaloosa, Alabama. This construction will entail extensive modification of the existing river bank, additional access roads, contractor maintenance yards, and disposal sites. In addition, river bank erosion downstream from the new dam site will also require construction. The Federal Government is obligated to investigate the archaeological resources to be in compliance with the Federal laws. This survey is the first phase of that investigation.

The goals of this project as specified in the Scope-of-Work were threefold: (1) to conduct documentary research, (2) to locate all of the cultural resources within the project area, and (3) to provide recommendations for further work, if necessary.

Based on the available information the sites have been classified into two groups; (1) sites whose integrity has been destroyed by erosion or cultivation, and for which no further work is recommended, (2) sites evaluated as potentially eligible for nomination to the National Register of Historic Places (NRHP). These sites will also require further testing in order to obtain sufficient information for the NRHP nomination.

This chapter discusses the project area, a history of research in the area, and the environmental setting. The geomorphology of the project area has been outlined and a series of hypotheses was generated to guide the Phase II deep testing program. The Holocene environmental setting of the project area has also been included as part of the background and literature information. The documentary research included a search of the

available archival sources concerning the history of the project area. The results of this research were integrated into the general prehistory and history of west Alabama (Chapter III). The field and laboratory methods and a discussion of the site evaluation procedures are included in Chapter V.

THE PROJECT AREA

The Oliver Lock and Dam project area is located in central Tuscaloosa County in west central Alabama on the western edge of the city of Tuscaloosa. Consisting of 1100 acres (445.2 ha), the project area is divided by the Black Warrior River into the northern and southern portions (Figure 1). The northern portion, 989 acres (400.4 ha), extends approximately 3.7 km (2.29 miles) east-west and 1.6 km (1 mile) north-south. It is bordered on the east by 30th Avenue. The western boundary corresponds to the western limit of the Tuscaloosa Quadrangle Topographic map. The Black Warrior River forms the southern boundary of the northern portion. Van de Graph Field is the northern limit. The southern portion of the project area is composed of 105 acres (42.51 ha) and extends approximately 1.52 km (.95 miles) east-west and 0.3 km (0.22 miles) north-south. It is bordered on the east by Oliver Lock and Dam and on the west by the Hunt Oil Refinery. Railroad tracks parallel the southern edge of the survey area. The northern boundary is the Black Warrior River.

HISTORY OF RESEARCH

In 1937, the first archaeological survey within the immediate vicinity of the project area was conducted by Walter B. Jones of the Museum of Natural History at The University of Alabama. During the 1937 survey, 12 sites (1Tu134-1Tu146) were recorded between the west bank of Tater Hill Creek and Big Creek. The original field maps could not be found and the exact location of these sites could not be determined.

In response to the preliminary plans for work on Oliver Lock and Dam a limited archaeological reconnaissance was conducted by the Office of Archaeological Research in 1974. At that time archaeological sites 1Tu264-1Tu266 were recorded and evaluated as being NRHP significant. It was determined at that time that these sites would require further investigation (Oakley 1976).

A preliminary archaeological survey of the barge canal and levee-spoil dump of the proposed Tuscaloosa County Industrial Complex was conducted in 1978 west of Tater Hill Creek. Six archaeological sites were located. Some of these are the same sites recorded by Jones in 1937. These sites were assigned temporary numbers and were not recorded in the Alabama Site Files. Four of these sites were recommended for further work (Bizzoco and Albright 1978).

Northeast of the Oliver Lock and Dam Survey area, Parcels A and B of the proposed Tuscaloosa County Industrial Park were surveyed in 1980 (Mistovich 1980). Three prehistoric sites and one historic site were

located. None of these sites contained undisturbed cultural deposits and no further work was recommended.

The University of Michigan's Black Warrior River survey and site testing program recorded three sites (1Tu421, 1Tu422, 1Tu423) within the project area (Welch 1981). These sites, all on the south bank of the river, were reevaluated during this survey.

ENVIRONMENTAL SETTING

A model of the natural environment provides a matrix for interpreting the prehistoric and historic cultural responses to environmental conditions. Within the survey area, prehistoric and historic site locations were selected to maximize optimum use of the water supply, soil productivity, and proximity to riverine resources. One assumption of settlement pattern analysis is that human groups tend to locate near resources that they exploit and they move to locations that afford maximum access to necessary or desirable resources with minimum expenditure of effort (Zipf 1949, Plog and Hill 1971, Cole and Alexander 1981:54-53). The location of specific site types adjacent to different natural resources will permit an interpretation of the group's exploitative behavior.

The environmental study of the survey area discussed in this section was designed to address the following goals: (1) to locate and define the geomorphic features of the project area, (2) to locate buried cultural resources, (3) to provide an overview of the geology and geomorphic history of the area, and (4) to develop a predictive model of the location, distribution, and nature of the cultural resources and settlement patterns (Cole and Alexander 1981:17).

Hydrology

The Black Warrior River basin extends to the Tennessee River basin in northwestern Alabama. It is bounded on the south and east by the Alabama, Cahaba, and Coosa River drainages and on the west by the Escatawpa and Sipsey Rivers which drain into the Tombigbee River. The Black Warrior River, formed at the junction of the Locust and Mulberry Forks 20 miles (32.2 km) northwest of Birmingham, flows 45 mi (72.4 km) westward to the Fall Line at Tuscaloosa (Figure 2). From this point it flows 120 mi (193.1 km) southward to its confluence with the Tombigbee River at Demopolis. The Tombigbee River enters the Gulf of Mexico 216 mi (347.5 km) farther south at Mobile.

Physiography and Geology

The Black Warrior River flows through the Cumberland Plateau and the Eastern Gulf Coastal Plain physiographic sections. Topographic and geologic contrasts within these two physiographic sections largely determine the soil types, vegetation, land use patterns, and economic development in

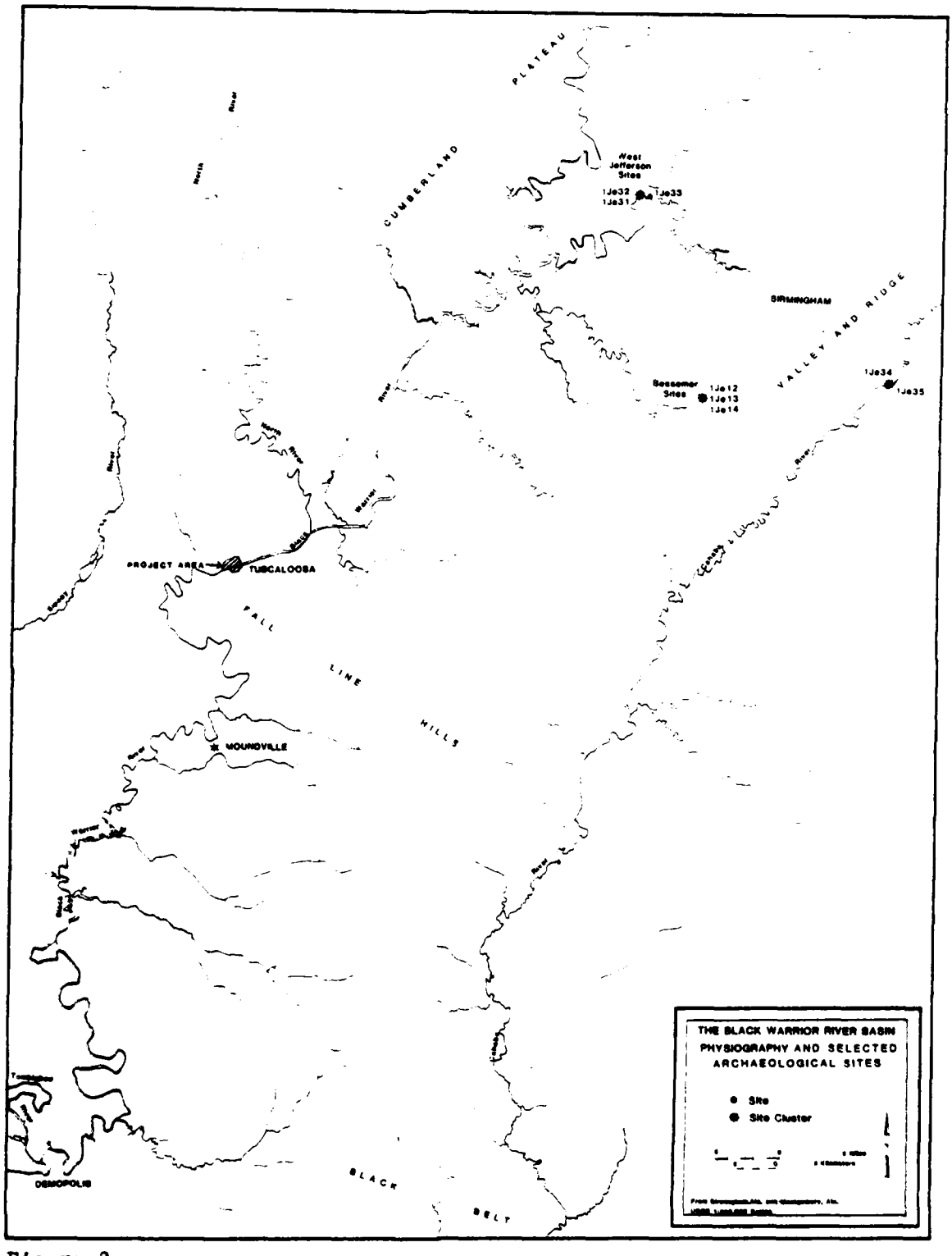
PLATEAU
CUMBERLAND
West Jefferson Sites
1Je32
1Je31
1Je33
BIRMINGHAM
VALLEY AND RIDGE
Bessemer Sites
1Je12
1Je13
1Je14
1Je34
1Je35
PROJECT AREA
TUSCALOOSA
FALL LINE HILLS
MOUNDVILLE
DEMOPOLIS
BLACK BELT
THE BLACK WARRIOR RIVER BASIN
PHYSIOGRAPHY AND SELECTED
ARCHAEOLOGICAL SITES
Site
Site Cluster

Figure 2.

the area. The project area is situated at the Fall Line, the geologic intersection of the Cumberland Plateau and Eastern Gulf Coastal Plain physiographic sections. The Cumberland Plateau, a subdivision of the Appalachian Plateau physiographic province, comprises the northern part of the Warrior Basin. The topographic features of the plateau are characteristic of a submature dissected upland peneplain developed on massive Paleozoic sandstone beds and shales (Adams et al. 1926). This area represents the southern terminus of a formerly great plateau which extended to the northeast throughout Tennessee and Kentucky. These Paleozoic beds have been gently warped into a broad syncline fold interrupted in the eastern section by a district anticlinal fold which has exposed older Paleozoic rocks. The elevations range from 1500 ft (457.2 m) AMSL in the northeastern edge of the basin to 500 ft (152.4 m) AMSL in the south where the Paleozoic strata are gradually submerged below the Cretaceous sediments of the Eastern Gulf Coastal Plain.

The exposed Paleozoic rocks of the Cumberland Plateau have eroded into steep, rough hillsides. Little of the original peneplain surface remains. The Black Warrior River and its tributaries have eroded deeply incised steep-sided gorge like channels to 400 ft (121.9) below the former plateau surface.

Cretaceous sediments of gravel, sand and clay originally extended north of the Fall Line and covered portions of the Paleozoic rocks. The Tuscaloosa gravels have gradually been removed by erosion and only isolated remnants which cap the undissected uplands remain.

The Fall Line Hills separate the Appalachian Plateau from the Eastern Gulf Coastal Plain. The Eastern Gulf Coastal Plain here consists of poorly consolidated sand, clay, and gravels of the Gordo and Eutaw formations. Together, these formations have a maximum thickness of 800 ft (243.8 m) in Tuscaloosa County and a maximum width of 50 mi (80.5 km) in western Alabama. Topographically, these sediments form a dissected upland belt with a few broad flat ridges, moderately steep slopes, and deeply incised rugged topography. The hills and ridges are usually well rounded. Where the streams descend from the resistant Paleozoic rocks to the less resistant Cretaceous strata, falls and rapids develop.

The Eastern Gulf Coastal Plain is topographically characterized as a low, gradually rolling surface with acute and subparallel valleys and cuestas. These land forms are developed by the differential resistance to erosion of the sediments of the plains (U.S. Army Corps of Engineers 1974). Siltstone, sandstone, and poorly sorted clays and gravels form the cuestas. The intervening valleys are generally underlain by chalk, marl, clay, and sandstone. The elevation of this portion of the Coastal Plain ranges from 500 ft (152.4 m) AMSL at the Fall Line to about 100 ft (30.48 m) AMSL near the Black Prairie.

The Quaternary alluvial deposits of the Black Warrior River consist of a series of alluvial terraces. The highest deposits are of early Pleistocene or Pliocene age, the middle level terraces are Pleistocene age and the first terrace (T-1) is Holocene or recent. These terrace deposits are derived from the Coker and Gordo formations and are composed of gravels, sands, and silts. These deposits are red-brown or yellow-brown

depending on their age and exposure to weathering. These terrace remnants form the uplands adjacent to the Black Warrior River and occur at 140 to 150 ft (42.7 to 45.7 m), 150 to 200 ft (45.7 to 60.9 m), and 200 to 250 ft (60.9 to 76.2 m) AMSL.

At Oliver Lock and Dam the Black Warrior River flows out of its incised channel in the Pottsville sandstone and begins to flow over the Coastal Plain sediments. At this point the river changes from an incised channel with a restricted floodplain to a broad relatively flat floodplain with numerous meanders characteristic of a much older stage of development. The modern floodplain is composed of Holocene or recent sediments less than 10,000 years old. These deposits may contain buried cultural material.

Paleoenvironment

In order to reconstruct the project area's environment prior to significant modification by American settlers (before the nineteenth century A.D.), paleoarchaeological research was consulted. Using the modern plant and pollen macrofossils recovered from springs and bogs, previous climates have been described by paleoecologists. Data recovered from Anderson Pond in White County, Tennessee, and Mingo Pond, Franklin County, Tennessee, by Delcourt (1978) and from northwest Georgia (Watts 1970, 1973, 1975) document paleoclimatic changes which are applicable to the Fall Line Hills of western Alabama.

During the middle Wisconsin interstadial, dating from 40,000 to 23,000 or 24,000 years ago, the climate in western Alabama may be characterized as a cool moist environment:

> During the Farmdalian interstadial, dated at Anderson Pond at 25,000±3,000 B.P., northern Diploxylong pines, spruce, oak, and additional deciduous forest trees were present, indicating that the climate was cooler and more moist than that of today (Delcourt 1978:1).

Following the Farmdalian interstadial, the late Wisconsin was the last period of major glacial advance in North America. It began at approximately 20,000 B.P. and terminated at approximately 12,500 B.P. A major transition to a warmer climate was also noted in the time between 16,300 to 12,500 B.P.:

> From 19,000 to 16,300 B.P., during the late Wisconsin continental glacial maximum forests of jack pine, spruce and fir were dominant. Late glacial climatic amelioration is evidenced by replacement of jack pine-spruce-fir forest by deciduous forest between 16,300 and 12,500 B.P., with ash, ironwood, hickory, birch, butternut, willow, and elm increasing in importance first followed by beech and sugar maple (Delcourt 1978:2).

The spruce and fir forests are located today in northern Wisconsin and Canada.

The more cold sensitive mesic deciduous forests continued to exist locally in protected south facing gorges of the Cumberland Plateau at this time. During the warming of the late Wisconsin glaciation after 16,500 B.P., the boreal tree species migrated northward and were replaced in the southern Cumberland Pleateau region by mixed conifers and deciduous forests (Delcourt 1978:2).

During the following early Holocene, from 12,500 to 8000 B.P., a mixed mesophytic forest developed in cool to temperate environments in the Middle Tennessee area. These forest species are essentially the modern species which continue to exist today.

The next period of climatic change is referred to as the Hypsithermal interval or the middle Holocene. During this period, 8000-4500 B.C., the climate became warmer and slightly drier. There were local extinctions of mesic forest species and a more xeric oak-chestnut forest developed (Delcourt 1978:2, Watts 197[illegible]291).

The faunal taxa which accompany these climatic changes have not been comprehensively studied and only scant data are present. In western Missouri, King (1973:550) recovered Mammut (mastodon), Equus (horse), Symbos (musk-ox), Castoroides (giant beaver) and Paramylodon (ground sloth) in addition to nonextinct species. Radiocarbon determinations from the mastodon tusks indicate a date of approximately 13,550±400 B.P. (King 1973:552), placing mastodon and other now extinct species contemporary with the earliest human inhabitants of the area.

For the most part, however, the archaeological fauna recovered in the Tennessee Valley reflects species of animals still present today. The notable exceptions are porcupine, recovered from the Stanfield-Worley Bluff Shelter (Parmalee 1962) and Russell Cave (Weigel et al. 1974) and peccary recovered from Russell Cave (Weigel et al. 1974).

The primary implication of this paleoenvironmental reconstruction is that essentially modern climatic conditions had been reached at the end of the Wisconsin glacial period about 12,500 years ago. During the period from 8000 to 4500 B.P. the climate became warmer and drier, producing greater numbers of oaks and chestnuts than today. From 4500 years ago to present there has been little climatic or faunal/floral change based upon what was observed in the early 1800s. As the first white settlers moved into west central Alabama, they introduced foreign species of fauna and flora which have adapted and continue to the present.

Recent Environment

The modern environment within Tuscaloosa County is discussed in terms of the climate, fauna and flora in this section. The following has been taken from Johnson et al. (1981) and U.S. Army Corps of Engineers (1974).

The climate is generally mild. The average annual temperature is 62 degrees F. The normal monthly average temperature ranges from 46 degrees F in January to 82 degrees F in July. A maximum of 114 degrees F and a minimum of -17 degrees F have been recorded. The growing season lasts from April to November.

The yearly average rainfall is 50 to 55 inches. The wettest period is between January and May. The dryest period is from September through October.

The project area is located within the transitional zone between the oak-hickory Eastern Deciduous Forest of the Appalachian Highlands and the swamp forest complex of the Coastal Plain Mixed Forest (Clark 1971:113). Typical oak-hickory biotic community species are found in the higher dryer environments. Southern floodplain forest species are characteristic of the Black Warrior floodplains and swamps.

In its undisturbed state, the oak-hickory-pine forest throughout upland Central Alabama consists of hardwoods with small clusters of pines. Succession to a climax forest gradually eliminates the pine stands. Dominant species include bitternut, mockernut, and pignut hickories; white and red oak; loblolly and short leaf pine. In moist areas yellow poplar, Shumard oak, willow oak, live oak and bay magnolia occur frequently. On the dryer slopes, Virginia pine and scarlet oak are dominant. The oak-hickory-pine forest is rich in tree species and is a prolific environment, but the species have a limited distribution.

Below the Fall Line on the Black Warrior River, the swamp forest creates distinct environments each dominated by different tree species. Within the low water saturated zones, the forest is dominated by tupelo gum, bald cyprus, and other water species. Within the more well drained areas of the floodplain forest water oak and willow oak, eastern cottonwood, black willow, ironwood, American elm, hackberry, red mulberry, plannertree, sycamore river birch, and cherry species are found. On the well drained slopes and bluffs along the river, sweet gum, beech, and oaks are common.

Normal faunal populations within the project area include the southern gray squirrel, cottontail rabbit, opossum and white-tailed deer. Chipmunk, gopher, beaver, fox, racoon, weasel, mink, skunk, otter and bobcat may be present. The smaller mammals are more common on the forest edge and in fence rows adjacent to cultivated areas. Turtles, lizards, snakes, salamanders, frogs and toads are common along the river.

Soils and Geomorphology

Introduction

The geomorphology of the study area is primarily the result of the climate of the Pleistocene and Holocene, which has determined the cycles of erosion and deposition by the Black Warrior River. The Tuscaloosa formation has been continually reworked to provide the raw materials for terrace formation. The Holocene and recent deposits are of primary concern to this project. Prehistoric settlements were located on the Black Warrior River floodplain during the Holocene. By describing the floodplain features, assigning a series of relative dates to these features, and predicting where the archaeological sites will be located on those features, a predictive model of prehistoric site location can be generated.

Within the study area the soil types and geomorphology have resulted from alluvial deposits and reworking of the Tuscaloosa gravels by the Black Warrior River. These alluvial deposits are discussed in terms of terrace formation, soil types and depositional sequences below (Figure 3 and Table 2). The relative ages of each deposit are inferred from the assumed correlation of climatic conditions with terrace formations.

Terrace Formations and Soil Types

The third and fourth terrace group, T-3 and T-4, are composed of Bama-Smithdale-Shatta soils. These are described as deep, nearly level to sloping, well to moderately well drained soils with well drained loamy subsoils (Johnson et al. 1981:119). These terraces are composed of unconsolidated clays, sands, and gravels and range in elevation from 200 to 350 ft (60.9-106.6 m) AMSL. The terraces form broad upland ridge tops and plateaus scattered along the eastern edge of the Black Warrior River floodplain in Tuscaloosa and Hale Counties. These terraces date to the Late Pliocene-Pleistocene, 70,000-150,000 years ago (Stephenson and Monroe 1940, Szabo 1972).

The second terrace, T-2, parallels the river floodplain. Portions of this terrace are located on both the northern and southern survey tracts (Figure 3). The second terrace ranges in elevation from 150 to 200 ft (45.7-60.9 m) AMSL and is not subject to highwater flooding. This terrace is composed of silts, clays, and localized strata of river cobbles and sandstone blocks. The second terrace soil types adjacent to the project area are Ruston fine sandy loam and Shatta silt loam (on 0 to 6 percent slopes) and Smithdale fine sandy loam (Johnson et al. 1981:26-30). This terrace is of late Pleistocene age and dates from 30,000 to 15,000 years ago (Szabo 1972).

The Holocene age deposits of the Black Warrior River consist of the T-1, T-0 and the Alluvial Fans deposited by Mill Creek. The T-0 is of recent age. The Holocene terrace, T-1, is intermediate between the T-0 and the T-2 and occurs at elevations of 140 to 150 ft (42.6 to45.7 m) AMSL. The T-1 well drained surface outcrops are mapped as Cahaba sandy loam and Choccolocco silt loam within the study area. The seasonally inundated areas of the Holocene terrace are designated as Adaton silt loam, Dundee silt loam, and Falkner silt loam. Cahaba sandy loam is a deep well drained soil of the first terraces and alluvial fans along the Black Warrior River:

> Typically, the surface layer is dark yellowish brown sandy loam about 4 inches thick. The upper part of the subsoil is yellowish red clay loam to a depth of 19 inches. The lower part is yellowish red, mottled loamy sand.
>
> This soil is low in natural fertility and organic matter content. Permeability and available water capacity are moderate. Reaction ranges from medium acid to very strongly acid. (Johnson et al. 1981:16).

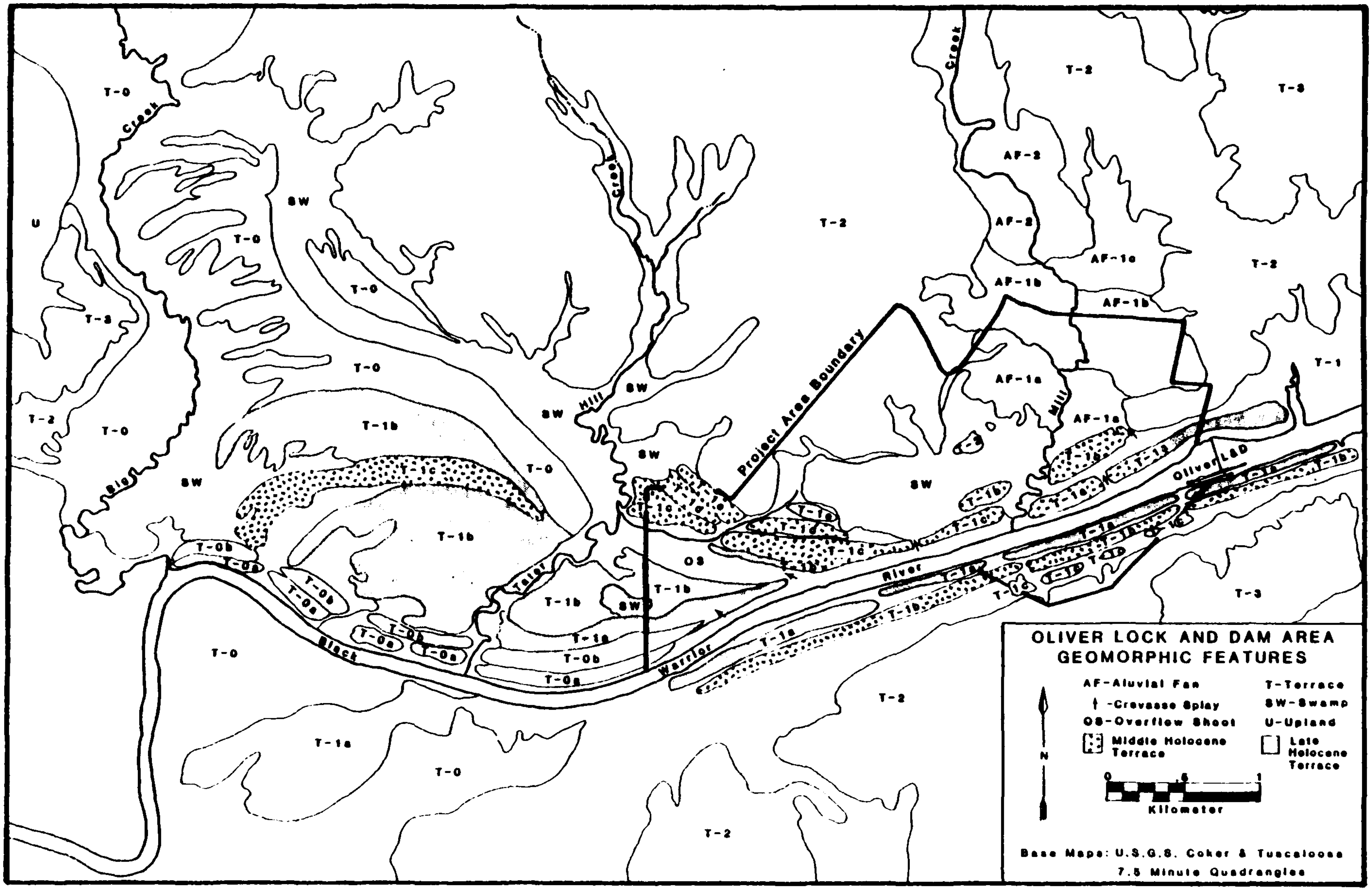
OLIVER LOCK AND DAM AREA
GEOMORPHIC FEATURES
AF-Aluvial Fan
-Crevasse Splay
OS-Overflow Shoot
Middle Holocene Terrace
T-Terrace
SW-Swamp
U-Upland
Late Holocene Terrace
N
0 .5 1
Kilometer
Base Maps: U.S.G.S. Coker & Tuscaloosa
7.5 Minute Quadrangles
Project Area Boundary
Black Warrior River
Oliver L&D
Big Creek
Mill Creek
Creek
SW
OS
U
T-0
T-0a
T-0b
T-1
T-1a
T-1b
T-1c
T-2
T-3
AF-1a
AF-1b
AF-2

Figure 3.

Table 2. Geomorphology and Soil Types

Topographic Zones	Elevation Ranges m/ft AMSL	Soil Type	Comments
Recent Terrace Active Alluvial Terraces T-0	28.95-42.67 m		500 A.D.-
T-0a	95-140 ft	(17) Ellisville Silt Loam	Present
T-0b		(17) Ellisville Silt Loam	
Late Holocene Terraces T-1	42.67-45.75 m	(14) Choccolocco Silt Loam	5000 B.C. to
T-1a	140-150 ft		A.D. 500
T-1b			
T-1c			
T-1d			
T-1e			
Middle Holocene Terrace T-1	42.67-45.75 m	(13) Cahaba Sandy Loam	7000 B.C. to
	140-150 ft		5000 B.C.
Floodplain,	42.67-44.19 m	(2) Adaton Silt loam	
Backswamps T-1	140-145 ft	(16) Dundee Silt loam	
		(18) Falkner Silt loam	
Alluvial Fans	42.67-45.75 m	(18) Falkner Silt loam	Late
AF-1a	140-150 ft		Holocene
AF-1b			
AF-1c		(13) Cahaba	Early Holocene
Late Pleistocene Terrace T-2	45.75-60.96 m	(6) Smithdale-Luvern	
	150-200 ft	(28) Ruston fine sandy loam, 2-6% slopes	
		(29) Shatta Silt Loam, 0-2% slopes	
		(30) Shatta Silt Loam, Urban Complex	
		(33) Smithdale fine sandy loam	
Pleistocene	60.96-91.44m	(6) Bama fine sandy loam	
Terrace T-3	200-300 ft	(28) Ruston fine sandy loam	
		(26) Ruston fine sandy loam, 0-2% slopes	

Choccolocco silt loam is a:

> deep, well drained soil . . . on high stream terraces above escarpment banks of the Black Warrior River . . . . Typically, the surface layer is dark brown silt loam about 6 inches thick. The subsoil is brown silty clay loam to a depth of 38 inches and loam to a depth of 44 inches. The underlying material is brown loam.
>
> This soil is medium in natural fertility and organic matter content. Reaction ranges from medium acid to very strongly acid . . . . Permeability and available water capacity are moderate.
>
> Included with this soil in mapping are convex areas that have a sandy surface layer and some soils that have a yellowish brown subsoil [Cahaba sandy loam] (Johnson et al. 1981:16-17).

The less well drained and inundated soil types of the floodplain include Adaton and Dundee silt loams. These soil types are mapped for the low backswamp ponds and sluggish drainage channels of the floodplain (Johnson et al. 1981:11-20).

Adaton silt loam is a poorly drained soil on the floodplain of the Black Warrior River and its tributary streams. The surface stratum is a dark gray silt loam up to two inches thick. Below this are strata of grayish brown silt loam and light gray mottled silt loam (Johnson et al. 1981:11-12). This soil is perennially water saturated and forms swamps and meandering shallow water drainage channels or depression ponds to the rear of a point bar sequence within the project area.

Dundee silt loam is a deep poorly drained soil associated with overbank deposits on the Black Warrior River and its associated drainage channels. The profile of Dundee silt loam consists of surface stratum of brown silt loam about three in (7.6 cm) thick underlain by a dark grayish brown silt loam 13 in (33.0 cm) thick. The lower stratum is a gray mottled silty clay loam (Johnson et al. 1981:19). This soil is formed by recent active floodplain deposits associated with the lower less well drained river levees and drainage channels within the floodplain. This soil is seasonally inundated and remains wet throughout most of the year.

The Alluvial Fans, AF, deposited during the Holocene by Mill Creek are composed of Falkner silt loam and Cahaba sandy loam. Falkner silt loam is described as follows:

> Typically, the surface layer is dark brown silt loam about 3 inches thick. The subsurface layer is yellowish brown, mottled silt loam to a depth of 12 inches. The upper part of the subsoil is yellowish brown, mottled silty clay loam to a depth of 39 inches. The lower part is mottled yellowish brown, dark yellowish brown, pale brown, and light brownish gray silt loam to a depth of 63 inches. The underlying material is yellowish brown, mottled silt loam.
>
> This soil is low in natural fertility and organic matter content. Reaction ranges from medium acid to very strongly acid throughout, ... Permeability is slow, and available water capacity is high . . . .

> Included with this soil in mapping are a few small areas of Adaton and Dundee soils in depressional areas and narrow depressional strips along small streams (Johnson et al. 1981:20).

Cahaba sandy loam has been described above.

The T-0 terrace is the recent active floodplain and ranges in elevation from 95 ft (28.9 m) AMSL (the Black Warrior River base level) to 140 ft (42.6 m) AMSL. The T-0 within the project area is nearest to the present river channel and is mapped as Ellisville silt loam. Overall the T-0 is composed of interbedded silts and sands and illustrates no signs of extensive eluviation, illuviation, oxidation or pedogenic formation of iron or manganese nodules. This floodplain is frequently flooded, contains low amounts of organic deposits and is typically well drained. Johnson describes the Ellisville silt loam of this terrace as follows:

> Ellisville silt loam, frequently flooded. This deep, well drained frequently flooded soil is on flood plains and low stream terraces . . . . Typically, the surface layer is very dark grayish brown silt loam about 3 inches thick. The subsurface is dark grayish brown silt loam to a depth of 9 inches and dark brown silty clay loam to a depth of 15 inches. The upper part of the subsoil is dark brown silty clay loam to a depth of 25 inches. The lower part is brown, mottled silty clay loam to a depth of 58 inches. The underlying material is brown silt loam.
>
> This soil is high in natural fertility and organic matter content. Reaction is strongly acid or very strongly acid throughout . . . . Permeability is moderate, and available water capacity is high (Johnson et al. 1981:20).

Within the project area, the T-0 consists of a low bench like structure attached to the front of the T-1. On the front of the point bar, near the southwestern end of the project area, the T-0 is composed of two components, the T-0a and the T-0b. The T-0b is at a slightly lower elevation, 130 ft (39.6 m) AMSL, above the local base level and is farther from the river shore than the T-0a. The T-0a is at a slightly higher elevation than the T-0b and often extends to 140 ft (42.6 m) AMSL. This river levee is younger than the T-0b and is in front of the T-0b on the present river bank.

Three distinct soil profiles have been identified during the fieldwork. Each soil profile is the result of soil horizonation processes transforming the alluvial deposits. In the floodplain each of the three soil profiles could be identified with one of the three terrace formations present.

The first soil type encountered is a yellow-brown sandy stratum and a yellowish brown subsoil with developed iron and manganese concretions more dominant in the subsoil than were encountered in the reddish brown subsoil. This soil type is Cahaba sandy loam which was not correctly identified during mapping. This soil type is associated with the middle Holocene terrace, and the T-1c, T-1d, and the T-1e river levels. Cahaba silt loam dates from the end of the Pleistocene to the Hypsithermal, approximately 7000 to 5000 B.C.

The second type of soil profile encountered is a distinctive red-brown silt loam or silty clay soil. It appears to be a developing B horizon soil and small amounts of manganese concretions were observed. This soil type, Choccolocco silt loam, was encountered on the late Holocene terrace and river levees T-1a, T-1b, and T-1c. A relative date for this soil type ranges from the Hypsithermal to the recent, approximately 5000 B.C. to A.D. 500.

The third type of soil profile encountered is loose fine sandy loam with a well developed A horizon soil immediately below the plowzone. The soil consists of alternating flood deposited strata with little soil horizonation observed. No iron or manganese deposits were observed. This is the Ellisville silt loam. It composes the active floodplain, the T-0a and T-0b. A relative date for this soil deposition is A.D. 500 to the present.

Relative Dating

The date estimates for the Holocene and recent terrace formations are based on archaeological and geomorphic studies conducted elsewhere in the southeast. A precise date for the inception of terrace deposition is impossible to determine at this time due to lack of research in the area. The establishment of a narrow time range can only become a realistic objective when excavations recover datable material in an unquestionable context. The drop in sea level or correlated climatic changes initiated responses as the drainage basins adjusted to the changes in the base level. The depositional sequences may have been initiated at different times throughout the southeast.

Research on the Tombigbee River has established a series of tentative dates for the Holocene terraces. The early Holocene and late Holocene terraces were recognized on the Tombigbee River. The upper Holocene terrace has been dated to approximately 10,000 to 12,000 B.C. (Muto and Gunn 1981:3-48). At Site 22Ts954, in the Bay Springs Reservoir, the middle Holocene terrace has been dated at approximately 5000 B.C. and the late Holocene terrace dated to approximately 2000 B.C. (OAR n.d.).

Research along the Duck River in the Nashville basin has provided a well dated sequence for the late Holocene and recent terraces. The initial deposition of the late Holocene terrace began at approximately 5000 to 4500 B.C. and terminated 1000 B.C. to A.D. 500. The active floodplain (T-0) deposition began sometime during the first millenium A.D. and has continued to the present (Alexander 1982; Mahaffey 1980, 1982).

Holocene Features

A series of three distinct but closely related fluvial developments were taking place simultaneously on the Holocene floodplain. Within the project area the geomorphic formations will be discussed in terms of: (1) a river channel levee, (2) a point bar sequence and, (3) alluvial fans at the mouth of Mill Creek.

A preliminary model of the late Pleistocene and Holocene geomorphology of the project area is critical to understanding the settlement patterns and to the identification of areas to be deep tested for buried cultural deposits. The following is based on information obtained during the preliminary survey of the area. Geomorphic features are discussed in terms of fluvial systems active during the Holocene.

The Channel Levee

The Black Warrior River channel levee is on the right and left bank descending the river immediately below Oliver Lock and Dam and continues 2.4 km (1.5 mi) downstream. The downstream terminus of the northern levee is approximately 50 m (164 ft) west of the north-south trending pipeline crossing the project area. Here the point bar-overflow chute development begins (Figure 3). The origin of the channel levee is upstream, outside of the project area. Here the river channel has incised itself into the bedrock which prohibits lateral meandering. As a result a series of very unique river channel levees has been preserved.

The channel levee is comprised of two distinct levee deposits, the T-1a and T-1b. The T-1b levee is located to the rear of the T-1a channel levee. These deposits range from 140 to 145 ft (42.6 to 44.2 m) AMSL and will be discussed no further. The T-1a levee soils are Cahaba sandy loam, and amounts of Choccolocco and Ellisville silt loam are superimposed over Cahaba sandy loam (Johnson et al. 1981: Sheets 70 and 71). Additional testing will more closely define these soil designations.

The channel levee was formed by sand and silt overbank deposits. Subsequent soil formation has eluviated and oxidized the soil profiles. Iron and manganese nodules were present in the yellow-brown Cahaba sandy loam subsoil. This Cahaba sandy loam is of pre-Hypsithermal age, and is equivalent to the middle Holocene terrace. The extent to which the Cahaba soil profile has been truncated by postdepositional erosion was not determined.

The river channel levee consists of a pre-Hypsythermal base which has been truncated during the Middle Archaic. This truncation has scoured the lower end of the river levee in the vicinity of the present mouth of Mill Creek and downstream. Upstream in the vicinity of Site 1Tu264 the scouring does not appear to be as intense and segments of a Middle Archaic settlement may be preserved.

The late Holocene levee has been unconformably superimposed over the middle Holocene levee. To a large extent, however, this deposition has also been truncated by overbank flooding and soil scouring. The area in the vicinity of Sites 1Tu265 and 1Tu266 is an overflow chute and a large volumes of soil have been removed from this area. As a result, the late Woodland and Mississippian occupations directly overlie the middle Holocene soils.

In the vicinity of Site 1Tu264, the late Holocene overbank deposits have not been severely eroded, and stratified late Archaic through Mississippian deposits are probably present.

The testing program also identified a second distinct subsoil on the river channel levee. In addition to the yellow-brown Cahaba sandy loam subsoil, a loose fine sandy silt subsoil is referred to as Ellisville silt loam. These discontinuous subsoil types are the result of overflow channels or chutes which have breached and dissected the levee at several locations. The overflow crevasse splays have dissected the original levee deposit into a series of isolated remnants. Figure 3 shows the locations of these overflow chutes within the project area. These overflow chutes have been recently filled by Ellisville silt loam and have been contoured to the shape of the original levee deposit during the recent past. This latest soil deposit in the upper Black Warrior River region has been dated by archaeological materials to approximately A.D. 500 at Site 1Tu432.

Models for soil deposition and buried cultural deposits on channel levees have been formulated from excavations by Broyles (1966, 1971) Chapman (1975, 1977) and Coe (1964). The model of topography and deposition was based on the assumption that constrictions in the river channel alter the load carrying capacity of the river and result in soil being deposited upstream from these constrictions. Downstream from river channel constrictions eddies form and river levee and point bar formation develop. The downstream ends of islands were also identified as locations where buried cultural deposits could be located (Chapman 1975:27-59). Physiographic, topographic, and sedimentary conditions at Oliver Lock and Dam are very similar to the situations encountered by Broyles and by Coe.

Point Bar-Chute Cutoff

The point bar-chute cutoff complex is located on the north bank of the Black Warrior River immediately downstream from the river levee development. This complex occupies 230 acres (92 ha) within the western third of the project area (Figure 3) and continues west of the project area. It is bounded on the north and west by the Pleistocene terrace and on the south by the present channel of the Black Warrior River.

The Holocene terrace is composed of the late Holocene terrace, and the middle Holocene terrace. The late Holocene terrace is in turn composed of a series of river levees which will be designated as T-1a, T-1b, and T-1c. The middle Holocene terrace is composed of river levees T-1c, T-1d, and T-1e. The late Holocene terrace is composed of primarily Choccolocco silt loam with deposits of Ellisville silt loam localized in the crevasse splays and a major overflow chute. The middle Holocene terrace is composed of Cahaba sandy loam and Cahaba silt loam (Johnson et. al. 1980: Sheet 70).

The point bar/river levee sequence on the Oliver Lock and Dam project area represents the middle and late Holocene depositional history for the migration of the Black Warrior River channel. A series of five major levees (T-1a to T-1e) have been deposited in two major river terraces. Each river levee represents a successive deposition of soil on the inside of the point bar and each can be dated using archaeological materials.

The depositional history of this point bar was initiated during the late Pleistocene-early Holocene, approximately 12,000 to 8000 B.C. During this period a lateral meander of the Black Warrior River cut to the north and created a scarp at the foot of the second terrace. Following this meander, the river shifted its channel to the south and began depositing a series of three river levees, T-1e, T-1d, and T-1c. These levees were being deposited on the inside of the point bar while the river continued its southern migration. The soils associated with this deposition are primarily Cahaba silt loams. The extent to which the soils on the river levees have been truncated by erosion is unknown. The inside levees of point bars continue to aggrade with little erosion taking place. Soil profile truncation at the downstream end of point bars has been noted by Mahaffey (1980) in the Duck River area.

The middle Holocene river levee, T-1c, (Figure 3) contains a Middle Archaic, Late Archaic, and Gulf Formational site, Site 1Tu428. This site, at the head of a point bar, is partially covered with late Holocene deposits and does not appear to have been eroded. In situ and stratified Middle to Late Archaic deposits are likely present. Downstream on the river levee is Site 1Tu436, also with Middle to Late Archaic, Gulf Formational and later components. This site is located on an outstanding topographic rise. Erosion appears to have significantly impacted the stratified deposits at this site.

A former channel of the Black Warrior River is located between the middle and late Holocene terraces. When active, this river channel was responsible for the extensive point bar and oxbow slough development west of the project area. The downstream terminus of this river channel-oxbow is at the mouth of Big Creek (Figure 3).

The extent to which this former river channel was abandoned after its original development or the number of times it has served as an overflow chute cannot be estimated at this time. The mouth of this overflow channel was silted over and contoured by the river so that it no longer functions as an overflow channel. The most recent plug in the mouth of this slough may correspond with siltation of the crevasse splays in the channel levees, dating to approximately A.D. 500.

The late Holocene terrace was deposited by continued lateral migration of the Black Warrior River to the south. A series of two river levees which have been mapped as Choccolocco silt loam comprise this terrace.

The former river channel bounds this terrace on the north and the active floodplain or the recent terrace (T-0) bounds this terrace on the south. A 6 ft (2 m) scarp clearly delinates the topographic boundary between these two terraces. A series of levee breaches or crevasse splays are present on the river front side of this terrace. The most important of these is located at river mile 336. The crevasse splay marks a former overflow chute which flowed into the swamp (Figure 3) and bisected the T-1b levee. The flood channel flowed into the major Black Warrior River channel which separated the middle Holocene and late Holocene terraces. This crevasse splay was recently filled with a sandy loam and contoured to the shape of the original levee deposit. The estimated date for the

filling of this crevasse splay is based on Site 1Tu430 where Late Woodland-Mississippian ceramics were recovered from the plowzone and fire cracked rock was recovered from an A horizon soil immediately below the plowzone.

A extensive series of Late Archaic, Gulf Formational, Late Woodland and Mississippian sites has been recovered on the riverward edge of the late Holocene terrace. These sites include 1Tu432, 1Tu433, and 1Tu434. Three more large sites of the same period have been recorded outside the project area (Alexander n.d.). Stratified Late Archaic and Gulf Formational sites are potentially present on the edge of the late Holocene terrace. These sites along with the extensive Late Woodland-Mississippian settlements in the river channel constitute a well developed riverine-horticultural settlement pattern.

Unlike the river channel levees, few systematic surveys of floodplain point bars correlating the depositional stages with settlement patterns and rates of alluviation have been conducted. The best studied examples have been conducted in the Lower Mississippi River Valley (Connaway et al. 1977, Duke 1981, Saucier 1974, Weinstein 1981). These studies have discovered shifts in the Mississippi River fluvial systems and settlement locations within the floodplains.

Along the Duck River in Middle Tennessee a series of buried Middle and Late Archaic deposits have been recovered from a series of point bars (Alexander 1982, Hoffman 1981). In this area the early Holocene and middle Holocene river levees have been destroyed by erosion, and the late Holocene river levee is the only remaining stratified deposit.

Alluvial Fans

The third geomorphologic feature encountered within the project area is a series of alluvial fans deposited by Mill Creek on the floodplain of the Black Warrior River. These deposits are located near the northern corner of the project area. The Mill Creek alluvial fans are composed of three deposits, designated AF-1a, AF-1b, and AF-1c (Figure 3). These three deposits encompass an area of approximately 10 to 20 ha (45 to 50 acres).

Alluvial Fans AF-1a and AF-1b, the most recent deposits, are located 784.5 m (2574 ft) south of 5th Street in Northport. Alluvial Fan AF-1 c is located between 5th Street and the Gulf-Mobile and Ohio Railroad north of the project area. Alluvial Fans AF-1a and AF-1b are paired with similar land forms east of Mill Creek. Alluvial Fans AF-1a and AF-1b are mapped as Falkner silt loam. Alluvial Fan AF-1c is mapped as Cahaba sandy loam (Johnson et al. 1981). Alluvial Fan AF-2c (Figure 3) contains an extensive Pleistocene gravel deposit which has been quarried.

The soil profiles of alluvial fans were investigated using a series of shovel tests and excavation units. The subsoil at Site 1Tu442 and 1Tu454 on Alluvial Fan AF-1a was described as a reddish brown, silty clay with a minor development of manganese concretions (Johnson et al. 1981). These alluvial deposits both occupy elevated positions overlooking the

active floodplain, T-0, of Mill Creek and contained small Late Archaic, Gulf Formational, and Woodland occupations.

These alluvial fans were shallow water deposits laid down in a backswamp of the Black Warrior river at the mouth of Mill Creek. Alluvial Fans AF-1a and AF-1b represent successive alluvial deposits by Mill Creek that predate the Middle Woodland occupation of their surface and the formation of Cahaba silt loam deposited during the middle to early Holocene.

These two alluvial fans are likely correlated with the late Holocene changes in riverine deposition. Alluvial Fan AF-1a contains Late Archaic, Gulf Formational and Late Woodland sites. No Mississippian components were recognized. The similarity of profile development, physiographic location and ages of the cultural components indicated that these alluvial fans are contemporaneous with the late Holocene terrace.

SUMMARY

In this chapter, the project area, its history of research, and its environmental setting were discussed. The Oliver Lock and Dam project area, near the western edge of Tuscaloosa, Alabama, extends over 1100 acres (445 ha) north and south of the Black Warrior River. Archaeological research in this area began in 1937, when Walter B Jones of The University of Alabama's Museum of Natural History surveyed the region between Tater Hill Creek and Big Creek. Later surveys by Oakley (1976), Bizzoco and Albright (1978), Mistovich (1980), and Welch (1981) located sixteen sites in the area. Five of these sixteen sites within the project area had been recommended for further work in these survey reports and were reevaluated during the present survey.

The paleoenvironment of west central Alabama may be inferred from studies in Tennessee and northwest Georgia and southeast Alabama. These studies indicate that a moist cool climate prevailed in the southeast from 40,000 to 24,000 years ago during the middle Wisconsin Farmdalian interstadial. Following the Late Wisconsin glacial advance, 12,500 B.P., the glacial forests were replaced by early Holocene mixed conifers and deciduous forests including many modern species. The middle Holocene or Hypsithermal interval, 8000 to 4500 B.C., was a period of warmer drier climate. Since 4500 B.P. the climate, fauna, and flora became similar to that which was encountered by Old World explorers. During the early 1800s new species from Europe and Africa were introduced by European settlers and many of these were incorporated into the landscape.

The physical environment of the project area has been formed by alluvial deposits of the Black Warrior River. The Holocene deposits include both the first terrace, T-1, at elevations of 140 to 150 ft (42.6 to 45.7 m) AMSL, and the active floodplain, T-0, which ranges in elevation from 95 to 140 ft (28.9 to 42.6 m) AMSL.

The Holocene terrace is composed of the middle and late Holocene terraces. The middle Holocene terrace is composed of Cahaba silt loam and dates from approximately 7000 to 5000 B.C. Two sites containing materials

of the appropriate age have been identified on this terrace. One of the site locations has been alluviated and buried cultural components are potentially present.

The late Holocene terrace is composed of Choccolocco silt loam and dates from approximately 5000 B.C. to A.D. 500. This terrace contains potentially intact Late Archaic through Late Woodland age deposits. Several filled crevasse splays and a plug across a former channel of the Black Warrior River have been identified. The alluvial material filling these overflow channels contains Late Woodland and Mississippian age deposits. Undisturbed subplowzone deposits are potentially present in these situations.

The alluvial fans at the mouth of Mill Creek, following the deposition sequence of the river channel levees and the point bar sequence contain early and middle Holocene deposits.

The floodplain within the project area has been discussed in three depositional sequences, the channel levees, point bar terraces and the alluvial fans of Mill Creek. Each area is the result of a distinct series of fluvial processes which can be correlated with climatic shifts and changes in the base level of the Gulf of Mexico.

The river channel levee is composed of Cahaba silt loam overlain by Choccolocco silt loam and minor amounts of Ellisville silt loam. Bedrock constrictions of the river channel prevented lateral meandering and erosion of these deposits. However, overbank scouring and crevasse splays have eroded local areas of the levee. The Cahaba silt loam contains potential stratified Early to Middle Archaic deposits, and the localized deposits of Choccolocco silt loam contain potential stratified Archaic through Woodland age deposits.

CHAPTER III

DOCUMENT AND LITERATURE REVIEW

by Vernon J. Knight, Jr.

INTRODUCTION

The primary goals of the literature review for the William B. Oliver Lock and Dam relocation project were to conduct sufficient background research to identify all documented prehistoric and historic properties in the survey area, and to provide a synopsis of the cultural history of the area. The purpose of generating the historical synopsis is to supply a framework for evaluating the cultural resources data gathered during the survey.

This aspect of the investigations was procedurally carried out in two phases. In the first phase, a preliminary literature search was followed by more intensive documentary research and study. The second phase entailed the preparation of the overview, employing, in part, the results of the survey.

The National Register of Historic Places was consulted in order to determine if any listed properties are within the survey area. There were none as of the date of the investigation, and a representative of the Alabama Historical Commission (B.M. Brooms, personal communication) confirms that no National Register nominations pertinent to the survey area are currently pending.

Because the survey areas are adjacent to established cities with a historical time depth of 167 years, the amount of pertinent American historical data available to researchers is quite extensive. There is much more, in fact, than could possibly be reviewed in the short space of the current project, and this study consequently makes no pretense whatever to thoroughness or exhaustion of the potential historical resources for the area. For the historic portion of the literature search, the investigator elected to divide his labors about evenly between, on the one hand, general sources pertinent to a regional historical overview, and on the other hand, archival materials relating specifically to the historical features, events, and persons of the survey area. This division is reflected in the corresponding pages to follow.

Source materials for the historic period were drawn largely from The University of Alabama library, Tuscaloosa, especially the Alabama collection therein housed; from the State of Alabama Department of Archives and History, Montgomery; from the Tuscaloosa County Court House, Tuscaloosa; and from the Southern Collection of the Birmingham Public Library, and the Agee collection of historic maps deposited there. Census data, deed records, probate records, wills, land patent records, and legislative proceedings were all examined in the course of the project, as were both published and unpublished documentary sources and syntheses.

The investigator conducted additional informal interviews with knowledgeable Tuscaloosa informants, and personally inspected the survey area as time permitted.

PREHISTORY

If one were to attempt, in a preliminary way, to define prehistoric culture areas for Alabama, as for example has been done in Florida, there would be little hesitation in grouping together the Black Warrior River drainage south of the Fall Line (herein called the lower Black Warrior region) with the central and upper Tombigbee River watershed to the west. From what is known of the culture-historical sequence in either area, it appears that there are strong similarities both in culture type and in cultural development, despite the inevitable differences attributable to geographic distance.

This observation is important, for the present state of affairs, because of the uneven pace of modern archaeological research in the two areas. During the last decade, the quantity of archaeological data available for the central and upper Tombigbee regions has dramatically increased, largely because of investigations conducted in connection with the Tennessee-Tombigbee Waterway. In contrast, the available data for the lower Black Warrior region remain minimal, with the single exception of data concerning the late prehistoric Mississippian period. Consequently many of the initial classificatory concepts and organizational units to be used for the time being, here and elsewhere, in discussing the archaeology of the lower Black Warrior region, are borrowed from the work on the Tombigbee. In some cases the relevance of these concepts is not yet fully demonstrated for the lower Black Warrior. That situation will improve with further research, as the bare sequence outlined herein will be refined, and refined again. Figure 4 presents a provisional chronology for the lower Black Warrior region.

Paleo-Indian: 10,000-8000 B.C.

The earliest human occupation of the Black Warrior region that can be documented with some certainty is assignable to the culture stage known throughout North America as Paleo-Indian. Judging from limited data on types of Paleo-Indian sites in the eastern United States and types of tools associated with them, it appears that these remains were produced by loosely organized bands of individuals, whose livelihood depended upon hunting and gathering. Certain tool forms are characteristically associated with eastern Paleo-Indian assemblages, which also serve as historical marker types. These include lanceolate points, which are often fluted at the base, uniface end scrapers and side scrapers, burins, flake-blade knives, drills, choppers, gravers, utilized blades, spokeshaves, and splintered wedges or pieces esquilles (Ensor 1981b:6-8).

While Paleo-Indian remains west of the Mississippi River are found with some frequency in association with extinct late Pleistocene fauna, similar evidence from the eastern United States has been both scarce and equivocal. Recent research in south Florida has nevertheless shed a great deal of light on eastern Paleo-Indian subsistence, suggesting a diffuse, broad-spectrum hunting and gathering economy that relied on extinct fauna and modern Holocene fauna alike (Clausen et al. 1979:609-10). The Paleo-Indian era was one of changing climatic conditions, accompanied by the slow northward retreat of the boreal forests at the end of the Wisconsin

LOWER BLACK WARRIOR RIVER VALLEY CULTURAL CHRONOLOGY

AGE	CULTURAL STAGE	PERIOD	CULTURAL TAXON
	HISTORIC	RECENT	
1700		COLONIAL	CHOCTAW/CREEK
		PROTOHISTORIC	ALABAMA RIVER
1500	MISSISSIPPIAN	LATE MISSISSIPPIAN	MOUNDVILLE III
1300		MIDDLE MISSISSIPPIAN	MOUNDVILLE II
1100		EARLY MISSISSIPPIAN	MOUNDVILLE I
900	WOODLAND	LATE WOODLAND	WEST JEFFERSON
700			MILLER III
500		MIDDLE WOODLAND	MILLER II
300			
100			MILLER I
0 A.D.			
100 B.C.	GULF FORMATIONAL	LATE GULF FORM.	ALEXANDER
1000		MID. GULF FORM.	WHEELER
2000	ARCHAIC	LATE ARCHAIC	WEST GREEN
3000			BENTON
4000		MIDDLE ARCHAIC	
5000			VAUGHN
6000		EARLY ARCHAIC	BIFURCATE
7000			KIRK
8000		TRANSITIONAL PALEO	DALTON/HARDAWAY
	PALEO-INDIAN	LATE PALEO-INDIAN	QUAD/BEAVER LAKE
9000		EARLY PALEO-INDIAN	CLOVIS
10,000			

Figure 4.

glacial episode. Although direct evidence is lacking, it is highly likely that such extinct mammals as mastodons, sloths, and bison were hunted in Alabama, concurrently with fauna of the modern type.

Evidence of Paleo-Indian occupation of the Black Warrior region consists of isolated surface finds of diagnostic artifact types attributable to the period based on secure dating elsewhere. Isolated finds of fluted projectile points have been informally reported in the vicinity of Moundville and again farther north near the town of Fosters. Steeves (1956:25) records additional fluted Clovis points from Tuscaloosa County and from the Mulberry Fork of the Black Warrior River.

Such data are sufficient only to demonstrate the presence of Paleo-Indian remains within the region, and to allow the suggestion that the intensity of Paleo-Indian occupation was much lower on the Black Warrior than in the Tennessee Valley, where the number of documented sites of this period is quite high. Data on site types and site distribution are unavailable, and inferences concerning settlement systems, society, and subsistence will have to await future research.

Early Archaic: 8000-6000 B.C.

Evidence of Early Archaic occupation of the Black Warrior region consists, again, exclusively of surface finds of tool forms diagnostic of the period. Projectile points assignable to the Dalton, Big Sandy, Hardaway, Kirk, and Bifurcate classes (Cambron and Hulse 1975:14, 37-39, 66, 73-75, 77) have all been informally noted from surface collection in various parts of the region. These forms are all widespread in the eastern United States, and radiocarbon dates achieved elsewhere (e.g. DeJarnette et al. 1962, Broyles 1971, Chapman 1976) support the conclusion that they form a definite temporal sequence, in the order listed from earliest to latest.

The nearest excavated samples are from the Gainesville Lake area of the central Tombigbee Valley, where Dalton, Kirk, and Bifurcate components were found stratigraphically underlying Woodland and Mississippian occupations at Sites 1Gr1X1 and 1Gr2. Ensor (1980:85-6) describes the associated technology, in which bipolar percussion flaking is dominant, as an adaptation to the small size of local Tuscaloosa formation chert cobbles. Most specialized tool forms during this period were manufactured either from imported chert or thermally altered local chert. The Early Archaic components at Sites 1Gr1X1 and 1Gr2 were thin and diffuse, and the amount of information recovered was fairly insubstantial. Nevertheless some botanical remains were recovered, including nuts and seeds indicating late summer to early fall occupations of these sites (Caddell 1981:42). Based upon limited data, Jenkins and Curren (1976:13-16) pointed out the tendency of Early Archaic sites in the Gainesville Lake area to be located on the sandy loam soils of alluvial terraces. They suggested further that such site components were representative of a restricted wandering type of settlement system, characterized by small, highly mobile bands of hunter-gatherers.

Middle Archaic: 6000-4000 B.C.

The recognition of site components dating to the Middle Archaic period has been impeded by a lack of the stratigraphic data required to clarify precisely which projectile point styles are characteristic of the period. The Eva and Morrow Mountain types, which are diagnostic of this interval in the Tennessee Valley, appear to be rare in the Black Warrior and Tombigbee regions of west central Alabama.

Recently, however, a group of roughly similar broad stemmed projectile point styles has been recognized as constituting a distinct Middle Archaic lithic tradition on the Gulf Coastal Plain. In the Gainesville Lake area of the Central Tombigbee Valley, this tradition is considered characterized by the types White Springs (Cambron and Hulse 1975:128), which is also common to the Tennessee Valley, Vaughn, named for the Vaughn midden mound site near Columbus, Mississippi (Atkinson 1974), and Demopolis, defined for the Gainesville Lake area. These types are discussed and illustrated by Ensor (1981a:65-66, Classes 125-128, 106). In that area, Middle Archaic lithic technology in general appears to be similar to that of the Early Archaic period, in the use of local Tuscaloosa gravels with a bipolar cobble technique. Nevertheless, the specialized tools are almost invariably made of nonlocal materials, principally Tallahatta quartzite (Ensor 1981b:15).

Site components bearing this assemblage within the Gainesville Lake area were grouped within the "Vaughn Culture" (Ensor 1981a:106). The type site is considered a base camp, and the larger number of less dense components are interpreted as transitory camps, suggesting a central based wandering type of settlement system (Jenkins and Curren 1976).

No specific Middle Archaic site components have yet been recognized in the Black Warrior region, although they may be expected, as with other Archaic sites, buried beneath recent alluvial deposits.

Late Archaic: 4000-1000 B.C.

Several projectile point forms are diagnostic of the Late Archaic period in west-central Alabama. These include the Benton type, suggested to date to the early end of the Late Archaic time range, and a variety of later stemmed types. Types recognized in the Gainesville Lake area are Pickwick, Ledbetter, Little Bear Creek, Mulberry Creek, McIntire, Gary, Elora, Wade, and Cotaco Creek (Cambron and Hulse 1975:33-4, 46-7, 57, 78, 82, 86, 95, 122). This typology has been recently refined, with each of these types, and one new type (Tombigbee Stemmed) being assimilated to a number of varieties and clusters (Ensor 1981a:94-8).

Technologically, Late Archaic lithic assemblages appear to continue the earlier Archaic traditions emphasizing bipolar reduction of Tuscaloosa gravels. Imported materials such as Tallahatta quartzite continue to be used in the manufacture of specialized bifaces, but to a lesser extent than during the Middle Archaic (Ensor 1981b:18).

No definite Benton occupation was noted for the Gainesville Lake area, but there was widespread use of the area by peoples who manufactured projectile points related to the Little Bear Creek type. There such components have been assigned to a "West Greene culture." The known components are invariably small with a low diversity of tool classes, suggesting transitory camps. These tend to be located on first alluvial terraces, usually near abandoned river channels or stream junctions (Ensor 1981b:18-19). Some botanical remains have been recovered from a few features, consisting of hickory nutshells, acorn shells, black walnut shells, and pokeweed seeds (Caddell 1981:42).

Evidences of Late Archaic occupation of the lower Black Warrior region are limited to surface finds, diagnosed largely from projectile point forms. What little is known of site distribution suggests that the patterning in the lower Black Warrior region may parallel that of the central Tombigbee Valley, with emphasis on riverine environments near stream junctions and abandoned channels. At least one substantial Benton component is informally known from the Hale County area.

Gulf Formational: 1000-100 B.C.

The concept of a Gulf Formational stage for the southeastern Coastal Plain, intermediate between Archaic and Woodland, was introduced by Walthall and Jenkins (1976). It is defined as beginning with the appearance of early Gulf tradition ceramics, and closing with the appearance of ceramics of the Northern, Middle Eastern, and Southern Appalachian traditions.

The Middle Gulf Formational (1000-500 B.C.) manifestation in west-central and northwest Alabama is Wheeler (Jenkins 1975), thought to represent a continuing Archaic mode of existence, with the addition of fiber tempered plain, dentate stamped, punctated, and simple stamped pottery. A local Wheeler phase, termed Broken Pumpkin Creek, was defined for the central Tombigbee River area, but is tentatively thought by Jenkins to include the lower Black Warrior region as well. Nevertheless, Jenkins observes that survey data for this eastern margin of the phase are poor (Jenkins 1981b:31). Evidence consists of surface collections from a few sites in Hale and Tuscaloosa counties that have yielded Wheeler series ceramics, usually mixed with later materials at the same sites.

The material culture of the Broken Pumpkin Creek phase, other than ceramics, is a clear inheritance from the local Late Archaic manifestation. Associated chipped lithic debitage reflects the continuation of emphasis on nonheated local cherts, with the importation of such materials as Tallahatta quartzite for use in the manufacture of specialized bifaces. The principal projectile point styles are those of the Wade cluster (Jenkins 1981b:29, Ensor 1981a:95-96).

On the basis of the known data, it has been suggested that a central based wandering type of settlement system is applicable to the phase. For the parallel manifestation in the lower Black Warrior region, we might predict both base camp sites and a greater number of small, transitory sites, placed in areas of optional access to high mast-producing forests. The overall density of sites is probably low.

The succeeding Late Gulf Formational (500-100 B.C.) manifestation is marked by the appearance of sand tempered Alexander series ceramics. The local representative defined for the central Tombigbee Valley is the Henson Springs phase (Jenkins 1981b:35-40). This is a tentative construct, based upon limited distributional and temporal data. It is characterized by the disappearance of Wheeler ceramics, the presence of plain, pinched, punctated and incised Alexander ceramics, a chipped lithic repertoire similar to that of the preceeding Broken Pumpkin Creek phase, and the Flint Creek var. Tombigbee projectile point type.

Jenkins (1981b:38) restricts the Henson Springs phase to the central and upper Tombigbee drainage, but Alexander ceramics are consistently found on the lower Black Warrior as well. A number of components, however minor, have been recognized in surface collections from Tuscaloosa and Hale counties, usually accompanied by Wheeler ceramics. Few definite statements can presently be made regarding these components.

Middle Woodland: 100 B.C.-A.D. 650

Prior to the Middle Woodland period, the lower Black Warrior region does not appear to have been densely peopled. Virtually all of the known Archaic and Gulf Formational components, from what we may judge of them from surface collections, show a limited range of material culture in apparently small and thin artifact scatters. Large sites of the base camp class are presently undocumented.

Beginning with the Middle Woodland period, however, there is increasing evidence of larger and more dense site components, probably reflecting a growing degree of sedentism. Again through this period we see no perceptible divergence from the better documented central Tombigbee sequence, while pointing out that the data are again almost exclusively from surface survey.

The Miller I phase (100 B.C.-A.D. 300) appears to represent a cultural disjunction with the earlier Alexander culture in west-central Alabama. It is characterized by the appearance of fabric marked and cord marked sand tempered ceramics of the Saltillo-Furrs series, by the appearance of burial mounds and evidence for interregional exchange and interaction, and by the appearance of a variety of new chipped lithic forms.

At least three Miller I site types have been documented for the central Tombigbee Valley. These are large, dense base camps, smaller and more frequent transitory camps, and occasional mound centers consisting of groups of one to six mounds. The settlement system is provisionally classified as the central based wandering type (Jenkins 1981b:46).

To date, the known distribution of Miller I sites in the lower Black Warrior region is spotty. Most of the known sites appear to be transitory camps. A few such components have been identified in the southern part of the region near the confluence with the Tombigbee River. Others are known between Moundville and the Fall Line. These components are situated on the levees of the river and along tributary streams. No Miller I mounds have yet been identified for the lower Black Warrior region, however, and

the overall site density may still be substantially lower than for the central and upper Tombigbee.

The succeeding Miller II phase (A.D. 300-600), which occupies the late Middle Woodland period in west-central Alabama, is marked ceramically by a decline in the relative percentage of Saltillo Fabric Marked in favor of Furrs Cord Marked. Essentially it is a direct development from the preceeding phase, during which there is increasing evidence of interaction and participation in the Baytown sphere centered in the lower Mississippi Valley. Jenkins (1981b:57-67) has provided a concise summary of the present state of knowledge concerning this phase.

During the latter part of the Miller II phase, limestone tempered plain and paddle stamped ceramics appear as minorities, as do ceramics of the McLeod and Weeden Island series. Bone tempered pottery also appears. The bulk of the pottery is nevertheless plain and sand tempered. The sand tempered ware group gradually yields through time to the grog tempered ware characteristic of Baytown.

Late Miller II components, differing little from their counterparts on the Tombigbee, have been identified with some frequency from surface collections in the lower Black Warrior region. Since these components are invariably mixed with earlier and later materials, however, it is difficult to make any firm statements concerning them. It is probable that sites of both the base camp and transitory camp classes are present, again suggesting a central based wandering settlement system.

Late Woodland: A.D. 650-1050

During the Late Woodland period, west central Alabama reached its fullest participation in the western Baytown ceramic tradition. The two ceramic modes most characteristic of Baytown, grog tempering and cord marking, were at their peak popularity at this time.

The lower Black Warrior region represented the easternmost limit of the Baytown sphere in the Southeastern United States. Consequently, while early Late Woodland ceramic assemblages from the Black Warrior show clearly the Baytown alliance, nevertheless this influence appears to be somewhat diminished by distance from the Baytown center of gravity in the lower Mississippi Valley. Cord marking, for example, never reaches the popularity on the lower Black Warrior that it enjoys in the central and upper Tombigbee regions, the latter being closer to the Baytown heartland.

The local archaeological phase which occupies the period from ca. A.D. 650 to ca. A.D. 900 is known as Miller III. The ceramic complex consists mainly of the types Baytown Plain var. Roper, Mulberry Creek Cord Marked var. Aliceville, Withers Fabric Marked var. Blubber, along with a number of minority types and varieties. The data from the Gainesville Lake area has allowed Jenkins to subdivide the phase based upon fine-scale changes in the relative frequencies of the ceramic types through time (Jenkins 1981a:24-29).

Very little is known concerning the Miller III phase in the lower Black Warrior region. Although a number of components of the phase have been identified from surface collections, there have been no reported excavations of Miller III sites. In the adjacent central Tombigbee Valley, Miller III populations were primarily hunters and gatherers, operating from large and dense camp sites and exploiting an extremely wide range of local floral and faunal resources (Caddell 1981, Woodrick 1981). In the latter area, it has been suggested that this was a time of considerable environmental stress related to population growth (Jenkins 1981b).

Nevertheless, population and settlement system dynamics may have been considerably different for the lower Black Warrior region. From what might be judged of the reported components, the Miller III phase on the Black Warrior River may lack the numerous large base camp sites that are characteristic of Miller III settlement in the central Tombigbee Valley. These issues are part of the larger range of research problems concerning settlement, subsistence, demography, social life, and ecology, which have yet to be addressed for the entire Woodland period sequence in the lower Black Warrior region.

Following Miller III is the West Jefferson phase, dated between A.D. 900 and A.D. 1050. At this point in the sequence, and henceforth through the late prehistory of the region, there is, for the first time, a sharp divergence from concurrent developments in the central and upper Tombigbee Valley.

The West Jefferson phase was first described by Jenkins and Nielsen (1974), with subsequent amplifications by O'Hear (1975) and Ensor (1976). The initial data resulted from the excavation of a series of sites on the Locust Fork drainage of the upper Black Warrior River, and on the Cahaba River in central Alabama. Jenkins (1976) recognized that the phase extended also to the lower Black Warrior region, where it has recently been the subject of attention as the local precursor of the Moundville phase (Welch 1980).

The West Jefferson ceramic complex consists of approximately 99 percent plain, grog tempered pottery, of the type Baytown Plain var. West Jefferson. The small amounts of decorated pottery consist largely of the types Mulberry Creek Cord Marked, var. Aliceville, Alligator Incised var. Geiger, and Benson Punctated var. Unspecified. A Mississippian presence, of uncertain nature (Jenkins 1976, Peebles 1978b) is apparent in the appearance of standard Mississippian jar vessel forms, and in small amounts of shell tempered pottery. This phenomenon is alternately seen as evidence of contemporaneous presence of Woodland and Mississippian peoples, or more simply as evidence for the gradual adoption of Mississippian usages, without the benefit of any intrusion of population.

The West Jefferson phase in the Black Warrior Valley is known primarily from surface collections. One excavated component, at the Moundville site, has been recognized from the Alabama Museum of Natural History excavation records for that site.

Welch (1980) describes West Jefferson society as tribally organized. The present evidence suggests a two-phase settlement system. Floodplain

villages were occupied during the spring, summer, and fall, and served as bases for limited gardening, hunting, and gathering. During the winter, the population would disperse to smaller upland sites, where they would subsist mainly on upland resources such as nuts and upland fauna (Welch 1980).

Mississippian: A.D. 1050-1500

The great majority of the archaeological research that has been conducted to date in the lower Black Warrior region has dealt with the Mississippian period. Attention has long been focused on the mound centers of the region and the sometimes spectacular material culture associated with them. The Moundville site, which lies on the banks of the Black Warrior River in southern Tuscaloosa and northern Hale Counties, has itself attracted over a century of scholarly research.

During the nineteenth century there were noteworthy excavations at the Moundville site by Thomas Maxwell, Nathaniel T. Lupton, and James D. Middleton (Peebles 1980), and attention was drawn to the site in the publications of Squier and Davis (1848) and Pickett (1851). More extensive research was carried out during 1905 and 1906 by Clarence B. Moore, whose excellent publications (1905, 1907) confirmed the archaeological wealth of the site. Moore was also able to test a number of other Mississippian mounds on the Black Warrior River during the course of his investigations.

The Alabama Museum of Natural History resumed research at Moundville in 1929 and this work continued until 1941. Only brief summaries utilizing these data were written (DeJarnette 1947, 1952; Wimberly 1956). Work was also conducted in 1930 and 1932 at Snow's Bend, Site 1Tu2, (DeJarnette and Peebles 1970). The Moundville series of shell tempered ceramic types was introduced to the archaeological literature by DeJarnette and Wimberly (1941).

The Moundville materials excavated during the 1930s have been restudied in recent years by McKenzie (1964, 1965, 1966) and Peebles (1971, 1974, 1978b), resulting in, among other things, a definition of the Moundville phase, and some preliminary models of the community organization and social status ranking at the site. Peebles subsequently initiated a two-year multidisciplinary study of Moundville and the Moundville phase, conducted by the University of Michigan (Scarry 1980a). This most recent project has greatly advanced our understanding of various aspects of the social complexity of the Moundville phase.

In this limited space it would be impossible to adequately review the large number of sources that are now available concerning the Moundville phase. In order to compensate in part, a relatively extensive bibliography is attached to this section, which has relied heavily on the useful bibliography recently compiled by Margaret Scarry (1980a).

The geographical limits to the Moundville phase, as presently defined, include the Black Warrior River Valley from Tuscaloosa south to Akron, Alabama (Peebles 1980:9). The settlement system is hierarchical, with a major ceremonial center (Moundville), several secondary centers,

subsidiary villages, and numerous hamlets (Bozeman 1980), apparently arranged so as to maximize the efficiency of tribute flow to the ceremonial centers (Steponaitis 1978), and systematically patterned with respect to catchment productivity (Peebles 1978a). Although research in progress by Tandy Bozeman is addressing the nature of sites of the hamlet class, there are still virtually no excavated data on lower-order sites. At present, Moundville phase research remains extremely "top-heavy," and the internal nature of its villages and hamlets remains a matter of conjecture.

Peebles (1978b) has concluded, from analysis of the mortuary data, that Moundville social organization included a three tiered rank hierarchy. At the upper end of the ranking system was a small group of males occupying the supreme ascribed polictical and ritual offices. Another, larger group of males apparently occupied similar positions of lesser rank. The third subordinate group consisted of the remainder of the population.

An important outcome of the University of Michigan's Moundville project has been the development of an internal chronology for the Moundville phase. Steponaitis (1980a) now divides the Moundville phase into a series of subphases (which he nevertheless refers to as phases), as follows: Moundville I, A.D. 1050-1250; Moundville II, A.D. 1250-1400; and Moundville III, A.D. 1400-1550.

The primary modern topical studies of the Moundville phase are the following. Discussions of the settlement system are found in Peebles (1978a, 1978b) and Bozeman (1980). The community organization of the Moundville site is treated by Peebles (1978a, 1979) and Steponaitis (1980a). Scarry (1980c) and Michal (1980) supply discussions of floral and faunal exploitation respectively. The chronology is treated by Steponaitis (1980b) and by Haddy and Hanson (1980). Systems of social status are investigated by Peebles (1974, 1978b) and Schoeninger and Peebles (1980). Ceramic typology, technology, and production are discussed by McKenzie (1966), Steponaitis (1980b), van der Leeuw (1980), and Hardin (1980).

Protohistoric: A.D. 1500-1670

At the close of the Mississippian period, there is evidence of a fairly striking depopulation of the lower Black Warrior Valley, and the central Tombigbee Valley as well. Post-Mississippian site components appear to be far fewer than Mississippian components, and more restricted in range. It is quite certain that important structural aspects of the Moundville system collapsed at this time, although the responsible mechanisms remain obscure. This collapse is close enough in timing with the initial appearance of Europeans along the Gulf Coast to entertain the idea that the European presence had something to do with it. On the other hand, there remains a definite possibility that the breakdown was internally caused, and only accelerated by the European impact. In these matters the precise dating of events is crucial evidence, along with evidence of changes in society and settlement. At present this evidence falls far short of admitting causal inferences.

The archaeological taxon now employed for this period and cultural configuration is the Alabama River phase (Cottier 1970), earlier known more informally as the Burial Urn Culture. Sheldon (1974) has discussed the small cluster of Alabama River phase sites which exists on the Black Warrior River between Tuscaloosa and Moundville. Recent research by Curren and Little (1981) has added considerably to our knowledge of the material culture and dating of the phenomenon, based on the excavation of two sites.

Ceramically, the Alabama River phase appears to be directly descended from Moundville. A few ceramic traits are modified, and a few others added, demonstrating increasing interaction with the lower Mississippi Valley and with north central Mississippi. The pottery complex remains largely shell tempered and discontinues many of the elaborate engraved and incised Moundville styles.

Alabama River phase settlements remained agricultural but there is preliminary evidence of dietary shifts and consequent biological stress (Hill-Clark and Clark 1981). There are large gaps in our knowledge concerning these diachronic changes. Other apparent changes in need of investigation are shifts in mortuary practices, the loss of mound ceremonialism, the collapse of the political heirarchy and the disappearance of the associated ideological symbolism, and apparent changes in settlement and community organization.

Most of these sites, from the present evidence, date approximately to the sixteenth century. At least one, Site 1Tu4, bears clear evidence of European contact in the form of nonaboriginal artifacts in unequivocal archaeological context. As Curren and Little point out, only a single site component in the lower Black Warrior Valley, Site 1Tu52, can be dated securely to the late seventeenth or early eighteenth century (1981). There are none at all known from the second half of the eighteenth century onward, a fact which squares well with the ethnohistorical record.

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As noted, the great majority of the published works available for lower Black Warrior regional archaeology deal directly with Moundville or some aspect of the Moundville phase. Published research concerning other prehistoric periods is largely wanting. Relatively extensive surveys have been conducted on four occasions, but these were generally neither systematic nor comprehensive. The results have not yet been generally incorporated into published works, with the exception of the recent University of Michigan survey. A number of other smaller surveys have been carried out by various individuals. These records are on file at Mound State Monument.

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ETHNOHISTORY

Soto and Luna: 1540-1560

The protohistoric period for the interior Southeast is loosely defined as the interval between initial exploratory contact and the first colonial enterprises in the area. This was a time when native cultures were suffering the initial effects of foreign contagious diseases, to which the natives had little resistance. It was also a time when native cultures were rapidly changing, both in social organization and in man-land relationships.

The abundantly documented expedition of Hernando de Soto through the Southeast is often thought of as a major catalyst in effecting these changes. But as large as Soto's entrada looms in history, he was not the first to make contact. Such adventurers as Miruelo and Pineda, and perhaps several more of their undocumented contemporaries as well, had ex-

plored the Gulf Coast more than 20 years earlier. Of these, at least Pineda stayed long enough to have exposed the native populations of Alabama to contagious diseases, and to have introduced a variety of European goods, initially to be guarded, as the archaeology makes clear, as items of wealth and prestige.

The unsettled, and continually unsettling, route of the Soto expedition has seen almost three centuries of cult-like attention and debate. The most important scholarly synthesis of the route to appear in the twentieth century was the De Soto Commission Report of 1939, representing the consensus of a number of scholars including John R. Swanton (Swanton 1939). More recent scholars have attempted, with some success, to follow Soto's itinerary with more precision, by means of a restudy of the relevant documents, and by attempting to correlate the route with archeological knowledge of sixteenth century site and artifact distributions.

By all modern accounts, the Mauvilla of 1540 was somewhere in southwest Alabama, while Chicasa was somewhere in north-central Mississippi. To get from one to the other, Soto's force must have travelled northwest through west-central Alabama, near our area of concern, the lower Black Warrior region. Two of the Soto narratives, those of Ranjel (Bourne 1904) and Elvas (Smith 1968), speak of a group of Indian towns four or five days north of Mauvilla, near a large river that had to be crossed on the way to Chicasa. The DeSoto Commission suggested that this river was the Black Warrior, and that the towns--Talicpacana, Moculixa, Apafalaya, and Zabusta --were situated just north of Demopolis near Meltons Bend (Swanton 1939: 219).

All of these names are probably in the Choctaw language. Swanton translates Talicpacana as tali apakana = "plenty of rocks." He derives Moculixa from moshali-asha = "place where the fire has gone out" (1939: 218), but this seems forced, and there is really no specific reference to fire in the translated phrase. Owen's idea, that the place name is simply Moshulika, a common Choctaw personal name (Owen 1950:191), seems more credible. Swanton's suggested translation of Zabusta (Elvas: Cabusto) is "place of burr-oaks" (1939:218), to which we may generally concur, except to note that sa probably functions here as a possessive pronoun (Byington 1915:32); hence sabushto = "my burr-oaks" (1915:96, 321).

Lankford, in a more recent assessment of the Soto route, agrees that this "Province of Pafallaya" was on the Black Warrior, but he places it farther north, between Moundville and Tuscaloosa. In the latter location, the towns encountered by Soto would correlate with a known, discrete cluster of protohistoric sites (Lankford 1977:30-1; Sheldon 1974:27). Recent excavations by Curren and Little (1981) at Site 1Tu4 were designed in part to test this possibility.

The conclusions reached by Lankford regarding the route are compelling enough to provisionally accept them as preferable to the findings of the De Soto Commission, although exact archaeological identifications for these towns are unlikely to ever be found.

Most probably, then, the sixteenth century name of the Black Warrior River, and also of the "province" of Indian towns on its banks, was Pafal-

laya. That term is also in the Choctaw language, meaning "long hairs," and it seems highly significant that the same term was applied to the Choctaws by their neighbors during the eighteenth century (Swanton 1922: 421). Both Halbert and Swanton concluded from this fact that the Province of Pafallaya, with its four towns, must have been directly ancestral to some part of the later Choctaws. There is no current reason to dispute this assertion. In fact the linguistic evidence, coupled with the observation that the Choctaws are otherwise unaccounted for in the sixteenth century, makes this identification quite defensible relative to the alternative possibilities.

Tentatively, then, it is reasonable to suggest that Pafallaya was ethnically a proto-Choctaw polity, that it was centered in the lower Black Warrior region between present-day Moundville and Tuscaloosa, and that it can be archaeologically aligned with a definable cluster of protohistoric Alabama River phase sites in that area. In any case, it can be asserted with full confidence that the native inhabitants of the lower Black Warrior region at A.D. 1540 absorbed the full force of an immediate Spanish presence in the person of Soto.

The subsequent colonizing expedition of Tristan de Luna, in the year 1560, interests us at only one point. During that expedition, while Luna was encamped on the Alabama River at Nanipacana, a small force under Sauz was sent on to Coosa. While at Coosa, the Spaniards under Sauz were asked to participate in an expedition, westward, in order to subjugate the "Napochies," who were supposed to have rebelled against their overlords at Coosa. This expedition succeeded in burning a village of the Napochies, and in driving them beyond the "Oquechiton" (Choctaw Oke Chitto = "big water") River (Priestley 1936:130ff).

These Napochies deserve comment here because the Black Warrior River has been suggested as their home--the "Okechitto." Davila Padilla (in Swanton 1922:238) describes this river as "very deep and of the width of two harquebuse-shots," but wider and more shallow at a ford, beyond which the first of two Napochi villages lay at a distance of two leagues. Swanton (1922:238) was of the opinion that this was the Black Warrior, as was Pickett (1962:45) before him. Lankford (1977:30) agreed, going further to equate the Napochies with the Pafallaya towns encountered by Soto, but Priestley (1936:130) thought it was the Tallapoosa, while this author has suggested the Cahaba (Knight and Adams 1981:51).

Recent research by DePratter, Hudson and Smith (1981), bearing on the location of sixteenth century Coosa, suggests yet another identification for "Okechitto": the Tennessee River. These scholars place Coosa much farther north than has been previously thought, in northwest Georgia. Consequently for them, the "big water" to the west must be the Tennessee, as some earlier scholars have also thought, and in fact that river represents the best match to date with Padilla's description. Accepting this, for the present, as the best location for the Napochies, if nothing else relieves us of the problem of having two sixteenth century names for the Black Warrior River.

With Luna's departure, the book is closed for the next 139 years. This is Hamilton's "century of obscurity," during which, we may infer from

the archaeological record, virtually all of the indigenous inhabitants of the lower Black Warrior River withdrew from the area. Henceforth, the river was to be a borderland between Muskogee and Choctaw, and any permanent aboriginal settlements there were to be viewed as encroachments.

Cartography

Before the Black Warrior River of west Alabama received its present name, it was known as Apotaka Hacha, usually corrupted to "Potagahatchee," or something similar, on British and early American maps. Apotaka Hacha is Choctaw, and can be roughly translated as "river off to the side," or "river on the margin" (Byington 1915:56, 143). The term is a fitting one, because of the fact that the Black Warrior River area was part of the eighteenth century boundary between the Muskogees to the east and the Choctaws and Chickasaws to the west. As such it was usually in dispute, and the practical result of this political tension was that the area long remained a sort of no-man's land, sparsely settled, if at all. The situation is quite clearly reflected in the published maps of the era, not a single one of which, between 1701 and 1800, shows a contemporary Indian village in the Black Warrior watershed.

The geography of what is now interior Mississippi and Alabama remained largely unknown to Europeans until the beginning of the Charles Town trade in 1670, which initiated permanent ties between the English and the Choctaws, Chickasaws, and Muskogees. The first reasonably good maps nevertheless date somewhat later, to the years following the establishment of the French colony of Louisiana on the Gulf Coast, in 1699.

The earliest published maps to show what is probably the Black Warrior River are French, the work of Guillaume de L'Isle. De L'Isle was geographer to Louis XIV, King of France, and was respected as the preeminent geographer and cartographer of his day. His maps and atlases were well known and widely copied in all of Europe. De L'Isle's information for the interior Southeast came from careful study of the official correspondence of the Louisiana colony.

De L'Isle's map of 1701 shows a single eastern tributary of the Tombigbee (Mobile) River. The tributary is unnamed, but it is shown erroneously surrounded by the villages of the Choctaws. At this date no Frenchmen had yet ascended the Tombigbee as far as the mouth of the Black Warrior. A revised map, published in 1703, has moved the Choctaws west of the Tombigbee to their proper position, and has added a second eastern tributary. Still later revisions by de L'Isle, appearing in 1718, retain the two eastern tributaries of the Tombigbee, enlarging the one which most closely resembles the Black Warrior River.

These later maps by de L'Isle have the interesting feature of demonstrating the cartographer's ideas concerning the probable route of Soto in 1540. This results in a fairly confused map combining speculative sixteenth century village sites with established eighteenth century locations. De L'Isle decided to place Soto's "Tascalousa" midway up the Black Warrior, and it is for that reason only that the Black Warrior River and

the city of Tuscaloosa bear their present names. The connection was specious, but the name stuck.

Thus later French maps, for example those of d'Anville (1732) and de Crenay (1733), which now show a reasonably accurate Black Warrior River, label it "Riviere de Tascalousa," after de L'Isle. But the English, who were also quite familiar with the stream, because their trading paths to the Chickasaws crossed it, learned a different name. Eighteenth century English maps, e.g. Popple (1733), Mitchell (1755), Purcell (1773), and Faden (1777), all use some version of "Potagahatchee," the Choctaw name for the Black Warrior. Otherwise they sometimes call it "Tascalousa," following the French, or for some reason "20 mile creek."

By the turn of the nineteenth century, the Choctaw term was on its way out, and the French version prevailed, or rather its more euphonic English translation, "Black Warrior." The accurate map by G.H.V. Collot, which shows the Chickasaw country in 1796-1800, depicts for the first time the major forks and tributaries of the upper reaches of the Black Warrior River. Collot brands the entire area east of the Tombigbee, "Country Quite Uninhabited."

The upper tributaries--Locust Fork, Mulberry Fork, and Sipsey Fork--received their present names following the Creek war of 1813-1814. The Melish map of 1818 is probably the last map to preserve the Indian names for these streams.

French and British Colonies: 1699-1781

The buffer zone defined by "Potagahatchee," the Black Warrior River, endured through the years of European domination by French Louisiana and British West Florida. It was roughly equidistant between two sets of old adversaries: the Choctaw towns to the west, and the Alabama, Abihka, and Tallapoosa towns to the east. To the northwest were the Chickasaws, whose enmity with the Choctaws was also a constant factor. Because it was so long uninhabited, there is really very little ethnohistory to relate for the lower Black Warrior region prior to the Creek war of 1813-1814.

The historical role of the Black Warrior River during the eighteenth century was as a vaguely defined political boundary between Choctaws and Muskogees; as a winter hunting ground utilized, and claimed, by both groups; as a zone traversed by trading paths between the Muskogees and Chickasaws; as the site of one or two ephemeral settlements of refugees of the Indian wars; and probably as the occasional locus of unrecorded skirmishes or raids. The history of the area is thus understandable only as a minor feature in the larger drama of intercolonial rivalries, Indian alliances, and intertribal warfare. Through the French period, the players in that drama remained relatively constant: the Choctaws were allied with the French, and the Chickasaw and most of the Muskogees were allied with the English.

It is not known from what period began the protracted conflict between the Muskogees and the Choctaws. Almost from the first we hear of them after the "century of obscurity," we learn of a costly conflict,

supposed to have been inspired by the English, which had already cost over eighteen hundred Choctaw lives (Higginbotham 1977:77). English traders had, in fact, armed the Creeks and Chickasaws, and had employed them to conduct slave raids, not only among the Choctaws, but among the smaller Indian tribes of the Gulf region as well. But the cultural division which lay behind this rift was already in place, without much doubt, long before the first Charles Town entrepreneur schooled a Muskogee Indian in the arts of musketry.

The slave raiding trailed off in subsequent years, but the warfare continued from both sides. The eighteenth century wars between the Muskogees and the Choctaws, if they may be called such, were in reality a series of uncoordinated raids conducted by independent war parties. This type of warfare was important to the male social organization of both Muskogees and Choctaws, and one of the reasons for the almost incessant conflict was the need for each generation to prove itself in warfare against a traditional enemy.

The French arrived on the Gulf Coast in 1699, and immediately set to work expanding their sphere of influence in the Southeast. In 1702, Iberville and Tonty managed to secure an alliance with both the Choctaws and the Chickasaws, by arguing that the French were their true friends, while the English desired "nothing but blood and slaves" (Higginbotham 1977:78). The height of French dominance among the southeastern Indians was perhaps about 1714, when the Alibamus were so disaffected from the English as to demand a French fort among them. This was Fort Toulouse, henceforth to put a serious damper on English trade among the Tallapoosa and Abihka towns. By the same date French influence, and French trade goods, had penetrated as far as the Shawnees and Cherokees (Hamilton 1976:203).

But the Chickasaws, traditional enemies of the Choctaws, had become alienated from the French as early as 1706. British influence was henceforth strongly felt among them, and periodically penetrated even among the Choctaws. The Choctaws largely preferred to deal with the French, but English trade goods were consistently cheaper, more plentiful, and more desirable than those offered by their allies. French presence on the upper Tombigbee was eroded, and the Chickasaws became better customers to the English traders even than the friendly Muskogees.

The English took advantage of every opportunity to establish themselves among the Choctaws. In 1729 the Choctaw chiefs openly invited them to come and trade. In response, the traders sent an advance party of Muskogees to Boutoucoulouchitto, in March of 1730. But there was a misunderstanding, and the suspicious Muskogee trading party fled east to "a place called Tascaloosa," where they remained for several months (Rowland and Sanders 1927:I:158-9). By June of 1731, the English traders themselves came and established a storehouse, stocked with limbourg cloth, "at the Tascaloosa River," to facilitate the revived Choctaw trade. This bid was successful, but the outbreak of the Chickasaw war in 1731 made the storehouse too risky to maintain, and it was withdrawn the same year (Rowland and Sanders 1927:I:159, 187).

We have only brief French accounts of this storehouse, and these are too vague to enable us to determine its location on the Black Warrior River. When the French speak of "a place called Tascaloosa," as in the report of Father Beaudouin concerning the outpost, they generally mean the mouth of the Black Warrior, on the Tombigbee at present Demopolis. Lankford concludes, on this basis, that Demopolis was the site of the storehouse (Lankford 1981:134). The account of Regis du Roullet, however, says that it was "at the Tascaloosa River which is a branch of that of the Chickasaws," and that is not the usual phrase employed to specify the Tombigbee River site. Nevertheless the bluff at Demopolis would have been most convenient to the Choctaws, and that is probably the most reasonable interpretation.

At about the same time as these English traders were trying to establish permanent ties with the Choctaws, a group of Muskogees from the Tallapoosa region advanced to settle upon the Black Warrior River. Their purpose in doing so, we learn from Bienville, was to "facilitate the passage of the English to the Chickasaws" (Rowland and Sanders 1927:I: 203). The location of this settlement is not given, but Bienville's statement of their purpose allows the conclusion that it was probably at the intersection of the Black Warrior River with one of the Chickasaw trading paths, in present Tuscaloosa County. This is our first notice of a Muskogee town on the Black Warrior. Bienville says that they were shortly expelled by Sieur de Beauchamps (Rowland and Sanders 1927:I:203).

These events, and the outbreak of the Chickasaw war, stimulated Bienville to finally build a French fort among the Choctaws. He planned for a time to put it at the mouth of the Black Warrior River, but he changed his mind, and in 1736 Fort Tombecbe was erected closer to the Chickasaws, on the Tombigbee River near present Epes, Alabama (Rowland and Sanders 1927:I:295).

A decade later, at the beginning of the Choctaw civil war of 1747-1750, English traders were once again making inroads among the Choctaws, with James Adair prominent among them. Adair states that at the close of the war, the French considered the merits of moving their Tombecbe outpost to the Potagahatchee, "in order to decoy many of the Choctaws to settle there by degrees, and intercept the English traders on their way up from our settlements" (Adair 1930:352). The projected site of the new fort was actually the mouth of the Black Warrior, a place that had long attracted the notice of the French (Pate 1980:101-04). But no such plan was carried out.

With the Treaty of Paris in 1763, the French withdrew from Louisiana, ceding their holdings east of the Mississippi to the English. A new boundary between the Europeans on the Gulf Coast and the Choctaws was negotiated. The English subsequently abandoned Fort Tombecbe. Thus for the duration of British West Florida we loose sight of events on the Potagahatchee borderland. But from such observers as Romans (1961), we learn that the conflict between the Choctaws and Muskogees was escalating in the absence of French diplomacy, and it is not improbable that there were many unrecorded clashes in the Black Warrior region.

Spanish and American Tenure: 1781-1814

West Florida became a Spanish province following the Revolutionary War. In McGillivray's time there is little news of Muskogee-Choctaw difficulties. The Creek Confederacy under McGillivray's influence was preoccupied by white incursions, by the Georgians on their eastern border and by white settlers along the lower Tombigbee River. It is difficult to decide whether Creek hostilities with the Choctaws were actually curtailed, or simply received less emphasis during these years. The Spanish were obliged to protect the white Tombigbee River settlements from the threat of Creek raids. Two forts were built: Fort San Estaban de Tombecbe in 1789, and Fort Confederation in 1794, the latter on the old site of French Fort Tombecbe (Lankford 1981:159).

Toward the end of the eighteenth century, the previously unoccupied areas of the lower Tombigbee and the lower Alabama began to receive new Indian and half-breed settlements, bringing the Choctaw-Alibamu boundary into open dispute. A settlement was, however, eventually reached. The Hopewell treaty of January 3, 1786, defined the boundary as the watershed line between the Tombigbee and Alabama Rivers. Going north, the boundary continued along the watershed between the Black Warrior and Cahaba Rivers, up to the Chickasaw boundary at about the latitude of Fort Tombecbe (Royce 1899:Pl-2).

We have at hand a singular, detailed account of a major battle between Muskogees and Choctaws, that is supposed to have taken place on the Black Warrior River below present Tuscaloosa, during this period. This is the Battle of Tuscaloosa, an uncorroborated event in the early career of Pushmataha, related in Gideon Linceum's biography of the Choctaw chief.

Lincecum resided in the Choctaw country during the years 1822-1825, and his information on this battle, and other deeds of the young Pushmataha, were taken from Choctaw informants at that time. The account therefore bears the embellishments of an oral history, and perhaps Lincecum's own embellishments as well. Nevertheless Lincecum was quite familiar with the surroundings discussed in the relation, because he was one of the first, if not the first, white settler to reside in what is now Northport in Tuscaloosa County.

We are given to understand, from the context of the narrative, that Pushmataha, then known as Ishtilauata, took part in the "Battle of Tuscaloosa" while in his early twenties. That datum, if reliable, would put the battle at ca. 1785 or 1786. It is impossible to judge the historical value of this document, concerning an action in which no white man took part, but it is necessary to point out that Gideon Lincecum was a thorough and reliable researcher in his time. Whatever, therefore, might be the historical shortcomings of this story, we may trust Lincecum that he has it faithfully recorded as told during the 1820s. Passing to the story itself, we find it prefaced as follows.

> The Muskogees and Chahtas had been long at war about the ownership of the district of country lying between the Black Warrior [and Tombigbee] Rivers. The dispute was not settled until the Muskogees were conquered by Gen. A. Jackson in 1814. Conse-

quently the Chahtas and Muskogees had very many battles, which war had continued many years previous to the battle of Tuscaloosa . . . (Lincecum 1906:450).

This introduction is followed by a detailed record of the battle, which is said to have lasted two days. A Choctaw war party had advanced to the falls of the Black Warrior, in order to engage the Muskogee warriors in residence there. The first day's fighting took place in a cane brake, on the north (west) side of the Black Warrior, below the Muskogee village which was on the opposite side of the river. On this day the Muskogees were routed, and they fled across the river to their homes at dusk. During the evening, the Choctaws held a council, and decided to move two and one-half miles upriver to the head of the shoals (the actual shoals being two miles in extent). A detachment of sentries was left below the falls at the site of the first engagement. On the next day the sentries reported that the Muskogees were crossing the river, in force, a mile below the first battle site. The Choctaws now quickly withdrew to establish themselves "at a little creek a small distance below the falls." There was a fierce fight, in which the Choctaws were outnumbered, but a small force of Choctaws managed to encircle the Muskogees and attack them from the rear. This was sufficient to break their discipline, and so the Muskogees were again defeated. Only a few managed to escape to the opposite bank, and the Choctaws did not follow them, "not caring to cross the river to attack a town of women and children." The Choctaw dead, numbering twenty-seven, were buried at the site of the battle (Lincecum 1906:449-54).

Lincecum goes on to say that Pushmataha much later "raised another party and made a furious forage upon the Muskogee towns," and still later led the Choctaws against the Muskogees during the Creek War of 1813-1814. "And such was the terror of his name that the Muskogees had ceased to make incursions west of the boundary lines between the two nations or to hunt on the disputed territory which lay in the fork of the Tushkalusa and Tombigbee Rivers" (Lincecum 1906:454-5).

The site which best fits the description of the scene of the Battle of Tuscaloosa is Mill Creek, west of Northport, which flows into the Black Warrior River from the north. One would expect to find little material evidence of such a battle, except for the twenty-seven burials of Choctaw dead mentioned in the account.

By 1795 Alexander McGillivay had died, and Benjamin Hawkins had arrived among the Creeks to begin his coercive program of civilization and progress. The enlightened policies established by Hawkins, as Indian agent to the Creeks, amounted to forced acculturation, and helped to divide them more sharply into progressive and conservative factions. These pressures would shortly result in a Creek civil war, which, with American intervention, became the Creek War of 1813-1814 (Nunez 1958).

Tecumseh had attempted to lure the Choctaws into an uprising against the Americans, but the Choctaws had refused. When the U.S. Army entered the fray in the fall of 1813, the Choctaws declared war against the Creeks, and four Choctaw companies under Pushmataha served under General Claiborne. This alliance is probably to be understood as an opportunity

on the part of the Choctaws to continue their traditional war with the Creeks, rather than as an act of American patriotism by Pushmataha, as has been argued.

Documents of the Creek War bring to light the renewed presence of Muskogees in the disputed Black Warrior country. We have record of at least four Muskogee settlements on the Black Warrior River during 1813, perhaps to be interpreted as refugee towns withdrawing from increasing Georgian pressures to the east. Whatever their reasons for coming to Potagahatchee, they were considered a threat by Choctaws, Chickasaws, and Americans alike, and military actions were carried out against them during the war. These actions will be throughly reviewed in the following section, which is an analysis of the controversy over the location of the Muskogee settlement known to the Americans as Black Warrior Town.

The Creek War ended with the Treaty of Fort Jackson in 1814, at which Andrew Jackson "extorted from the (Creek) Nation twenty-five million acres of land in Alabama and southern Georgia" (Green 1979:40), ostensibly as payment for expenses incurred in the prosecution of the war. This huge cession included the portion of the Black Warrior River that lay north of the Choctaw claims, the boundary being at the present northeastern limit of Tuscaloosa County. The southern portion of the river was ceded to the United States just two years later, at the Choctaw factory at old Fort Tombecbe (Royce 1899:684). Mississippi Territory, which at that time included present Alabama, quickly extended jurisdiction over the ceded lands, and the lower Black Warrior region began to fill up with American settlers at a rapid pace.

Friendly Choctaws continued to frequent the Tuscaloosa area for some time after the 1816 cession, trading with the white settlers who had begun to establish themselves in a town. A final difficulty with hostile Creeks occurred in 1818, when a remnant party of Red Sticks under Savannah Jack came to the Black Warrior, after being suspected of committing murders of white settlers in south Alabama. At McCoun's Bluff, north of the mouth of Big Sandy Creek on the Black Warrior, the hostiles murdered three white children and a black woman. They were pursued to Gun Island, on the Black Warrior, by a group of settlers headed by Thomas Hunter. A skirmish took place on the west side of the river, which was indecisive, and although several more expeditions were made to the Warrior in order to drive out any remaining Creeks, there were no more encounters (Pickett 1962:622). Thus ends the period of Indian dominance of the Black Warrior region, and begins the period of Alabama statehood.

Bibliography of Sources: Black Warrior Region Ethnohistory

There are, regrettably, no scholarly treatments of Black Warrior River ethnohistory, either modern or of other times. The student who wishes to pursue the subject must distill his account from a great many sources, none of which offers an in-depth treatment. For the route of Soto through Alabama, Swanton's DeSoto Commission report remains the standard secondary reference, but this must be supplemented by the more modern analyses of Lankford, Curren, and DePratter, Hudson and Smith. For the colonial period, the student might do well to begin with Hamilton,

especially for the French side of the intercolonial rivalry of the eighteenth century. The maps listed below represent only a sample of the extensive series that is available for cartographic study.

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Ethnohistorical Chronology

1540	Expedition of Hernando de Soto in Alabama
1559-1561	Expedition of Tristan de Luna in Alabama
1670	Initiation of the Charles Town trade
1699	French establish colony of Lousisana
1702	Fort Louis de la Mobile founded, "Pax Gallica," French treaty with Choctaws and Chickasaws
1729	Natchez war, Choctaws accept British traders
1731	British storehouse established on Black Warrior River, withdrawn
1736	Fort Tombecbe erected
1763	Treaty of Paris, French territory east of the Mississippi ceded to English
1766	Fort Tombecbe abandoned by English
1781	West Florida becomes a Spanish province
ca. 1785-1786	Alleged "Battle of Tuscaloosa"
1786	Treaty of Hopewell establishes Choctaw eastern boundary
1793	Fort Confederation built by Spanish at old Fort Tombecbe
1797	Fort Confederation abandoned by Spanish
ca. 1805	Oceochemotla settles villages on Black Warrior River
1813-1814	Creek war, Choctaw-American raids on the Black Warrior settlements of Creeks
1814	Treaty of Fort Jackson
1816	Choctaw cession of lands east of Tombigbee River
1818	Savannah Jack raids Black Warrior settlements

BLACK WARRIOR TOWN

Black Warrior Town was the name given by whites to an Indian settlement on the Black Warrior River, associated with the military actions in that quarter during the Creek war of 1813-1814. The location of Black Warrior Town, and the historical circumstances surrounding it, have been sources of controversy since the middle of the nineteenth century. No modern historian has treated the subject in sufficient depth to clarify these matters.

Misinformation about Black Warrior Town has permeated the literature of history down to the present time. There are a number of reasons. For one, the only published accounts of the military actions on the Black Warrior that were available in the decades following the Creek war, were written long after the fact, and were flawed in important respects. For another, the errors of earlier historians were perpetuated by many later writers, who did not, or could not, consult the primary sources. Finally, the events which allegedly took place at Black Warrior Town were rapidly transformed as local folklore in the romantic tradition. The strength of local sentiment, and the local investment of energies in one version or another of a semi-folkloric event, is and always has been a powerful phenomenon.

Two Alabama counties, Walker and Tuscaloosa, presently claim Black Warrior Town. A recent official publication of the Alabama Historical Commission, undoubtedly trying to be fair in the matter, grants the honor to both (A.H.C. 1978:188, 189). But the proponents of a Tuscaloosa County location are themselves disagreed. At least three different Tuscaloosa County localities have been offered as the precise place where the elusive settlement stood.

This report will not review the many modern opinions regarding the locations and events in the Black Warrior Town story. Instead, we will take a dispassionate look at the available documentary evidence and its probable reliability. A new interpretation of the evidence will then be provided.

For those who might wish to cite this brief study, or to pursue related historical research, a disclaimer is necessary. While an effort was made to consult all reasonably available sources within the brief time allowed under the present contract, these were mainly limited to published accounts, correspondence, and maps. The author is quite certain that further relevant materials exist, for example in the McKee papers, the National Archives, and in the territorial records of Mississippi. This study should only be considered as a background evaluation for potentially much more thorough historical research.

The Dramatic Rescue of Mrs. Crawley

In 1812, a year before the major outbreak of hostilities in the Creek country, the attention of whites was drawn to a settlement of Creek Indians on the Black Warrior River. A certain Mrs. Crawley had been abducted from her home on Duck River in Tennessee, taken to the Black

Warrior settlement, and finally rescued by Tandy Walker, a blacksmith from St. Stephens. The story of her abduction and rescue attracted a great deal of notoriety at the time, and even before a reliable account of the event was published, it had become well-established in the oral tradition.

The violence was apparently spawned by the visit of Tecumseh to the southern tribes late in 1811. Tecumseh had come both as a prophet and an agent of British intrigue, urging the Indian tribes to unite in the overthrow and expulsion of the Americans. He was poorly received among the Choctaws, but his speeches among the Creeks helped to trigger the factional conflict that led to the Creek war of 1813-1814.

According to Pickett (1962:515), the one responsible for the Duck River raid and abduction of Mrs. Crawley was the Little Warrior. The Little Warrior and a party of thirty Creeks had gone to Canada with Tecumseh, in order to secure agreements with the British to supply the Creeks with arms and ammunition. On their return, the Little Warrior and his party attacked the white settlement on Duck River.

The "Reminiscences" of George S. Gaines, U.S. Indian Agent and Factor, supply the details concerning the attack, kidnapping, and rescue of Mrs. Crawley (Gaines 1964:151-154). Mrs. Crawley's husband was absent the day of the raid. Two of her four children were murdered while playing in the yard, but Mrs. Crawley had time to bolt the door of her house, and hide the remaining two children in a small potato cellar, where they were spared. From her house the unfortunate Mrs. Crawley was taken as a prisoner to "Tuscaloosa (falls of the Black Warrior)."

That Creek settlement was well known to Gaines, because it was the residence of Chief O-ce-o-che-mot-la (Oceochee Emathla). According to Gaines (1964:150), "O-ce-o-che-mot-la obtained permission of the Choctaws to make a settlement at the falls of the Black Warrior, so that the hunters of each tribe might have a resting place when visiting each other. This settlement had increased to many families before I took charge of the Choctaw trading house [in 1805], at St. Stephens, and traded largely with us." The chief had come annually to trade at St. Stephens, and on the occasion of his last visit in 1811 he had spoken privately of joining the British cause in an upcoming war.

Tandy Walker, the public blacksmith at St. Stephens and a confidant of Oseochemotla, was urged by Gaines' wife to rescue Mrs. Crawley from the grasp of the Indians. Walker consented, and in two week's time returned with the woman in a canoe. She was badly shaken, but she recovered, with the help of Mrs. Gaines, and returned to Tennessee, where she found her husband and her two remaining children alive. Gaines informed the War Department of the affair, and Tandy Walker was rewarded for his conduct by the territorial legislature (Gaines 1964:151-4).

Raids on the Black Warrior: 1813-1814

The early focus of the Creek war was the lower Tombigbee region, where there were several settlements of Americans. The massacre at Fort Mims, in which more than five hundred whites and half-breeds were killed

by a war party of Creeks, took place in late August of 1813. Through September, preparations were made by both the U.S. Army and the territorial government to meet the threat of further depredations, and to advance military forces into the Creek country. Meanwhile the Tombigbee residents were thrown into a panic. Their suspicions with regard to the source of the raids is made clear in the following excerpt from a letter posted from Mobile, September 7, 1813. "It is said that [the hostile Creeks] have left their wives and children at a western frontier settlement of the Creeks on a branch of the Tom Bigby, called the Black Warrior . . ." (Toulmin 1813). It was consequently made a part of the Army's campaign strategy to destroy any Creek settlements on the Black Warrior River.

At this time the general supposition was that the hostile "Red Stick" faction of Creeks planned to migrate en mass to Spanish territory on the west side of the Mississippi. The two western camps, "Holy Ground" on the Alabama River and the main settlement on the Black Warrior, were thought to be staging areas for this migration, and for raids on the Tombigbee settlements. Anticipating a move into the Chickasaw country by the Creeks, James Robertson, the Chickasaw Indian agent, employed and equipped a force of twelve mounted Chickasaw "rangers." In his report to the Secretary of War (September 23, 1813), Robertson described their duties.

> They are to range about Sixty miles South East of this place so as to be out of the stock range + about half way to the Little Warriors town, on the black Warrior river, which I apprehend most danger from as it is the place where the rebellious Creeks hold their Council + War dances of late, there is no house or Settlement from this place to that town on the black warrior river (U.S. Dept. of War 1813-1814b).

In another report, dated September 30, 1813 (U.S. Department of War 1813-1814b), Robertson gives the distance from Randall's Alabama River settlement to the Little Warrior's Town: 120 miles. This distance, which must be considered a rough estimate, corresponds with a point on the upper Black Warrior River northwest of Birmingham. There is no report stating whether Robertson's Chickasaw rangers ever encountered hostile Creeks from the Black Warrior settlements.

General Andrew Jackson was in Nashville when the news arrived from George Gaines about the Fort Mims massacre. Jackson, with the assistance of Governor Blount of Tennessee, spent the month of September mustering troops and arranging for the supplies necessary to conduct a campaign against the "Red Sticks." He also dispatched Colonel John McKee to the Choctaw settlements along with Captain George Smith and a small command of 25 mounted troops. McKee's orders at this point were to "watch the movements of the Creeks in that quarter and stimulate the Choctaws to a declaration of war with the Creeks" (Jackson 1926:381). Meanwhile Pushmataha, a district chief of the Choctaws, came independently to Mobile to offer the services of the friendly Choctaws to General Flournoy. That offer was accepted, and Pushmataha returned to raise four companies of Indian troops, who reported to General Claiborne at St. Stephens early in October.

For the accuracy of the next passage, below, which describes a military expedition to the Creek towns at the falls of the Black Warrior, we rely on the memory of George S. Gaines. Gaines' "Reminiscences" on the Creek War of 1813-1814 were set to paper some fifty-nine years after the fact, as Gaines approached ninety years of age (Brannon 1964:133). After relaying to Jackson and Blount his report on the tragedy at Fort Mims, Gaines relates the following:

> Col. McKee informed me that my messenger, Mr. Edmondson, arrived at Nashville in a remarkably short time, delivered my letters to Gen. Jackson and Gov. Blount, and the General had sent him (McKee) to "get out" as many Chickasaw and Choctaw warriors as practicable, and then to march against the Creek towns at the falls of the Black Warrior . . . Col. McKee found no difficulty in raising, with the aid of Maj. Pitchlyn, all the warriors necessary for this projected expedition to the Creek village at the falls of the Black Warrior, and took up his line of march within a week after his arrival from Nashville. On his arrival at the falls of the Black Warrior he found that the Chief Oceochemotla, with his villagers, had made his escape, and there was nothing left for the Choctaw and Chickasaw warriors to do but burn the deserted cabins and return home (Gaines 1964:161, 167).

This would have been about mid-September, 1813. Pickett's secondhand account is much the same, being based upon conversations with Gaines, but there are two points of divergence. Pickett specifies, firstly, that the force was Chickasaw, gathered through the influence of John "Peachland" (Pitchlyn). This is demonstrably in error. Secondly, Pickett states that the force divided upon returning to Pitchlyn's at the "mouth of the Octibaha," one part returning home and the other part going to St. Stephens to join General Claiborne. Pickett also says that McKee found the village already in ashes, but this must surely be misconstrued from a comment made to him by Gaines, who himself specifies that McKee's force burned it (Pickett 1962:549-51).

George S. Gaines' "Reminiscences" must be treated as a generally reliable document, but in this case other more secure evidence suggests that Gaines' memory has failed him on one or two points. For one thing, McKee's instructions, if we follow Jackson's correspondence on the matter, were simply to observe and to stir up the Indian allies, not to march immediately on the enemy (Jackson 1926:324, 381). For another, had the expedition occurred as early as September, the fact should certainly have been noted in the same correspondence. In fact there is little doubt that it occurred several weeks later, after McKee's return from an expedition to gather arms for the Indian troops.

Gaines' account is nevertheless valuable, since he is remembering a real event, simply placing it earlier than it actually happened, and confusing the nature of McKee's orders from Jackson. We may therefore place some confidence in the matter of the burning of the town, and note further that in one place Gaines speaks of the Creek towns, plural, at the falls of the Black Warrior.

The end of September and the early weeks of October found General Jackson ready to advance into the Creek country from the Tennessee Valley,

but stalled for want of provisions. Jackson meanwhile engaged a man named John Russell to penetrate the enemy's country and report back on any movements detected (Jackson 1926:325, 329). On the ninth of October, Russell was

> authorized to get two confidential men such as he can get and may choose and proceed across the Tennessee to the Black Water and Blackwarrior town and procure information of their strength, their Movements, and Where they have collected their stock and Negroes from which we can form a correct opinion of their design and whether they contemplate a Movement of their families, and if they do, to what point (Jackson 1926:329).

By October 15th, it was time for Jackson to act. Not only was he impatient to begin the offensive, his army was virtually starving on the banks of the Tennessee. If a few Creek towns could be sacked in short order, perhaps Indian corn could be secured for the subsistence of the main body of troops. On the 15th, General John Coffee's brigade of seven hundred volunteer cavalry and mounted riflemen was directed to "scour the Black Warrior . . ., on which were supposed to be several populous villages of the enemy (Reid and Eaton 1974:37)." On the 22nd, Coffee submitted his report from the field.

> "Indian Lands," October 22, 1813, "12 O Clock."
> Genl. Jackson,
> Agreably to your orders, I proceeded, to cross the [Tennessee] River at the upper end of the [Muscle] shoals, all my efforts failed to procure a pilot, I took with me one of Melton's sons, who said he knew not the road, he shewed me a path that had been reputed the Black Warriors path. I proceeded on it, in its whole course about 10 degrees East of South, in the early part of the third days march I met Russell who said I was on the right way. At a distance of 80 miles, I crossed a river about 60 yards wide runing to the west, where there is small deserted Indian Village, which Russel said was the Black Warriors town, being convinced it was not, I proceeded over the River, and at about two miles found a cross path leading nearly west, but not in late use. I turned on that path west, and at 13 miles distance come to a small Indian village. Corn in the fields but no person to be found got about 100. bushels corn, burnt the houses, and proceeded eight miles further, come to the main Black Warriors town abandoned by the inhabitants found some corn in the fields and some old corn in the cribbs, fresh fish of One or two Indians, and no other signs--got in the whole about 300. bushels corn, burnt their town or counsel house and about 50 other buildings this town is supposed to be the principal one of the tribe and the lowest down the river, (I am certain it is not the nearest to the Shoals) and seeing that the Indians had fled I deemed it not adviseable to go further in search of villages where no other Spoil can be had than such as we have found, and having no pilot or even any one that ever had been in this country with me am uninformed if any more are in this quarter, having been two days out of rations the most of the men are living on parched corn, I have determined to meet your army the

nearest possible--am now on a path that Russel went out and he says about 30 miles from Dick Browns . . .

Very respectfully your obt. Sert (Jackson 1926:334-5).

John Coffee rejoined Jackson on the 25th of October.

This document suggests that "Black Warrior's town" was thought to be among several Creek settlements on the upper reaches of the Black Warrior River. It is noteworthy that Jackson, Coffee, and Crockett all refer to it by that name, while John Robertson, among the Chickasaws, instead repeatedly calls it the "Little Warrior's Town." Probably it is Robertson that is correct, since he was closer and more familiar with the natives and their territory. Jackson and Coffee, when told of the Little Warrior's Town on the Black Warrior River, could easily have come up with a confused rendering as "Black Warrior's Town."

Coffee reached three abandoned villages, burning two of them. After some initial confusion, he was satisfied that the last of these towns was Black Warrior Town, his main objective, although the reference to its nearness to the Muscle Shoals suggests that he had been given some faulty information about its location.

The route is specific enough to faithfully reconstruct it. The Tennessee River was crossed at Meltons Bluff at the upper (eastern) end of the Muscle Shoals. From the Melish map of 1818 we learn that Melton's Bluff was on the south bank, near present Courtland in Lawrence County. From Melton's the march was southward along a road which held a steady bearing of 10° east of south. Precisely such a road is shown on the Melish map, originating at Melton's and intersecting on the south end a "cross path," just as indicated in Coffee's report. We can be assured on this basis that the route shown was the one taken by Coffee's brigade. After a march of "80 miles" (the true linear distance is about 65 miles), the party forded the Black Warrior River, after passing an abandoned Indian town on the north bank. This crossing was at a point near where Interstate 65 now crosses the Mulberry Fork of the Black Warrior, a few miles east of Arkadelphia, Alabama.

Now in present Blount County, the force traveled two miles southward before coming to an intersecting road, at which point they turned west. This intersecting route is labeled the "Black Warrior Road" on the Melish map. A few miles further, they encountered another Indian village, probably on the south bank of the river four or five miles east of present Dilworth in Walker County. This village was burned. Continuing on the same route, they came to a larger Indian settlement, and likewise put it to the torch.

This last settlement, at the terminus of the Black Warrior Road, is clearly indicated on the Melish map, with the label "Black Warrior Town, Burnt by Gn. Coffee." The town is spotted on the east bank of the Black Warrior River, directly opposite the mouth of Sipsey Fork, then "Shoal River," in present Walker County.

An earlier map than Melish's of 1818, though less accurate, shows essentially the same features, and strongly reinforces our conclusions

regarding the location of these actions. This is a map labeled "for General Jackson's campaign against the Creek Indians 1813 & 1814," drafted nevertheless after the conflict, probably in late 1814. That map shows both of the towns burned by Coffee, and again fixes Black Warrior town on the east bank of the Warrior, opposite the mouth of Sipsey Fork. An additional feature of the Jackson campaign map is a minor creek, shown barely north of Black Warrior Town at the mouth of Sipsey Fork, which is probably meant to represent Old Town Creek. This would put the town just south of the mouth of that creek.

Black Warrior Town is again shown in the same location on the map of H.S. Tanner, 1822, with the notation "Black Warrior T. (dest.)." Triangular village symbols are placed by Tanner both on the north and south banks of Old Town Creek, at its mouth. The La Tourette map of 1838 has it again at the mouth of Sipsey Fork. At this late date the feature was undoubtedly copied from an earlier map, as with all subsequent maps which show the location.

Having fixed these historical events in time and space, we may proceed to another document, this one penned by the famous frontiersman David Crockett. Crockett served under General Coffee during the Creek War of 1813-1814. In Crockett's autobiography, published in 1834, we find the following account of the Black Warrior Town raid.

> About eight hundred of the volunteers, and of that number I was one, were now sent back, crossing the Tennessee River, and on through Huntsville, so as to cross the river again at another place, and to get on the Indians in another direction. After we passed Huntsville, we struck on the river at Muscle Shoals, and at a place on them called Melton's Bluff. This river is here about two miles wide, and a rough bottom; so much so, indeed, in many places, as to be dangerous; and in fording it, this time, we left several of the horses belonging to our men, with their feet fast in the crevices of the rocks. The men, whose horses were thus left, went ahead on foot. We pushed on till we got to what was called the Black Warrior's town, which stood near the very spot where Tuscaloosa now stands, which is the seat of government for the State of Alabama.
>
> This Indian town was a large one; but when we arrived we found the Indians had all left it. There was a large field of corn standing out, and a pretty good supply in some cribs. There was also a fine quantity of dried beans, which were very acceptable to us; and without delay we secured them as well as the corn, and then burned the town to ashes; after which we left the place.
>
> In the field where we gathered the corn we saw plenty of fresh Indian tracks, and we had no doubt they had been scared off by our arrival (Crockett 1902:57-8).

On the whole, Crockett's memory on these matters stands up well against Coffee's field report, and no doubt several details recorded here, but not elsewhere, may be trusted. Nevertheless Crockett gives the month

as November, whereas it was really October, and there is the additional matter of his assertion that the site of this action was Tuscaloosa.

That assertion is quickly disposed of by comparison with the record of travel given by Coffee while still on the Black Warrior, an itinerary which could not possibly have brought the brigade to the Tuscaloosa area. But the damage was done long ago: Crockett's autobiography was, without doubt, the most complete and most widely read account of the raid available during the nineteenth century. We have Crockett to blame primarily for the long-standing confusion among historians between the towns on the upper Warrior, and the town or towns lower down near the falls. The settlement at the falls is never referred to in any contemporary document as Black Warrior Town, nor is the connection, if any, between the two areas ever made clear.

Pickett perpetuates the error in his History of Alabama of 1851, by saying that Black Warrior Town was "a hundred miles distant" from the Tennessee River (1962:552). That distance, which agrees with a Tuscaloosa location, suggests that Pickett was familiar with the Crockett account and did not have reason to doubt its veracity.

We now return to the narrative of events. At the close of October, 1813, Jackson and Coffee struck at the Upper Creek heartland from the north. There was a rapid sequence of engagements at Littafutchee (October 29), Tallessehatchee (November 3), Talladega (November 9), Hillabee (November 18), Emuckfau (January 22) and Enitacopco (January 24). Jackson built Fort Strother on the Coosa, remaining five months and preparing for the final engagement, to be fought on March 25, 1814, at Horseshoe Bend.

Now it will be recalled that Jackson had dispatched Captain George Smith and a small company of 25 men to assist Colonel John McKee in the Choctaw country. This unit quartered at John Pitchlyn's on the Tombigbee River, near present Meridian, its purpose being to provide security, and insure stability on that front. The assignment was probably made at the close of September, 1813.

At the same time Pushmataha, with the help of George Gaines, raised four companies among the friendly Choctaws. These Indian troops reported for duty at St. Stephens about the first week of October, and subsequently served General Claiborne through the duration of his south Alabama campaign. McKee was not among them, having agreed with Gaines to operate in the northern district.

On the 22nd of November Captain George Smith wrote to Jackson as follows:

> Col. McKee I expect here every hour whom I have been informed has succeeded in procuring ammunition for the Chocktaws to effect an Expedition against the Creeks; so soon as Colo. McKee arrives here we shall endeavor at all hazards to join your Army. We have it in contemplation to proceed on from this to a village of Creeks and a considerable number of rebellious Chaktaws on the Black Warrior situated as I am informed about forty miles above the mouth of said river. From thence if we consider our

> force sufficient we shall attack the Cawhawssau Village from whence we shall endeavor to fall in with your army some where on the Alabama. Our situation here has been too inactive a one. We long to be engaged in more active scenes with you in the heart of the Creeks country . . . Mr Pitchland has been remarkablie friendly and has furnished our little band with every kind of provision that was in his power (Jackson 1926:358-9).

This report largely clears up the matter of the supposed September raid to the falls of the Black Warrior, already discussed. Two things are apparent. First, the expedition as of the date of this letter, was still in the planning stages, being dependent on securing arms for the Indian allies. Prior to this, Smith's force at Pitchlyn's had been idle. Gaines' recollection that it took place in September (Gaines 1964:167) is clearly in error, as is Pickett's conclusion that the month was October (Pickett 1962:551). Second, the proposed expedition was conceived entirely on the initiative of McKee and Smith. Without doubt this was the first Jackson had heard of it.

We have no firsthand account of this raid, but there is little reason to suspect that it did not occur much as reported in Gaines' "Reminiscences." Colonel McKee, Captain Smith and his detachment of mounted U.S. troops, and a newly-armed force of Choctaw warriors, marched from Pitchlyn's to the falls of the Black Warrior (present Tuscaloosa). They found the town abandoned, and burned it. McKee's force returned, and some portion of the Indian allies marched south to join General Claiborne. Captain Smith rejoined Jackson at Fort Strother. While the record is incomplete, this action shows the continued concern, on the part of the whites and friendly Indians, regarding the Creek presence on the Black Warrior River. This concern lasted through the duration of the war.

By the 10th of December, McKee had written to Jackson informing him that the Choctaws and Chickasaws had "raised the sharp knife" against the Creeks (Jackson 1926:381, 457). If Jackson had received any further details concerning the Black Warrior enterprise, the fact strangely does not appear in his correspondence. It is conceivable that McKee was actually reticent about the matter in his communcation to Jackson, because neither he nor Captain Smith had any authorization to initiate an offensive against the enemy.

During the month of December, despite the fact that a force of 300 Choctaws under Pushmataha was already serving with General Claiborne in south Alabama, there was official concern over the proper use of the Choctaw and Chickasaw allies in the conduct of the war. A large party of Chickasaw warriors had been mustered, without any authorization, by Major George Colbert, and Colbert was prepared to lead them immediately into the Creek Country, where they planned to join Jackson's army. Just as they were preparing to set out, word was received from the office of the Secretary of War that they were to desist from such unsponsored actions. Jackson's army was thought sufficient to subdue the Creeks, and there were further British threats on the Gulf Coast to consider. Any forces raised in Mississippi Territory would be under the jurisdiction of General Flournoy, not General Jackson. Thus the Chickasaw allies were blocked from participating in the most attractive campaign, from their point of view, and they were displeased about it.

Flournoy wrote for official authorization to employ the Choctaws in the service of the United States, for the present ignoring the Chickasaws. The Secretary of War granted this authorization on December 29th, informing Flournoy that the Choctaws would be allowed arms, ammunition, and subsistence, and would be rewarded for their participation (U.S. Dept. of War 1813-1814a:85). This approval was seconded by the President (ibid: 101).

James Robertson, agent to the Chickasaws, wrote to the Secretary of War on December 29th, informing him that the Chickasaws desired to partipate in some active capacity, in concert with the Choctaws. Included in Robertson's letter is a summary of the recent activities and current plans of the Choctaws, as conveyed from Major Pitchlyn.

> I [Robertson] received a letter a few days since from Mr. Pitchlynn stating that a party of Chaktaws had burned a Creek village killed and scalped five Creeks killed a Chaktaw who had joined the disaffected creeks & cut off his head; that there are nearly three Hundred Chaktaws out against the Creeks at this time.
>
> Mushulatubbe King of the lower town Chaktaws has sent one of the Creek scalps to Maj. George Colbert and the Chickasaws with a letter naming that he is going out by the 11th next month [January] against the Creeks at the head of 400 Chaktaws with a determination not to return til the Creeks are conquered & he wishes Geo. Colbert & the Chickasaw warriors to unite with him & the Choktaws in assisting to exterminate the creeks (U.S. Dept. of War 1813-1814b).

In these short paragraphs we have information on three separate Choctaw actions against the Creeks. The first of these actions has an unnamed objective, but there is little doubt that it is identical with the late November raid, by McKee and the Choctaws, to the falls of the Black Warrior. Accepting this identification, we gain a few more details about the affair. Firstly, the Indian force was definitely Choctaw, as Gaines reports, not Chickasaw, as Pickett has it. Secondly, the Choctaw district chief Mushulatubbee was aparently involved. Finally, besides the burning of the town, we learn that there was a minor engagement, in which five Creeks lost their scalps. A Choctaw, who was unlucky enough to be caught sympathizing with the enemy, was beheaded by his fellow tribesmen.

Mention is also made of a force of 300 Choctaws in action against the Creeks "at this time," that is, the 29th of December. Although we cannot be sure that this was not yet another raid to the Black Warrior towns, it more probably refers to the force of about that number then serving under General Claiborne.

Robertson then speaks of Mushulatubbee's plans for a major, conclusive raid, to occur in January, 1814, for which the Choctaw chief was soliciting the aide of the Chickasaws under Colbert. The objectives for this raid are not given, but we may assume that Mushulatubbee had in mind the remaining Black Warrior and Cahaba River towns at least, if not some more ambitious itinerary. This would be another independent, unauthorized venture, of the sort in which the Chickasaws had just been forbidden to participate.

The agent to the Chickasaws thus sought the immediate opinion of the Secretary of War concerning Chickasaw participation. The reply is dated January 14, 1814.

> Sir. Your letter of Dec. 29 has been received. You are authorized to employ in the service of the United States such force from the Chickasaws as General Flournoy may direct -- + you will continue to correspond with and follow his instructions on this subject (U.S. Dept. of War 1813-1814c:163).

This answer was tantamount to a refusal, in the matter of joining Mushulatubbee's semi-legitimate operations. At least it meant a delay: Flournoy could not be expected to approve what amounted to intertribal pillaging in the name of the U.S. Government.

Robertson reports that the Chickasaws were finally in action against the Creeks on the first of February, 1814, although he fails to state the objective of their raids (U.S. Dept. of War 1813-1814b:85).

Turning our attention to southern front, General Claiborne was finally allowed to advance against the Creeks on the Alabama River on the 13th of December, 1813. Reinforced by Colonel Russell's regiment, and accompanied by Pushmataha's Choctaw allies, the army marched to the so-called "Holy Ground," which they took by force on the 23rd of the month. Claiborne left Colonel Russell in command of Fort Claiborne, and then marched back to Mount Vernon. There Claiborne's force disbanded and returned home, their terms of service expired.

The first of February found Colonel Russell planning an expedition from Fort Claiborne on the Alabama River, to the Creek towns on the Cahaba, and thence to the Black Warrior towns. The army marched as far as the Cahaba Old Towns, where they were supposed to be met by a supply barge bound up the Cahaba River. That barge never arrived, having missed the mouth of the Cahaba, and having proceeded up the Alabama River instead. The expedition rapidly fell into disaster, and was forced to return, with the soldiers butchering their horses for subsistence. The Black Warrior settlements were never reached.

At the same time, the Choctaws were again out against the Creeks on the Black Warrior. The records of the Department of the Interior reveal that in February, 1814, an expedition of 75 Choctaws under Pushmataha marched westward to engage the enemy. This force is reported to have crossed the Tombigbee just below the confluence with the Black Warrior (Halbert and Ball 1969:286). There is some evidence that this action was inconsequential. A letter to the Secretary of War from Silas Dinsmoore (March 11, 1814), records that the Choctaw warriors had returned by the 9th (or 12th) of February. They had failed to locate the enemy. It had been rumored that the Creeks had been forewarned and had fled. The expedition somehow lost about thirty horses (U.S. Dept. of War 1813-1814b). No further details have come to light regarding this Choctaw raid in early February.

Now, in February of 1814, only six months after the Fort Mims massacre, most of the battles had been fought, and General Jackson was plan-

ning a final series of actions to end the Creek War. On the 5th of February he wrote to Thomas Pinckney in Georgia, outlining his strategy. First his army was to make a sweep of the Coosa and Cahaba Rivers. Next he would swing eastward, crossing the Coosa and destroying the Hickory Ground. There he would link up with the Georgia militia, and then "destroy every warrior on the Tallapoosie." Finally he would turn his army back to the west, to scour the Alabama River. The mounted troops, in company with the friendly Creeks and Cherokees, would then be directed to scourge the Black Warrior towns, to be followed by an infantry assault in that quarter, in a vigorous "coup de main" (Jackson 1926:457).

By the 17th of the month, there was a change in plans. Jackson's mounted troops were to proceed immediately to the Cahaba, and destroy there anything that might assist the Coosa River towns. They were then to return to the main body. But simultaneously, he would instruct Colonel McKee to strike again at the Black Warrior, on the 25th of the month. This was a task which Jackson had earlier determined to perform with his own army.

> I have requested Colo. Mckee to have all the warriors of The Chickesaw and Choctaw nations on the Black warrior against the 25th Instant. If they do their duty in this quarter, I pledge myself, with the Smiles of heaven, we chrush the creeks all in the next moon (Jackson 1926:465).

We know that the Choctaw district chief Mushulatubbee had been planning such a combined Choctaw-Chickasaw excursion since late December of 1813. Presumably the source of the delay was the conflict in commands that was now beginning to surface. The Choctaws seem to have been responding to John McKee (in the absence of their agent), and McKee was answering directly to Andrew Jackson. Jackson was also hoping to manipulate the friendly Chickasaws, again through McKee. But John Robertson, the agent to the Chickasaws, and the ranking U.S. officer among them, had been instructed to answer only to Flournoy, and in fact it was Flournoy, and not Jackson, who had been given the official permission to enlist the Choctaws. In effect, both generals claimed authority over both Indian forces, while the respective ranking U.S. officers among the Indians were divided in their allegiance.

If the combined expedition ordered by Jackson ever took place, we have at hand no reliable account of it. We do have on record, nevertheless, a singular account of a battle at the Creek town at the falls of the Black Warrior. There a stockade fort is supposed to have been defended by refugees from Black Warrior Town upstream. We unfortunately have no way to assess the reliability of this account. It was recorded by Tuscaloosa historian Archibald McEachin, from information supplied by Isaac Cannon, in the year 1880. McEachin records that Cannon, then 88 years of age, was "a gentleman of more than ordinary intelligence," whose memory of early events was "remarkably distinct." Here is Cannon's story.

> About the first of January, 1816, [Cannon] and John Wilson came to Black Warrior Town [that name probably supplied by McEachin; see below], and selected a settlement in the "Indian old field," near the Seminole Fort, a short distance below what is now known

as New Town [Tuscaloosa, West End]. There was then not a single white settler within the present limits of Tuscaloosa County . . . .

A large mound, or circular fortification, lay to the right of the Indian trail, and somewhere near the present site of the Methodist [Stillman] College, which covered a half acre or more of ground; and all along the bluff below, were the charred remains of Indian huts, indicating the destruction of an Indian town by fire. The Seminole Fort was only partially destroyed, and Cannon counted more than twenty human skeletons, supposed to be Indian--bleaching on the plain near by. He subsequently saw two men, each of whom said that he was in the battle when the fort was captured, and each told about the same story. The fort was assaulted from the opposite side of the river by white soldiers and Indian allies. The Seminoles fought bravely, and even sallied from the fort whenever the soldiers retreated from the river's bank. Finally, two companies of Indians, one of Choctaws and the other of Chickasaws, stealthily crossed the river at a ford below and cut the Seminoles off from the fort, while they were making a sally against the soldiers in their front. The victory was complete. Not one of the garrison was left alive to carry the tale of disaster to his people. Black Warrior Town had been abandoned a short time before this battle was fought, and the warriors made their last stand in the Seminole Fort. The white soldiers came from Mississippi, and the Indian allies joined them from the country down the river (McEachin 1977:43-5).

In evaluating this remarkable account we should distinguish between the credibility of Cannon's personal observation of the burned fort, houses, and skeletons in 1816; and that of the story given him of the battle. The latter sounds suspiciously similar to the "Battle of Tuscaloosa" tradition that was then in circulation (cf. Lincecum 1906:449-55), and may be significantly distorted. McEachin speculated that the assault might have been led by Major Hinds and his Mississippi Dragoons (McEachin 1977:45), but the record of Hinds' unit is complete enough to rule this out. If there is any merit to this account, the best conclusion, against the evidence at hand, is that it refers to the final Black Warrior raid of February, 1814, by McKee and Pushmataha.

Cannon's use of the term "Seminoles" is not surprising. At that time "Seminole" referred not to any ethnic or political entity, but to any Indian group separated from the main body. The term is an Indian corruption of the Spanish cimarrones, meaning "wild" or "untamed" (Fairbanks 1978:171).

Summary

The facts have now been presented concerning the military actions which took place on the Black Warrior River during the Creek War of 1813-1814, along with an evaluation of certain secondary documents of less historical merit. The record is spotty, but it allows a reasonably clear picture to emerge. We have concluded that there were probably four separ-

ate military assaults (and probably many more lesser raids) on several Creek Indian towns on the Black Warrior River. These are summarized as follows.

(1) October 15-25, 1813. During these ten days Colonel John Coffee struck with 700 mounted troops from the Tennessee Valley, following the "Black Warrior Road." He encountered a group of three Creek towns near the convergence of Blount, Cullman, and Walker counties. Two of these towns were burned, including Little Warrior's Town, located on the east bank of the Black Warrior River opposite the mouth of Sipsey Fork. Coffee subsequently rejoined Jackson's army.

(2) November 25, 1813. Shortly after this date Colonel John McKee, Captain George Smith's detachment of 25 mounted gunmen, and a force of friendly Choctaw troops, marched from near present Meridian, Mississippi to the falls of the Black Warrior, near present Tuscaloosa. They found their objective, the Creek town at the falls (probably the same as Oceochemothla's falls settlement), and burned it. A limited engagement took place in which five hostile Creeks and one Choctaw sympathizer were killed. Smith's company then rejoined Jackson, and the remainder of the force returned to Mississippi.

(3) February 9, 1814. In the days preceeding this date, Pushmataha, at the head of a Choctaw force of 75 warriors, raided the Creek towns on the Black Warrior River. The Creeks had apparently fled, however, and none were encountered.

(4) Feburary 25, 1814. Andrew Jackson issued orders to Colonel John McKee to lead a combined Choctaw-Chickasaw force against the Black Warrior settlements on this date. The precise objectives of this obscure raid are unknown, and it is furthermore unclear whether it actually occurred or not. One uncorroborated account speaks of an engagement at the "Seminole Fort," near the falls of the Black Warrior, at which the Creeks were defeated.

Location of the Falls Settlement

It now remains to locate more precisely the southernmost of the Creek settlements on the Black Warrior River. This is the unnamed village consistently referred to as being at the "falls of the Black Warrior." That stream has more than one set of shoals, but in common usage, both before and after the Creek War of 1813-1814, the term referred particularly to the shoals located at the present site of Tuscaloosa.

Let us first examine the opinion of historian W.S. Wyman.

If any reader of this true story wishes to visit the site of the old Indian town, let him walk down Eighth Street, Tuscaloosa,

towards the west. At or near the west end of this street he will find a wagon gate owned by Mr. E.N.C. Snow. Passing through this gate, if he will turn to the right and walk northwardly towards the river, he will soon find himself on the spot where the old town stood. He will know it by the few Indian relics yet to be found there scattered over the surface, flint chips, arrow points, bits of pottery, and the broken slabs of sandstone which once formed the hearthstones of the ancient people (quoted by Clinton n.d.:233).

This is none other than Site 1Tu421, recorded as having no later components than Moundville III-Alabama River Phase. Dr. Wyman gives us no other evidence for his conclusion that this is the Creek War settlement, being apparently satisfied in the fact that aboriginal artifacts could be found there. We may disregard the statement as unsupportable, and note further that Site 1Tu421 was well known to the nineteenth century inhabitants of Tuscaloosa.

There is, fortunately, a more trustworthy statement on record. We have already cited Archibald McEachin's information, gotten from Isaac Cannon, that the Seminole Fort, village, and old fields stood below Newtown, on and below a bluff near present Stillman College. A more precise location is given by Thomas P. Clinton.

I always preferred to believe the statement of Martin Sims in the matter. He was bridgekeeper during the [Civil] war and perhaps was some time before. He had for quite a time been a preacher among the Choctaw Indians, and came to Tuscaloosa in 1818, two years after the first white settler. He used to say that the Indian town was on the property now owned by Mr. E.N.C. Snow on the Sander's Ferry Road, one and one half miles west of Tuscaloosa, and known as the Inge place at one time and later as the O'Connor place. And immediately across the road, on the south side of the road stood the Seminole fort. I have the testimony of different persons to this effect. First, I will say that more than twenty-five years ago an old gentleman, Elias Wilson, told me of the statement of his grandfather, Wm. Wilson, who in the early settlement of Tuscaloosa lived at this old Inge place. He came here in 1816, the year the first settler came. And he made the statement to his grandson, Elias Wilson, that the old Indian fort stood just across the road in front of his house. That would have placed the fort in the edge of my [Clinton's] field about one hundred yards west of my house in Section 29 [sic, 21], and the Indian town stood across the road in Section 28, the road being a section line. A very old negro named Charles Whitfield, who died thirteen years ago, told me that he remembered the remnants of the old fort as it appeared when he was a boy. And perhaps fifteen years ago I had this paricular field subsoiled and deeply broken and there were plowed up several large Indian cooking vessels and other relics on this particular spot. So everything considered, I think it safe to conclude that this was the location of the old fort (Clinton n.d.I:10).

The question is now left for historical archaeology to decide. The Inge place, spoken of as situated in the "old fields" across from the Seminole Fort, was on Sander's Ferry Road about 100 yards west of the intersection of Sander's Ferry Road and Clinton Drive. The area is now a suburban neighborhood. There is no official record of an archaeological site on the spot. It is undoubtedly significant, though, that nearby archaeological Site 1Tu459, located a short distance northwest of the proposed Seminole Fort site, yielded a single filleted rim sherd classifiable as Ocmulgee Fields Plain, a Creek ceramic type.

As concerns the present survey, there is no documentary evidence that the area defined contains any site of relevance to the Creek War of 1813-1814.

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HISTORY

Early Settlement of Tuscaloosa County: 1815-1819

The possibility of encountering hostile Creeks in the Black Warrior area was a contingency to be considered by all potential white settlers, as late as 1818. Immigration to these remote forests was a less secure prospect, to be sure, than that of taking up residence in the rapidly expanding territorial towns of Huntsville or St. Stephens. But the lure of vast tracts of good, unsettled land, virtually free for the taking, proved irresistible to the many who were willing to take the risk. As Pickett puts it, "the flood gates of Virginia, the two Carolinas, Tennessee, Kentucky, and Georgia were now hoisted, and mighty streams of emigration poured through them, spreading over the whole territory of Alabama" (1962:622). By the year 1818, settlements had appeared in Jones Valley (now Birmingham), in the vicinity of present-day Greensboro, and at the "falls of the Black Warrior."

Indeed, following the Treaty of Fort Jackson, the "Indian problem" in Alabama was thought to be sufficiently stable that such immigration was openly, if not officially, encouraged. Among the promoters and earliest white settlers were military men who had served with Jackson and Claiborne, and who had been allowed, during the hostilities, a first-hand preview of the quality of the ceded lands (Boucher 1947:8, Clinton 1958: 10). But there was another impediment of some importance: such informal white settlements as were now germinating at places like the falls of the Black Warrior River were strictly unlawful. No legal title could be held until the public lands were surveyed into townships, ranges, and sections by the United States Surveyor General's office in St. Stephens. And that laborious process, which would have to preceed the land auctions, would take several years. The federal government was put in the delicate position of opposing white encroachment, while at the same time the territorial government sanctioned it by establishing counties, thereby aggravating the issue of "states rights" (Clinton 1958:65-66).

Settlers nevertheless flocked to the Tuscaloosa area, simply taking the lands they wanted. By 1821, when the federal survey was completed and patents were available, there were already over 8,000 residents of Tuscaloosa County (Fourth U.S. Census, 1820); each one of them, from wealthy planter to lowly tradesman, an illegal "squatter." There had been land for the taking, but also money to be made, so that when the public lands finally came to auction, many of the residents could simply purchase title for a reasonable sum. For the immigrant planter, the Black Warrior Valley represented a chance for more expansive holdings than could be obtained at similar expense in the east. Cotton prices were high, and the crop could be raised at a healthy profit using black labor, if an inexpensive way to

transport the crop to Huntsville or Mobile could be found. For less sedentary minds, the forested valley represented a sort of last frontier, a refuge from the alarming pace of expansionism elsewhere. Accordingly such men as Davy Crockett were attracted to the falls of the Black Warrior in its first two years of settlement (Crockett 1902). By 1817, the new settlement at this location was beginning to prosper, having about 200 inhabitants and consisting of an agglomeration of log cabins with cribbed log chimneys (Wyman 1899).

The initial economic development of the newly-opened territory depended upon cotton sales in distant markets, which meant that reliable systems of overland and riverine transportation had to be developed rapidly. Experimentation with a Black Warrior River route to south Alabama had begun prior to 1817 (Halbert 1899:152n). James O. Crump, a Huntsville merchant, deserves credit for what today appears as an extraordinarily prophetic insight. Crump reasoned that it might be feasible to economically link the Tennessee Valley with the port of Mobile, via the Tombigbee and Black Warrior Rivers. It would only be required to improve the existing trail from Huntsville through Jones Valley to the head of navigation on the Black Warrior, to establish a wharf at that location, and to arrange for a flatboat to ascend the river from Mobile. The feat was successfully attempted in 1816, as Crump brought a cargo of sugar, coffee, rum, wine, oranges, and dry goods from St. Stephens to Huntsville in less than a month (Halbert 1899:152). This earliest precursor of the Tennessee-Tombigbee Waterway undoubtedly inspired confidence among the first planters and merchants of the Tuscaloosa area.

The beginnings of a political superstructure for the area date to 1817. In that year Alabama Territory was created, with its capital located at St. Stephens. Shortly thereafter, Tuscaloosa County was organized, and the already existing settlement at the falls was partially legitimized by the act of reserving that tract, for eventual entry and public sale as an official town site. The town of Tuscaloosa was incorporated in 1819, the same year that Alabama achieved statehood (Clinton 1958:25-26).

Old Town and Newtown: 1820-1826

Early nineteenth century Tuscaloosa (more popularly spelled "Tuskaloosa" at that time) was divided into two adjacent, independent settlements. The original town ("old" Tuscaloosa) was confined to Section 22 of Township 21 S., Range 10 W. The adjoining settlement corresponded to the fraction of Section 21 lying south of the river. This was called Newtown (now "West End"). The two settlements left a history of mutual competition and public jealousy.

The reason for this competition resides in the fact that the survey of the original settlement, and the first auction sale of lots therein, was delayed until mid-1821. The survey had been imminent in the minds of residents and incoming settlers for many months, because of the anticipated relocations that would be caused by the act of imposing regular streets and lots on a haphazard accretion of cabins. Consequently there arose a general reluctance to establish new residences within the town boundaries, as no clear titles were to be had.

This predicament did not escape the notice of certain Tuscaloosa entrepreneurs, who saw a way to turn it to profit. Their plan was to incorporate themselves, and to jointly purchase adjacent Section 21. They would have the tract privately surveyed into streets and lots, and the lots would be offered for sale, with title, months ahead of the projected auctions in Tuscaloosa.

Section 21 was available for purchase in 1820 as a result of an act of the United States Congress, which granted a full township (36 sections, each one square mile) to the American Asylum at Hartford (Connecticut) for the Education and Instruction of the Deaf and Dumb (Annals of Congress 33:2514). The Asylum's agent, William Ely, for whom Elyton is named, arrived in Alabama early in 1820 in order to select the lands. Ely was by all evidence a shrewd businessman, choosing tracts, four sections at a time, in prime locations, and selling them immediately to local land speculators. Such resale was in spite of the provisions of the grant, which specified that the "land shall be and forever remain to the use of said asylum, for the education and instruction of the deaf and dumb" (Hoole 1950:37).

Ely's selection of lands in the Tuscaloosa vicinity was particularly strategic. Recognizing that the town of Tuscaloosa would soon expand beyond its Section 22 limits, he chose parcels on both sides of the Black Warrior River in a pattern literally boxing in the town on the east and south. Tuscaloosans were naturally outraged, and they reportedly came close to mobbing Ely (Clinton 1958:43, Boucher 1947:15).

William Ely was not much impressed with Alabama, but his surviving letters offer a valuable candid account of conditions of the time. He found Tuscaloosa a bit uncouth for his eastern tastes.

> It is but 4 or 5 Years since the first white Family settled here & the Population now may be from 6 to 800 Souls, not one of whom, except a few to whom I have sold Land since I came here, have any title to the Land they live on. What they call their houses, are either the most despicable rough dirty and uncomfortable rolling log cabins, or less durable and more mean buildings; most of them without a single Pane of Glass, with scarcely a saw'd board or Plank, Nail, or any other Iron about them, all with wooden Chimneys and fire Places & almost as destitute of furniture as of Glass or Iron, some have no floor but the bare earth, others have split flat pieces of Timber, or rough boards, laid either flat on the earth or on logs or poles lying on the Ground without any fastening; others again are raised from the ground high enough for Hog dogs, Cats & fowls to go under, which is their common place of retreat from bad Weather & I have sometimes been very much annoyed by the growling, squealing, barking, squalling, & cackling of those animals un[der] the floor where I slept (Hoole 1950:64).

Ely's letters discuss many other aspects of frontier existence in west-central Alabama, and he refers to the local government of 1820 as "mobocratic."

Nevertheless the agent for the Asylum found a ready buyer in the newly-formed corporation of 12 local investors, who came to be known as the Newtown Company. After arranging for the purchase of the Asylum lands, the company immediately had Section 21 surveyed into ranges of streets and town lots, the remaining lands being partitioned among the investors. Initially the new settlement was named "the Lower Part of the Town of Tuscaloosa," but shortly thereafter it became known in popular usage as Newtown (Clinton 1958:43).

The county deed record of the years 1821-22 testifies to the rapid pace of growth in Newtown. Newtown lots were quickly bought up by settlers anxious to hold clear title to land, something which old Tuscaloosa could not yet offer. A surviving plat of Newtown shows the lots and streets spread over most of fractional Section 21 south of the river, except for the western margin and northwestern waterfront, the area now largely occupied by the Tuscaloosa Country Club. Of 536 town lots, the "Commissioners of the Town of Lower Tuskaloosa" reported to the shareholders that 518 lots were sold in the first year (Deed Book 1:250-1), at prices averaging $30 to $50 per small lot.

The Newtown venture must be judged, altogether, a success in its early years, although the corporation was not long-lived. The price of town lots climbed during the 1820s, and investors who had initially purchased several Newtown lots, offered them again to prospective buyers at a profit. An active business community flourished along the main street, with stores, warehouses, offices, and a large hotel. A wharf was built on the Newtown riverfront, and a saw mill, tan yard, and cigar factory were established within the town limits. A ferry was put into service, and a Newtown bridge was authorized by the Alabama Legislature, though it was never built. Competition between Newtown and old Tuscaloosa was acute, and for a time the Newtown voters succeeded in having the county court house and jail moved to their part of town (Clinton 1958:44, Smith 1889: 24-26).

The demise of Newtown as an active commercial entity is attributable to the fact that steamboats could navigate one additional mile to the upper wharf, in Tuscaloosa proper. That extra mile to the head of navigation was incentive enough for steamboat lines to favor Tuscaloosa business over that of Newtown. Consequently Newtown commerce was gradually abandoned, and the town fell into decay, as many of the residents moved to the upper town. The Newtown corporation was dissolved in 1825, and in the same year the corporate limits of Tuscaloosa were expanded beyond Section 22 (Clinton 1958:54). Finally a major tornado, in 1843, destroyed a large proportion of the remaining buildings in Newtown (Smith 1889:26).

Plantation and Frontier Economics: Frontier Capitalists

Matthew W. Clinton quotes a letter of Joseph Noble, written to a friend in 1818 from the "Falls of Tuscaloosa."

> This town makes but an indifferent appearance with respect to buildings, but it contains some very respectable inhabitants, and has, I suspect, more retail trade than Saint Stephens and

> Jackson put together. The population of the town is about six hundred, and probably will not increase until the lands are sold . . . Choice lots will sell for $30.00 at the sales, without doubt. The neighborhood affords beautiful highlands . . . and I should be content to own them at a fair price; but there are capitalists who will give forty dollars per acre for them (Clinton 1958: 30).

Crucial to an understanding of the frontier economics of early nineteenth century west-central Alabama is an appreciation of the role of the "capitalists" spoken of in this letter, who were able to outbid this would-be landowner, and who were in fact responsible for the bulk of the retail trade that is also mentioned.

At the simplest level of analysis, there were only two ways to realize a large return on a investment in this region during the early years of white settlement. Both sources of wealth were naturally exploited in full by those who were financially capable of making the necessary outlay. One was cotton farming on a large scale, using black slave labor, transporting the cotton via steamboat, and employing commission merchants to deal with buyers in distant markets. The other lucrative possibility was to invest in one or more of several potential enterprises exploiting the instability of population, the instability of prices, and the lack of established free market competition that accompanied the great influx of farm workers and homesteaders.

The investors, of whom there were many, are generally referred to in contemporary documents simply as "merchants." A close examination reveals, nevertheless, the modesty of that appelation: these were not mere storekeepers. They are difficult to characterize as a group because of the diversity of their investment interests, but this diversity, indeed, is what distinguished their careers. Many did operate retail stores or warehouses, as one facet of their business lives, but what characterized these men as a group was their willingness to finance virtually any economic adventure in town or country, that could be expected to turn a profit. Thus it is perhaps more fitting, in reference to them, to adopt Nobles' word, "capitalists," than to acquiesce to a more polite but less accurate styling as "merchants."

Such men were the majority of the Newtown shareholders, among whom we find individuals historically classed not only as "merchant" but as a professor of mathematics, a tavern operator, a state senator, a physician, a plantation owner, a lawyer and politician, and a chief justice of the county court. Their backgrounds, from what little can be known, seem as diverse as their attributed vocations. Valuable personal sketches of the lives and character of several of Tuscaloosa early capitalists are offered in William R. Smith's Reminiscences (Smith 1889:92-129). By combining Smith's observations with the profusion of factual details concerning the business transactions of these same men, preserved in the county records, it is possible to piece together a summary of their modes of accumulating wealth.

Such prominent early Tuscaloosans as George Cox, James Hogan, Henry Snow, James Dearing, and Otis Dyer are remembered by Smith as "merchants,"

and each of them operated a storehouse supplying the material needs of a rapidly expanding populace. Because Tuscaloosa was already the largest town in west-central Alabama, it served as a hub of commerce for a sizable area. Mercantile stock was shipped by steamboat upriver from the port of Mobile, and the steamboats, after taking on a consignment of cotton or industrial products at the Tuscaloosa or Newtown wharf, would then return to port. It has been suggested that the already prosperous mercantile business in Tuscaloosa received additional stimulus from the removal of the state capital to that town in 1826 (Boucher 1947:33-34).

But these same individuals, like the shareholders of the Newtown corporation, were also invariably occupied in land speculation, the one virtually infallible, and consequently irresistible, source of instant profit of the time. Vast tracts of recently surveyed rural public land were offered up, all at once, at auction, and could be had at a low price. Similarly town lots were sold at auction, and could be bought, several at a time, for resale to newcomers. Clearly the prices could only go up as long as the stream of immigration continued unabated, and so it was only necessary to outbid those potential buyers, who with more limited resources, would attempt smaller purchases (Abernethy 1965:69). Consequently speculators could turn their profit from other enterprises into investments in both rural farmland and urban real estate.

Another common enterprise of the merchant capitalists, arising partly from the insecurity of the state banks, was private moneylending. This was, in fact, much more risky than land speculation, but the deed records of the period nevertheless attest to a profusion of credit, of securities, and endorsements. There is an accompanying record of defaults, of forfeiture of collateral, and bankruptcy.

Beyond controlling mercantile interests, engaging in real estate speculation, and moneylending, a number of other activities among these investors appear commonly enough in contemporary records to warrant mention. Several of them had other business interests, for example the operation of ferries and toll roads, the management of hotels, and the operation of a few manufacturing companies. Several were, in addition, involved in city, county, and state politics.

To summarize, an examination of the facts concerning certain prominent men of early Tuscaloosa County reveals that they played a major role in the local economy, in fact controlling much of the circulating private capital during the period of early growth. These regional monopolists, numbering perhaps two dozen, appear to have invested in a wide range of moneymaking enterprices, in addition to operating mercantile firms. Thus a newcomer to Tuscaloosa County in 1830 could expect to pay road and ferry tolls to one of these individuals, to purchase provisions from them, to purchase a town lot or a rural farm from them, perhaps to secure a loan from them, and in some cases even to have them levy taxes in their political roles. This brand of frontier capitalism seems to have been spawned by the uncertainties of a rapidly changing market, accompanying a rapidly expanding economic base resting on cotton production.

Plantation and Frontier Economics: Planters and Slavery

The great population influx of the years 1816-1820 was as much due to the price of cotton on the American and European markets as it was to the availability of inexpensive land. During these years cotton prices peaked at 30 to 35 cents per pound, greatly enhancing the profitability of cotton monoculture and driving up the value of a slave (Abernethy 1965:83). This induced eastern planters to investigate the newly-offered lands, and in many cases to relocate on the Alabama frontier.

In the early years the average plantation tended to be primitive in its furnishings, with the master's house often being nothing more than a large log cabin. By the 1830s, however, most large plantations had assumed the familiar characteristics of the antebellum southern rural estate. The "big house," or residence of the plantation master, was typically a spacious white two-story frame building with a portico and colonnade. Usually to the rear were several auxiliary buildings: barns, slave quarters, an overseer's house, a smokehouse, a ginhouse, and a cotton press (Abernethy 1965:78).

The larger Tuscaloosa County planters generally owned between 25 and 100 slaves (Herzberg 1955), although the overall average slave-to-master ratio was much lower, because of the large number of slaves employed by non-planters as domestic servants. The labor strength of a plantation was determined by adding up the ratings assigned to individual slaves, according to their productiveness: there were full hands, three-quarter hands, one-half, and quarter hands. Each full hand was expected to cultivate five to six acres of cotton, and five to six more of corn (Abernethy 1965:78-79).

The larger plantations were practically self-sufficient. Subsidiary crops, grown in addition to the cash crop, were diverted to the subsistence of the workers, as were the products of raising pigs. Meal and pork was issued to the slaves in a weekly allowance, and this was supplemented through foraging. The yearly cost of keeping a slave clothed, fed, and medically cared for, averaged only 20 to 25 dollars (Abernethy 1965:79).

Planters in the Tuscaloosa area were dependent upon steamboat service on the Black Warrior River to take the cotton crop to market, and upon commission merchants to see that the crop was sold at a fair price. While cotton monoculture cannot be said to have ever been wholly unprofitable, it was nevertheless a speculative business. Planters were completely at the mercy of uncertain, and generally falling, cotton prices set in distant eastern and European markets. A crisis developed as cotton prices dropped to ten cents per pound in the late 1820s, causing the state government to recommend crop diversification (Abernethy 1965:84).

In the absence of severe economic adversity, cotton remained the cash crop, while corn was the most important secondary crop. The ratio of cotton to corn production was determined jointly by the price of cotton, the requirements of the slaves, and crop scheduling considerations. In times of relatively high cotton prices, the planter might elect to intensify cotton production, and to buy his corn from other farmers (Abernethy 1965:79).

While plantation cotton farming dominated the rural landscape of Tuscaloosa County during the early nineteenth century, there were also numerous small farmers, whose main crop was not cotton but corn and oats. They often cultivated tracts of good land that were too isolated to be of value to the major plantations. As a class, these rural farmers were less profit-minded than were cotton planters, cultivating mainly for subsistence, and selling surplus corn, chickens, eggs, and swine in the town markets. Farming mainly to achieve economic independence, such farmers were not in direct competition with the plantations, and were little affected by international prices, or the availability of water transportation (Abernethy 1965:90). William R. Smith portrays the life of the rural Tuscaloosa County farmer as an idealistic, uncomplicated retreat from the pressures of urban life (1889:111-121).

Transportation

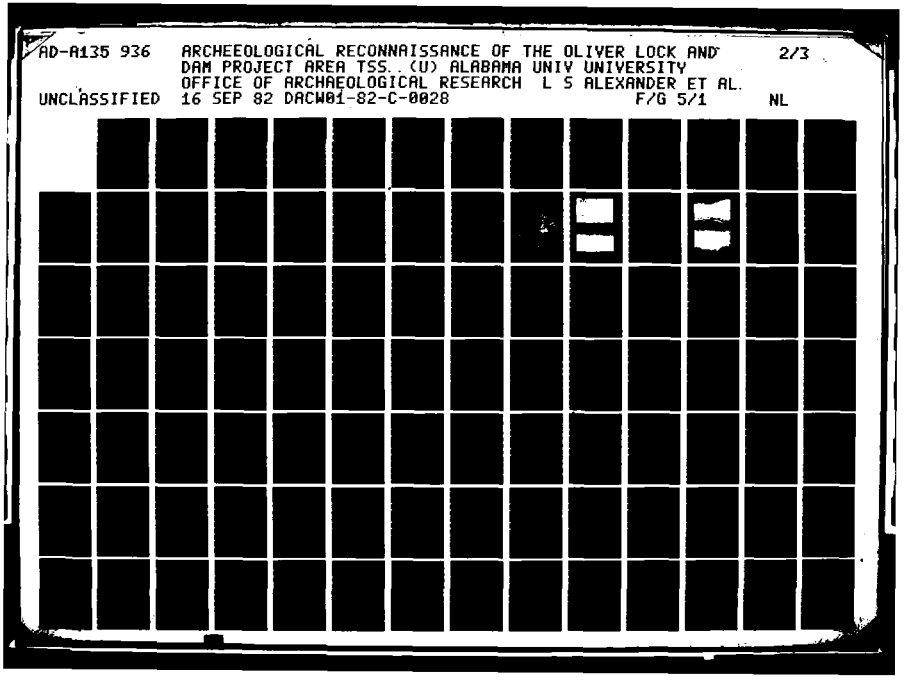
Modes and routes of transportation are an important aspect of any historical landscape, because they partially determine, and are mutually determined by, patterns of land use. Consequently, the history of the Black Warrior River Valley near the Fall Line is reflected in the state of the transportation network at any given time.

When the first permanent white settlers arrived in the area in 1815-1816, it was by means of an existing, mainly aboriginal, network of trails. There are some historical data concerning these, and, in one sense, a few of them still exist, as the original improved roads and finally the modern highways were often established along former aboriginal traces.

The great "English Indian Trail" was one of the principal east-west routes, linking Charleston on the Atlantic Coast with the Chickasaw country in northeast Mississippi. This horse path traversed the Creek country at Okfuskee and Coosa, and, according to Clinton, crossed the Black Warrior River at "Squaw Shoals," the present location of Lock 17 in northern Tuscaloosa County (1958:2). From this crossing the route headed west, to intersect the Tombigbee River south of present Columbus. It was used by the earliest English traders.

A more southerly route linked the Alibamus, and Fort Toulouse, with the Chickasaws. This path, which appears on the map of Crenay (1733), is called by Myer "the Alabama-Chickasaw Trail" (Swanton 1922: Pl.5; Myer 1928:Pl.15). It likewise traversed the Black Warrior River in the vicinity of present Tuscaloosa County, but the precise location of the crossing is unknown.

A third east-west trail extended from Coosa, near present-day Childersburg, west to French Fort Tombecbe, near present day Epes. This route, as reconstructed on a map prepared under the supervision of Peter Brannon, passed through Tuscaloosa County at or near where the city of Tuscaloosa now exists, crossing the Black Warrior River a few miles below the city. There is testimony of early Tuscaloosa settlers that Sander's Ferry Road followed an aboriginal trace, and it is possible that this was a portion of the "Kousa-Tombecbe" trail. Thomas P. Clinton, in an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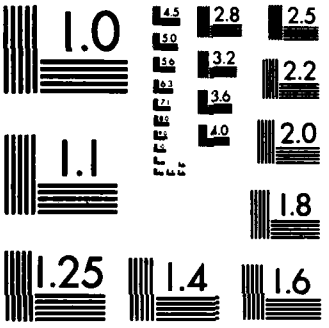

published scrapbook compiled in the early decades of this century, states the following:

> I also have it on good authority that an old trail existed leading from Tuscaloosa to Sander's Ferry nine mile west of Tuscaloosa. As best I can understand my informant, the route was very much the same as the present public road. He . . . expressly stated that the route was an Indian trail . . . Also, he stated that when the Elder Hood came to the present Sander's Ferry landing [in 1831] he found some Indians operating a ferryboat, pinned together with wooden pins. No nails were used in the building of the boat (T.P. Clinton n.d. I:30).

The existence of this route would help explain the location attested for the "Seminole Fort" and village on Sander's Ferry Road, discussed earlier.

There is some evidence that the principal early nineteenth century route of immigration to the Tuscaloosa area, known as the Huntsville Road, was in earlier times an Indian horse path. Also known as the Bear Meat Cabin road, the trail went south from Ditto's Landing on the Tennessee River (now Whitesburg), through Jones Valley to the falls of the Black Warrior River (M.W. Clinton 1958:36-37). The route was first improved for wagon transporation by James O. Crump in 1816 (Halbert 1899:152n).

Yet another local aboriginal trail appears on the Melish map of 1818 as the "Black Warrior Road." It is shown extending northeast from Black Warrior Town, in present day Walker County.

In the early nineteenth century, river travel was a vital mode of transportation. The Black Warrior River offered communication and commercial links with the early population centers of south Alabama: Cahaba, Jackson, St. Stephens, and Mobile. Flatboats laden with merchandise had been brought up the river to the falls as early as 1816, and the first steamboat made the round-trip from Mobile in 1821 (Wyman n.d.). At least four steamboat lines were in regular service to Tuscaloosa by 1826 (Boucher 1947:79), and that number steadily increased in subsequent years. These were generally large, shallow-draft side-wheelers (M.W. Clinton 1958:98). The principal landings were the Newtown wharf and the Tuscaloosa wharf. The shoals, beyond which the steamboats could not navigate, began just above the Tuscaloosa wharf about where the present bridge to Northport stands, extending for about two miles upstream with a fall of 24 feet (Clinton 1958:96).

Regional cotton plantations relied heavily on the steamboat service to Tuscaloosa, as the least expensive mode of transporting large quantities of bales. According to Matthew Clinton,

> Farmers in this section of the state brought their cotton to Tuscaloosa for shipment to Mobile and bought their supplies before making the trip back home. Since Tuscaloosa was at the head of navigation on the Warrior, the area dependent on river transportation from this place was considerable. Farmers from Pickens, Lamar, Fayette, Marion, and Walker counties found it convenient to trade in Tuscaloosa and Northport (Clinton 1958: 97-98).

At least two cotton storage houses were built in Tuscaloosa prior to 1832, each having a capacity of 2,000 bales (Boucher 1947:79). The cotton would be brought in and stored, between steamboat arrivals, and during several months of each year, generally in the summer and fall, during which the river was too low for the safe passage of the steamers (Boucher 1947:9, 78). The river prevailed as the primary mode of transporting cotton until after the Civil War, when the burden was gradually shifted to the railroads.

The network of roads radiating from the growing population center of Tuscaloosa was gradually improved and expanded in the early years of white settlement, from a beginning of rough horse paths unfit for wagons, to the mid-nineteenth century system of maintained "turn-pikes." By 1830 the principal routes had been established, with regular stage and mail service to other parts of the state and Mississippi. The Huntsville Road connected Tuscaloosa to Jones Valley and northeast Alabama, passing through Roup's Valley, Elyton, and Blountsville. Another route from Morgan County, known as the Crabb Toll Road, was opened in 1822. The St. Stephens Road, later known as the Greensboro Road, ran south from Tuscaloosa through Carthage, Greensboro, and Demopolis and thence to the former territorial capital of St. Stephens. The road to Sander's Ferry was improved at an early date, and Foster's Ferry Road branched from it to connect with the Foster settlement. From the north end of the Tuscaloosa ferry at Northport there were two major routes, the Columbus Highway branching west to Mississippi, and the Byler Road extending north to Tuscumbia. Other roads connected with Montgomery, and with Cahaba, via Centreville (Boucher 1947:81-85, M.W. Clinton 1958:36-38). Mail service reached Tuscaloosa as early as 1819 (Boucher 1947:85-86), and stage lines were in service to most parts of the state by 1830, with coach houses spaced along the roads every 10-16 miles (M.W. Clinton 1958:102-103).

Although the voters of Tuscaloosa County authorized, by a referendum of 1858, the extension of the Northeast and Southwest Alabama Railroad to Tuscaloosa, the construction was delayed by the Civil War, and a railroad did not actually reach the city until 1871 (M.W. Clinton 1958:124). In that year, the Alabama and Chattanooga (now Alabama Great Southern) Railway entered service to the area, making Tuscaloosa one of the last major population centers in the state to receive rail service. As a result, steamboat lines remained the dominant mode of shipping in west-central Alabama until the last quarter of the nineteenth century. In 1898 another rail line, the Gulf, Mobile, and Ohio, entered service to Tuscaloosa, the company constructing a long wooden trestle across the Black Warrior River parallel to the extant bridge, the latter having first been built in 1835 and twice rebuilt (M.W. Clinton 1958:97, 102). Afterward the Louisville and Nashville Railway became the third rail line to serve the county.

Through the Civil War: 1826-1865

At the achievement of Alabama statehood in 1819, Huntsville was selected as a temporary state capitol. That location was as inconvenient to the district representatives as had been the territorial capitol at St. Stephens, because of the distance of travel and poor conditions of the roads. A more central permanent location was quickly found in Cahaba, a

small town on the banks of the lower Alabama River. By 1825, nevertheless, the inadequacy of that location was being felt, in the occurrence of outbreaks of malaria and in the frequency of flooding. After a struggle between the communities of Tuscaloosa, Montgomery, Cahaba, Selma, Centreville, Greensboro, Wilson's Hill, and an eighth town in Autauga County for the honor, Tuscaloosa secured the distinction and served as capital of Alabama from 1826 to 1846. A capitol building was erected, and the presence of the seat of state government brought additional prosperity to the growing settlement. Along with the seat of government, the Bank of the State of Alabama removed to Tuscaloosa (Dowling 1939:4).

The population of Tuscaloosa and of Tuscaloosa County grew rapidly and steadily in the decades following settlement. The following figures (Table 3) are revealed in the United States Census records for 1820, 1840, and 1860 (Fourth, Sixth, Eighth U.S. Census).

Table 3. U.S. Census Returns, Tuscaloosa County, 1820-1860.

	White	Slave	Free Negro	Total
1820	5,958	2,325	0	8,283
1840	9,948	6,479	79	16,427
1860	12,971	10,145	84	23,116

These figures represent a mean annual rate of growth of 4.5 percent. The percentages of slaves owned were slightly below the state average for the same years (Herzberg 1955).

Accompanying the population increase, and with the establishment of commercial steamboat lines and improved overland routes, several industries were attracted to Tuscaloosa. The Black Warrior Cotton Factory, a manufacturer of woven cotton goods, was established on the banks of the river in 1846. A few years later the Leach and Avery Foundry began operations, manufacturing iron plows, farm tools, and industrial machines. During the Civil War the Leach and Avery machine shop manufactured cannons for the Confederacy. Early in the 1830s, a coal mine was opened by Oliver Keene six miles from Tuscaloosa, exploiting the coal seams at the southern end of the Cumberland Plateau. According to Dowling (1936:4), the mining procedure known as "ditching" prevailed, which made use of surface outcrops. Other important pre-Civil War industries included Foster's tannery and leatherworking shop, Daniel Cribb's jug factory, and a papermill (M.W. Clinton 1958:87-90, Dowling 1936:4).

The industrial schedules of the eighth U.S. Census (1860) for Tuscaloosa County list those establishments with a total annual production equivalent to five hundred dollars or more. Included are three boot and shoe factories, one carriage manufacturer, twenty-two flour and meal mills, three furniture factories, two hat factories, four tanneries, one planing mill, twenty-three sawmills, one lime manufacturer, three commerical potters, three saddlery and harness makers, one sash, door, and

blind manufacturer, one cart and wagon maker, and one wool carding company. The combined number of workers employed in industry for 1860 was 428, producing goods valued at $515,323 (M.W. Clinton 1958:90-91).

With the growing prosperity, the number of small businesses and schools in the Tuscaloosa area likewise increased during these years, providing services to the growing population and thereby contributing to the economic development of the region. By an act of the state legislature, The University of Alabama was authorized in 1819. A site was selected east of Tuscaloosa in 1827, and the school was ready to receive its first students in 1831. After the removal of the state capitol to Montgomery in 1846, Tuscaloosa suffered a temporary setback in population and economy, but the University was retained. Indeed the thirty-year period of growth inspired such confidence that a newspaper editor of 1846 stated, "We predict that the day is not remote when Tuscaloosa shall become the Pittsburgh of this section of the Union" (Boucher 1947:110). This was not to be: Tuscaloosa proved too distant from the iron ore and coal seams to partake in the industrial boom experienced by Birmingham and Bessemer, and the advantage of being at the head of navigation of a major river was lost with the demise of the steamboat lines, the construction of locks, and the coming of the railroads. The area remained predominantly agricultural through the nineteenth century, and the urban center of Tuscaloosa was gradually outgrown by other cities of the mid-south.

West-central Alabama was not an active theater of conflict during the Civil War. Nevertheless, the five year war had a profound effect on the area, as it did elsewhere in the south. Five military units were mustered from Tuscaloosa County, and several Tuscaloosans served as high-ranking officers in the Confederacy. As many as 3,500 inhabitants of Tuscaloosa County entered military service during the conflict, drawing heavily from the ranks of the agricultural and industrial labor force (M.W. Clinton 1958:135-143).

Both the agricultural and the industrial sectors turned to a wartime economy. Employing a system of tax-in-kind, the Confederacy extracted one-tenth of the agricultural produce from each farmer not holding an exemption. The two major industries of Tuscaloosa, the Leach and Avery Foundry and the Black Warrior Cotton Factory, both converted to production for the Confederate government, as did a few other smaller enterprises. The cotton factory alternated production: five days a week were devoted to producing cotton goods for the government, while the sixth was devoted to public sales (M.W. Clinton 1958:159).

In the closing days of the war, Tuscaloosa County was the scene of a single military operation, known as Croxton's raid. Croxton's federal unit was sent to Tuscaloosa from Elyton with orders "to destroy the river bridge, the factories, mills, military school (University), and whatever else might be of benefit to the rebel cause" (Dowling 1939:6). After an awkward skirmish near Vance, where Croxton's unit unexpectedly encountered a reluctant Confederate force, the northern soldiers pushed on to Northport, to attack Tuscaloosa from across the bridge. In this operation they succeeded, destroying factories, warehouses, and putting the torch to the University. The University's military cadets attempted some resistance to the federal troops, in an ill-advised fight which matched outnumbered

fifteen- and sixteen-year-olds with obsolete muskets, against seasoned soldiers with Spencer repeating rifles. After someone was shot in the foot, the cadets withdrew to eventually disband (M.W. Clinton 1958: 160-164).

Reconstruction and Post-Bellum Development: 1865-1980

While the Civil War was a severe blow to the regional economy, the basis of that economy, cotton agriculture, soon recovered despite the lack of capital, an inadequate post-war labor force, and the difficulty of replacing tools. The dominance of cotton as a cash crop continued until the arrival of the boll weevil plight after the turn of the century. The abolition of slavery and the post-war poverty of many white farmers required a shift in the organization of agricultural labor, toward sharecropping as the dominant mode. As tenants arranged to lease the tracts of land they farmed, and moved their domiciles directly onto the fields, the cultural geography of rural farming was significantly changed. Such arrangements, nevertheless, allowed patterns of rural land ownership to remain for some time much as they had been prior to the Civil War. For example, Robert Jemison's extensive Cherokee plantation west of Northport survived the reconstruction years largely intact, as tracts were leased to small-scale farmers (e.g. H. Cummings, Deed Book 10:177). The sharecropping pattern languished with the demise of cotton as the principal crop in the twentieth century, leading to the more diversified, mechanized agricultural pattern seen today.

The first railroad link to Tuscaloosa was completed in 1871, and with the railroad came the revitalization of industry. Concurrently a large development firm was organized, to be headed by W.C. Jemison, one-time mayor of the city. This was the Tuscaloosa Coal, Iron, and Land Company, whose land ventures included the purchase, and resurvey for development, of much of the land surrounding Tuscaloosa. Their prospectus of 1887 boasted of the city's industrial potential, citing,

> Two cotton mills employing 420 hands and turning out cotton yarn, plaids, and "checks and stripes" in quantity; two brick yards; two foundry and machine companies; a yarn mill; a street railway; a brick and tile company; a cottonseed oil company; a grist mill; a suspender factory; and a wool carding plant (Dowling 1939:7).

Under contract were,

> Three railroads, Friedman Furnace, Merchants National Bank, electric light and ice company, a public school, a cottonseed oil gin company, two brick companies, a building and loan association, a new four-story hotel nearly complete, and many residences (Dowling 1939:7).

The industrial development of central Alabama was quick-paced in the final years of the nineteenth century, and as this development blossomed, it became more pressing to open the Black Warrior River for navigation above Tuscaloosa. Mayor William C. Jemison was among the strong supporters of this idea, and in March of 1884 he received the blessing of Con-

gress on the project (Green 1980:17). The initial developments, beginning in 1895, consisted of removing the falls at Tuscaloosa. Three locks were built, numbered 1, 2, and 3 (later to be renumbered 10, 11, and 12), raising the river a total of 32 feet in a two mile stretch. According to Ben A. Green, congressional appropriations for the project were maneuvered by an interesting political sleight-of-hand: Congressman John H. Bankhead had managed to give his fellow legislators the impression that two rivers were involved, one being the Black Warrior (above Tuscaloosa) and the other being the Warrior (below Tuscaloosa) (Green 1980:73-74).

The chronology of the subsequent development of the Black Warrior River system of locks (Table 4), up to the time of construction of Oliver Lock and Dam, is as follows (Dowling 1939:14).

Table 4. Black Warrior River Development 1895-1915.

Lock No.	In operation since	Cost.	Location (Nearest town)
1	1908	$ 560,290	St. Stephens
2	1914	560,114	Pennington
3	1914	609,622	Oakchia
4	1908	479,000	Demopolis
5	1908	501,000	Cedarville
6	1908	443,000	Sawyerville
7	1903	225,600	Wedgeworth
8	1903	212,000	Akron
9	1903	202,000	Powers
10	1896	244,500	Tuscaloosa
11	1896	170,000	Tuscaloosa
12	1896	160,000	Tuscaloosa
13	1905	203,200	Tidewater
14	1910	414,714	Searles
15	1910	430,233	Kellerman
16	1915	520,853	Kellerman
17	1915	3,174,070	Kellerman

On January 13, 1896, the first steamer to pass upriver from Tuscaloosa, the tugboat Baltimore, entered the completed locks with a cargo of dignitaries and speechmakers. Once again pronouncements were made to the effect that Tuscaloosa was destined to become the Pittsburgh of the South (Dowling 1939:13). The Warrior River barge line was put into service in 1918 (Green 1980:73).

Construction on a new lock and dam to replace old Locks 10, 11, and 12 began at Tuscaloosa in 1937. The smaller locks were removed, and the new facility, christened the "Tuscaloosa Lock and Dam," was completed by 1939, at a cost of $3,700,000. Later the name was changed to the William B. Oliver Lock and Dam, to honor its strongest supporter (Green 1980:107, Dowling 1939:14).

The lumber, coal, and steel industries in the lower Cumberland Plateau grew and prospered throughout the twentieth century, each making use of the river and of the railroads to transport their products. Twentieth century industries such as the Gulf States Paper Corporation, the Central Foundry Company at Holt, the B.F. Goodrich Company, and the Hunt Oil Company, have gradually usurped the position of agriculture as the economic cornerstone of the Tuscaloosa and Black Warrior region.

THE SURVEY AREA: LANDMARKS OF THE EARLY NINETEENTH CENTURY

The history of the proposed site for the relocation of the William B. Oliver Lock and Dam (Figure 1), and the historical significance of the cultural properties located thereon, is linked in almost every particular to the regional history. It is linked to the establishment, growth, and nature of the adjacent cities of Tuscaloosa and Northport, and it is linked to the historical development of patterns of rural agriculture in the surrounding area. Having presented in synopsis form a narrative of the regional history, this section and the one to follow will home in on the cultural features, events, and individuals more particularly significant to the tracts defined and their immediate environs.

Sections 19, 20, 21, 28, 29; Township 21N, Range 10W.

Portions of these sections were among those granted to the American Asylum at Hartford (Connecticut) for the Education and Instruction of the Deaf and Dumb. Immediately following the initial survey of the area by the office of the Surveyor General, in 1820, the Asylum's agent, William Ely, arrived in Tuscaloosa to claim contiguous tracts amounting to four full sections. An original map showing the grant has been preserved, bearing the signature of Surveyor John Coffee, of Creek War fame. The specific tracts claimed included S. 1/2 Section 19 (fract. N. and S.); Section 20 (except N.W. 1/4); Section 21 (fract. N. and S.); Section 29; N. 1/2 Section 28; N. 1/2 Section 27; N.W. 1/4 Section 32. Ely's intent was to claim land surrounding the town of Tuscaloosa, then confined to Section 22, and then to sell these choice lands to local speculators.

The buyers were twelve local investors who had incorporated to form what became known as the Newtown Company. They were primarily interested in developing Section 21 as a town, and the remainder of the property was divided among the shareholders by a deed of partition dated April 28, 1821 (Deed Book 1:108). The purchase price was $20,184.58, of which an initial $3,332 was paid directly to Ely in bonds and promissory notes. In order that each of the investors be required to pay their share of the balance on schedule, the property was transferred in 1821 to a group of three trustees: John J. Inge, James Hogan, and George Starr (Deed Book 1:136, 140). The trustees were to oversee the payment over a period of two years, and in the event of failure to pay, were to sell portions of the property amounting to the size of the debt.

The entire property, except Section 21, was mortgaged to pay the Asylum, but payment was defaulted, and the mortgage foreclosed. In 1825 the Circuit Court ordered the lands to be sold, and appointed William G.

Glover and James Hogan as court commissioners to execute the sale. This time, the purchaser was John Boardman, acting as agent for the Hartford Asylum. As before, the Asylum elected to immediately sell out, and found a local buyer in William M. Marr (Probate Court Deeds and Mortgages 18: 23-27). Marr's purchase was confined to the fraction of Section 20 north of the Black Warrior River, and west of Jemison's Mill (now Mill) Creek, excepting the northwest quarter.

William M. Marr was a wealthy gentleman farmer, Newtown commissioner, and real estate investor. In 1825 Marr already owned a major plantation at the present site of The University of Alabama, and he later established another, four miles southwest of Tuscaloosa on the Warrior River (Smith 1889:202). Although Marr was thus the first agriculturalist to obtain possession of the Asylum lands north of the river, it is not known if steps were taken to clear and cultivate the tract during Marr's brief tenure (1825-1833). It seems more likely that the subsequent owner, Robert Jemison, Jr., was the first to improve that tract.

Upon Marr's death his widow conveyed the property to Robert Jemison, Jr., whose father William Jemison had already (1821-1822) acquired patent to surrounding lands as follows: S. 1/2 Section 17; E. 1/2 N.W. 1/4 Section 20 (Tuscaloosa County Tract Book II, Probate Court Deeds and Mortgages 18:23-7). These acquisitions became the basis for the Jemison's formidable and long-lived "Cherokee plantation" of later years.

Jemison's "Cherokee plantation"

Senator Robert Jemison, Jr., was a wealthy plantation owner, investor, industrial developer, and politician during the nineteenth century (Smith 1889:298-308). By all accounts he was one of the most prominent figures of early Alabama statehood. Much of the survey area north of the Black Warrior River and west of Mill Creek was included within the plantation he called "Cherokee."

Robert Jemison, Jr., came to Tuscaloosa County as a young man, accompanying his parents in 1822. Four years later the family removed to Pickens County, where Robert's father, William Jemison, established his "Garden plantation," renowned for the experimental agricultural techniques developed there. During this period both father and son invested in lands being offered for sale in west-central Alabama. Robert Jemison, Jr. returned to Tuscaloosa in 1836 (Meigs 1928:8-9).

Jemison enjoyed a multifaceted adult career. He was the developer of several stage coach lines, some owned individually and others jointly, in Alabama and Mississippi. After merging with his principal competitor to form the Jemison, Powell, Ficklin, and Company, he controlled most of the stage traffic of north and central Alabama. Jemison also owned a large area of timber land northeast of Tuscaloosa, at which he operated a sawmill (M.W. Clinton 1958:102-3). Other industrial interests of the Jemison "empire" included coal mines and grist mills, and he was instrumental in securing a charter for the Northeast and Southwest Alabama Railroad.

As a politician, Jemison served five terms in the State House of Representatives, and was a state senator from 1851-1863 (M.W. Clinton 1958:124). He represented Tuscaloosa in the Secession Convention of 1861, and was instrumental in the founding of the Alabama Insane (now Bryce) Hospital in Tucaloosa (Smith 1889:298-308).

"Cherokee plantation," west of Northport, was one of six plantations operated concurrently by Jemison in addition to his other interests. It included approximately 4,000 acres, of which 1,400 acres were cleared and 1,000 acres in "good bottom land." The "big house," along with the overseer's house, slave cabins, and family cemetery, were located in Section 18 north of the survey area (corresponding to Sites 1Tu385, 1Tu384 and 1Tu471 recorded in the Alabama Site Files). The "big house" stood as late as 1928 (Meigs 1928:20).

Robert Jemison's father William, who had secured the initial patents to land which became the "Cherokee plantation," is remembered as an innovator in plantation management practices. According to Louis Herzberg, Jemison,

> actually entered into an agreement with his slaves to pay them for their labor in 1827. One-third of the year's crop was to go to the owner; the remainder was to go to the slaves. The slaves were to take two-thirds of the produce and pay the overseer, the taxes on the farm and produce, their doctor's fees, and all other expenses of the plantation. Jemison provided that records would be kept of the time put in by the slaves to enable each of them to get his share of the produce (Herzberg 1955:11).

At the close of the Civil War, Robert Jemison, Jr. modeled his program of sharecropping along similar lines (Herzberg 1955:12).

Columbus Road and Stage Route

Throughout the nineteeth century this was the main wagon and stage route between Tuscaloosa and Columbus, Mississippi. It forms a portion of the northern boundary of the survey area. The precise year that the road was opened has not come to light, but it was in use by 1830. It was over this road that the Jemison and Ficklin stage coach line operated, connecting with John Pitchlyn's line from Columbus to Jackson, Mississippi (M.W. Clinton 1958:102).

Creek Removal Camp Site

In 1836, the Upper Creek Chief Opothleyohola led approximately 2,700 Creek emigrants to Indian Territory in the west, over a route which took them through Tuscaloosa. The group camped near Tuscaloosa for several weeks, during which a Eufaula chief delivered a farewell address to the state legislature.

Two camp sites were occupied: one on the University campus and the other north of the Black Warrior River at the intersection of Jemison's

Mill (Mill) Creek and the Columbus Road. At the latter site they received a visit from the youthful Joshua H. Foster, who provided an eyewitness account:

> With other boys I had visited their camp and bought from them a few trinkets. We had gone again to visit another camp across the river where we saw some boys and girls--fifty or more between the ages of two and twenty years, not clad in modern bathing suits, but all "in their birthday suits or in undress uniform," all paddling like ducks in the creek. I had seen Opothleyoholo and his lithe and graceful daughters and heard the great chief talk in eloquent pathos of their bitter grief on leaving their hunting grounds and the graves of their fathers (T.P. Clinton n.d. I:24).

No material evidence of this "Trail of Tears" camp site was found during the present survey. If any evidence remains of this fairly ephemeral camp, it should be thin and widely scattered, perhaps north of the Columbus Road outside the survey area.

Dyer and Dodson Survey

Otis Dyer was an early Tuscaloosa merchant of the caste discussed earlier as the "frontier capitalists." William R. Smith wrote that Dyer "found no difficulty keeping his capital afloat in the most remunerative channels" (1889:101). He established a ferry at Tuscaloosa prior to the time when there was a bridge, charging a toll for the crossing. He also invested heavily in real estate on the north bank of the river opposite Tuscaloosa, and encouraged the development of a settlement there. Dyer initiated a survey of a tract, now a part of Northport, known as the "Dyer and Dodson survey," and sold the lots "at great advantage, and yielded a large profit on the original investment" (Smith 1889:101).

The settlement at Northport, originally called "North Tuscaloosa" or more popularly "Kentuck," was thriving by the end of the 1820s. The nickname "Kentuck" had come as a result of the town's reputation for wildness and immorality (T.P. Clinton n.d. II:17).

Newtown

Officially called the "Town of Lower Tuskaloosa," this settlement was organized by a rival corporation to the original town. It was incorporated in 1820, and virtually all of the town's lots were sold by 1822. Newtown was an active business and residential community through the 1820s and 1830s. For a while it boasted the county seat, but it fell into decay and was virtually abandoned by the 1840s. Much of the northern section of the former town is now the site of the Tuscaloosa Country Club and surrounding subdivisions dating to the early twentieth century.

The southern survey area verges on, but apparently does not include, certain documented features of Newtown. The northwestern-most Newtown lots, those marked Nos. 502 and 503 on the 1821 plat of the town, were

located on the present Country Club ground in the vicinity of the railroad track, near but outside the survey limits. These lots were initially sold to William M. Marr, probably as an investment, in 1823 (Deed Book 1:273). Just to the east, near the present clubhouse, lies the unmarked grave of Captain George Cox, a noteworthy naval veteran and Newtown merchant of the early nineteenth century (Smith 1889:93-94; M.W. Clinton 1958:47). Matthew Clinton locates the Newtown ferry "about mid-way the grounds of the present Country Club" (1958:97), a location corresponding approximately with the lower end of the existing lock. It is more probable, however, that the ferry had been a few hundred yards east of the lock, near the north end of Thirty-fourth Avenue. Several businesses had been located at the Newtown ferry, including a large brick warehouse, Papizan's cigar factory, and Brown's sawmill (cf. M.W. Clinton 1958:44).

Inge Place and "Seminole Fort"

The southwest corner of Section 21, bordering Newtown on west, was known through most of the early nineteenth century as the Inge Place, the residence of Richard Inge, Sr. The tract included 40 acres, all immediately south of the project boundary. The sources identifying this as the site of the "Seminole Fort" and Creek war period Indian village have already been discussed.

Tuscaloosa historian Archibald McEachin reports that the first white men to settle on the site were Isaac Cannon and John Wilson, in January of 1816. McEachin interviewed the aging Cannon in 1880, and received testimony to the effect that the tract was in 1816 an "Indian old field," and that Sander's Ferry Road was then an Indian Trail (McEachin 1977:43-44). Matthew Clinton agrees that the Inge Place was first settled by a man named Wilson in 1816, but he gives the first name as William (M.W. Clinton 1958:9).

Clinton says that Richard Inge, Sr. purchased the place in 1832, and there built a two-story house with servant's quarters in the rear yard. The location is given as "on the north side of Sanders Ferry Road and about one hundred yards west of that part of the former Highway 11 [now Clinton Drive] which comes off Eighth Street" (M.W. Clinton 1958:49). This is now a residential area south of the Tuscaloosa Country Club.

Perteet and Marlow Tan-Yard

On the western margin of Section 21, on the original Newtown plat, is a rectangular lot marked "Tan-Yard." The location corresponds to a wooded area, adjacent to a ravine, on the present Tuscaloosa Country Club grounds. It is within the survey area.

A deed to a nearby property furnishes us with a name: the "Petite and Marlow tanyard" (M.W. Clinton 1958:46). The surname Petite is not found among any of the early nineteenth century census records for Tuscaloosa County, but there were two prominent Newtown residents named Solomon Perteet and Alfred Pryor Marlow, both propertied and relatively affluent investors. It is almost certain that the reference is to these men.

Solomon Perteet (other spellings appear as Petite, Petete, Peteed, Pertite, Perteat) led a remarkable life, for the times, as a free black businessman. Something of his influence, in what must have been a relatively intolerant community, is revealed in the fact that he is buried in the white section of Greenwood Cemetery, Tuscaloosa. The epitaph reads:

> Solomon Perteet, a free man of color, born in Wilkes County, Georgia, died at his home near this city, Oct. 3d., 1863, aged 76 years. By an industrious, sober, frugal, and honest life, he earned and left to his wife and children a handsome and comfortable estate.

Perteet first appears in the records in 1829, in which year an act was passed by the state legislature for his benefit, allowing him to emancipate from slavery his wife and two sons, whom he owned (Acts of Alabama 1823-1830:92-93). In return Perteet was required to post a bond of $1,200.00 to the governor, which he subsequently performed with the assistance of William M. Marr, in order to guarantee that the freed slaves would never become wards of the state.

In subsequent years we find Perteet engaged in extensive real estate investments in Newtown and in rural Tuscaloosa county, in the buying and selling of slaves, of which he owned as many as seven, and in immoderate moneylending--generally to white clients (Deed Books G-AA, 1-6). Curiously, we find no record among these transactions, or in Perteet's will (Will Book 3), suggesting his connection with the tan-yard or partnership with Marlow.

Clinton states that Perteet "became wealthy operating a store and trading in real estate," but he gives neither his source nor any indication of what might have been vended in the store (M.W. Clinton 1^58:46). As a seemingly incongruous datum, Perteet gave his occupation as "plasterer" in the U.S. census for 1850. In the same census he gave his race as "mulatto" (7th U.S. Census, Tuscaloosa County).

Alfred Pryor Marlow, (otherwise Marlowe, 1796-1858) first appears in Tuscaloosa County records in 1830, an immigrant from Tennessee. At that time he owned nine slaves (5th U.S. Census, Tuscaloosa County). Although he styled himself a "farmer" (7th U.S. Census, Tuscaloosa County), Marlow lived in Newtown, and his recorded business dealings reveal thoroughly urban investment interests. Like Perteet, Marlow was an investor in urban real estate as well as in rural property, and he was a buyer and seller of slaves (Deed Books H-Q). And as with Perteet, no corroborative evidence has come to light revealing Marlow's connection with the Perteet and Marlow Tan-Yard.

In dating the tan-yard there is not much to go on. The plat on which it appears is supposed to date to 1821, but other evidence fails to place either Perteet or Marlow in the area until a decade later. One possibility is that the tan-yard was bought out by Perteet and Marlow as an investment, and that it was formerly owned by another party. A man named John Dudgin is reported to have operated a tan-yard in the area as early as 1816 (McEachin 1977:47). Another possibility is that the entry on the plat is a later addition, a suspicion that could not be confirmed because

the original plat could not be examined. As for a terminal date, five tanneries are listed in the industrial schedules of the 1850 federal census for Tuscaloosa County (Schedule #5, 7th U.S. Census, Tuscaloosa County), none of which can be shown to correspond with the Perteet and Marlow Tan-Yard.

In sum, the evidence at hand suggests that the tan-yard operated during some period of 1821-1850, and that Solomon Perteet and Alfred P. Marlow held some interest in the operation after 1830. It is doubtful that either named individual ran the business personally.

Site 1Tu421

This aboriginal site is included among these early nineteenth century landmarks simply because it was well-known to the earliest white settlers of the area. It is a curious fact that the town of Tuscaloosa, prior to the time that it held that title, was named for a feature of Site 1Tu421. Thomas P. Clinton, a late nineteenth century resident of Tuscaloosa, writes that he,

> remembers hearing, when quite a small boy, "Uncle Martin Simms," as he was familiarly called, telling some one that the settlers first called the place "Shelltown," this name suggested by a large bank of mussel shells that marked the site of an old Indian camp or village just below Newtown (T.P. Clinton n.d. I:22).

Other recorded variants used by the settlers prior to 1819 are "Shellytown" and "Shelleyville" (M.W. Clinton 1958:34). Evidently the site, which W.S. Wyman locates more exactly, was thought by some residents to have been the site of the elusive Black Warrior Town. Presumably this error was propagated by the facility of finding Indian artifacts at the spot. This seems at least to have been what led Wyman astray.

THE SURVEY AREA: LATER HISTORY

Jemison's "Cherokee plantation" seems to have survived the Civil War intact, but eventually it suffered the same fate as almost all large antebellum landholdings. That fate was to be subdivided into smaller tracts, in a pattern of land ownership which persists to the present day. Robert Jemison, Jr. was obliged to initiate a sharecropping system in order to manage affairs, but in his case the transition may not have been as trying as for his peers, since the new system differed little from the plantation management practices of his father.

In the prosperous closing years of the nineteenth century, the plantation lands passed to Jemison's son-in-law, A.C. Hargrove, whose wife Cherokee Mims Hargrove carried on the Jemison family tradition of naming one female per generation "Cherokee." [This tradition is recounted by Sarah Maud Taylor in her "Preliminary Survey of Folk-Lore in Alabama," (Taylor 1925)]. The area was henceforth known as the Hargrove place. A

section of the northwest portion of the plantation was transferred to the Alabama Insane Hospital, which, as Bryce Hospital, continues to operate a facility on the property. During the early years of this century, the hospital land was farmed in cotton, and the inmates were put to work picking the crop as a kind of therapy (Henry Rice, personal communication). The now demolished remains of the hospital overseer's house are identified in the state site records as Site 1Tu410.

The late nineteenth century found the land east of the Hargrove (Mill) Creek boundary line in the possession of one-time Tuscaloosa Mayor Zimri Shirley (Plat Books 1876-1906).

The executrix of the Hargrove estate during the 1920s was Mrs. Minnie Van de Graaff, granddaughter of Robert Jemison, Jr. By the end of the 1920s the old "big house" of the plantation had fallen into ruins, and today nothing is to be seen at the site except for two scatters of historic artifacts, and the old family cemetery where both Robert and William Jemison rest. The head of the Van de Graaff family was a pioneer in the field of aviation, and operated an air strip on the northern margin of the survey area, known as "Maynor Field." Steps were taken by the city government in 1928 to improve the air strip as the foundation for a municipal airport, christened "Hargrove Van de Graaff Field" (Green 1980:88). The field was used as a military training center beginning in 1939 (Dowling 1939:12).

During the last quarter of the nineteenth century the entire survey area south of the Black Warrior River was bought up piecemeal by the Tuscaloosa Coal, Iron, and Land Company, along with the former Newtown locale (Plat Books 1898-1903). The Inge place in the southwest corner of Section 21 was the residence of L.W. O'Neal during the Civil War, and was later purchased by George O'Connor, whose widow occupied it until about 1907 (M.W. Clinton 1958:50). The tract to the north of the Inge place, formerly the site of the Perteet and Marlow Tan-Yard, was known in 1887 as the "Potter field," and had belonged to Harden P. Cochrane and William G. Cochrane prior to its sale to the development company (Deed Book 29: 146-147).

In 1907 the eastern end of the south survey area was sold to George Morgan, and the remainder to E.N.C. Snow. On the present Tuscaloosa Country Club grounds, south of the lock and near where the railroad track now crosses the property, Morgan ran a cold storage plant, identifiable as Site 1Tu456. Between 1906 and 1920, E.N.C. Snow had sold a small tract around Site 1Tu423 to the Kaul Lumber Company (Plat Book 1920-1923). The Tuscaloosa Country Club, which at present occupies the south margin of the lock area, was organized in 1921 (Green 1980:83) and was developed from the former Morgan and Snow properties.

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ces dealing with the history of rural areas and smaller communities are far less common. The Collier-Boone House, an Antebellum home, was excavated and reported (Brooms 1975). For the antebellum period, the most useful single reference is the book by Matthew W. Clinton, which for the most part is a compilation and revision of data collected in scrapbook form by his father, T.P. Clinton. The theses by Boucher and Herzberg also offer valuable summaries of the period. For the later history of the area, the works by Green and Dowling are the most informative.

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Historical Chronology

1798	Congress creates Mississippi Territory, with capitol at Jackson
1815	Earliest permanent white settlers arrive in Tuscaloosa County
1816	James O. Crump navigates the Black Warrior River with merchandise bound for the Tennessee Valley
1817	Congress creates Alabama Territory, with capital at St. Stephens
1818	Tuscaloosa County created
1819	Town of Tuscaloosa incorporated, Alabama achieves statehood
1820	Newtown incorporated
1821	First steamboat ascends Black Warrior River to the falls
1825	Newtown corporation dissolved
1826	State capitol moved to Tuscaloosa from Cahaba
1831	University of Alabama receives students
1842	Tornado destroys much of Newtown
1846	State capitol moved to Montgomery
1861	Alabama secedes from the Union, joins the Confederacy
1865	End of Civil War
1865-1876	Reconstruction in Alabama
1871	Tuscaloosa Coal, Iron, and Land Company organized, first railroad reaches Tuscaloosa County
1884	Congressional authorization to begin Black Warrior River development
1896	First series of locks completed near Tuscaloosa
1915	Series of Black Warrior River locks completed
1917-1918	World War I
1918	Warrior River Barge Line enters services
1928	Improvement of first municipal airport in Tuscaloosa County
1939	William B. Oliver Lock and Dam completed, Locks 10, 11, and 12 removed
1941-1945	World War II

CHAPTER IV

FIELD, LABORATORY, AND SITE ANALYSIS

INTRODUCTION

The cultural reconnaissance survey encompassed a total of 1100 acres (445 ha.) downstream from Oliver Lock and Dam. The survey area included the floodplain and edges of the second terrace on the north and south bank of the Black Warrior River. The Scope-of Work explicitly stated the level of investigation required during the work:

> Objectives. This project has multi-objectives. First, it is important to conduct a 100% on-the-ground survey to locate, identify, and preliminarily evaluate the potential nature, extent, distribution and significance of cultural resources within the study area . . . .
>
> Conduct a survey of the area for the purpose of locating all cultural resources present within the proposed project area, including prehistoric, historic, and architectural resources or properties. All previously recorded sites within the proposed project area will be revisited and handled with the same process as newly located resources . . . . Test excavations may be required at some prehistoric and historic archaeological sites so that preliminary evaluation of the resource may be adequately accomplished. It is not expected that this level of investigation will yield information of adequate scope to serve as the basis for requesting determination of eligibility for the National Register of Historic Places . . . . Information which shall be included as available is: 1) the extent, 2) the nature, and 3) the condition of each site for which existing information indicates potential for eligibility for inclusion in the Register based on local, State or National significance . . . .
>
> Provide recommendations for a program of additional investigations, if needed, after consultation with the Contracting Officer. The proposed program may include detailed time and funding requirements for each site. The recommendations may also include a research design, and a discussion of the public and scientific value of the proposed testing and evaluation actions . . . .

These objectives mandated an intensive survey coverage regardless of the topographic or surface conditions encountered. The depth, perimeter, and cultural affiliation of each site was also determined. An estimate of the intensity of occupation as well as the types of intact deposits was also made.

FIELD INVESTIGATION PROCEDURES

Site Location

The field reconnaissance consisted of a 100 percent investigation of the entire 1100 acre project area. Within the parameters specified in the Scope of Work, all of the cultural resources, with the exclusion of buried deposits, have been located and evaluated. Field techniques included shovel testing, bank profile examination, and the excavation of 50 cm by 50 cm test units depending upon the type of ground cover in a given area.

The field investigation strategy was adapted to the various types of surface vegetation within the project area. The percentage of surface visibility corresponds to four types of surface vegetation: (1) recently plowed open fields, or eroded river banks (2) fallow fields or pastures, (3) woodlots, and (4) areas covered by industrial trash or rip-rap which could not be surveyed. The survey techniques were adapted to these different field conditions. Each ground cover type, its distribution within the project area (Figure 5), the survey techniques used, and the reliability of the data recovered are discussed below.

Surface visibility was 60 to 90 percent in recently cultivated fields (Plate 1). These areas were planted in soybeans during the 1981 season. Soybean trash and winter weeds effectly reduced surface visibility to 60 percent in some areas. In recently plowed fields surface visibility increased to 80 to 90 percent. These areas were surveyed with pedestrian transects spaced at 20 m to 25 m (65.6 to 82.0 ft) intervals. Artifact recovery and site identification in these areas was approximately 100 percent. A total of 189.83 ha (465 acres) or 42.5 percent of the total area surveyed was located in cultivated fields.

The areas along the river bank adjacent to the golf course (Sites 1Tu421, 1Tu422, and 1Tu423) and along the north bank of the river (Site 1Tu264) were surveyed by examining bank profiles. Bank profiles throughout the remainder of the project area were also examined. The river bank adjacent to Sites 1Tu264, 1Tu421, 1Tu422 and 1Tu430, however, was the only other bank profile sufficiently exposed to permit inspection.

Permanent pastures, hay fields and golf course tracts were located near the western end of the project area (Figure 5). Approximately 48.9 ha (121 acres) or 11 percent of the project area was included in this vegetation type. Surface visibility in these areas ranged from 0 to 25 percent. Most of this area was surveyed by visually examining road beds and erosion cuts. A series of shovel tests and core auger holes were excavated in these areas. The shovel tests were spaced at 15 m to 20 m (49.2-65.6 ft) intervals in transects 10 m to 15 m (32.8 to 49.2 ft) apart. Core auger tests were used to supplement the shovel tests. At the request of the manager, areas within the golf course were not shovel tested.

Woodlots (Plate 2) were separated into two groups; first those permanently covered with trees, and second those which have been previously plowed and on which the trees have grown within the past 15 to 40 years. Permanently forested areas have a distinctive soil profile in which a

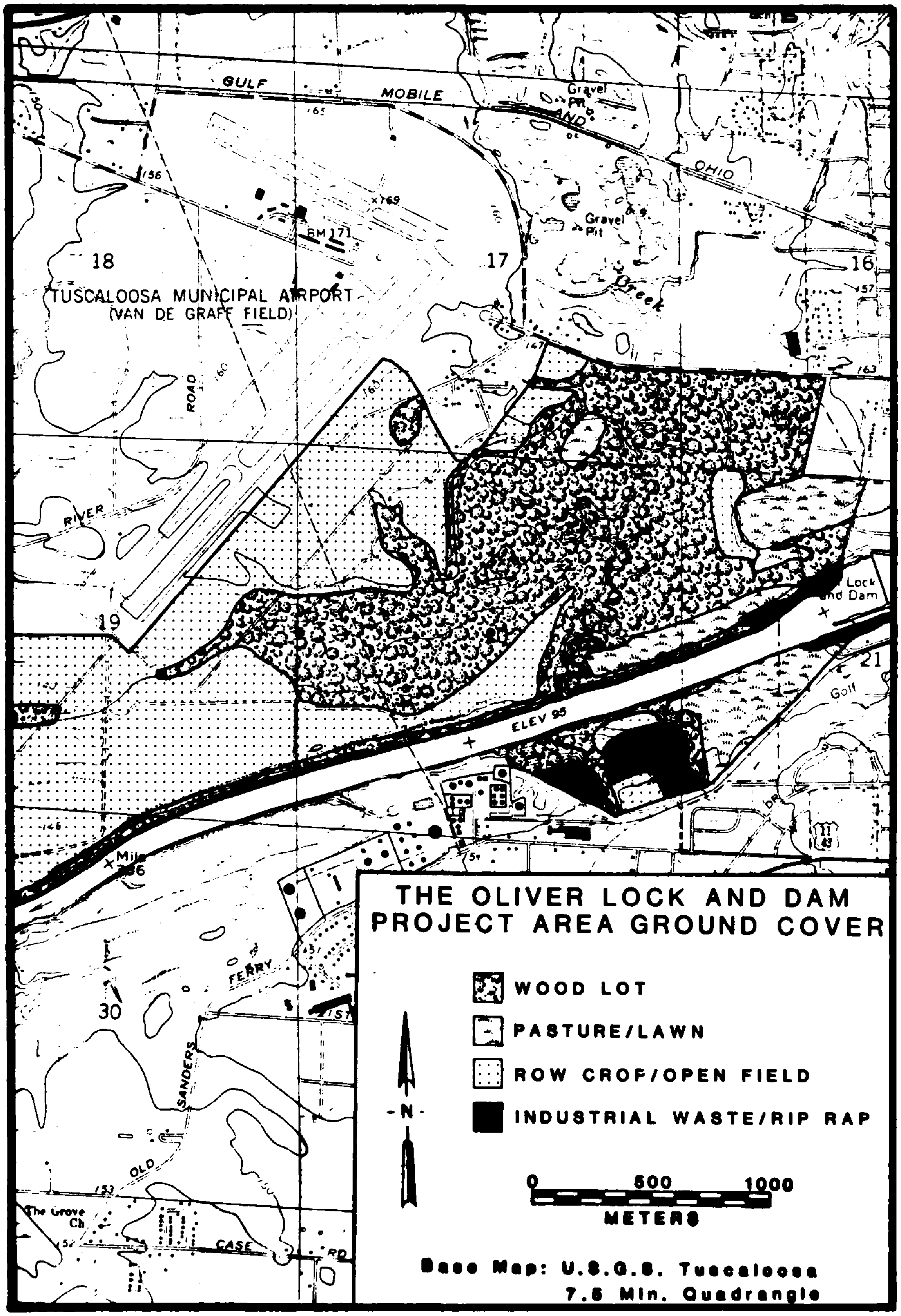

THE OLIVER LOCK AND DAM
PROJECT AREA GROUND COVER
WOOD LOT
PASTURE/LAWN
ROW CROP/OPEN FIELD
INDUSTRIAL WASTE/RIP RAP
N
0 500 1000
METERS
Base Map: U.S.G.S. Tuscaloosa
7.5 Min. Quadrangle
GULF
MOBILE
AND
OHIO
Gravel Pit
TUSCALOOSA MUNICIPAL AIRPORT
(VAN DE GRAFF FIELD)
ROAD
RIVER
ELEV 95
Lock and Dam
Golf
FERRY
SANDERS
OLD
CASE
RD
The Grove Ch
18
17
16
19
21
30

Figure 5.

Plate 1. Woodlot.

Plate 2. Soybean Field.

shallow A horizon soil is underlain by a well developed B horizon soil. Formerly cultivated fields contain an A horizon humus zone underlain by a distinctive plowzone stratum and B horizon subsoil. The permanent woodlots are generally located in low, water saturated areas, on steep slopes, or along the perimeters of drainage channels. Secondary growth woodlots are cultivated fields that have been abandoned and permitted to grow through a succession of plant communities until a permanent hardwood-pine tree cover or forest is established. Alternatively, the abandoned fields are planted in rows of pine trees. Approximately 191.1 ha (472 acres) or 43 percent of the project area was covered in permanent woodlots.

The fourth survey condition encountered was in areas covered with industrial midden or rock rip-rap associated with Oliver Lock and Dam, Site 1Tu465. The industrial deposit is near the south western edge of the project area. The rock rip-rap is along the river banks near the eastern edge of the project area (Figure 5). This surface condition covers approximately 14.6 ha (36 acres) or 3.2 percent of the project area.

All of these areas were surveyed. Several sites were located on the margins of the two land fill projects. Sites 1Tu457, 1Tu458, 1Tu459, 1Tu460 were encountered adjacent to the land fill in the southeastern portion of the survey area. Site 1Tu264 is covered by a layer of rip-rap. The western end of this site was tested. The eastern parts of the site, however, could not be tested.

Site Evaluation

In recently cultivated fields, after each site was located a surface collection was made. Emphasis was placed on collecting culturally diagnostic artifacts, but a sample of the entire range of artifacts was obtained. The horizontal perimeters of each site have been defined to incorporate a zone of 10 m (32.8 ft) where no artifacts were recovered. Often the site boundaries correspond to topographic boundaries such as the edge of a river levee or a topographic change on the edge of a drainage. In order to facilitate relocation when dealing with small sites and minimal lithic scatters, care was taken not to surface collect the entire site.

A series of 50 cm by 50 cm test units was excavated on sites which were located by shovel or auger testing in permanent pastures and woodlots. Each test unit was excavated by 20 cm levels to a maximum depth of 75 cm. These small excavation units or quantitative shovel tests yielded artifact density and horizontal distribution information which can be compared to the cultivated site test units.

A series of 50 cm by 50 cm test units were excavated at archaeological sites which contained intensive cultural deposits or midden (Plates 3 and 4). Each unit was excavated by natural stratigraphic levels to a maximum depth of 75 cm. Because 70 cm is the maximum practical depth of these units, these tests are not effective in locating deeply buried cultural deposits. These small test units are, however, capable of sampling the plowzone and locating subplowzone undisturbed features and undisturbed cultural deposits. A sufficent number of these units was excavated to evaluate each site for future recommendation.

Plate 3. River Bank Erosion Site 1Tu421.

Plate 4. Test Pit Site 1Tu428.

LABORATORY ANALYSIS

Cultural material collected from each site was bagged and labeled by the appropriate provenience. These bags were delivered to the OAR laboratory at Mound State Monument. All the artifacts were washed and sorted with attention toward maintaining the provenience of each sample.

Prehistoric lithic material was sorted into categories, counted and weighed. Lithic tools were placed in morphological categories. Culturally diagnostic lithic artifacts were given standard type names following artifact descriptions used for the OAR Tombigbee excavations (OAR n.d.: Table 5). Prehistoric ceramics were sorted by temper, paste, and by surface treatment. Both lithics and ceramics were used to determine cultural components present at each site (Table 5).

Historic artifacts were analyzed by raw material (metal, glass, ceramic and other) and placed into descriptive artifact categories (Table 5). Temporally significant artifacts were further analyzed in order to estimate occupation dates for each historic site. The approximate temporal ranges of historic assemblages are provided with the summaries.

Table 5. Artifact Categories and Component Assignment.

PREHISTORIC ARTIFACTS	
LITHICS	Component
Projectile Point/Knives	
Small Triangular	Late Woodland/Mississippian
Swan Lake	Middle Woodland
Woodland Residual	
Stemmed	
Greeneville	Middle Woodland
Flint Creek	Gulf Formational
Cotaco Creek	Late Archaic/Gulf Formational
Little Bear Creek	Late Archaic/Gulf Formational
Late Archaic Residual	
Stemmed	
Ledbetter	Late Archaic
Elora	Late Archaic/Gulf Formational
Vaughn	Middle Archaic/Late Archaic
Benton	Late Archaic
Middle Archaic Residual	
Stemmed	
Sykes/White Springs	Middle Archaic/Late Archaic
Eva-Morrow Mountain	Middle Archaic
Decatur	Early Archaic
PP/K Proximal Fragment	
PP/K Medial Fragment	
PP/K Distal Fragment	
Bifaces	
Triangular Biface	
Other Biface	
Biface Fragment	

Table 5. Artifact Categories and Component Assignment. (Continued)

LITHICS (Continued)	Component
Preforms	
Preform I	
Preform II	
Unfinished Small Triangular PP/K	
Preform I Fragment	
Preform II Fragment	
Cores	
Amorphous Core	
Bipolar Core	
Core Fragment	
Drills	
Stemmed Drill	
Shaft Drill	
Medial Drill Fragment	
Proximal Drill Fragment	
Gravers	
Microliths	
Microlith	
Microlith Scraper	
Microlith Perforator	
Expanded Base Microlith Perforator	
Wedges	
Chisels	
Knives	
Uniface Flake Knife	
Biface Flake Knife	
Biface Cobble/Pebble Knife	
Adzes, Axes	
Biface Adze	
Chipped Axe	
Chipped Axe Fragment	
Amorphous Bifacial Implements	
Choppers	
Uniface Chopper	
Biface Chopper	
Scrapers	
Uniface End Scraper	
Uniface Side Scraper	
Uniface Side/End Scraper	
Hafted End Scraper	
Scraper on Biface	
Concave Scraper	
Unidentifiable Scraper Fragment	

Table 5. Artifact Categories and Component Assignment. (Continued)

LITHICS (Continued)	Component
Compound Chipped Stone Tools	
Uniface Side/End Scraper/Uniface Flake Knife	
Uniface Side Scraper/ Biface Flake Knife	
Graver/Spokeshave	
Unidentifiable Chipped Stone Fragments	
Pecked and Ground Stone	
Hammerstone	
Anvilstone	
Pitted Anvilstone	
Muller	
Muller Fragment	
Mortar	
Edge Ground Cobble	
Celt	
Celt Fragment	
Greenstone Celt Fragment	
Gorget	
Gorget Fragment	
Steatite Sherd	
Ground/Scored Hematite	
Compound Pecked and Ground Tools	
Muller/Anvilstone	
Muller/Anvilstone/ Hammerstone	
Muller/Hammerstone	
Muller/Pestle	
Muller/Pitted Anvilstone	
Muller/Pitted Anvil-stone/Hammerstone	
Pitted Anvilstone/ Hammerstone	
Pitted Anvilstone/ Mortar Fragment	
Compound Chipped Stone and Pecked and Ground Stone Tools	
Chopper/Hammerstone	
Chopper/Pitted Anvil-stone	
Hammerstone/Core	
Unidentifiable Ground Stone Fragments	

Table 5. Artifact Categories and Component Assignment. (Continued)

Other	Component
Ferruginous Sandstone Concretion (Paint Pot)	
Debitage-Fire Cracked Rock-Shatter	
Introduced Rock	
CERAMICS	
Sand Tempered	
Ocmulgee Fields Plain	Historic
Shell Tempered	
Alabama River Applique	
var. Alabama River	Late Mississippian
Bell Plain var. Hale	Mississippian
Mississippi Plain	
var. Warrior	Mississippian
Carthage Incised	Mississippian
Eroded Coarse Shell Tempered	Mississippian
Eroded Fine Shell Tempered	Mississippian
Shell and Grog Tempered	
Bell Plain	
var. Big Sandy	Late Woodland/Mississippian
Sparse Shell and Grog Incised	Late Woodland/Mississippian
Eroded Fine Shell and Grog Tempered	Late Woodland/Mississippian
Baytown Plain	
var. Curry Creek	Late Woodland/Mississippian
Grog Tempered	
Baytown Plain	
var. Roper	Late Woodland
var. Tishomingo	Late Woodland
var. Unspecified	Late Woodland
Avoyelles Punctated	
var. Unspecified	Late Woodland
Mulberry Creek Cord Marked	
var. Aliceville	Late Woodland
var. Tishomingo	Late Woodland
Withers Fabric Impressed	
var. Gainesville	Late Woodland
var. Montgomery	Late Woodland
var. Unspecified	Late Woodland
Salomon Brushed	
var. Fairfield	Late Woodland
var. Unspecified	Late Woodland
Alligator Incised	
var. Unspecified	Late Woodland

Table 5. Artifact Categories and Component Assignment. (Continued)

CERAMICS (Continued)	Component
Marksville Incised	
var. Unspecified	Middle/Late Woodland
Unidentified Grog Tempered Incised and Punctated	Middle/Late Woodland
Eroded Grog Tempered	
Sand Tempered	
Baldwin Plain	
var. Blubber	Middle Woodland
var. Lubbub	Late Gulf Formational
var. O'Neal	Late Gulf Formational
Alexander Incised	
var. Unspecified	Late Gulf Formational
Alexander Pinched	
var. Unspecified	Late Gulf Formational
Alexander Punctated	
var. Unspecified	Late Gulf Formational
Unidentified Sand Tempered Punctated	Late Gulf Formational
Eroded Fine Sand Tempered	
Sherdlets - All Tempers	
Other	
Daub and Fired Clay	
Charcoal and Fired Clay	
Bone	
Charcoal	
HISTORIC ARTIFACTS	
GLASS	
Dark Olive Green	
Free Blown	Early-Middle 19th century
Mold Made	
Green	
Embossed	Early 19th-20th century
Unidentified Body Sherds	Early 19th-20th century
White	
Embossed	Early 19th-20th century
Unidentified Body Sherds	Early 19th-20th century
Clear	
Embossed	Middle 19th-20th century
Unidentified Body Sherds	Early 19th-20th century

Table 5. Artifact Categories and Component Assignment. (Continued)

GLASS (Continued)	Component
Aqua	
Embossed	Middle 19th-20th century
Unidentified Body Sherd	
Manganese Purple	
Unidentified Body Sherds	c. 1850-1915
Cobalt Blue	
Unidentified Body Sherds	c. 1875-1980
Amber	
Embossed	Middle 19th-20th century
Unidentified Body Sherds	
Red	
Embossed (Car Reflector)	1910-1980
Pink	
Embossed	20th century
Blue	
Marble	
CERAMICS	
Pearlware	
Undecorated	c. 1780-1830
Light Blue Painted	c. 1780-1830
Transfer Printed Blue	c. 1795-1840
Shell Edge Rim Treatment	
Blue	c. 1780-1830
Green	c. 1780-1830
Mocha	c. 1795-1890
Gaudy Dutch	c. 1820-1840
White Ware	
Undecorated	c. 1820-1950+
Molded Plain	c. 1820-1850+
Hand Painted	c. 1820-1950+
Machine Painted	c. 1820-1950+
Molded Transfer Print	
Transfer Printed Monochrome	
Transfer Printed Polychrome	
Utilitarian Stoneware	
Salt Glazed	c. 1820-1950+
White Bodied Slipped	c. 1820-1950+
Brown Slipped	
Acid Slipped	

Table 5. Artifact Categories and Component Assignment. (Continued)

CERAMICS	
Utilitarian Stoneware (Continued)	Component
Black Glazed	c. 1820-1950+
Slipped	c. 1820-1950+
Brown Glazed	c. 1820-1950+
Gray/Black Glazed	c. 1820-1950+
Porcelain	
Undecorated	c. 1800-1950
Transfer Printed	
Polychrome	c. 1800-1950+
Unidentified White Paste Earthenware	
METAL	
Wire Nail	c. 1855-1980
Iron Chain	
Horseshoe Fragment	
Unidentified Iron Fragments	
Adjustible Wrench	
Clamp	
Automobile-Tractor Associations	c. 1905-1980
Gun Shell	
Button/Stud	
Zinc Fragments	
Stainless Steel Tableware	
Steel Plate	
Wire	
Aluminum Pop Tab	
Unidentified Iron	
MODERN PRODUCTS	
Electric Shaver	c. 1930-1980
Television Tube	c. 1930-1975
BUILDING MATERIAL	
Brick	
Machine Made	
Hand Made	
Glazed	
Cement Fragment	
Slate	
Commode Fragment	
PLASTIC/RUBBER	
Shoe Sole	1940-1980
Unidentified Fragment	1940-1980
PLASTIC	
Button	1940-1980
Unidentified Fragment	
LEATHER	
Unidentified Fragment	

Table 5. Artifact Categories and Component Assignment. (Continued)

FIBERGLASS	Component
Unidentified Fragment	
OTHER	
Coal	

Determination of Components

The prehistoric components at each site were determined from culturally specific artifact types recovered during the evaluation of each site. Culturally diagnostic ceramics and projectile point/knife types have been defined from excavations in the Tombigbee and Tennessee River Valleys. The chronological sequence inferred from these cumulative excavations is presented in Chapter III. Diagnostic ceramic and projectile point/knife types specifically represented within the project area are listed in Table 5. A summary of the prehistoric sequence for west central Alabama has been outlined in Figure 4. This classification was used to identify prehistoric components represented within the Oliver Lock and Dam project area.

Historic artifacts recovered within the project area have also been classified. The temporal ranges of specific artifact types were used to establish approximate occupation dates for the recorded historic sites. Artifact types recovered within the project area, together with their temporal ranges, are listed in Table 5. The occupation dates from each of these historic components are listed at the end of the historic artifact recoveries for each site.

SITE DESCRIPTION

The sites investigated during this survey are described in terms of the observed artifact density, site size, preservation of cultural deposits, geomorphic location, and the culturally significant components for each site. These descriptive dimensions are discussed and summarized in tabular form below.

Artifact Density

The artifact density at a given site is an estimate of the number of artifacts in a 25 m square. The artifact densities were classified into six groups and assigned a numerical designation from 1 to 6 so that Group 1 is the least dense artifact cluster and Group 6 is a well developed midden (Table 6). This analytical system is inferred from field observations and assumes the site has been cultivated and that a surface collection can be obtained. It has not been quantitatively evaluated using a systematic controlled surface collection. This artifact density assessment can be extended to sites sampled with test units. The recovery from

Table 6. Site Typology.

	SITE AREA					
	A	B	C	D	E	F
Artifact Density	0-625 Square Meters	625-2,500 Square Meters	2,500-10,000 Square Meters	10,000-20,000 Square Meters	20,000-30,000 Square Meters	30,000-100,000 Square Meters
(1) 1 to 5 Artifacts per 625 meter square	-	1Tu455 1Tu449	1Tu439 1Tu446 1Tu448	1Tu437 1Tu462	-	1Tu428
(2) 5 to 10 Artifacts per 625 Meter Square	1Tu454	1Tu453 1Tu460	1Tu430 1Tu435 1Tu442 1Tu443 1Tu445 1Tu449 1Tu466 1Tu467	1Tu433 1Tu452	-	1Tu431
(3) 10 to 25 Artifacts per 625 meter square	-	1Tu440 1Tu456	1Tu434 1Tu461	1Tu462 1Tu308 1Tu422	1Tu451	1Tu450
(4) 25 to 100 Artifacts per 625 meter square	-	-	1Tu429 1Tu438 1Tu457 1Tu458 1Tu459	1Tu423 1Tu432 1Tu445	-	1Tu464
(5) 100 to 250 Artifacts per 625 meter square	-	1Tu441	1Tu426 1Tu447 1Tu463	1Tu464	1Tu421 1Tu436 1Tu444	1Tu266
(6) More than 250 Artifacts per 625 meters square and Midden deposit	-	1Tu265	-	-	-	1Tu427

_____ Sites recommended for Phase II testing.

each test unit can be compared to test units excavated in cultivated sites to derive an estimate of artifact density from the unplowed sites.

Class	Description	Observable Characteristics
1	Isolated Finds	1 to 5 artifacts per 625 m^2.
2	Multiple Isolated Finds	5 to 10 artifacts per 625 m^2.
3	Minimal Artifact Concentration	10 to 25 artifacts per 625 m^2.
4	Moderate Artifact Concentration	25 to 100 artifacts per 625 m^2.
5	Intense Artifact Concentration	100 to 250 artifacts per 625 m^2.
6	Midden	Dense black/dark brown organic deposit with artifact content more than 250 artifacts per 625 m^2.

Site Size

Site size is based on an estimate of the horizontal extent of artifact clusters (Table 6). The perimeters of the recorded sites were assigned to 5 categories based on a minimal area of 25m (82 ft) by 25 m or 625 m^2 (6724 ft^2). The basis of each site class size is an arbitrary assignment based on a hectare or fraction thereof. Estimates have been incorporated into the analytical system.

Designation	Site Area (m^2)
A	0-625
B	625-2,500
C	2,500-10,000
D	10,000-20,000
E	20,000-30,000
F	30,000-50,000

Site Types

The preceding descriptive conventions have been developed to economically describe the cultural resources and to provide a tool for making management recommendations for the recorded sites. The site types developed for this description have been developed by intersecting site size and artifact density (Table 6). A similar site description system was developed for use on the Coosa River by Waselkov (1980), but this descriptive system was unsatisfactory for describing sites encountered during the present survey. As a result the present analysis was generated to incorporate all of the meaningful variability encountered within the Oliver Lock and Dam project area.

This classification system precludes the definition of specialized activity sites such as fish weirs or lithic quarries. Standing structures or military works also were not included in this analysis. These specialized sites are described in the site descriptions (Chapter V) and are not considered in this analysis.

Site Integrity

For this report a site which contains undisturbed or intact cultural deposits has a measure of integrity. The integrity of a site is one measure of the site's potential to yield significant information concerning the prehistory or history of the area. The site's integrity can be damaged by the natural agents of erosion or flood or by cultural agents such as cultivation, logging, or construction. A summary of evaluation procedures, nature of the deposits, significant components present, and recommendations are presented in Table 7.

Intact cultural deposits are present at sites with undisturbed features below the plowzone, at sites where cultural strata have been buried by alluviation, and at sites which have not been cleared and cultivated. Archaeological sites impacted by cultivation have been plowed to a depth of 18 to 25 cm (10-14 in), mixing the upper strata of these sites. Testing may demonstrate that features which have not been entirely disturbed are present in the subsoil. These sites are found throughout the project area and contain high information potential.

Archaeological sites alluviated and subsequently buried during or following occupation possess a high degree of integrity. These sites have not been disturbed with the exception of flood scouring and have information potential for documenting short term occupations. At this stage of investigation, only three sites which contain sealed strata have been located within the project area.

The third class of intact cultural deposits in the project area consists of archaeological sites which have not been cultivated. These sites are located in areas which have been allowed to remain in timber because the area is too small to be efficiently cultivated or it is located on the edge of a cultivated field. The sites typically consist of an artifact scatter throughout the A horizon soil profile. Such unplowed sites provide a unique opportunity to examine the pristine matrix of archaeological sites. The research potential of these sites is enhanced by the preservation of specific classes of features which are completely destroyed by cultivation at other types of sites. Microstratigraphy and origin levels of features and structure floors are preserved at these sites. Uncultivated sites in the project area are rare and only three have been recorded.

RESOURCE EVALUATION

A total of 47 prehistoric sites has been identified within the Oliver Lock and Dam project area. These sites primarily represent the Late Archaic, Gulf Formational, Woodland, and Mississippian. The Late

Table 7. Site Evaluation and Integrity.

Site	Evaluation Procedure	Deposits	Significant Components	Recommendations
1Tu264	Shovel Tests 5 50 by 50 cm tests 3 Core augers River bank profile	Subplowzone deposits	Late Woodland, Mississippian	Phase II Testing CSC, DT, ST, TP
1Tu265	Surface collection Shovel Tests 4 50 by 50 cm tests	Subplowzone features	Gulf Formational, Late Woodland	Phase II Testing CSC, DT, ST, TP
1Tu266	Surface collection 5 50 by 50 cm tests	Subplowzone features	Gulf Formational, Late Woodland, Mississippian	Phase II Testing CSC, DT, ST, TP
1Tu308	Surface collection	Destroyed by cultivation and erosion	Late Archaic, Gulf Formational, Late Woodland, Mississippian	-
1Tu421	Surface collection 1 50 by 50 cm tests Bank profile	Subplowzone features Subplowzone stratigraphy	Late Woodland, Mississippian	Phase II Testing CSC, DT, ST, TP
1Tu422	Surface collection	Destroyed by erosion	Mississippian	-
1Tu423	Surface collection 3 50 by 50 cm tests	Subplowzone deposits	Late Archaic, Gulf Formational, Late Woodland, Mississippian	Phase II Testing CSC, DT, ST, TP
1Tu426	Shovel Tests Surface Collection 2 50 by 50 cm tests	Undetermined	Late Woodland, Mississippian	Phase II Testing CSC, DT, ST, TP
1Tu427	Surface collection 4 50 by 50 cm tests	Unplowed deposits Subplowzone features	Late Woodland, Mississippian	Phase II Testing CSC, DT, TP

Table 7. Site Evaluation and Integrity (Continued).

Site	Evaluation Procedure	Deposits	Significant Components	Recommendations
1Tu428	Surface collection 4 50 by 50 cm tests	Undetermined	Late Archaic/Gulf Formational, Late Woodland	-
1Tu429	Surface collection	Destroyed by cultivation and erosion	Late Woodland	-
1Tu430	Surface collection 4 50 by 50 cm tests	Undetermined	Late Woodland	-
1Tu431	Surface collection	Undetermined	Late Woodland, Mississippian	-
1Tu432	Surface collection 4 50 by 50 cm tests	Subplowzone cultural stratigraphy	Late Woodland, Mississippian	-
1Tu433	Surface Collection 2 50 by 50 cm tests	Undetermined	Late Woodland, Mississippian	-
1Tu434	Surface collection 2 50 by 50 cm tests	Subplowzone deposits	Late Woodland, Mississippian	-
1Tu435	Surface collection	Destroyed by cultivation and erosion	Undetermined	-
1Tu436	Surface collection 5 50 by 50 cm tests	Subplowzone feature	Late Archaic, Woodland	Phase II Testing CSC, DT, ST
1Tu437	Surface collection	Destroyed by cultivation and erosion	Undetermined	-

Table 7. Site Evaluation and Integrity (Continued).

Site	Evaluation Procedure	Deposits	Significant Components	Recommendations
1Tu438	Surface collection 3 50 by 50 cm tests	Subplowzone feature	Late Woodland	-
1Tu439	Surface collection	Destroyed by cultivation and erosion	Early nineteenth century	-
1Tu440	Surface collection	Destroyed by cultivation and erosion	Early nineteenth century	-
1Tu441	Surface collection Structure mapped Historic documentation	Undetermined	Early nineteenth to middle twentieth century	Phase II Testing ST, TP
1Tu442	Surface collection	Destroyed by cultivation and erosion	Middle/Late Archaic	-
1Tu443	Surface collection	Destroyed by cultivation and erosion	Early Archaic	-
1Tu444	Shovel Tests 6 50 by 50 cm tests	Unplowed deposits	Undetermined Middle/Late Archaic (?)	Phase II Testing TP
1Tu445	Surface collection	Destroyed by cultivation and erosion	Undetermined	-
1Tu446	Surface collection	Destroyed by cultivation and erosion	Undetermined	-
1Tu447	Surface collection Shovel test	Destroyed by cultivation and land clearing	Middle to late twentieth century	-
1Tu448	Surface collection Shovel test	Destroyed by cultivation and land clearing	Undetermined	-

Table 7. Site Evaluation and Integrity (Continued).

Site	Evaluation Procedure	Deposits	Significant Components	Recommendations
1Tu449	Surface collection	Destroyed by cultivation and erosion	Twentieth century	-
1Tu450	Shovel Tests 5 50 by 50 cm tests	Subplowzone cultural deposits	Undetermined	-
1Tu451	Surface collection	Destroyed by cultivation and erosion	Undetermined	-
1Tu452	Surface collection	Destroyed by cultivation and erosion	Undetermined	-
1Tu453	Shovel Tests 2 50 by 50 cm tests	Destroyed by cultivation and erosion	Undetermined	-
1Tu454	Shovel Tests 3 50 by 50 cm tests	Unplowed deposit	Undetermined	-
1Tu455	Surface collection Shove tests	Destroyed by cultivation and erosion	Undetermined	-
1Tu456	Photographed Historic documentation	Destroyed by landscaping	Twentieth century	-
1Tu457	Surface collection Historic documentation	Destroyed by landscaping	Twentieth century	-
1Tu458	Surface collection	Destroyed by landscaping	Late Woodland	-
1Tu459	Surface collection 5 Features excavated	Destroyed by landscaping	Late Woodland, Mississippian, Historic Creek	-

Table 7. Site Evaluation and Integrity (Continued).

Site	Evaluation Procedure	Deposits	Significant Components	Recommendations
1Tu460	Surface collection	Destroyed by landscaping	Undetermined	-
1Tu461	Surface collection	Destroyed by cultivation and erosion	Late Woodland	-
1Tu462	Surface collection Historic documentation	Destroyed by cultivation and erosion	Nineteenth to twentieth century	-
1Tu463	Surface collection Historic documentation	Destroyed by cultivation and erosion	Nineteenth to twentieth century	-
1Tu464	Oral interviews Structure Measurements Photography	Standing tenant house and associated outbuildings	Middle to late twentieth century	-
1Tu465	Photography Historic documentation	Standing structure	Middle twentieth century	-
1Tu466	Shovel Tests 2 50 by 50 cm Tests Historic documentation	Undetermined	Early to middle nineteeth century	-
1Tu467	Shovel Tests 3 50 by 50 cm tests	Unplowed deposits	Late Woodland	-

Woodland and Mississippian comprise the most intensive occupations in the area. The project has selected a series of ten sites which are potentially eligible for inclusion in the NRHP. Although sufficient information to make NRHP nominations has yet to be obtained, the NRHP criteria have been applied to the extent the data will allow. Further evaluation will be required at these sites during the Phase II testing.

The resource evaluation is based upon the National Register eligibility criteria (36CFR60.4) and the sites are considered potentially eligible for NRHP nomination under Criterion D of the National Register of Historic Places. These resources may have the capacity to produce meaningful information about the prehistoric and historic occupation of the Black Warrior River Valley.

The currently available data on settlement and subsistence patterns, technological processes, social organization, etc., in the Black Warrior Valley are presently being developed. Previous research in the area has been limited almost exclusively to large prehistoric Late Woodland-Mississippian mound and village complexes and historic antebellum mansions. Smaller prehistoric sites and historic tenant farms and industrial sites have received little attention. The regional research questions will be discussed in the following section. The attributes selected to evaluate the research potential of each site recommended for further investigation include: (1) resource integrity, (2) site integrity, (3) physiographic setting, and (4) period of occupation.

Resource Integrity

The integrity of a cultural resource is largely measured by the intactness of the cultural deposits. A statement of integrity is essentially an evaluation of the research potential of an archaeological property or a district to provide significant information on designated topics of prehistory or history. The integrity of a resource is enhanced by the presence of undisturbed deposits or features.

A site's integrity can be impacted by natural forces of erosion and flooding, postdepositional destruction by aboriginals, agricultural practices, timbering, and industrial developments. The following discussion will include the problems in evaluating the impact to archaeological sites by cultivation, timbering, and erosion within the project area.

Archaeological sites that have been cultivated but still contain subplowzone undisturbed cultural deposits are also potentially significant. The sites on the north side of the project area have not been subject to deep plowing or subsoil plowing within the past 40 years (Rice, personal communication, 1982). These sites have been cultivated to a depth of 18 to 25 cm (10 to 14 in). On upland floodplains with a steep gradient the floodplain soils are continually being degraded by flood scouring which removes the topsoil to the maximum depth of the plowzone. The net result is the deflation of the plowzone and destruction of the archaeological sites. In lowland floodplain soil deposition is more prevalent. Informants' statements and field observations have indicated that the floodplain in the project area has been both aggrading in the low

areas and degrading in the elevated locations throughout the nineteenth and twentieth centuries.

During the development of intensive horticulture in the Southeast, populations dispersed into small farmsteads throughout the most productive environments. During the Late Woodland, West Jefferson phase, and the Moundville I, II, and III phases, these farmsteads and dispersed hamlets are one class of settlement. The plowzone manifestations of these sites consist of a minimal ceramic scatter accompanied by small amounts of fire cracked rock. Repeated plowing of these sites during the last 150 years has effectively obscured these farmstead and hamlet locations.

Although no features were encountered during the preliminary testing of some sites, this can be attributed to the low probability of locating a feature with a limited number of tests. For example, if the dimensions of a site are 75 m by 50 m (246 ft by 164 ft) the total area of the site is 3,750 m^2 (40,344 ft^2). If four 50 by 50 cm (1.64 by 1.64 ft) units were excavated, 1 m^2 (10.7 ft^2) of the subsoil was examined. This constitutes a sample of 0.03 percent of the site. This is clearly an inadequate sample for evaluation of the subplowzone deposit.

Several criteria may be used as reasonable indicators that subplowzone features not encountered in tests may be present. The artifact content of these sites indicates a recurrent or intensive occupation at that location. Specific classes of food collecting or food processing artifacts such as pitted/edge battered cobbles, ground stone manos or metate fragments, suggest that food processing and on site storage facilities may be present. In either situation, where an intensive or long term occupation or evidence of task specific on site food processing is indicated from the surface collection the possibility of intact subplowzone deposits is strengthened.

Artifact distributions on the eroded subsoil located on the edge of the second terrace also provide evidence of undisturbed subplowzone deposits. As the surface is gradually eroded due to cultivation and sheet wash the artifacts are also moved down slope. Abundant artifacts in the plowzone of a site which has been eroded to the state where only subsoil is exposed provides evidence that subplowzone deposits are likely present. The artifacts have been continually plowed up from those features.

Ceramic artifacts exposed to annual cultivation are rapidly decomposed into a series of small sherdlets 1 to 3 cm in diameter. The surface treatment of these sherds also rapidly degenerates and the sherds are described as eroded. The ceramic tempering is also a factor in sherd preservation. Shell tempered sherds are leached by the acidic soils and will rapidly decompose. Grog tempering is more stable and does not readily erode or decompose in the soil. Large uneroded sherds recovered from a cultivated site have been recently removed from an undisturbed context.

An example of the problem of identifying Mississippian farmsteads from a plowzone surface collection was encountered at Site 1Tu459. During the original survey, under excellent surface collection conditions, one muller/pitted anvilstone, one Ocmulgee Fields Plain sherd, and one Baytown Plain sherd were recovered. The standard surface collection procedures were employed--approximately one hour of random surface collection by the

crew. The site was dismissed as a low density destroyed site relating to the Late Woodland and Creek occupations of the area.

During a later visit to the project area, a series of midden-filled features was located. Three features had been recently exposed by soil quarrying for an adjacent land fill. Soil removal was halted and an OAR crew excavated six midden filled features. The feature contents included mussel shell, fish bone, mammal bone, charcoal, and quantities of Moundville III phase ceramics. A Mississippian wall trench house, two other possible structures, and a large number of midden filled features and scattered post holes were also observed but could not be excavated prior to the removal of land fill.

Evidence for a Mississippian component at this site was not noted during the first investigation. Repeated cultivation and acid soils had rapidly decomposed shell tempered ceramics. Cultivation and erosion had also dispersed the localized midden so that it could not be recognized in the plowzone.

A second example of the problem encountered with dispersed settlement patterns and their potential to yield significant information is the West Jefferson sites, 1Je32 and 1Je33 (Jenkins and Nielsen 1974) northwest of Birmingham. Site 1Je32 was tested but not surface collected prior to the removal of the plowzone. Site 1Je32 measured approximately 450 by 150 ft (67,500 ft^2) and nine 10 by 10 ft (900 ft^2) test units--approximately 1.3 percent of the site area--were excavated prior to removal of the plowzone from this site. From these excavations 5 features and 32 post holes were recovered. After the site was stripped, 54 features and 265 post holes were recovered. The site appears to represent two to four dispersed structures and associated features.

Site 1Je33, located on Village Creek, was plowed and thought to be a camp site. However, after the plowzone was removed, and the subsoil examined, the site was reevaluated as a large site.

> Before the site was graded it was thought to be merely a camp site, for only small bits of pottery and chert flakes were found on the surface. However after the grading it was obvious that the site was a rather large village. The majority of the artifacts were found to be in the features. A total of 45 features were uncovered (Jenkins and Nielsen 1974:85).

These three sites, 1Je32, 1Je33, and 1Tu[illegible], were represented by a minimal artifact density in the surface collection. The features or structures were spatially restricted so that the subplowzone features may not be adequately sampled by test unit excavations. The Late Woodland groups developed extensive subterranean storage facilities which were later used for trash disposal. The Mississippian food storage technology did not involve extensive subterranean facilities, but burials, post hole patterns, and fire basins are commonly preserved below the plowzone. These sites were properly evaluated only by removal of the plowzone and examination of the subsoil for undisturbed deposits.

In summary, any attempt to evaluate the presence or absence of intact subplowzone deposits in cultivated fields without intensive testing is a

speculative proposition. Cycles of soil deposition and erosion have occurred repeatedly throughout the Holocene. Alluviated sites may occur but are not evident in the plowzone within the floodplain areas. During the Late Woodland-Mississippian occupations the settlement pattern was dispersed into small household units. The artifact debris has been scattered and the shell tempered ceramics have decomposed. Two examples have been cited where sites were underestimated on the basis of plowzone observations. Given the survey techniques and level of investigation employed during this project it is possible tnat undisturbed cultural deposits may occur. However, those sites selected for further testing and potential NRHP nomination retain the highest probability for containing significant archaeological information within an intact cultural matrix.

Site Integrity

Intact cultural deposits have been located throughout the project area. The intact deposits occur in three situations: (1) features preserved below the plowzone, (2) sites which have not been cultivated, and (3) sites which have been alluviated. All three situations occur in unique microenvironments and will require further evaluation.

In archaeological sites which have been cultivated, intact cultural deposits are commonly present below the plowzone. Generally archaeological sites impacted by cultivation have been plowed to a depth of 18 to 25 cm. This plowing has mixed the upper strata. However, features and/or cultural strata not entirely disturbed are present in the site subsoil. These features have a series of limitations which include: (1) strata of origin of these features have been destroyed, (2) the contents of these features are often mixed with earlier occupations on the site, and (3) the features' primary use is obscured by their secondary use for trash deposit. The research potential of these features has been widely developed through eastern North American archaeology.

These features are commonly filled with refuse which contains botanical and faunal subsistence data. The feature morphology and the lower stratum in the pit often yields evidence of primary function prior to being used as trash receptacle. The kind and quality of cultural materials contained in feature fill is often significantly different from that recovered from middens. The material recovered from middens has often been disturbed by pedal turbulation and sheet erosion by flood scouring, and the organic artifacts have been exposed to oxygen and normal decay processes. In contrast, the refuse fill of features may be a primary deposit and the contents have not been exposed to the destructive environments of the site surface.

In archaeological sites where the floors of houses have often been destroyed by cultivation, the post holes can yield information regarding the size and shape of structures. The arrangement of these features over a site can yield information regarding the number of households in a settlement, and the organization of activities on a site. The burials encountered in subplowzone features can yield information concerning human biology, mortuary practices, and aspects of the sociopolitical organization.

Archaeological sites within the project area which contain documented subplowzone features include: Sites 1Tu264, 1Tu265, 1Tu266, 1Tu421, 1Tu423, 1Tu426, 1Tu427, 1Tu432, 1Tu436, and 1Tu466.

The second kind of intact cultural deposits in the project area is archaeological sites which have not been cultivated. These sites are located in areas which have been allowed to remain in timber because the area was too small to be efficiently cultivated or is located on the edge of a cultivated field. These sites typically consist of an artifact scatter throughout the A horizon soil profile. These unplowed sites provide a unique opportunity to examine the pristine matrix of archaeological sites. The research potential of these sites is enhanced by the preservation of specific classes of features which are completely destroyed by cultivation at other types of sites. Microstratigraphy and origin levels of features and structure floors are preserved at these sites. An entire class of features which are not constructed by excavating subterranean pits are rarely preserved except in uncultivated sites. Uncultivated sites in the project area are rare and only three have been recorded: Sites 1Tu444, 1Tu454, and 1Tu467.

Archaeological sites which have been alluviated and subsequently buried during or following excavation possesses a high degree of integrity. With the exception of potential flood scouring and disturbance by aboriginal occupants, the sites have not been disturbed. The high information potential of these sites is the temporal control and recovery of single occupation components in a sealed context. Within the project area the stratified or potentially stratified sites include: Sites 1Tu264, 1Tu265, 1Tu266, 1Tu421, 1Tu423, 1Tu427, 1Tu426, 1Tu423, and 1Tu436.

Physiographic Setting

The physiography of the project area has been described in Chapter II. An assumption employed during the survey is that both prehistoric and historic settlement patterns are influenced by topography and relationship to water. Prehistoric settlements occurred on both the first and second terraces. The major prehistoric settlements were located on the floodplain on the bank of the active river or creek channels. Minor extraction sites were located adjacent to impounded water and also adjacent to drainage channels. The historic settlements are located almost exclusively on the second terrace above any threat from flooding. The topography and the sites associated with the topographic features are presented in Table 8.

Period of Occupation

The five major stages of human occupation are represented at 49 sites investigated within the Oliver Lock and Dam project area. A total of 70 prehistoric and 31 historic components was identified. These include 2 Early Archaic, 2 Middle Archaic, 9 Late Archaic, 9 Gulf Formational, 10 Middle Woodland, 24 Late Woodland, and 15 Mississippian components as illustrated in Table 9. The components recommended for Phase II investi-

Table 8. Geomorphic Features and Settlements.

River Channel Levee T-1a	River Channel Levee T-1b, T-1c	Late Holocene Terrace T-1a	Middle Holocene Terrace T-1b, T-1c T-1d	Alluvial Fan AF-1a, AF-1b	Second Terrace T-2
1Tu264	1Tu453	1Tu430	1Tu428	1Tu443	1Tu308
1Tu265	* 1Tu457	1Tu431	1Tu429	1Tu445	1Tu438
1Tu266	1Tu458	1Tu432	1Tu435	1Tu446	* 1Tu439
1Tu421	1Tu460	1Tu433	1Tu436	* 1Tu447	* 1Tu440
1Tu422	* 1Tu466	1Tu434	1Tu437	1Tu448	* 1Tu441
1Tu423			1Tu451	1Tu450	1Tu442
1Tu426				1Tu454	1Tu444
1Tu427					1Tu449
* 1Tu465					1Tu452
1Tu467					1Tu455
					* 1Tu456
					1Tu459
					1Tu461
					* 1Tu462
					1Tu463
					* 1Tu464
10	5	5	6	7	16

_____ Sites Recommended for Priority 1, Phase II testing.

* Denotes Historic Sites

Table 9. Cultural Components Represented at Sites Investigated.

	Early Archaic	Middle Archaic	Late Archaic	Gulf Formational	Middle Woodland	Late Woodland	Mississippian	Undetermined Prehistoric	Historic Major Sites	Historic (Trace)	Site Type
1Tu264	-	-	-	-	-	X	X	-	-	X	4F
1Tu265	-	-	-	X	-	X	-	-	-	-	6B
1Tu266	-	-	X	X	-	X	X	-	-	X	5F
1Tu308	-	X	X	X	X	X	X	-	-	X	3D
1Tu421	-	X	-	X	-	X	X	-	-	-	5E
1Tu422	-	-	-	-	-	-	X	-	-	-	3D
1Tu423	-	-	X	X	-	X	X	-	-	X	4D
1Tu426	-	-	-	-	X	X	X	-	-	X	5C
1Tu427	-	-	-	-	-	X	X	-	-	-	6F
1Tu428	-	X	X	X	X	X	-	-	-	X	1F
1Tu429	-	-	-	-	-	X	-	-	-	X	4C
1Tu430	-	-	-	-	-	X	-	-	-	X	2C
1Tu431	-	-	X	-	-	X	X	-	-	X	2F
1Tu432	-	-	-	-	-	X	X	-	-	X	4D
1Tu433	-	-	X	X	-	X	X	-	-	X	2D
1Tu434	-	-	-	-	-	X	X	-	-	X	3C
1Tu435	-	-	-	-	-	-	-	X	-	-	2C
1Tu436	-	-	X	X	X	X	X	-	-	X	5E
1Tu437	-	-	-	-	-	-	-	X	-	X	1D
1Tu438	X	-	-	-	X	X	-	-	-	X	4C
1Tu439	-	-	-	-	-	-	-	X	X	-	2C
1Tu440	-	-	-	-	-	-	-	X	X	-	3B
1Tu441	-	-	-	-	-	-	-	X	X	-	5B
1Tu442	-	X	X	-	-	X	-	-	-	-	2C
1Tu443	X	-	-	-	-	-	-	-	-	-	2C
1Tu444	-	-	-	-	-	-	-	X	-	-	4F
1Tu445	-	-	-	-	-	-	-	X	-	-	2C
1Tu446	-	-	-	-	-	X	-	-	-	-	1C
1Tu447	-	-	-	-	-	-	-	X	X	-	5C
1Tu448	-	-	-	-	-	-	-	X	-	X	1C
1Tu449	-	-	-	-	-	X	-	-	-	X	1B
1Tu450	-	-	-	X	-	-	-	-	-	-	3F
1Tu451	-	-	-	-	-	-	-	X	-	-	3E
1Tu452	-	-	-	-	-	-	-	X	-	-	2D
1Tu453	-	-	-	-	-	-	-	X	-	-	2B
1Tu454	-	-	-	X	-	X	-	-	-	-	2A
1Tu455	-	-	-	-	-	-	-	X	-	X	1B
1Tu456	-	-	-	-	-	-	-	-	X	-	3B
1Tu457	-	-	-	-	-	-	-	X	X	-	4C
1Tu458	-	-	X	-	-	X	-	-	-	-	4C
1Tu459	-	-	-	-	-	X	X	-	-	X	4C
1Tu460	-	-	-	-	-	X	-	-	-	-	2B
1Tu461	-	-	-	-	-	X	-	-	-	-	3C
1Tu462	-	-	-	-	X	-	-	-	X	-	3D
1Tu463	-	-	X	-	-	-	-	-	X	-	5C
1Tu464	-	-	-	-	-	-	-	-	X	-	5D
1Tu465	-	-	-	-	-	-	-	-	X	-	-
1Tu466	-	-	-	-	-	-	-	-	X	-	2C
1Tu467	-	-	-	-	-	X	-	-	-	-	2C
TOTALS	2	4	10	10	6	26	14	14	11	19	

_____ Sites Recommended for Further Evaluation.

gation include: 2 Middle Archaic, 4 Late Archaic, 6 Gulf Formational, 3 Middle Woodland, 10 Late Woodland, 8 Mississippian, 2 Historic. These components were identified from diagnostic projectile points, ceramics, glass, and metal fragments recovered from each site. The Early and Middle Archaic periods are minimally represented. The Late Archaic, Gulf Formational, and Middle Woodland, although represented, comprise a relatively minor portion of the prehistoric cultural resources. The Late Woodland and Mississippian occupations represent the largest prehistoric settlements in the area. The Historic period encompasses the period from the earliest settlement, ca. 1816, to the middle twentieth century. These sites include the former residence of a small land holding farmer which was later subsumed into one of the large plantations of the area. A number of tenant sharecropper houses was also located.

Together the resource integrity, physiographic setting, and components represented have provided the basis for evaluating whether an archaeological site may characterize the cultural development of the project area and contribute to an understanding of the local or regional prehistory and history. The significance of each specific resource must be evaluated in comparison to similar sites in related environments along the Black Warrior River. Because no comprehensive archaeological surveys or excavations of the Holocene and Pleistocene terraces have been conducted, little meaningful descriptions for resource comparison are available. Comparative information from similar topographic, geologic, and vegetational microenvironments is also not available.

RESEARCH DESIGN

The cultural resources reconnaissance survey of the Oliver Lock and Dam project area represents one of the first systematic comprehensive investigations encompassing more than one physiographic zone within the Black Warrior River Valley. The sites located within the project area have been evaluated by the above criteria in order to determine which sites may be potentially qualified for National Register consideration. Further information will be required before a complete determination of eligibility can be made. Although all of the resource locations contain potentially useful data, the sites recommended for further investigation are those evaluated as capable of contributing the most significant information to further understanding the area's history or prehistory. These archaeological sites contain data in a context of sufficient integrity to enable a successful interpretation of the human adaptation and settlement of the area. The archaeological sites recommended for further work have been summarized by component and integrity in Table 7.

Prehistoric Sites

A study of the cultural dynamics which have taken place within the Black Warrior River Valley will require an investigation of the prehistoric chronology, settlement-subsistence adaptations, social systems, and the environment to which those cultural systems have adapted. A research design for the west central Alabama region is intended to guide these investigations. Following is a series of research topics, drawn from the

as yet unspecified research design, which will illustrate the range of topics to be addressed.

(1) The cultural chronology for the Black Warrior River has been largely extrapolated from excavations conducted along the Tombigbee River. The Archaic and Gulf Formational stages are largely unknown at this time. A sample of single component or stratigraphically isolated components is required to adequately define these cultural stages. The artifact assemblages and synchronic development have only been initially investigated. A larger sample with well controlled stratigraphic relationships will be necessary to develop a more specific chronology.

(2) Lithic resources within the Black Warrior River area include chert, quartzite, and sandstone gravels of the Tuscaloosa formation. The larger crude tools and some of the projectile point/knives and milling stones were commonly manufactured from locally available materials. Cherts of the Fort Payne formations were consistently noted during this survey. In addition, minor amounts of greenstone and Tallahatta quartzite were also recovered. The presence of these nonlocal materials implies trade or long distance resource procurement. The development of models to understand prehistoric interactions and exotic material procurement can be initiated using data recovered from future investigations in this area.

(3) The process of cultural adaptation to an environment has, to this point, been largely extrapolated from a generalized ecological model for each cultural stage. Specific information of the synchronic environmental adaption of cultures to the riverine, floodplain, and second terrace microenvironments can be obtained by further archaeological research in this area.

(4) In the Oliver Lock and Dam study area initial steps have been made to specify Holocene topographic development. Specific attention was given to the Hypsithermal (Middle-Late Archaic) shift in the Black Warrior River channel. The Middle Archaic riverine topography has been identified and the development of post-Hypsithermal point bar/river levee sequence has been identified. The effect of these riverine changes on site locations and potentially buried cultural deposits can be intensively investigated.

(5) The project area is situated at the Fall Line where the Black Warrior River changes from a narrow constricted channel with a relatively steep gradient to a wide alluvial valley with a consequent change in gradient. Here the river widens and begins a series of meanders which continue downstream to its confluence with the Tombigbee River. The project area is located at that transition between these two regimes. As a result, a unique series of river levees has been preserved, and the settlement patterns on the first meander belt within the Black Warrior River valley can be evaluated.

(6) The Late Woodland-Mississippian transition is the most widely disputed cultural development in Alabama. The dynamics of this cultural development have been established in a series of hypotheses which range from a complete acculturation of the Late Woodland groups by migrating Mississippian groups, to the in place development of Mississippian culture from the Late Woodland population. The large incidence of Late Woodland and Mississippian phase components at the sites investigated will provide a laboratory to test these hypotheses.

(7) The Late Woodland-Mississippian cultural transition involves primarily a change to intensive horticulture and the emergence of a complex sociopolitical system. The causal relationship between these developments is largely unknown. Is the transition to a productive surplus a prerequisite for the development of a chiefdom or will a chiefdom sociopolitical system promote an intensification of productivity? Future research using bone collagen, botanical remains, and population curves should contribute important components to this research.

(8) The Mississippian stage in the Warrior Valley is represented by the Moundville phases on the Black Warrior River, one of the largest Mississippian developments in eastern North America. Literally dozens of articles, papers, reports, and dissertations on various aspects of this culture have been written (Scarry 1980a).

Almost all of the fieldwork has focused on the site of Moundville itself. This has had two results. First, the size and adequacy of the data base on the Moundville population is essentially in direct proportion to site rank. A large amount of data is available on the Moundville site, less on the local centers, still less on the villages, and almost nothing on the hamlets and farmsteads. The existence of Mississippian hamlets or farmsteads in the Moundville settlement system is now being explored (Bozeman 1980). The single component farmsteads and hamlets are virtually unknown and no excavations have been conducted at these sites. Site 1Tu459 was located during this survey. A three day salvage excavation sufficiently demonstrated that this site was essentially a single component Mississippian site.

The Phase I survey has obtained the initial information relevant to formulating and addressing these research topics. Additional testing and evaluation of these sites will substantially add to this information base.

Historic Site

One historic American site has been recommended for Phase II testing because of its potential for significantly enhancing our knowledge of certain aspects of frontier and antebellum life in early Alabama. This site is the Rhodes farmstead, Site 1Tu441.

The Rhodes farmstead site consists of the remains of a log cabin with associated wells, outbuildings, and an archaeological deposit. The site

is on an 80 acre tract purchased by Issac Rhodes in 1821. There is a preponderance of diagnostic early nineteenth century ceramics at the site, as well as artifacts demonstrating occupation through the later nineteenth and twentieth centuries. The Rhodes farmstead archaeological contexts may provide important data concerning the economic and social roles of the small farmer participating in an economy dominated by a plantation regime. The study of a small, early nineteenth century farmstead adjacent to a vast contemporaneous cotton plantation (Cherokee plantation) may reveal economic interdependencies that are inaccessible through documentary research.

PHASE II TESTING

A total of 10 sites has been recommended for further testing. The Phase II testing program should consist of (1) a 20 percent controlled surface collection, (2) a stratigraphic deep testing program using a backhoe to locate deeply buried cultural deposits, (3) removal of a sufficient area of the site's plowzone to evaluate the subplowzone horizon for intact deposits, and (4) excavation of a series of test units. A resistivity survey of the historic site should also be performed. The information generated from the Phase II intensive testing program will be sufficient to complete a determination of eligibility to the NRHP for each site investigated.

Controlled Surface Collection

A 20 percent controlled surface collection (CSC) should be obtained from each recently plowed site. If the 20 percent sample is insufficient, one or more increments of 10 percent will be added until sufficient material is obtained to supply a meanful sample. The CSC should consist of a series of 2 m by 2 m or larger units. Transects will be placed at consistent intervals across each site, depending on the site size and artifact density. The CSC will permit an accurate definition of the site boundaries and location of specific areas of artifact concentration within each site. The effects of erosion and plow drag, which tend to obscure the site boundaries, can also be ascertained by this method.

Deep Testing

Sites located on the Holocene floodplain have been subjected to alluviation and soil formation which obscures the site or its potential intensity. A model of the Holocene geomorphology and the changes which have taken place was presented in Chapter II. An evaluation of that model and testing for the presence of buried cultural deposits will require the excavation of a series of backhoe trenches. A geomorphologist or pedologist familiar with Holocene fluvial systems should be consulted. The backhoe trenches will be located and described under the direction of both an archaeologist and a pedologist. A research goal will be to further seriate the river levee accretions and date these deposits using archaeological information.

Plowzone Stripping

Removal of the plowzone and examination of the subplowzone strata is recommended for sites where the potential for undisturbed features in the subsoil is present. This field method is particularly useful when Late Woodland-Mississippian sites with a dispersed settlement pattern are present. It has been documented in Chapter IV that in situ deposits from farmsteads and hamlets cannot be adequately evaluated from the surface collection or limited test pit excavation.

One aspect of the Phase II testing program will consist of a 10 percent sampling of each site following a CSC and test pitting in the area to be affected. The plowzone can be removed and the subsoil examined for intact features. This can be accomplished by employing a motor grader or grade-all to strip the plowzone. Any intact deposits can then be mapped and excavated.

Test Pits

In conjunction with the CSC and the deep testing operations, a series of test units should be excavated within each site matrix. These test units will obtain information relevant to the following goals:

1. Determine the depth of the artifact bearing matrix.
2. Evaluate the relationship of the surface artifact distribution to the subsurface artifact distribution.
3. Determine the stratigraphic sequence of each deposit.
4. Locate and sample undisturbed archaeological deposits.
5. Evaluate the postdepositional disturbance of the cultural matrix.

These test excavations will generally consist of a series of 1 m by 1 m units excavated by natural strata or artificial 20 or 25 cm levels where the natural stratigraphy has not been defined. Test pits can be placed adjacent to backhoe trenches when evaluating buried cultural deposits.

SUMMARY

The Oliver Lock and Dam Phase I archaeological survey encompassed an area of 1100 acres downstream from the present location of Oliver Lock and Dam, Tuscaloosa County, Alabama. The objectives of this project were to provide a 100 percent Phase I survey of the area, to define the nature, extent, and cultural affiliation of each site and to make a preliminary evaluation of all sites encountered.

The field investigation strategy was designed to implement these goals. Shovel testing, examination of bank profiles, and excavation of 50 by 50 cm tests were used to evaluate each site depending on surface visibility afforded by the various types of vegetation, cultivation, and industrial development encountered within the survey area.

The sites were evaluated by a surface collection in recently cultivated fields where 60 to 90 percent of the surface was exposed. In permanent pastures and woodlots with low surface visibility (0 to 25 percent) sites were located by shovel or auger tests and further tested by 50 cm by 50 cm test units. Exposed bank profiles were examined throughout the project area. Rip-rap in some areas precluded examination of the ground surface.

The materials collected from the surface collections, shovel tests, and test units were analyzed at the OAR laboratory at Mound State Monument. The components represented at each site were determined from this analysis. The results of this analysis are presented by provenience in the site inventory, Chapter V.

A description of the artifact density, site size, preservation, geomorphic location, and the cultural significance of each site was presented (Tables 6-9). The typology of sites was generated from this description of site size and artifact density. The integrity, physiographic setting, and components represented were used to devise a preliminary research design for Phase II testing of sites located within the survey area. Research topics which may be investigated during the Phase II testing program were suggested for both the prehistoric and historic sites identified during the present survey.

Finally, the recommended procedures to be used for further evaluation of 10 of the 49 sites recorded during the Phase I survey were described in this chapter. The following chapter contains a detailed description of each of the sites evaluated during the present survey.

CHAPTER V

SITE INVENTORY

Site 1Tu264

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145-150 ft (44.2-45.7 m) AMSL.
Physiographic Location: Site 1Tu264 is located on the T-1a levee, 50 m (164 ft) north of the Black Warrior River and 500 m (1,640 ft) east of the mouth of Mill Creek.

Soil Type: Cahaba sandy loam, Falkner silt loam.

Site Description: Site 1Tu264 is a moderate artifact concentration represented by a plowzone ceramic scatter measuring 600 m (1,968 ft) east-west and 100 m (328 ft) north-south. The soil type is typically a dark yellowish brown sandy loam, 15-25 cm (6-10 in) thick, underlain by yellowish red clay loam. An intermediate stratum of medium brown fine sandy or silt loam, 10-15 cm (4-6 in) thick, is present in the eastward portion of the site. Cultural material was recovered from this stratum. Undisturbed cultural deposits are present in the subsoil.

The western portion of the site is currently utilized as pasture, while the eastern portion is wooded and unplowed. The eastern boundaries of the site could not be defined because of extensive rock rip-rap cover, used to control river bank erosion. A field access road from Oliver Lock and Dam makes the site accessible from the east.

Investigation Procedure: Site 1Tu264 was originally located and surface collected in 1974. The original survey reported:

> This site is on the north bank of the Black Warrior River approximately ½ mile east of the mouth of Mill Creek. A thin scatter of pottery sherds occurs along the ruts of a field road. Small tests revealed no in situ aboriginal material below the plowzone. Possibility of subsoil intrusions does exist (Hubbert 1974, State of Alabama Site Files).

The 1982 survey involved surface collection, five 50 by 50 cm test units, river bank profile, and random shovel tests. Three auger holes were drilled to examine the soil stratigraphy.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	11.6	
Introduced Rock	--	69.0	

	Count	Wt. (g)	Component
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	3	7.0	Late Woodland

Provenience: Test Pit 1, Level 1 (0-13 cm).

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Other			
Concretion (Paint Pot)	--	125.0	
Introduced Rock	--	69.0	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	2	7.0	Late Woodland
Sherdlets - All Tempers	--	3.5	

Provenience: Test Unit 2, Level 1 (0-27 cm).

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	20.2	

Provenience: Test Unit 2, Level 2 (27-60 cm).

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	5.0	

Provenience: Test Unit 3, Level 1 (0-21 cm).

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Cores			
Amorphous Core	1	5.8	
Other			
Debitage-Fire Cracked Rock-Shatter	--	45.4	
Introduced Rock	--	40.6	
CERAMICS			
Sherdlets - All Tempers	--	0.5	

Provenience: Test Unit 3, Level 2 (21-30 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	23.9	

Provenience: Test Unit 4, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.4	
Introduced Rock	--	0.6	
HISTORIC ARTIFACTS			
GLASS			
Mold Made			
Green			
Embossed	2	--	Early 19th-20th century
Unidentified Body Sherds	3	--	Early 19th-20th century
Clear			
Embossed	20	--	Middle 19th-20th century
Unidentified Body Sherds	27	--	Early 19th-20th century
Amber			
Embossed	2	--	Middle 19th-20th century
Unidentified Body Sherds	1	--	
METAL			
Automobile-Tractor Associations	1	--	c. 1905-1980
Gun Shell	1	--	
Aluminum Pull Tab	1	--	
PLASTIC			
Unidentified Fragment	1	--	

Provenience: Test Unit 4, Levels 2 and 3 (20-65 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	1.6	
Introduced Rock	--	11.2	
CERAMICS			
Sherdlets - All Tempers	--	1.5	

Provenience: Test Unit 5, Levels 1 and 2 (0-28 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Distal Fragment	1	0.3	
Unidentifiable Ground Stone Fragments	2	169.3	
Other			
Debitage-Fire Cracked Rock-Shatter	--	4.5	
Introduced Rock	--	226.1	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	1	1.0	Mississippian
Grog Tempered			
Baytown Plain var. Roper	3	6.5	Late Woodland
Unidentified Grog Tempered Incised and Punctated	1	3.0	Middle/Late Woodland
CERAMICS			
Sherdlets - All Tempers	--	5.5	

Provenience: Test Unit 5, Level 3 (28-40 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.4	
Introduced Rock	--	4.0	
CERAMICS			
Sherdlets - All Tempers	--	2.0	

Cultural Affiliation: Late Woodland, Mississippian, American.

Resource Evaluation: Site 1Tu264 is a large Late Woodland-Mississippian site with intact subplowzone cultural deposits. This site probably represents a hamlet once part of a dispersed horticultural settlement pattern which included other similar sites, e.g., Sites 1Tu265, 1Tu266, and 1Tu427. Settlements are expected to be distributed along T-1a levees, so that soils suitable for horticulture could be most effectively utilized. Phase II testing of Site 1Tu264 should provide new information concerning the development of horticultural subsistence settlement patterns in the Black Warrior drainage. The artifact recovery is insufficient to document the significance of a historic component.

Recommendation: Phase II testing.

Site 1Tu265

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145-150 ft (44-46 m) AMSL.
Physiographic Location: Site 1Tu265 is located on a T-1a levee, 20 m (66 ft) north of the Black Warrior River and 100 m (328 ft) east of the junction of Mill Creek with the river. A first order intermittent drainage joins Mill Creek 120 m (394 ft) north of the site. Post-Holocene river deposition provides good potential for buried cultural deposits.

Soil Type: Falkner silt loam, Cahaba sandy loam.

Site Description: Site 1Tu265 is represented by a midden with a dense lithic and ceramic scatter measuring 100 m (328 ft) east-west by 80 m (262 ft) north-south. Testing indicates the presence of dense midden in the plowzone. One post hole was excavated in the subplowzone. The post was 22 cm (9 in) in diameter and extended 16 cm (6 in) below the plowzone. The plowzone is a medium to light brown silty or fine sandy loam 20-25 cm (8-10 in) thick. The subsoil is a yellowish brown silty clay loam.

The site is located in a fallow field. A field service road from Oliver Lock and Dam makes the site accessible from the east. A power line cut is located 160 m (525 ft) north of the site.

Investigation Procedure: 1Tu265 was originally located and surface collected in 1974. The 1974 survey reported:

> This site is located on the east bank of Mill Creek, at the junction of Mill Creek and the Black Warrior River. The site has been recently cultivated. Only one flake was found below the dark, sandy plowzone . . . . Small tests indicate no deposition below the plowzone other than the possibility of features intruded into the subsoil. Black midden-like topsoil argues for possible intense, if brief, occupation. Controlled surface collection and mechanical stripping of topsoil is recommended (Hubbert 1974, State of Alabama Site files).

The 1982 survey involved surface collection, shovel tests, and the excavation of four 50 by 50 cm test pits.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Unidentified Chipped Stone Fragments	1	1.1	
Pecked and Ground Stone			
Hammerstone	2	584.0	

	Count	Wt. (g)	Component
Compound Pecked and Ground Tools			
Muller/Anvilstone	1	905.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	2.4	
Introduced Rock	--	4.5	

Provenience: Test Unit 1, Level 1 (0-15 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Medial Fragment	1	4.7	
Knives			
Uniface Flake Knife	1	14.8	
Other			
Debitage-Fire Cracked Rock-Shatter	--	61.6	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	2	5.0	Late Woodland
Mulberry Creek Cord Marked var. Aliceville	1	3.5	Late Woodland
Sherdlets - All Tempers	--	17.0	

Provenience: Test Unit 1, Level 2 (15-25 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	30.5	
Introduced Rock	--	84.1	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	3.0	Late Woodland
Sherdlets - All Tempers	--	.5	

Provenience: Test Unit 2, Level 1 (0-25 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Pecked and Ground Stone			
Hammerstone	2	140.0	
Ground/Scored Hematite	1	2.0	
Unidentifiable Ground Stone Fragments	1	17.8	

	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	170.0	
Introduced Rock	--	1,581.0	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	4	11.0	Late Woodland
Mulberry Creek Cord Marked var. Aliceville	4	9.5	Late Woodland
Sand Tempered			
Baldwin Plain var. Lubbub	1	2.0	Late Gulf Formational
Sherdlets - All Tempers	--	26.0	

Provenience: Test Unit 2, Level 2 (25-30 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	5.5	
Introduced Rock	--	57.0	
CERAMICS			
Sherdlets - All Tempers	--	0.5	

Provenience. Test Unit 2, Level 2, post hole fill.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	20.0	
Introduced Rock	--	54.4	

Provenience: Test Unit 3, Level 1 (0-21 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Chisels	1	3.4	
Knives			
Biface Flake Knife	1	11.0	
Unidentifiable Chipped Stone Fragments	1	3.7	
Pecked and Ground Stone			
Hammerstone	1	7.0	

	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	—	192.0	
Introduced Rock	--	1,351.0	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	3	9.5	Late Woodland
var. Tishomingo	1	3.0	Late Woodland
Withers Fabric Impressed			
var. Unspecified	1	2.5	Late Woodland
Sand Tempered			
Alexander Pinched			
var. Unspecified	1	2.5	Late Gulf Formational
Sherdlets - All Tempers	—	12.5	

Provenience: Test Unit 3, Level 2 (21-30 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	—	13.0	
Introduced Rock	--	70.0	

Provenience: Test Unit 4, Level 1 (0-21 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	6.2	
Introduced Rock	--	578.0	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	1	2.5	Late Woodland
Sand Tempered			
Eroded Fine Sand Tempered	1	2.0	

Provenience: Test Unit 4, Level 2 (21-35 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	19.7	

Cultural Affiliation: Gulf Formational, Late Woodland.

Resource Evaluation: Site 1Tu265 is a site with at least one intact subplowzone undisturbed feature. More undisturbed deposits are likely present. The site's topographic associations and cultural affiliations indicate its probable identity as a Late Woodland site. Site 1Tu265 is expected to have been a part of a dispersed settlement pattern incorporating similar sites such as Sites 1Tu264, 1Tu266, and 1Tu427. Phase II testing of Site 1Tu265 is expected to be valuable in understanding the development of horticultural subsistence-settlement patterns in the Late Woodland. Further investigations of Site 1Tu265 are also potentially valuable because of the presence of a Late Gulf Formational component.

Recommendation: Phase II testing.

Site 1Tu266

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145-150 ft (44-46 m) AMSL.
Physiographic Location: Site 1Tu266 is located on a T-1a levee 60 m (197 ft) north of the Black Warrior River and 100 m (328 ft) west of the juncture of Mill Creek with the river. The site has been truncated by stream action and flooding through an old sandy overflow chute to the west. Iron and manganese nodules in the soil profiles suggests that this river levee has been present since the middle Holocene.

Soil Type: Choccolocco silt loam, Cahaba sandy loam.

Site Description: Site 1Tu266 is an intense artifact concentration measuring 240 m (787 ft) east-west by 100 m (328 ft) north-south. The midden is contained in the plowzone but testing has located intact features in the subsoil. The topsoil is a dark brown silt loam 10-20 cm (4-8 in) thick. The subsoil is a yellow-brown or orange-gray silty clay loam. Cultural material was confined to the plowzone topsoil with the exception of intact features in the subsoil. One basin shaped pit was encountered that extended 50 cm (20 in) below the plowzone. Two post holes were also noted during the testing. The square plan view of Post Hole 1 suggested that the post was of historic origin. The post holes extended 35-40 cm (14-16 cm) below the plowzone. The site is currently utilized for soybean cultivation providing good surface visibility. A field access road running along the levee makes the site accessible from the west.

Investigation Procedure: Site 1Tu266 was originally located, surface collected, and tested in 1974. The 1974 survey noted:

> This site has two clusters of surface material: one near the creek and the other further east (100 yards) along the river bank. No midden extends below the plowzone, though features dug into the subsoil are a likelihood. Controlled surface collection and mechanical stripping of plowzone are recommended (Hubbert 1974, State of Alabama Site Files).

The 1982 survey involved surface collection of areas producing cultural material and the excavation of five 50 by 50 cm test pits in areas of artifact concentration.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Bifaces			
Triangular Biface	1	5.5	
Preforms			
Preform I	2	56.1	

	Count	Wt. (g)	Component
Cores			
Amorphous Core	2	216.7	
Bipolar Core	1	30.0	
Choppers			
Biface Chopper	1	200.0	
Unidentifiable Chipped Stone Fragments	1	1.4	
Pecked and Ground Stone			
Hammerstone	2	255.7	
Pitted Anvilstone	2	494.0	
Ground/Scored Hematite	1	7.9	
Compound Pecked and Ground Tools			
Muller/Pitted Anvilstone	1	278.1	
Other			
Debitage-Fire Cracked Rock-Shatter	--	129.5	
Introduced Rock	--	141.6	
CERAMICS			
Shell Tempered			
Bell Plain var. Hale	1	1.5	Mississippian
Mississippi Plain var. Warrior	9	25.0	Mississippian
Grog Tempered			
Baytown Plain var. Roper	13	43.5	Late Woodland
var. Tishomingo	2	11.0	Late Woodland
Mulberry Creek Cord Marked var. Aliceville	1	3.5	Late Woodland
Sherdlets - All Tempers	--	17.0	
HISTORIC ARTIFACTS			
GLASS			
White Embossed	1	--	Early 19th-20th century

Provenience: Test Unit 1, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Unidentifiable Chipped Stone Fragments	1	3.5	
Unidentifiable Ground Stone Fragments	1	0.9	
Other			
Debitage-Fire Cracked Rock-Shatter	--	4.0	
Introduced Rock	--	162.6	
CERAMICS			
Sherdlets - All Tempers	--	10.5	

Provenience: Test Unit 1, Level 2 (20-37 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	112.6	
CERAMICS			
Sherdlets - All Tempers	--	0.5	

Provenience: Test Unit 2, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	10.8	
Introduced Rock	--	343.5	
CERAMICS			
Shell Tempered			
Bell Plain var. Hale	1	2.0	Mississippian
Grog Tempered			
Baytown Plain var. Roper	3	10.0	Late Woodland
Sand Tempered			
Alexander Incised var. Unspecified	1	5.0	Late Gulf Formational
Sherdlets - All Tempers	--	15.5	

Provenience: Test Unit 2, Level 2 (20-40 cm), Feature 1.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Unidentifiable Ground Stone Fragments	2	14.9	
Other			
Debitage-Fire Cracked Rock-Shatter	--	40.0	
Introduced Rock	--	154.6	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	2	18.5	Mississippian
Grog Tempered			
Baytown Plain var. Roper	1	5.0	Late Woodland
Sherdlets - All Tempers	--	7.0	

Provenience: Test Unit 2, Level 3 (40-70 cm), Feature 1.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Unidentifiable Ground Stone Fragments	2	11.5	
Other			
Debitage-Fire Cracked Rock-Shatter	--	105.1	
Introduced Rock	--	661.1	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Tishomingo	1	2.5	Late Woodland
var. Unspecified	1	4.0	Late Woodland
Sand Tempered			
Baldwin Plain			
var. Lubbub	1	12.0	Late Gulf Formational
Alexander Incised			
var. Unspecified	2	5.5	Late Gulf Formational
Sherdlets - All Tempers	--	1.5	

Provenience: Test Unit 2, Level 3 (21-57 cm), Post Hole 1.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	1	1.0	
Introduced Rock	--	3.3	
CERAMICS			
Sherdlets - All Tempers	--	0.5	
Bone	--	1.0	

Provenience: Test Unit 2, Level 3 (18-60 cm), Post Hole 2.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	30.0	

Provenience: 50 by 50 cm unit west of Test Unit 2, Level 1 (0-12 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Unidentifiable Ground Stone Fragments	2	60.4	
Other			
Debitage-Fire Cracked Rock-Shatter	--	178.4	
Introduced Rock	--	437.7	

	Count	Wt. (g)	Component
CERAMICS			
Shell Tempered			
Mississippi Plain			
var. Warrior	1	1.5	Mississippian
Grog Tempered			
Baytown Plain			
var. Roper	1	1.5	Late Woodland
var. Tishomingo	1	1.5	Late Woodland
Sherdlets - All Tempers	--	17.5	

Provenience: 50 by 50 cm unit west of Test Unit 2, Level 2 (12-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	1.0	
Introduced Rock	--	47.0	

Provenience: 50 by 50 cm unit west of Test Unit 2, Level 3 (20-56 cm), Feature 1.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	64.2	

Provenience: 50 by 50 cm unit west of Test Unit 2, Level 3 (56-70 cm), Feature 1.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Unidentifiable Chipped Stone Fragments	1	7.3	
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.8	
Introduced Rock	--	59.7	
CERAMICS			
Sand Tempered			
Baldwin Plain			
var. Lubbub	1	3.5	Late Gulf Formational
Sherdlets - All Tempers	--	0.5	

Provenience: Test Unit 3, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Cores			
Bipolar Core	1	22.0	

	Count	Wt. (g)	Component
Scrapers			
Uniface End Scraper	1	5.5	
Other			
Debitage-Fire Cracked Rock-Shatter	--	6.5	
Introduced Rock	--	331.0	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	1	1.5	Mississippian
Grog Tempered			
Baytown Plain var. Tishomingo	1	1.5	Late Woodland
Sherdlets - All Tempers	--	17.0	

Provenience: Test Unit 4, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	19.2	
Introduced Rock	--	122.1	
CERAMICS			
Shell Tempered			
Eroded Coarse Shell Tempered	1	1.5	Mississippian
Grog Tempered			
Baytown Plain var. Roper	2	5.0	Late Woodland
Sherdlets - All Tempers	--	1.0	

Provenience: Test Unit 5, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Ledbetter	1	7.8	Late Archaic
Other			
Debitage-Fire Cracked Rock-Shatter	--	2.8	
Introduced Rock	--	82.5	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	1	2.0	Mississippian

Provenience: Test Unit 5, Level 2 (20-50 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	27.0	

Provenience: Test Unit 6, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	14.2	

Provenience: Test Unit 6, Level 2 (20-37 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	14.2	
OTHER			
Charcoal and Fired Clay	--	232.0	

Provenience: Test Unit 7, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	17.5	
OTHER			
Charcoal	--	1.0	

Cultural Affiliation: Late Archaic, Gulf Formational, Late Woodland, Mississippian, American.

Resource Evaluation: Site 1Tu266 represents a large site with intact cultural features below the plowzone. Recovery of Late Archaic and Gulf Formational artifacts indicates the presence of a long cultural sequence. The site's size, topographic location, and cultural affiliation indicate its identity as part of a dispersed horticultural subsistence-settlement pattern. Phase II testing of Site 1Tu266 in addition to similar T-la levee sites such as Sites 1Tu264 and 1Tu265 is potentially valuable to the understanding the development of Late Woodland-Mississippian subsistence and settlement patterns in the Black Warrior drainage. The recovery is insufficient to document the significance of a historic component at this site.

Recommendation: Phase II testing.

Site 1Tu308

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 160 ft (49 m) AMSL.
Physiographic Location: Site 1Tu308 is located on a T-2 terrace, 900 m (2,952 ft) north of the Warrior River. The second terrace has been dissected by a small intermittent drainage immediately west of the site. The site overlooks the Mill Creek floodplain immediately east of the site, and a shallow water swamp 200 m (656 ft) south of the site. The site has been subject to continued sheet erosion and repeated cultivation on the edge of the second terrace. All of the topsoil has been removed.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu308 is a minimal artifact concentration measuring 160 m (525 ft) north-south and 90 m (295 ft) east-west. The 1982 survey found no indication of intact midden or features. The soil type present is typically composed of a dark yellowish brown, fine sandy loam topsoil over a yellowish red loam subsoil.

The site is currently cultivated in soybeans, providing good surface visibility. The southern one-fourth of the site is covered with a 15 to 20 year old growth of planted pines. The site is accessible by a field access road from the north.

Investigation Procedure: Site 1Tu308 was originally located and surface collected in 1976 (Curren, personal communication). Freshly plowed exposed pits were reported in the 1976 survey. The 1982 survey conducted additional surface collections.

Materials Recovered:

Provenience: General Surface Collection, 1976.

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Woodland Residual Stemmed	1	6.5	
Flint Creek	1	8.7	Gulf Formational
Vaughn	1	16.2	Middle Archaic/Late Archaic
Benton	1	29.0	Late Archaic
PP/K Medial Fragment	1	3.8	
PP/K Distal Fragment	1	6.0	
Other			
Debitage-Fire Cracked Rock-Shatter	—	10.0	
CERAMICS			
Shell Tempered			
Eroded Coarse Shell Tempered	1	3.0	Mississippian
Grog Tempered			
Baytown Plain			
var. Roper	4	33.5	Late Woodland
var. Tishomingo	1	6.5	Late Woodland

	Count	Wt. (g)	Component
Withers Fabric Impressed var. Gainesville	3	35.5	Late Woodland
Salomon Brushed var. Unspecified	1	25.5	Late Woodland
Eroded Grog Tempered	1	9.5	
Sand Tempered			
Unidentified Sand Tempered Punctated	1	4.5	Late Gulf Formational

Provenience: General Surface Collection, 1982.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Flint Creek	1	3.7	Gulf Formational
Late Archaic Residual Stemmed	1	6.6	
PP/K Distal Fragment	1	5.5	
Preforms			
Preform II	1	7.9	
Cores			
Amorphous Core	1	6.0	
Pecked and Ground Stone			
Pitted Anvilstone	1	1474.5	
Other			
Debitage-Fire Cracked Rock-Shatter	--	144.5	
Introduced Rock	--	1557.8	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	2	6.5	Late Woodland

HISTORIC ARTIFACTS

CERAMICS			
Pearlware			
Light Blue Painted	1	--	c. 1780-1830
Porcelain	1	--	

Cultural Affiliation: Middle to Late Archaic, Gulf Formational, Middle Woodland, Late Woodland, Mississippian, American.

Resource Evaluation: Surface collection of Site 1Tu308 indicates prehistoric habitation spanning the Middle Archaic through Mississippian periods. The site's topographic location, like Site 1Tu428, on the second terrace overlooking a diverse range of floodplain backswamp environments is potentially valuable for understanding the exploitation of upland and floodplain environments during the culture periods represented. No features or buried deposits were encountered. The 1976 report of exposed features has not been validated. The extreme contrast in the quantity and diversity of artifacts collected during 1976 when compared to the 1982 collections warrants an explanation. Two potential hypothesis can be

generated: (1) the artifacts were recovered from a feature that had been exposed by plowing and the remaining portions of the feature have been eroded away (2) the site is incorrectly identified as the one Curren recorded. The first hypothesis appears to be the most plausible explanation for the discrepancies in artifact recovery. In either case, the site as it appeared in 1982 did not warrant any further investigation. The historic artifact recovery is insufficient to document the presence of a significant historic component.

Recommendation: No further investigation is recommended.

Site 1Tu421

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu421 is located on the T-1a terrace, 28 m (92 ft) south of the Black Warrior River. Three first order, intermittent drainages flow into the river in the vicinity of the site, one on the site itself, one 80 m (262 ft) east, and one 60 m (197 ft) west of the site. Lateral erosion by the river has created a steep scarp on the site. Buried Mississippian cultural deposits 25 cm (10 in) thick are visible in the river cut bank indicating continued alluviation on the site since this occupation.

Soil Type: Smithdale fine sandy loam.

Site Description: Site 1Tu421 is an intense artifact concentration with a multicomponent buried cultural deposit measuring 450 m (1,476 ft) east-west by 60 m (197 ft) north-south. The soil type present is typically a dark brown fine sandy loam underlain by red sandy loam. A sandy cultural deposit was seen in the river cut bank, buried 20 cm (8 in) deep and 25 cm (10 in) thick. A probable structure was identified in this stratum on the river cut bank at 10 to 15 cm (4 to 6 in) below plowzone. This structure was marked by a deposit of horizontally oriented daub approximately 5 cm (2 in) thick representing the structure floor. A randomly oriented daub layer measuring approximately 3 m (10 ft) in width was located above and around the daub floor, representing a daub fall layer. Two vertically buried sandstone slabs which may represent a feature were seen in a borrow pit bank on the south edge of this site. The site is currently partially wooded and is included in the golf course.

Investigation Procedure: Site 1Tu421 was originally located and surface collected in 1981. The 1981 survey reported:

> Severe erosion of the river bank is eating into the site, which appears to be owned by Tuscaloosa Country Club Golf Course. Some landscaping for the golf course appears to have preserved portions of village midden up to one foot thick beneath a (buried) shallow plowzone.
>
> The Late Woodland component is manifested by McLeod Check Stamped var. Bigbee and Baytown var. Roper. The Mississippian diagnostics are all late Moundville III and Alabama River Phase (arcaded handles, red on white painted bowls, Barton Incised flaring rim bowls). The Middle Archaic component is recognized by the presence of a Vaughn-related projectile point (Welch 1981, State of Alabama Site Files.)

During the 1982 survey, visual observation and collection of the cut bank, borrow pits, and golf course areas were conducted. One 50 by 50 cm test unit was excavated.

Materials Recovered:

Provenience: General Surface Collection, 1982.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Pecked and Ground Stone			
Muller	1	382.0	
Mortar	1	4,080.0	
Unidentifiable Ground Stone Fragments	2	401.4	
Other			
Debitage-Fire Cracked Rock-Shatter	--	39.0	
Introduced Rock	--	3,407.7	
CERAMICS			
Shell Tempered			
Alabama River Applique var. Alabama River	1	1.0	Late Mississippian
Barton Incised var. Unspecified	1	20.0	Late Mississippian, Protohistoric
Bell Plain var. Hale	1	5.5	Mississippian
Mississippi Plain var. Warrior	5	28.0	Mississippian
Eroded Fine Shell Tempered	1	2.5	Mississippian
Grog Tempered			
Baytown Plain var. Roper	3	72.5	Late Woodland
Sand Tempered			
Alexander Punctated var. Unspecified	1	49.5	Late Gulf Formational
Eroded Coarse Sand Tempered	1	2.5	
Sherdlets - All Tempers	--	8.5	
OTHER			
Daub and Fired Clay	--	58.4	
Bone	--	5.0	

Provenience: Test Unit 1, Level 1 (0-18 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	12.0	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	2	2.5	Mississippian
Shell and Grog Tempered			
Eroded Fine Shell and Grog Tempered	1	1.5	Late Woodland/Mississippian
Grog Tempered			
Baytown Plain var. Roper	1	1.5	Late Woodland
Sherdlets - All Tempers	--	7.5	

	Count	Wt. (g)	Component
OTHER			
Daub and Fired Clay	--	9.0	
Charcoal	--	1.5	

Provenience: Test Unit 1, Level 2 (18-35 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	4.0	
CERAMICS			
Sherdlets - All Tempers	--	4.0	
OTHER			
Daub and Fired Clay	--	4.5	
Charcoal	--	0.3	

Provenience: River bank recovery from structure floor.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Scrapers			
Uniface End Scraper	--	29.0	
CERAMICS			
Shell Tempered			
Mississippi Plain			
var. Warrior	3	15.0	Mississippian
Grog Tempered			
Baytown Plain			
var. Roper	1	4.0	Late Woodland

Cultural Affiliation: Middle Archaic, Gulf Formational, Late Woodland, Mississippian.

Resource Evaluation: Site 1Tu421 represents a multicomponent buried cultural deposit, with an intact culture bearing stratum present. The site's topographic location and cultural affiliations indicate its identity as a part of a dispersed Late Woodland-Mississippian settlement pattern. The site also contains buried cultural material probably relating to the Gulf Formational stage. Phase II testing of Site 1Tu421, in conjunction with similar sites such as 1Tu264, 1Tu265, 1Tu266, and 1Tu423 would be valuable for understanding the development and interaction of Late Woodland-Mississippian subsistence settlement strategies. Recovery of Middle Archaic and Gulf Formational artifacts from the surface indicates the possibiiity of older, deeper deposits. This site may be the "Shelltown" site described by Knight (this volume).

Recommendation: Phase II testing.

Site 1Tu422

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 135 ft (41 m) AMSL.
Physiographic Location: Site 1Tu422 is located on a T-1a terrace 20 m (66 ft) south of the Black Warrior River. A small first order intermittent stream is located 20 m (66 ft) to the west. The site has undergone severe stream bank erosion. A minimal buried cultural deposit is present.

Soil Type: Smithdale fine sandy loam.

Site Description: Site 1Tu422 is a minimal artifact concentration measuring 240 m (787 ft) east-west by 50 m (164 ft) north-south. A cultural deposit was observed approximately 50-75 cm below the surface in the riverbank scarp. Extensive erosion beginning downstream from Oliver Lock and Dam has destroyed most of this site. The soil type present is typically a dark brown, fine sandy loam topsoil overlying a red loam subsoil. The site is partially located on a golf course and partially located on Corps of Engineers property. The site is accessible from the east by Corps of Engineers service roads.

Investigation Procedure: Site 1Tu422 was originally located and surface collected in a 1981 survey. The 1981 survey reported:

> The severe streambank erosion immediately downstream of Oliver Lock and Dam on the left of the river has already consumed much of this site. Rip-rap appears to be of minimal efficiency in halting the erosion. The site is on Corps of Engineers land, at least partially, and landscaping and ground cover prevent determination of extent of the site.
>
> The sherds seen along the eroding river bank and in a private collection (D. Temple) indicate Late Moundville III or/and Alabama River Phase occupation. D. Temple speaks of an "old man" who for years insisted that this site was an "Indian burial ground," but this aspect of the site has not been verified (Welch 1981, State of Alabama Site Files.)

The 1982 investigation involved surface collection of the river bank.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Cores			
Bipolar Core	1	3.2	
Choppers			
Biface Chopper	1	570.0	
Compound Pecked and Ground Tools			
Muller/Pitted Anvilstone	2	2030.0	

	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	82.0	
CERAMICS			
Eroded Fine Shell Tempered	--	1.4	Mississippian
HISTORIC ARTIFACTS			
METAL			
Gun Shell	1	--	
PLASTIC/RUBBER	1	--	

Cultural Affiliation: Mississippian, American.

Resource Evaluation: Site 1Tu422 represents the remnants of a buried cultural deposit. The site contains evidence of a Mississippian occupation. However, the site has been destroyed by erosion, construction, and landscaping activities. No intact features were located. No further investigation is recommended.

Recommendation: No further investigation is recommended.

Site 1Tu423

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 135 ft (41 m) AMSL.
Physiographic Location: Site 1Tu423 is located on a low T-1a terrace, 20 m (66 ft) south of the Black Warrior River. A first order intermittent drainage joins the river 40 m (131 ft) east of the site. The site has been affected by stream bank erosion and lateral meandering of the river. Buried cultural deposits are potentially present due to overbank soil deposition.

Soil Type: Falkner silt loam.

Site Description: Site 1Tu423 is a moderate artifact concentration in the plowzone measuring 300 m (984 ft) east-west by 100 m (328 ft) north-south. The soil type present is typically a dark yellowish brown silt loam topsoil, overlying a yellowish brown mottled silty clay loam. The site is currently cultivated in a garden, and three 50 by 50 cm units were excavated. Although no midden or features were detected, cultural material was recovered from a subplowzone stratum extending 12 cm (5 in) beneath the plowzone. The wide range of components and the presence of alluviation represent a situation where *in situ* features may be present.

Investigation Procedure: Site 1Tu423 was originally located and surface collected in 1981. The 1981 survey reported:

> A large garden plot on the left bank of the Warrior River has a light scatter of shell-tempered pottery. The site lies on a ridge of land parallel to the river, 50-100 meters N-S.
>
> The few plain shell-tempered sherds seen during a quick visit to this site are augmented by D. Temple's collection of Late Moundville III and/or Alabama River Phase ceramics (Welch 1981, State of Alabama Site Files).

The 1982 survey involved surface collection of exposed river bank areas and excavation of three 50 by 50 cm test units.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Small Triangular	1	1.8	Late Woodland/Mississippian
Little Bear Creek	1	11.7	Late Archaic/Gulf Formational
Late Archaic Residual Stemmed	1	8.2	Late Archaic
Bifaces			
Other Biface	1	16.0	
Knives			
Uniface Flake Knife	1	10.0	

	Count	Wt. (g)	Component
Choppers			
Uniface Chopper	1	199.4	
Biface Chopper	2	1,408.6	
Unidentifiable Chipped Stone Fragments	1	0.6	
Pecked and Ground Stone			
Hammerstone	4	1,373.8	
Pitted Anvilstone	1	250.0	
Greenstone Celt Fragment	1	5.4	
Unidentifiable Ground Stone Fragments	1	31.8	
Other			
Debitage-Fire Cracked Rock-Shatter	--	93.8	
Introduced Rock	--	1,121.4	
CERAMICS			
Shell Tempered			
Bell Plain var. Hale	2	13.3	
Mississippi Plain var. Warrior	15	42.6	Mississippian
Carthage Incised var. Unspecified	1	7.3	
Shell and Grog Tempered			
Sparse Shell and Grog Incised	2	9.0	Late Woodland/Mississippian
Baytown Plain var. Curry Creek	1	5.5	Late Woodland/Mississippian
Grog Tempered			
Baytown Plain var. Roper	3	22.5	Late Woodland
var. Unspecified	2	14.1	Late Woodland
Sand Tempered			
Baldwin Plain var. Lubbub	1	34.8	Late Gulf Formational
Alexander Punctated var. Unspecified	1	10.5	Late Gulf Formational
Sherdlets - All Tempers	--	1.5	
HISTORIC ARTIFACTS			
METAL			
Iron Chain	1	--	

Provenience: Test Unit 1, Level 1 (0-19 cm).

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	2.5	
CERAMICS			
Sherdlets - All Tempers	--	0.5	

	Count	Wt. (g)	Component
OTHER			
Charcoal	--	0.3	
HISTORIC			
GLASS			
Clear			
Unidentified Body			
Sherds	2	--	Early 19th-20th century

Provenience: Test Unit 2, Level 1 (0-18 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	62.0	
Introduced Rock	--	139.0	
OTHER			
Charcoal	--	0.5	

Provenience: Test Unit 3, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	71.5	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	1	1.5	Mississippian
Sherdlets - All Tempers	--	5.5	
OTHER			
Daub and Fired Clay	--	4.5	
Charcoal	--	0.2	

Provenience: Test Unit 3, Level 2 (20-40 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	23.0	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	1	4.5	Mississippian
OTHER			
Daub and Fired Clay	--	2.0	

Cultural Affiliation: Late Archaic, Gulf Formational, Late Woodland, Mississippian, American.

Resource Evaluation: Site 1Tu423 is a moderate artifact concentration in the plowzone with subplowzone features and/or midden potentially present. The number of components present, together with the possibility of buried cultural deposits, could make Site 1Tu423 valuable for understanding the cultural sequence in the Black Warrior region. The site is potentially valuable for understanding riverine subsistence from the Late Archaic to the Mississippian. Testing of this site, in conjunction with similar homestead sites (1Tu264, 1Tu265, 1Tu421) would be potentially valuable for understanding Late Woodland-Mississippian subsistence and settlement strategies. The significance of Site 1Tu423 is potentially high due to the undisturbed subplowzone deposits and the presence of Late Archaic through Mississippian components.

Recommendation: Phase II testing.

Site 1Tu426

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu426 is located on a T-1a levee 80 m (262 ft) north of the Black Warrior River and 400 m (1,312 ft) west of the confluence of Mill Creek and the river. A small swamp occurs immediately north of the site. Buried deposits are potentially present as a result of recent alluvial deposition.

Soil Type: Cahaba sandy loam.

Site Description: The site is an intense artifact concentration in the plowzone measuring 160 m (525 ft) east-west and 60 m (197 ft) north-south. The topsoil present is a dark brown sandy loam underlain by a yellowish clay loam. During the test pit excavation a dense daub concentration feature was encountered in both the plowzone and subplowzone.

The site is currently under soybean cultivation. A pipeline and power line right of way crosses 50 m (164 ft) west of the site. A field road makes the site accessible from the west.

Investigation Procedure: Surface collection in areas of concentration. Two 50 by 50 cm test units were excavated.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Swan Lake	1	4.5	Middle Woodland
Preforms			
Preform I	1	14.0	
Cores			
Amorphous Core	3	61.0	
Knives			
Biface Cobble/Pebble Knife	1	22.0	
Adzes, Axes			
Biface Adze	1	66.2	
Scrapers			
Scraper on Biface	1	7.5	
Unidentified Chipped Stone Fragments	1	3.2	
Pecked and Ground Stone			
Gorget Fragment	1	17.4	
Unidentifiable Ground Stone Fragments	2	98.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	335.4	
Introduced Rock	--	1137.8	

	Count	Wt. (g)	Component
CERAMICS:			
Shell Tempered			
Mississippi Plain			
var. Warrior	1	1.5	Mississippian
Shell and Grog Tempered			
Baytown Plain			
var. Curry Creek	1	5.0	Late Woodland/Mississippian
Grog Tempered			
Baytown Plain			
var. Roper	96	531.0	Late Woodland
var. Tishomingo	14	35.5	Late Woodland
Mulberry Creek Cord Marked			
var. Aliceville	5	27.0	Late Woodland
Marksville Incised			
var. Unspecified	1	2.5	Middle/Late Woodland
Eroded Grog Tempered	2	8.6	
Sherdlets - All Tempers	--	55.0	
HISTORIC ARTIFACTS			
CERAMICS			
Pearlware			
Undecorated	1	--	1780-1830
BUILDING MATERIAL			
Cement Fragment	1	--	
Slate	1	--	

Provenience: Test Unit 1, Level 1 (0-30 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	9.3	
Introduced Rock	--	234.7	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	2	4.3	Late Woodland
Mulberry Creek Cord Marked			
var. Aliceville	2	4.0	Late Woodland

Provenience: Test Unit 2, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	12.0	
Introduced Rock	--	58.9	

	Count	Wt. (g)	Component
CERAMICS			
Shell Tempered			
Bell Plain			
var. Hale	2	3.1	Mississippian
Mississippi Plain			
var. Warrior	1	1.4	Mississippian
Grog Tempered			Late Woodland/Mississippian
Grog Tempered			
Baytown Plain			
var. Roper	1	1.0	Late Woodland
OTHER			
Daub and Fired Clay	--	259.0	

Provenience: Test Unit 2, Level 2 (20-38 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Unidentifiable Ground Stone Fragments	2	13.8	
Other			
Introduced Rock	--	62.2	
CERAMICS			
Sand Tempered			
Eroded Fine Sand Tempered	1	1.4	
OTHER			
Daub and Fired Clay	--	159.8	

Cultural Affiliation: Middle Woodland, Late Woodland, Mississippian, American.

Resource Evaluation: Site 1Tu426 is an intense artifact concentration in the plowzone. One test unit contained a feature consisting of dense daub layer in the plowzone and subplowzone. Intact midden and/or features are potentially present. Surface recovery from Site 1Tu426 indicates occupations spanning the Middle Woodland to Mississippian. The site's cultural affiliation and physiographic location make it a probable dispersed Late Woodland-Mississippian horticultural settlement. Further testing of Site 1Tu423 in conjunction with tests of similar first terrace Late Woodland-Mississippian Sites 1Tu264, 1Tu265, 1Tu266, 1Tu421, and 1Tu422 may potentially yield valuable information understanding horticultural subsistence and settlement strategies. Historic artifacts recovered from this site are insufficent to determine the presence of a significant historic component.

Recommendation: Phase II testing.

Site 1Tu427

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu427 is located on the T-1a levee 60 m (197 ft) north of the Black Warrior River. This site is bordered by poorly drained swamp areas at 180 m (590 ft) east and 200 m (656 ft) north of the site. The site is located near relatively recent deposits of sandy loam soils, bordered by an old overflow slough to the west.

Soil Type: Choccolocco silt loam.

Site Description: The site is a well developed midden deposit in the plowzone measuring 400 m (1,312 ft) east-west by 220 m (722 ft) north-south. Dense midden is contained within the plowzone, but testing indicates the presence of pockets of intact subplowzone midden and features. The midden deposit is a dark brown-black silty clay loam extending 15 cm (6 in) below the plowzone. The plowzone is a dark brown silty loam 20 cm (8 in) thick. The A horizon in one test pit extended 15 cm (6 in) below the plowzone with a mottled transition into the red-brown silty clay loam subsoil. One pit, 58 cm (23 in) in diameter and extending 45 cm (18 in) below the plowzone, was excavated.

The site was under soybean cultivation in 1981 providing good surface visibility. The western 20 percent of the site is wooded. A pipeline right of way passes 100 m (328 ft) east of the site. A field road makes the site accessible from the west.

Investigation Procedure: Site 1Tu427 was surface collected in all areas producing cultural material. Four 50 by 50 cm test pits were excavated in areas of heavy artifact concentration.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Small Triangular	1	0.4	Late Woodland/Mississippian
Bifaces			
Biface Fragment	1	16.0	
Gravers	1	4.0	
Scrapers			
Uniface End Scraper	2	1.2	
Other			
Debitage-Fire Cracked Rock-Shatter	--	11.3	
Introduced Rock	--	225.0	

	Count	Wt. (g)	Component
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	18	76.5	Late Woodland
var. Tishomingo	1	2.5	Late Woodland
Avoyelles Punctated			
var. Unspecified	1	3.0	Late Woodland
Sherdlets - All Tempers	--	18.5	
OTHER			
Daub and Fired Clay	--	0.9	

Provenience: Test Unit 1, Level 1 (0-22 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Preforms			
Preform I	1	4.3	
Cores			
Amorphous Core	1	4.7	
Gravers	1	0.3	
Wedges	1	0.6	
Scrapers			
Uniface End Scraper	1	4.3	
Uniface Side Scraper	1	0.4	
Unidentifiable Chipped Stone Fragments	2	0.6	
Other			
Debitage-Fire Cracked Rock-Shatter	--	54.0	
Introduced Rock	--	168.2	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	35	121.0	Late Woodland
var. Tishomingo	1	3.5	Late Woodland
Alligator Incised			
var. Unspecified	1	3.0	Late Woodland
Sherdlets - All Tempers	--	86.0	
OTHER			
Daub and Fired Clay	--	3.8	
Bone	--	0.2	

Provenience: Test Unit 1, Level 2 (22-45 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Scrapers			
Uniface Side/End Scraper	1	0.4	

	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	3.6	
Introduced Rock	--	110.0	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	4	14.5	Late Woodland
Sherdlets - All Tempers	--	10.5	

Provenience: Test Unit 2, Level 1 (0-26 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Small Triangular	3	2.3	Late Woodland/Mississippian
PP/K Proximal Fragment	1	0.9	
Gravers	1	0.6	
Microliths			
Microlith Scraper	2	0.3	
Scrapers			
Uniface Side/End Scraper	2	2.6	
Unidentifiable Chipped Stone Fragments	2	1.2	
Other			
Debitage-Fire Cracked Rock-Shatter	--	122.0	
Introduced Rock	--	136.0	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	1	3.0	Mississippian
Grog Tempered			
Baytown Plain			
var. Roper	78	279.0	Late Woodland
var. Tishomingo	1	2.5	Late Woodland
Mulberry Creek Cord Marked			
var. Aliceville	1	3.0	Late Woodland
Unidentified Grog Tempered Incised and Punctated	1	2.5	Middle/Late Woodland
Sherdlets - All Tempers	--	137.5	
OTHER			
Bone	--	1.0	

Provenience: Test Unit 2, Level 2 (25-50 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	1.8	
Introduced Rock	--	2.4	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	2	6.0	Late Woodland
Sherdlets - All Tempers	--	0.5	

Provenience: Test Unit 2, Level 3 (50-75 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.6	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	4.5	Late Woodland

Provenience: Test Unit 3, Level 1 (0-21 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Small Triangular	2	2.4	Late Woodland/Mississippian
PP/K Proximal Fragment	1	0.5	
PP/K Distal Fragment	2	0.9	
Cores			
Amorphous Core	1	3.6	
Scrapers			
Uniface End Scraper	2	4.5	
Uniface Side Scraper	1	3.1	
Other			
Debitage-Fire Cracked Rock-Shatter	--	75.6	
Introduced Rock	--	123.7	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	64	245.0	Late Woodland
Salomon Brushed var. Unspecified	2	26.0	Late Woodland
Unidentified Grog Tempered Incised and Punctated	1	4.0	Middle/Late Woodland

	Count	Wt. (g)	Component
Sherdlets - All Tempers	--	119.5	
OTHER			
Bone	--	1.3	
Charcoal	--	0.4	

Provenience: Test Unit 3, Level 2 (21-31 cm), feature fill.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Small Triangular	1	0.5	Late Woodland/Mississippian
Cores			
Amorphous Core	2	42.7	
Unidentifiable Chipped Stone Fragments	1	0.2	
Unidentifiable Ground Stone Fragments	1	7.2	
Other			
Debitage-Fire Cracked Rock-Shatter	--	47.0	
Introduced Rock	--	164.0	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	23	144.0	Late Woodland
Mulberry Creek Cord Marked var. Aliceville	1	4.5	Late Woodland
Salomon Brushed var. Unspecified	1	3.5	Late Woodland
Sherdlets - All Tempers	--	23.5	

Provenience: 50 by 50 m unit south of Test Unit 3, Level 1, (0-23 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Proximal Fragment	1	0.6	
PP/K Distal Fragment	1	0.2	
Preforms			
Preform I	1	7.8	
Preform II Fragment	1	1.2	
Cores			
Amorphous Core	1	28.7	
Knives			
Biface Flake Knife	1	2.8	
Scrapers			
Uniface Side Scraper	1	0.9	

	Count	Wt. (g)	Component
Compound Chipped Stone Tools			
Graver/Spokeshave	1	1.1	
Unidentifiable Chipped Stone Fragments	2	1.3	
Other			
Debitage-Fire Cracked Rock-Shatter	--	60.0	
Introduced Rock	--	88.0	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	48	230.0	Late Woodland
var. Tishomingo	2	3.5	Late Woodland
Mulberry Creek Cord Marked			
var. Aliceville	2	21.0	Late Woodland
Salomon Brushed			
var. Fairfield	1	5.5	Late Woodland
Unidentified Grog Tempered Incised and Punctated	2	7.5	Middle/Late Woodland
Sherdlets - All Tempers	--	101.0	
OTHER			
Bone	--	1.0	
Charcoal	--	1.0	

Provenience: 50 by 50 cm unit south of Test Unit 3, Level 2 (23-36 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	9.3	
Introduced Rock	--	6.5	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	11	60.0	Late Woodland
Salomon Brushed			
var. Fairfield	1	23.5	Late Woodland
Sherdlets - All Tempers	--	12.0	
OTHER			
Bone	--	1.0	
Charcoal	--	6.2	

Provenience: Test Unit 3 (1 x 0.5 m), Feature Fill (34-57 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Distal Fragment	2	0.4	

	Count	Wt. (g)	Component
Microliths			
Microlith Perforator	1	0.3	
Unidentifiable Chipped Stone Fragments	1	0.4	
Unidentifiable Ground Stone Fragments	1	13.6	
Other			
Debitage-Fire Cracked Rock-Shatter	--	53.0	
Introduced Rock	--	85.0	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	24	180.5	Late Woodland
var. Tishomingo	1	15.0	Late Woodland
Salomon Brushed			
var. Fairfield	2	13.0	Late Woodland
Sherdlets - All Tempers	--	13.5	
OTHER			
Bone	--	1.0	
Charcoal	--	1.5	

Provenience: Test Unit 4, Level 1 (0-18 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Small Triangular	2	1.9	Late Woodland/Mississippian
Preforms			
Unfinished Small Triangular PP/K	1	3.2	
Cores			
Amorphous Core	1	4.8	
Microliths			
Microlith Perforator	1	0.3	
Scrapers			
Uniface End Scraper	1	2.7	
Pecked and Ground Stone			
Ground/Scored Hematite	2	18.2	
Other			
Debitage-Fire Cracked Rock-Shatter	--	151.0	
Introduced Rock	--	103.0	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	84	321.5	Late Woodland
var. Tishomingo	2	5.0	Late Woodland

	Count	Wt. (g)	Component
Mulberry Creek Cord Marked var. Aliceville	1	2.0	Late Woodland
Unidentified Grog Tempered Incised and Punctated	2	8.0	Middle/Late Woodland
Eroded Grog Tempered	2	15.0	
Sherdlets - All Tempers	--	175.0	
OTHER			
Bone	--	1.0	
Charcoal	--	1.0	

Provenience: Test Unit 4, Level 2 (18-44 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Preforms			
Unfinished Small Triangular PP/K	1	1.2	
Cores			
Amorphous Core	2	18.1	
Gravers	1	0.9	
Scrapers			
Uniface Side Scraper	1	0.3	
Unidentifiable Ground Stone Fragments	1	0.1	
Other			
Debitage-Fire Cracked Rock-Shatter	--	69.0	
Introduced Rock	--	68.7	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	64	412.0	Late Woodland
var. Tishomingo	1	1.5	Late Woodland
Sherdlets - All Tempers	--	54.0	
OTHER			
Bone	--	1.0	
Charcoal	--	7.5	

Cultural Affiliation: Late Woodland/Mississippian.

Resource Evaluation: Site 1Tu427 represents a midden deposit with intact features. The site's topographic location and cultural affiliation identify it as a probable Late Woodland/Mississippian village. Site 1Tu427, however, stands apart from other sites (Sites 1Tu264, 1Tu265, 1Tu266, 1Tu421, 1Tu423, and 1Tu426) located in the survey. Groundstone food processing implements (anvilstone, mullers, mortars, etc.) that are commonly found on other small Late Woodland/Mississippian sites are absent from Site 1Tu427. Recovered instead from Site 1Tu427 was a diverse range of specialized lithic tools usable in hunting, hide preparation, wood-

working and other subsistence activities. Testing of Site 1Tu427 in conjunction with other Late Woodland-Mississippian first terrace sites could yield information extremely valuable for understanding the dispersed homestead subsistence and settlement strategy of these groups.

Recommendation: Phase II testing.

Site 1Tu428

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu428 is located on the T-1c middle Holocene terrace trending northwest-southeast. The site is 100 m (328 ft) to 420 m (1,378 ft) north of the Black Warrior River and 200 m (656 ft) south of a first order stream. The levee was once the north bank of a now abandoned river channel. The possibility exists for buried Holocene deposits.

Soil Type: Cahaba silt loam.

Site Description: The site is a series of multiple isolated finds measuring 520 m (1,706 ft) northwest-southeast and 140 m (459 ft) southwest-northeast, contained in the plowzone. The topsoil is a medium brown silt loam plowzone 20 cm (8 in) thick, underlain by a red-brown silty clay loam. Intact deposits may be present buried beneath recent alluvium.

Site 1Tu428 is currently utilized for soybean cultivation, providing good surface visibility. Field access roads border the northern and western edges of the site.

Investigation Procedure: The entire area was surface collected. Four 50 cm by 50 cm test pits were placed along the levee top.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Cotaco Creek	1	11.0	Late Archaic/Gulf Formational
Little Bear Creek	2	33.1	Late Archaic/Gulf Formational
PP/K Medial Fragment	1	4.5	
Eva-Morrow M untain	1	9.6	Middle Archaic
Cores			
Amorphous Core	1	140.0	
Wedges	1	18.5	
Scrapers			
Uniface End Scraper	1	119.0	
Uniface Side/End Scraper	1	20.0	
Pecked and Ground Stone			
Hammerstone	4	1,537.0	
Anvilstone	2	908.0	
Pitted Anvilstone	1	522.0	
Compound Pecked and Ground Tools			
Muller/Anvilstone	2	1,346.0	
Muller/Pitted Anvilstone/Hammerstone	1	751.0	

	Count	Wt. (g)	Component
Compound Chipped Stone and Pecked and Ground Stone Tools			
Chopper/Hammerstone	1	165.0	
Chopper/Pitted Anvil-stone	1	313.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	878.0	
Introduced Rock	--	3,256.0	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	2	9.0	Late Woodland
var. Tishomingo	2	4.5	Late Woodland
Sand Tempered			
Baldwin Plain			
var. Blubber	1	2.5	Middle Woodland
var. Lubbub	1	2.5	Late Gulf Formational
Sherdlets - All Tempers	--	1.5	
HISTORIC ARTIFACTS			
GLASS			
Mold Made			
Unidentified Body Sherd	2	--	Early 19th-20th century
Clear			
Unidentified Body Sherd	2	--	Early 19th-20th century
CERAMICS			
White Ware			
Undecorated	1	--	c. 1820-1950+
METAL			
Horseshoe Fragment	1	--	
BUILDING MATERIAL			
Slate	1	--	
PLASTIC			
Unidentified Fragment	4	--	
OTHER			
Coal	1	--	

Provenience: Test Unit 1, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	8.2	
Introduced Rock	--	14.9	

	Count	Wt. (g)	Component
CERAMICS			
Sand Tempered			
Baldwin Plain			
var. O'Neal	1	5.5	Late Gulf Formational
Sherdlets - All Tempers	--	1.0	

Provenience: Test Unit 1, Level 2 (20-33 cm).

PREHISTORIC ARTIFACTS	Count	Wt. (g)	Component
OTHER			
Charcoal	--	6.2	

Provenience: Test Unit 2, Level 1 (0-26 cm).

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked			
Rock-Shatter	--	12.3	
Introduced Rock	--	20.3	
CERAMICS			
Sherdlets - All Tempers	--	2.0	
HISTORIC ARTIFACTS			
METAL			
Unidentified Iron	1	--	

Provenience: Test Unit 2, Level 2 (26-50 cm).

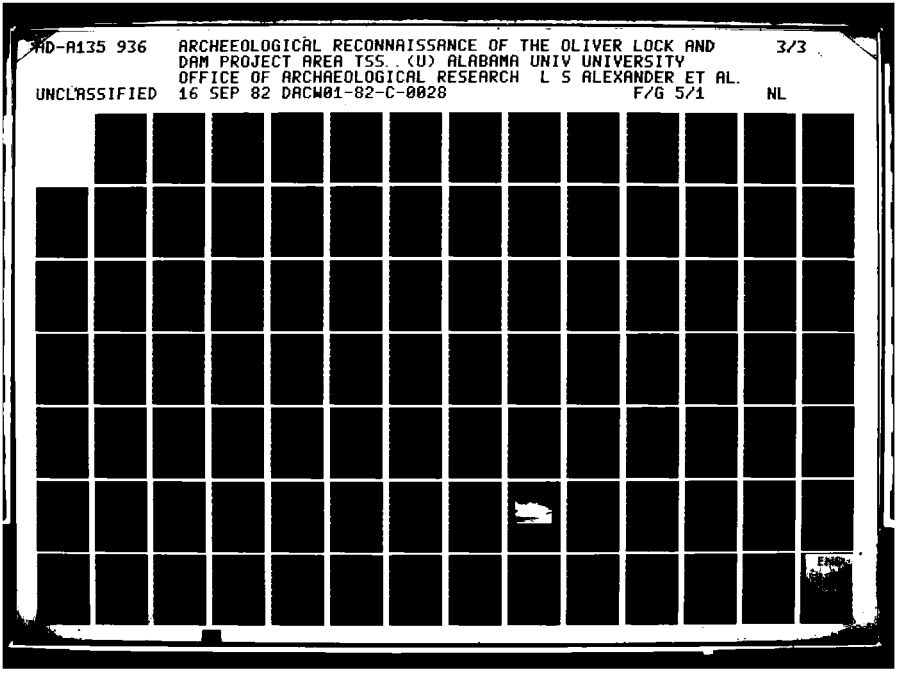
PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked			
Rock-Shatter	--	1.0	
Introduced Rock	--	3.0	

Provenience: Test Unit 3, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked			
Rock-Shatter	--	5.4	

Cultural Affiliation: Middle Archaic, Late Archaic, Gulf Formational, Middle Woodland, Late Woodland, American.

Resource Evaluation: Site 1Tu428 is an elliptical multiple isolated fire scatter. The site's position on the middle Holocene terrace indicates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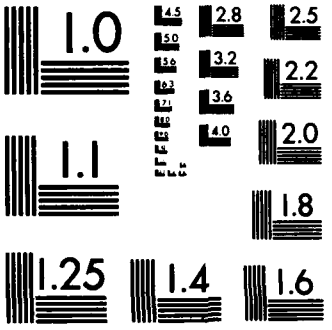

that it was once on the north bank of a now abandoned river channel. Cultural material recovered from Site 1Tu428 indicates an occupation extending from the Middle Archaic to the Late Woodland. The high incidence of pecked and ground stone artifacts also suggests that food processing and storage was taking place at this site. Subplowzone features are likely present at this site. Post-Hypsithermal deposition and soil development has obscured earlier Archaic deposits. Site 1Tu428 could provide valuable information for understanding Archaic and Woodland subsistence strategies at a time when the course of the river and the distribution of its environs were radically different than present. Data regarding rates of Pre-Hypsithermal soil deposition and stratified Early to Middle Archaic deposits can potentially be investigated at this site. This site has a very high potential for the location of alluviated, in situ, Middle Archaic to Late Archaic deposits. Testing revealed no indications of a historic deposit, although historic material was recovered from the surface.

Recommendation: No further investigation is recommended.

Site 1Tu429

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu429 is located on the T-1c levee 540 m (1,771 ft) north of the Black Warrior River and 20 m (66 ft) south of a first order stream. The levee was once the north bank of an abandoned river channel. The possibility exits for buried Archaic deposits, due to alluvial deposition.

Soil Type: Cahaba silt loam.

Site Description: Site 1Tu429 is a moderate artifact concentration within the plowzone measuring 140 m (459 ft) east-west by 100 m (328 ft) north-south. The topsoil is a medium brown silt loam underlain by a red-brown silty clay loam. The site is currently utilized for soybean cultivation providing good surface visibility. A field road in the northwest corner of the site makes the site accessible from the north.

Investigation Procedure: Surface collection of entire site area.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Preforms			
Preform I	3	39.0	
Preform II	1	7.2	
Preform I Fragment	1	9.1	
Cores			
Amorphous Core	3	462.7	
Knives			
Biface Flake Knife	1	5.5	
Scrapers			
Uniface Side Scraper	2	47.8	
Pecked and Ground Stone			
Pitted Anvilstone/ Hammerstone	1	532.8	
Unidentifiable Ground Stone Fragments	1	180.0	
Other			
Debitage-Fire Cracked Rock-Shatter	—	189.0	
Introduced Rock	—	171.0	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	3.0	Late Woodland

	Count	Wt. (g)	Component
HISTORIC ARTIFACTS			
METAL			
Unidentified Iron Fragments	1	--	
PLASTIC			
Button	1	--	1940-1980
LEATHER			
Unidentified Fragments	1	--	

Cultural Affiliation: Late Woodland, American.

Resource Evaluation: Site 1Tu429 is a large site with no midden or features detected. Cultural material recovered from Site 1Tu429 indicates a Late Woodland occupation. The site's location on the middle Holocene terrace indicates that it was on the north bank of an abandoned river channel. Alluvial deposition makes it likely that Archaic deposits are buried within the levee. Site 1Tu429 and other middle Holocene terrace sites (Sites 1Tu428, 1Tu430, 1Tu431, 1Tu436) could provide valuable information for understanding the nature of Archaic habitation in Black Warrior drainage. Site 1Tu429 might also yield information concerning the exploitation of nonriverbank first terrace areas by the Late Woodland culture. The recovery of historic artifacts is insufficient to document the presence of a historic component.

Recommendation: No further investigation is recommended.

Site 1Tu430

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu430 is located on the T-1b levee, 40 m (131 ft) to 180 m (590 ft) north of the Black Warrior River and 300 m (984 ft) south of a first order stream. The site area once was the south bank and inside point bar of a presently abandoned river channel. This site, like Site 1Tu428, may contain stratified or undisturbed subplowzone cultural deposits.

Soil Type: Choccolocco silt loam.

Site Description: The site is a series of multiple isolated finds in the plowzone measuring 360 m (1,181 ft) east-west by 100 m (328 ft) north-south. Testing did not locate any subplowzone deposits. The topsoil is a medium brown silty loam 20 cm (8 in) thick, underlain by a red-brown silty clay loam B horizon.

Site 1Tu430 is currently utilized for soybean cultivation, providing good surface visibility. A field road immediately west of the site makes the site accessible from the north.

Investigation Procedure: The entire site area was surface collected. Four 50 by 50 cm test pits were excavated in areas of artifact concentrations.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Greeneville	1	5.6	Middle Woodland
Choppers			
Biface Chopper	1	503.3	
Unidentifiable Ground Stone Fragments	1	423.0	
Other			
Debitage-Fire Cracked Rock-Shatter	—	248.0	
Introduced Rock	—	1,007.0	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	4.5	Late Woodland
Sherdlets - All Tempers	—	3.0	

HISTORIC ARTIFACTS

GLASS			
Clear			
Embossed			
Unidentified Body Sherds	1	—	Early 19th-20th century

	Count	Wt. (g)	Component
CERAMICS			
White Ware			
Undecorated	1	--	c. 1820-1950+
Unidentified White Paste Earthenware	1	--	
METAL			
Automobile-Tractor Associations	1	--	c. 1905-1980

Provenience: Test Unit 1, Level 1 (0-21 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	8.2	

Provenience: Test Unit 2, Level 2 (20-28 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	12.9	

Provenience: Test Unit 3, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	3.4	

Provenience: Test Unit 4, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Pecked and Ground Stone			
Pitted Anvilstones	1	1,151.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	11.8	

Cultural Affiliation: Middle Woodland, Late Woodland, American.

Resource Evaluation: Site 1Tu430 is a large site with no intact midden or cultural features detected. Prehistoric cultural material from Site 1Tu430 indicates a Middle and Late Woodland habitation. The site's geomorphic location on the late Holocene terrace indicates that it was on the south bank of a now abandoned river channel. Site 1Tu430 in addition to other late Holocene terrace sites (Sites 1Tu428, 1Tu429, 1Tu431, 1Tu436) could yield information potentially valuable for understanding the nature

of the Archaic in the Black Warrior drainage. The general scatter of Late Woodland ceramics, fire cracked rock, and food processing tools throughout the site indicates this location represents a series of small, dispersed Late Woodland settlements. Surface recovery of historic artifacts is insufficient to document the presence of a historic component.

Recommendation: No further investigation is recommended.

Site 1Tu431

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu431 is located on the T-1b levee 280 m (918 ft) to 540 m (1,771 ft) north of the Black Warrior River and 100 m (328 ft) south of a first order stream. The levee was once the south bank of an abandoned river channel. The possibility exists for buried Archaic deposits as the result of riverine alluvial deposition.

Soil Type: Choccolocco silt loam.

Site Description: Site 1Tu431 is a multiple isolated find measuring 200 m (656 ft) north-south and extending 550 m (1,804 ft) northwest-southeast, 150 m (492 ft) beyond the survey boundary. The presence or absence of subsoil features and midden has not been determined. The topsoil is a medium brown silt loam underlain by a red-brown silty clay loam.

The site is currently utilized for soybean cultivation providing good surface visibility. An airport service road transects the site, and a field access road runs north-south 40 m (131 ft) east of the site.

Investigation Procedure: Surface collection of entire site area.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Late Archaic Residual Stemmed	1	6.4	Late Archaic
PP/K Proximal Fragment	1	6.5	
Preforms			
Preform I	1	242.0	
Preform II	2	24.2	
Preform I Fragment	1	4.9	
Drills			
Stemmed Drill	1	3.7	
Medial Drill Fragment	1	1.9	
Adzes, Axes			
Chipped Axe	1	336.4	
Amorphous Bifacial Implements	1	1,108.0	
Choppers			
Biface Chopper	1	341.0	
Unidentifiable Chipped Stone Fragments	3	16.0	

	Count	Wt. (g)	Component
Pecked and Ground Stone			
Hammerstone	3	810.2	
Pitted Anvilstones	3	1,067.6	
Pitted Anvilstone/ Muller	1	674.0	
Unidentifiable Ground Stone Fragments	3	511.0	
Other			
Debitage-Fire Cracked Rock-Shatter	—	324.8	
Introduced Rock	--	1,269.8	
CERAMICS			
Shell and Grog Tempered			
Bell Plain var. Big Sandy	1	1.5	Late Woodland/Mississippian
Baytown Plain var. Curry Creek	4	13.5	Late Woodland/Mississippian
Grog Tempered			
Baytown Plain var. Roper	3	11.0	Late Woodland
Sherdlets - All Tempers	—	2.0	
HISTORIC ARTIFACTS			
GLASS			
Dark Olive Green Free Blown	1	—	Early-Middle 19th century
Machine Made			
Green			
Unidentified Body Sherds	6	—	20th century
Clear			
Unidentified Body Sherds	1	—	20th century
Amber			
Embossed	1	—	20th century
Blue			
Marble	1	—	
CERAMICS			
Pearlware			
Undecorated	2	—	1780-1830
White Ware			
Undecorated	3	--	1820-1950+
Transfer Printed Monochrome	2	—	
Transfer Printed Polychrome	1	--	
Utilitarian Ware			
Salt Glazed	1	—	1820-1950+
Slipped	1	—	1820-1950+
BUILDING MATERIAL			
Brick	2	—	
Commode Fragment	1	--	

	Count	Wt. (g)	Component
PLASTIC			
Unidentified Fragments	1	—	

Cultural Affiliation: Late Archaic, Late Woodland, Mississippian, American.

Resource Evaluation: Site 1Tu431 is a large dispersed site with no intact features or midden detected. Cultural material from surface collections indicates Late Archaic, Late Woodland, Mississippian, and historic habitations. The high incidence of anvilstones, hammerstones, and ground stone fragments suggests that this site represents nonriverine floodplain exploitation. All of the ceramic artifacts were recovered in a small locus approximately 70 m east of the paved roadway which bisects the site.

Levee sites in T-1b and T-1c contexts, such as Site 1Tu431, could be potentially valuable in contributing to the understanding of the Archaic within the Black Warrior drainage. Surface recovery of nineteenth and twentieth century artifacts indicates a historic deposit at this site.

Recommendation: No further investigation is recommended.

Site 1Tu432

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu432 is located on the T-1a levee, 40 m (122 ft) to 100 m (305 ft) north of the Black Warrior River. Testing revealed the presence of an undisturbed buried A horizon soil containing a late Woodland component.

Soil Type: Choccolocco silt loam.

Site Description: Site 1Tu432 is a moderate artifact concentration measuring 300 m (915 ft) southwest-northeast and 60 m (183 ft) northwest-southeast. The plowzone topsoil is a medium-light brown silty loam 25 cm (10 in) deep. Beneath the plowzone is a dark brown layer of silty clay loam, 10cm (4 in) to 15 cm (8 in) thick. The transition between the plowzone and the sub-plowzone layer is sharp and well defined, but the boundary between Level 2 and the underlying subsoil is a gradual, mottled transition 35 cm (14 in) below the surface. The subsoil beneath Level 2 is a red-brown silty clay. This stratum is an alluviated A horizon, containing undisturbed cultural deposits.

The site is currently used for soybean cultivation. A field access bisects the site from the north.

Investigation Procedure: General surface collection was conducted over the entire site. Four 50 cm by 50 cm test pits were excavated.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.9	
Introduced Rock	--	857.0	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	1	2.5	Mississippian
Grog Tempered			
Baytown Plain var. Roper	5	28.5	Late Woodland
var. Tishomingo	1	4.5	Late Woodland
Sherdlets - All Tempers	—	3.0	
OTHER			
Daub and Fired Clay	—	8.5	

	Count	Wt. (g)	Component
HISTORIC ARTIFACTS			
GLASS			
Clear			
Embossed	1	--	Middle 19th-20th century

Provenience: Test Unit 1, Level 1 (0-24 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.1	
Introduced Rock	-	14.5	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	2.5	Late Woodland
Sherdlets - All Tempers	--	4.0	
OTHER			
Daub and Fired Clay	--	5.5	

Provenience: Test Unit 1, Level 2 (24-50 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	1.0	

Provenience: Test Unit 2, Level 1 (0-23 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.3	
Introduced Rock	--	13.6	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	3.5	Late Woodland
Sherdlets - All Tempers	--	4.5	

Provenience: Test Unit 2, Level 2 (23-33 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	0.7	

	Count	Wt. (g)	Component
OTHER			
Charcoal	--	1.0	

Provenience: Test Unit 2, Level 3 (33-60 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	7.2	
OTHER			
Charcoal	--	1.0	

Provenience: Test Unit 3, Level 1 (0-28 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	1.4	
CERAMICS			
Shell Tempered			
Bell Plain			
var. Big Sandy	--	3.0	Late Woodland/Mississippian
Sherdlets - All Tempers	--	4.5	

Cultural Affiliation: Late Woodland, Mississippian, American.

Resource Evaluation: Site 1Tu432 contains a moderate artifact concentration in the plowzone which overlays an undisturbed alluviated A horizon soil. The site appears to be located on an overflow chute which has been filled and recontoured during the Middle to Late Woodland period. The site's topographic location on the T-1a levee and the cultural material recovered indicates that Site 1Tu432 represents an occupation dating to the Late Woodland and Mississippian period. Site 1Tu432 and other Late Woodland/Mississippian T-1a sites could provide information potentially valuable for understanding dispersed subsistence and settlement patterns.

Recommendation: No further investigation is recommended.

Site 1Tu433

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu433 is located on an old point bar on a T-1a levee. The site is 240 m (787 ft) north of the Black Warrior River, 440 m (1,443 ft) south of a first order stream and 1,100 m (3,608 ft) east of the confluence of Tater Hill Creek and the Black Warrior River. The point bar site area has been actively eroded and large areas of subsoil have been exposed.

Soil Type: Choccolocco silt loam.

Site Description: The site consists of a series of multiple isolated finds in an area 100 m (328 ft) north-south by 200 m (656 ft) east-west. Only the eastern end of the site is within the project area. Testing did not locate any intact sub-plowzone features or midden. The plowzone is a medium brown silt loam 20 cm (8 in) thick. This overlies a 20 cm (8 in) thick dark brown silty loam. The subsoil is a yellowish brown silty clay. Cultural material was recovered from all three levels.

The site is currently utilized for soybean cultivation and the front slope of the site has been cleared by recent clear cutting, providing good surface visibility. A field road near the southern boundary of the site makes the site accessible from the east.

Investigation Procedure: Areas producing cultural material were surface collected. Two 50 cm by 50 cm test pits were placed in areas of high surface density.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Late Archaic Residual Stemmed	1	7.4	Late Archaic
Preforms			
Preform I	3	145.5	
Gravers	1	3.4	
Unidentifiable Chipped Stone Fragments	1	2.2	
Pecked and Ground Stone			
Hammerstone	1	340.0	
Pitted Anvilstone	1	948.0	
Unidentifiable Ground Stone Fragments	1	16.3	
Other			
Debitage-Fire Cracked Rock-Shatter	--	65.3	
Introduced Rock	--	904.3	

	Count	Wt. (g)	Component
CERAMICS			
Shell Tempered			
Mississippi Plain			
var. Warrior	2	6.0	Mississippian
Shell and Grog Tempered			
Bell Plain			
var. Big Sandy	1	2.5	Late Woodland/Mississippian
Eroded Fine Shell and Grog Tempered	1	4.0	Late Woodland/Mississippian
Grog Tempered			
Baytown Plain			
var. Roper	18	59.5	Late Woodland
var. Tishomingo	3	18.5	Late Woodland
Mulberry Creek Cord Marked			
var. Tishomingo	1	3.0	Late Woodland
Withers Fabric Impressed			
var. Unspecified	1	12.5	Late Woodland
Salomon Brushed			
var. Fairfield	1	24.5	Late Woodland
Sherdlets - All Tempers	--	10.5	
HISTORIC ARTIFACTS			
GLASS			
Mold Made			
Green			
Unidentified Body Sherds	1	--	Early 19th-20th century
Clear			
Unidentified Body Sherds	2	--	Early 19th-20th century
CERAMICS			
White Ware			
Undecorated	1	--	

Provenience: Test Unit 1, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Pecked and Ground Stone			
Steatite Sherd	1	6.0	
Ground/Scored Hematite	1	6.7	
Other			
Debitage-Fire Cracked Rock-Shatter	--	43.9	
Introduced Rock	--	132.0	
CERAMICS			
Shell Tempered			
Bell Plain var. Hale	2	3.5	Mississippian
Mississippi Plain			
var. Warrior	2	3.0	Mississippian

	Count	Wt. (g)	Component
Grog Tempered			
Baytown Plain			
var. Roper	3	11.0	Late Woodland
Sherdlets - All Tempers	—	17.0	

Provenience: Test Unit 1, Level 2 (20-39 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked			
Rock-Shatter	—	4.0	
Introduced Rock	—	205.0	

Provenience: Test Unit 1, Level 3 (39-45 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked			
Rock-Shatter	—	165.0	
Introduced Rock	--	5.6	

Provenience: Test Unit 2, Level 1 (0-10 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked			
Rock-Shatter	—	1.3	
Introduced Rock	-	1.9	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Tishomingo	1	2.0	Late Woodland
Sand Tempered			
Baldwin Plain			
var. Lubbub	1	6.0	Late Gulf Formational
Sherdlets - All Tempers	—	1.0	

Provenience: Test Unit 3, Level 1 (0-12 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked			
Rock-Shatter	—	1.0	
Introduced Rock	—	1.4	

Cultural Affiliation: Late Archaic, Gulf Formational, Late Woodland, Mississippian, American.

Resource Evaluation: Site 1Tu433 is intermediate in size. No intact midden or features were detected but these may be present. One excavation unit in a disturbed area located a subplowzone artifact deposit. Cultural material recovered from Site 1Tu433 indicates a habitation spanning the Late Archaic to the Mississippian. Archaic deposits may have been buried by recent river deposition. The site's topographic location on a T-1a levee indicates that it may have functioned as a small settlement during the Late Woodland-Mississippian culture periods. Site 1Tu433 and other T-1a Late Woodland-Mississippian sites could provide potentially valuable information for understanding the development and interrelationship of sites included within a dispersed subsistence-settlement pattern.

Recommendation: No further investigation is recommended.

Site 1Tu434

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu434 is located on the T-1a levee, 180 m (590 ft) north of the Black Warrior River and 450 m (1,476 ft) south of a first order stream. Recent deposition may have buried cultural deposits at this site. The topsoil has been eroded and the reddish brown subsoil exposed.

Soil Type: Choccolocco silt loam.

Site Description: Site 1Tu434 is a minimal artifact concentration of aboriginal and historic artifacts, measuring 100 m (328 ft) north-south by 100 m (328 ft) east-west. The plowzone is a light brown silty loam 15 cm (6 in) thick, underlain by a mottled light brown silty clay containing iron and manganese nodules. Cultural material was most dense in the plowzone, but there was light recovery from the subplowzone layer.

The site is currently utilized for soybean cultivation, providing good surface visibility. A field road to the south made the site accessible from the east.

Investigation Procedure: The site was surface collected and two 50 cm by 50 cm test pits were excavated in areas of high surface concentration.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Knives			
Uniface Flake Knife	1	11.5	
Choppers			
Biface Chopper	1	135.8	
Compound Pecked and Ground Tools			
Muller/Pitted Anvilstone/Hammerstone	1	776.0	
Unidentifiable Ground Stone Fragments	1	155.6	
Other			
Debitage-Fire Cracked Rock-Shatter	—	369.2	
CERAMICS			
Shell Tempered			
Bell Plain var. Hale	2	5.0	Mississippian
Mississippi Plain var. Warrior	2	4.0	Mississippian
Grog Tempered			
Baytown Plain var. Roper	8	47.5	Late Woodland
Sherdlets - All Tempers	—	18.5	

	Count	Wt. (g)	Component
HISTORIC ARTIFACTS			
GLASS			
Mold Made			
Green			
Unidentified Body Sherds	1	--	Early 19th-20th century
Clear			
Embossed	1	--	Middle 19th-20th century
Utilitarian Stoneware			
Brown Slipped	1	--	
Acid Slipped	2	--	
METAL			
Adjustible Wrench	1	--	

Provenience: Test Unit 1, Level 1 (0-15 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	14.7	
Introduced Rock	--	1.0	

Provenience: Test Unit 2, Level 1 (0-15 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	24.0	
Introduced Rock	--	105.0	
CERAMICS			
Shell Tempered			
Bell Plain var. Hale	1	2.5	Mississippian
Grog Tempered			
Baytown Plain var. Roper	1	1.5	Late Woodland
Sherdlets - All Tempers	--	10.5	
HISTORIC ARTIFACTS			
CERAMICS			
White Ware			
Undecorated	1	--	c. 1820-1950+

Provenience: Test Unit 2, Level 2 (15-30 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	41.5	

	Count	Wt. (g)	Component
Introduced Rock	—	126.0	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	1	2.0	Late Woodland
Sherdlets - All Tempers	—	2.5	

Cultural Affiliation: Late Woodland, Mississippian, American.

Resource Evaluation: No intact midden or features were located at Site 1Tu434, but small amounts of cultural material were recovered from a subplowzone context. Material recovered from Site 1Tu434 indicates a Late Woodland-Mississippian aboriginal occupation. Site 1Tu434, in conjunction with other Late Woodland-Mississippian T-1a levee sites, could provide information potentially valuable for understanding the dispersed settlement patterns for this time period. This site contains the same components as the adjacent Site 1Tu430 which contains intact deposits and has been recommended for Phase II testing.

Recommendation: No further investigation is recommended.

Site 1Tu435

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu435 is located in an abandoned river channel between the T-1b and T-1c levees. The site is adjacent to a first order stream joining Tater Hill Creek 500 m (1,640 ft) south of the site. The site's location in a scoured and abandoned river channel makes buried cultural deposits unlikely.

Soil Type: Adaton silt loam.

Site Description: Site 1Tu435 consists of multiple isolated finds measuring 75 m (246 ft) east-west by 50 m (164 ft) north-south. No cultural midden or features were detected. The topsoil is typically a shallow dark gray silt loam overlying a grayish brown silt loam. The subsoil is a mottled light gray silt loam. The site is currently cultivated in soybeans (1981). The site is accessible from the west by an airport service road.

Investigation Procedure: Surface Collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Distal Fragment	1	8.5	
Pecked and Ground Stone			
Muller	1	178.0	
Muller Fragment	1	390.6	
Other			
Debitage-Fire Cracked Rock-Shatter	--	26.1	
Introduced Rock	--	577.0	

Cultural Affiliation: Unknown prehistoric.

Resource Evaluation: Site 1Tu435 is small site with little likelihood of intact features or midden. No culturally diagnostic materials were recovered. The site is potentially important because it should post-date the abandonment of the river channel which crosses the project area.

Recommendation: No further investigation is recommended.

Site 1Tu436

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu436 is located on a T-1c levee, 20 m (66 ft) north of a first order stream and 650 m (2,132 ft) north of the Black Warrior River. The levee was once the north bank of an abandoned river channel. Alluvial deposition provides a good possibility that buried cultural deposits are present on the foreslope of the site.

Soil Type: Cahaba silt loam.

Site Description: The site is an intense artifact concentration measuring 560 m (1,837 ft) east-west and 150 m (492 ft) north-south. The western 200 m (656 ft) of the site lies outside the survey area. The plowzone is a medium brown silt or fine sandy loam 20-30 cm (8-12 in) thick. The underlying material is a red-brown silty clay loam 35 cm (14 in)thick, underlain by a brown loam. Testing indicated the presence of an intact feature below the plowzone suggesting that other buried cultural deposits are also present. The feature tested extended 50 cm (20 in) below the plowzone.

The site was recently cultivated, providing good surface visibility. An airport service road transects the site northeast-southwest.

Investigation Procedure: Surface collections were made and five 50 cm by 50 cm test pits were excavated in areas of dense artifact concentration.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Late Archaic Residual Stemmed	1	3.6	Late Archaic
Sykes/White Springs	1	20.0	Middle Archaic/Late Archaic
PP/K Distal Fragment	1	3.0	
Bifaces			
Biface Fragment	1	3.3	
Preforms			
Preform I	3	74.2	
Preform I Fragment	1	37.2	
Cores			
Core Fragment	1	64.0	
Microliths			
Microlith Scraper	1	0.7	
Wedges	1	4.3	
Knives			
Uniface Flake Knife	2	15.0	
Adzes, Axes			
Chipped Axe Fragment	1	35.3	

	Count	Wt. (g)	Component
Amorphous Bifacial Implements	1	367.0	
Choppers			
Uniface Chopper	1	243.0	
Scrapers			
Uniface End Scraper	1	5.2	
Uniface Side Scraper	3	27.1	
Uniface Side/End Scraper	2	5.8	
Unidentifiable Chipped Stone Fragments	8	113.9	
Pecked and Ground Stone			
Hammerstone	2	541.0	
Pitted Anvilstone	1	363.0	
Muller	2	459.0	
Mortar	2	27, 319.0	
Compound Pecked and Ground Tools			
Muller/Pitted Anvilstone	4	2,917.0	
Pitted Anvilstone/ Mortar Fragment	1	770.0	
Unidentifiable Ground Stone Fragments	2	1,004.0	
Other			
Debitage-Fire Cracked Rock-Shatter	—	434.0	
Introduced Rock	—	1,843.0	
Sherdlets - All Tempers	—	2.5	
HISTORIC ARTIFACTS			
METAL			
Automobile-Tractor Associations	1	--	c. 1905-1980

Provenience: General Surface Collection, Eastern Portion.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Woodland Residual Stemmed	1	6.6	Woodland
Preforms			
Preform I	2	47.0	
Preform II	1	22.7	
Drills			
Stemmed Drill	1	6.1	
Adzes, Axes			
Chipped Axe	1	259.0	
Amorphous Bifacial Implements	1	322.0	
Choppers			
Biface Chopper	1	370.0	

	Count	Wt. (g)	Component
Unidentifiable Chipped Stone Fragments	1	5.8	
Pecked and Ground Stone			
Hammerstone	1	764.0	
Pitted Anvilstone	3	1,790.0	
Compound Pecked and Ground Tools			
Muller/Anvilstone	2	1,372.0	
Unidentifiable Ground Stone Fragments	2	111.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	455.5	
Introduced Rock	--	1,425.0	
OTHER			
Bone	--	9.2	
HISTORIC ARTIFACTS			
GLASS			
White			
Embossed	1	--	Early 19th-20th century
Unidentified Body Sherds	29	--	Early 19th-20th century
Clear			
Embossed	7	--	Middle 19th-20th century
Unidentified Body Sherds	3	--	Early 19th-20th century
Manganese Purple			
Unidentified Body Sherds	1	--	c. 1850-1915
Cobalt Blue			
Unidentified Body Sherds	1	--	c. 1875-1980
Pink			
Embossed	1	--	20th century
CERAMICS			
White Ware			
Undecorated	1	--	c. 1820-1950+
Utilitarian Stoneware			
Salt Glazed	1	--	c. 1820-1950+
METAL			
Automobile-Tractor Associations	2	--	c. 1905-1980
Zinc Fragments	3	--	

Provenience: General Surface Collection, Central Portion.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Woodland Residual			
Stemmed	1	6.3	

	Count	Wt. (g)	Component
Elora	1	6.8	Late Archaic/Gulf Formational
PP/K Distal Fragment	1	1.3	
Preforms			
Preform I	1	30.2	
Knives			
Uniface Flake Knife	1	37.8	
Biface Cobble/Pebble Knife	2	80.5	
Choppers			
Biface Chopper	1	844.4	
Scrapers			
Uniface Side Scraper	1	3.5	
Uniface Side/End Scraper	1	2.5	
Scraper on Biface	1	8.5	
Unidentifiable Chipped Stone Fragments	4	42.9	
Pecked and Ground Stone			
Mortar	1	4,050.0	
Edge Ground Cobble	1	812.6	
Other			
Debitage-Fire Cracked Rock-Shatter	--	465.0	
CERAMICS			
Shell Tempered			
Mississippi Plain var. Warrior	1	2.0	Mississippian
HISTORIC ARTIFACTS			
CERAMICS			
White Ware			
Undecorated	2	--	c. 1820-1950+
Moulded Transfer Print	1	--	
METAL			
Automobile-Tractor Associations	1	--	c. 1905-1980
Button/Stud	1	--	

Provenience: General Surface Collection, Western Portion.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Late Archaic Residual Stemmed	1	6.5	
Preforms			
Preform I	1	70.0	
Wedges	1	67.0	
Adzes, Axes			
Chipped Axe	1	312.0	

	Count	Wt. (g)	Component
Scrapers			
Uniface Side/End Scraper	1	8.3	
Unidentifiable Chipped Stone Fragments	1	18.5	
Pecked and Ground Stone			
Hammerstone	1	436.6	
Pitted Anvilstone	1	264.0	
Unidentifiable Ground Stone Fragments	1	5.4	
Other			
Debitage-Fire Cracked Rock-Shatter	--	27.3	
Introduced Rock	-	54.4	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	16.3	Late Woodland

Provenience: Test Unit 1, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	53.3	
Introduced Rock	--	64.0	

Provenience: Test Unit 2, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Unidentifiable Chipped Stone Fragments	1	1.9	
Other			
Debitage-Fire Cracked Rock-Shatter	--	73.4	
Introduced Rock	--	305.5	

Provenience: Test Unit 2, Level 2 (20-35 cm).

PREHISTORIC ARTIFACTS CERAMICS	Count	Wt. (g)	Component
Sherdlets - All Tempers	--	1.0	

Provenience: Test Unit 3, Level 1 (0-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	16.8	
Introduced Rock	--	63.5	

Provenience: Test Unit 4, Level 1 (0-24 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Bifaces			
Biface Fragment	1	1.4	

Provenience: Test Unit 4, Level 1 (0-24 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Bifaces			
Biface Fragment	1	1.4	
Other			
Debitage-Fire Cracked Rock-Shatter	--	50.0	
Introduced Rock	--	116.5	

Provenience: Test Unit 4, Level 2 (24-80 cm), feature fill.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	21.0	
Introduced Rock	--	154.0	
CERAMICS			
Sherdlets - All Tempers	--	1.0	
OTHER			
Charcoal	--	2.7	

Cultural Affiliation: Middle/Late Archaic, Gulf Formational, Late Woodland, Mississippian, American.

Resource Evaluation: Site 1Tu436 is a large, multicomponent site with an intact subplowzone feature. Prehistoric cultural material recovered from Site 1Tu436 suggests an aboriginal habitation spanning the Late Archaic to the Mississippian periods. The site's topographic location on a levee indicates that it once occupied the north bank of a river channel. Holocene deposition makes it likely that earlier Archaic deposits lie buried within the levee. Phase II testing of Site 1Tu436 could yield information potentially valuable for determining the nature of Late Archaic-Gulf

Formational occupation in the Black Warrior drainage. Testing would also help document the use of nonriverbank, first terrace environments by Late Woodland-Mississippian horticulturalists.

Recommendation: Phase II testing.

Site 1Tu437

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu437 is located on a T-1d levee 1,250 m (4,100 ft) north of the Black Warrior River. Tater Hill Creeek is 40 m (131 ft) west of the site. First order streams join Tater Hill Creek 320 m (1,050 ft) north and 300 m (984 ft) south of the site.

Soil Type: Dundee silt loam.

Site Description: The site is an isolated find measuring 200 m (656 ft) east-west by 100 m (328 ft) north-south. Only the eastern 25 percent of the site lies within the survey area. The topsoil is typically a dark brown silt loam overlying a pale brown mottled silt loam. The site is currently planted in soybeans. River Road, a light-duty dirt road, runs east-west 300 m (984 ft) north of the site.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	—	16.7	
Introduced Rock	--	420.0	
HISTORIC ARTIFACTS			
BUILDING MATERIAL			
Brick			
Hand Made	2	--	

Cultural Affiliation: Unidentified prehistoric, American.

Resource Evaluation: Site 1Tu437 represents a small artifact scatter with no accompanying cultural deposit. The density of surface material was less than one observable artifact per 1000 m^2. No diagnostic aboriginal artifacts were recovered.

Recommendation: No further investigation is recommended.

Site 1Tu438

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 150 ft (46 m) AMSL.
Physiographic Location: Site 1Tu438 is located on a T-2 terrace, 650 m (2,132 ft) north of the Black Warrior River. The site is on a spur of the terrace, overlooking a large swamp 60 m (197 ft) to the south. The cultural deposit has been truncated by sheet erosion and has been heavily eroded because of cultivation. Buried cultural deposits are unlikely.

Soil Type: Ruston fine sandy loam.

Site Description: The site is a moderate artifact concentration measuring 120 m (394 ft) east-west by 80 m (262 ft) north-south. An intact subplowzone post hole extending 52 cm (20 in) below the plowzone was located and tested. The plowzone is a red brown fine sandy loam 10-20 cm (4-8 in) thick, underlain by a yellowish red clay loam.

Site 1Tu438 is presently under cultivation, providing good surface visibility. A field access road is 50 m (164 ft) west of the site.

Investigation Procedure: The site area was surface collected. Three 50 cm by 50 cm test pits were excavated in areas of dense artifact concentration.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Swan Lake	3	16.5	Middle Woodland
Decatur	1	3.0	Early Archaic
PP/K Distal Fragment	1	12.0	
Bifaces			
Biface Fragment	1	13.4	
Preforms			
Preform I	1	42.0	
Preform II	1	5.3	
Cores			
Amorphous Core	1	4.8	
Wedges	1	0.8	
Knives			
Uniface Flake Knife	1	5.7	
Biface Cobble/Pebble Knife	1	4.7	
Scrapers			
Uniface End Scraper	2	7.8	
Uniface Side/End Scraper	3	25.2	
Unidentifiable Chipped Stone Fragments	1	3.0	

	Count	Wt. (g)	Component
Pecked and Ground Stone			
Hammerstone	2	301.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	179.0	
Introduced Rock	--	170.7	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	13	33.5	Late Woodland
Withers Fabric Impressed var. Montgomery	1	5.5	Late Woodland
Sherdlets - All Tempers	--	14.5	

HISTORIC ARTIFACTS

CERAMICS			
White Ware Undecorated	1	--	c. 1820-1950+
BUILDING MATERIAL			
Brick Machine Made	1	--	
PLASTIC/RUBBER			
Shoe Sole	1	--	1940-1980

Provenience: Test Unit 1, Level 1 (0-15 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	.3	
Introduced Rock	--	19.0	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	2	5.0	Late Woodland
Sherdlets - All Tempers	--	2.0	

Provenience: Test Unit 1, Level 2 (15-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	4.7	

Provenience: Test Unit 2, Level 1 (0-19 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Cores			
Bipolar Core	1	3.2	

	Count	Wt. (g)	Component
Scrapers			
Uniface Side Scraper	1	5.7	
Other			
Debitage-Fire Cracked Rock-Shatter	--	2.4	
Introduced Rock	--	54.0	
CERAMICS			
Sherdlets - All Tempers	--	3.5	

Provenience: Test Unit 2, Level 2 (14-49 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Compound Pecked and Ground Tools			
Muller/Anvilstone	1	555.0	
Unidentifiable Ground Stone Fragments	1	0.4	
Other			
Introduced Rock	--	10.5	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	3.0	Late Woodland
Sherdlets - All Tempers	--	0.5	

Provenience: Test Unit 3, Level 1 (0-14 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.8	
Introduced Rock	--	38.5	

Provenience: Test Unit 3, Level 2 (14-22 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	2.1	

Cultural Affiliation: Early Archaic, Middle Woodland, Late Woodland, American.

Resource Evaluation: Site 1Tu438 is intermediate in size, with an intact subplowzone feature. One Decatur projectile point indicates that an Early Archaic component is present. Site 1Tu438 could provide information valuable for understanding the nature of the Archaic-Woodland occupations

in the Black Warrior drainage. The site's second terrace location on a point overlooking a variety of floodplain environments is similar to that at Site 1Tu308. This site could be useful in determining the nature of exploitation of first and second terrace environments by both Archaic hunter-gatherers and by Late Woodland/Mississippian horticulturalists. Recovery of historic artifacts is insufficient to document the presence of a significant historic component.

Recommendation: No further investigation is recommended.

Site 1Tu439

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 160 ft (49 m) AMSL.
Physiographic Location: Site 1Tu439 is located on T-2 terrace 800 m (2,624 ft) north of the Black Warrior River and 60 m (197 ft) north of a large swamp. The site is centered on a small knoll overlooking an intermittent drainage 20 m (66 ft) northwest of the site. Sheet erosion and cultivation have truncated the soil profile.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu439 is a multiple isolated find measuring 100 m (328 ft) in diameter. The soil is typically a brown fine sandy loam underlain by a yellowish red loam subsoil. A structure is indicated at this location on the 1911 Tuscaloosa County soil map.

The site is currently under cultivation and planted in soybeans. A field road crosses the site making it accessible from the north.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Microliths			
Microlith	1	0.3	
Other			
Debitage-Fire Cracked Rock-Shatter	--	71.5	
Introduced Rock	--	153.8	

HISTORIC ARTIFACTS

GLASS			
Mold Made Green Unidentified Body Sherds	1	--	Early 19th-20th century
CERAMICS			
Pearlware			
Undecorated	1	--	c. 1780-1830
Transfer Printed Blue	1	--	c. 1795-1840

Cultural Affiliation: Unidentified prehistoric, American.

Resource Evaluation: Site 1Tu439 is a small site with no intact deposits. No temporally diagnostic aboriginal materials were recovered. An early nineteenth century structure was once present. No further work is warranted at this site.

Recommendation: No further investigation is recommended.

Site 1Tu440

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 160 ft (49 m) AMSL.
Physiographic Location: Site 1Tu440 is located on the T-2 terrace 900 m (2,952 ft) north of the Black Warrior River. It overlooks an intermittent drainage immediately to the south and west. This drainage flows into a swamp 350 m (1,148 ft) to the south. The presence of buried cultural deposits is unlikely because of sheet erosion and cultivation.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu440 is a minimal artifact concentration measuring 80 m (262 ft) in diameter. The soil is typically a brown fine sandy loam underlain by a yellowish red loam subsoil. The site is currently planted in soybeans, providing good surface visibility. A light-duty road runs east-west 100 m (328 ft) north of the site.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience. General Surface Collection.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	206.9	
Introduced Rock	--	1,147.0	
HISTORIC ARTIFACTS			
GLASS			
Dark Olive Green Free Blown	1	--	Early-Middle 19th century
Mold Made			
Green			
Unidentified Body Sherds	8	--	Early 19th-20th century
Clear			
Embossed	1	--	Middle 19th-20th century
Unidentified Body Sherds	2	--	Early 19th-20th century
CERAMICS			
Pearlware			
Undecorated	3	--	c. 1780-1830
Shell Edge Rim Treatment			
Blue	1	--	c. 1780-1830
Green	3	--	c. 1780-1830

	Count	Wt. (g)	Component
Mocha	1	—	c. 1795-1890
Gaudy Dutch	2	--	c. 1820-1840
White Ware			
Undecorated	9	—	c. 1820-1950+
Transfer Printed	1	—	c. 1820-1950+
Utilitarian Ware			
Brown Slipped	1	--	
BUILDING MATERIAL			
Brick			
Glazed	1	—	

Cultural Affiliation: Unidentified prehistoric, American.

Resource Evaluation: Site 1Tu440 is a small prehistoric camp site with little possibility of intact features. No temporally diagnostic prehistoric artifacts were recovered. The site also contains an early nineteenth century ceramic scatter. This site is probably associated with Sites 1Tu439 and 1Tu441, and represents an early farming settlement. No further work is warranted because it is unlikely that any undisturbed deposits are present.

Recommendation: No further investigation is recommended.

Site 1Tu441

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 150 ft (46 m) AMSL.
Physiographic Location: Site 1Tu441 is located on the T-2, 850 m (2,788 ft) north of the Black Warrior River. The site is situated at the head of an intermittent drainage which flows into a swamp 220 m (722 ft) south of the site.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu441 is a intense artifact concentration consisting of a historic double pen of log cabin construction, burned in 1981. The site area is 250 by 250 m (820 by 820 ft). Only the foundations, brick piers, and chimney remain of the house. The foundations measure 13.6 m (44.6 ft) by 7 m (23 ft). The chimney is made from brick and mortar and measures 2.1 m (6.9 ft) by 2.6 m (8.5 ft). A standing outbuilding is located 21 m (68.9 ft) south of the house. A well is located 11 m (36 ft) north of the house. A second well is located under the back porch. The structure is not located on the 1911 soil map, but it is present on the 1924 Tuscaloosa Quadrangle map. The surface collection was obtained from the garden plot 20 m (65.6 ft) west of the house site. The outbuilding is currently used as an animal pen. The soil is typically a dark yellowish brown sandy loam underlain by a yellowish red loam. The deposit has not been plowed.

Investigation Procedure: Surface collection, structure measurements (Figure 6) and photographs.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Microliths			
Microlith	1	1.0	
Wedges	1	11.4	
Pecked and Ground Stone			
Hammerstone	1	296.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	356.6	
Introduced Rock	--	22.1	
HISTORIC ARTIFACTS			
GLASS			
Machine Made			
Green			
Embossed	2	--	Early 19th-20th century
Unidentified Body Sherds	1	--	Early 19th-20th century
White			
Embossed	1	--	Early 19th-20th century

SITE 1Tu441 PLAN VIEW

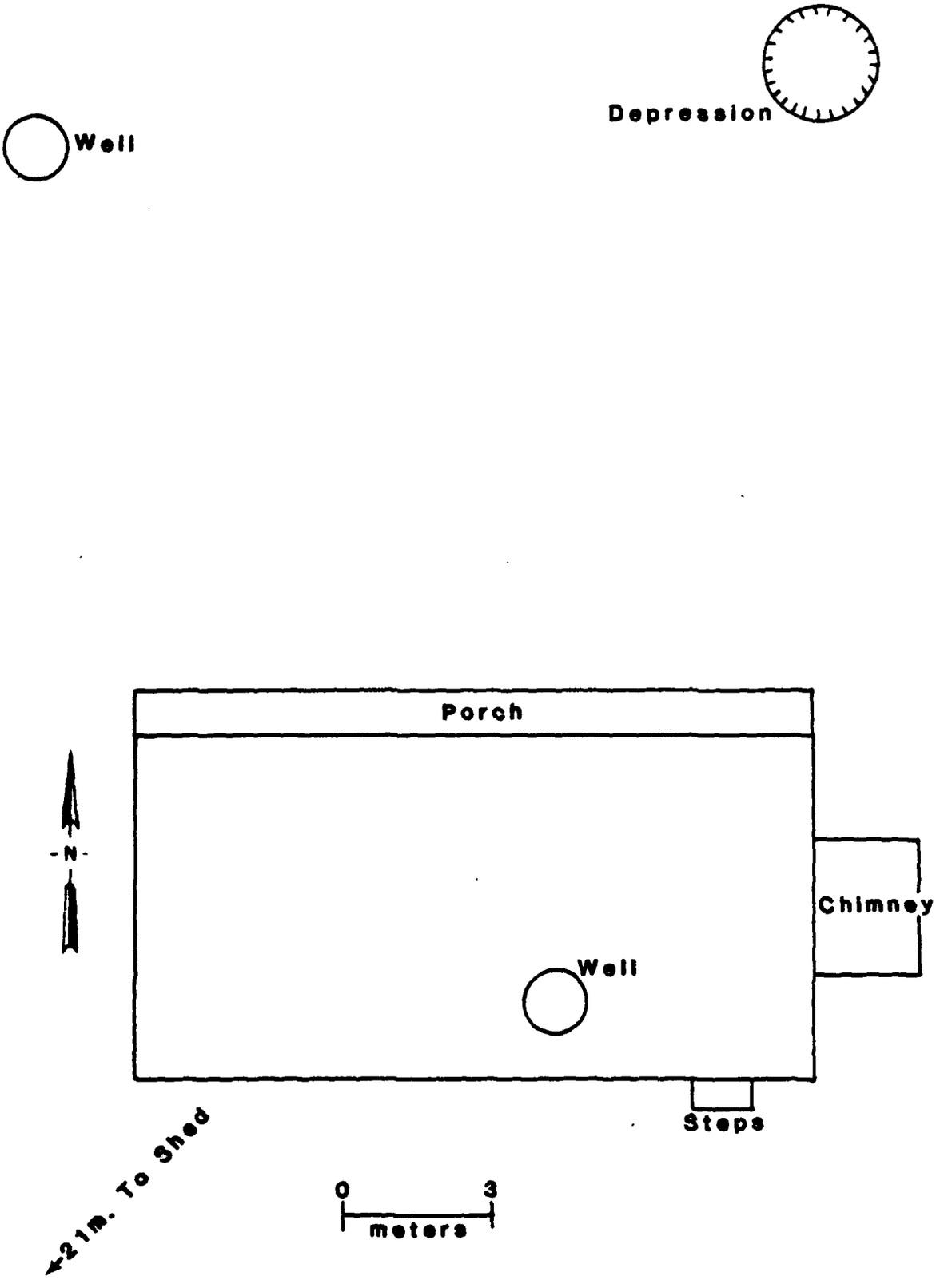

Figure 6.

	Count	Wt. (g)	Component
Unidentified Body Sherds	2	--	Early 19th-20th century
Clear			
Embossed	4	--	Middle 19th-20th century
Amber			
Embossed	1	--	Middle 19th-20th century
Unidentified Body Sherds	3	--	
Red			
Embossed (Car Reflector)	1	--	1910-1980
CERAMICS			
Pearlware			
Undecorated	4	--	c. 1780-1830
Transfer Printed Blue	5	--	c. 1795-1840
Utilitarian Ware			
Salt Glazed	3	--	c. 1820-1950+
Brown Slipped	1	--	
Black Glazed	1	--	c. 1820-1950+
Grey/Black Glazed	2	--	c. 1820-1950+
Porcelain			
Transfer Printed Polychrome	1	--	c. 1800-1950+
METAL			
Wire Nail	2	--	c. 1855-1980
Stainless Steel Tableware	2	--	
Steel Plate	1	--	
MODERN PRODUCTS			
Electric Shaver	1	--	c. 1930-1980
T.V. Tube	1	--	c. 1930-1975
BUILDING MATERIAL			
Brick			
Machine Made	1	--	

Cultural Affiliation: Unknown prehistoric, American.

Resource Evaluation: The historic ceramic remains indicate an initial date of occupation no later than 1830 for this log structure. The site is located on an 80 acre tract purchased by Isaac Rhodes in 1821. It is reasonable to infer that the site was initially the Rhodes homestead. The small size of the purchased tract, and the vernacular style of the log house, suggest that Rhodes was a subsistence farmer operating in the shadow of Jemison's huge Cherokee plantation (Chapter III). Intact deposits of material remains are likely to be preserved in the unplowed soils in the vicinity of the structure and in the wells.

Site 1Tu441 is potentially important for documenting the economic role and status of the white antebellum subsistence farmer and his relationship to the larger plantation which dominated the landscape.

Recommendation: Phase II testing. Additional testing is recommended in order to assess the research potential of historic yard and well deposits at the site.

Site 1Tu442

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 150 ft (46 m) AMSL.
Physiographic Location: Site 1Tu442 is located on the second terrace of Mill Creek, 1,100 m (3,608 ft) north of the Black Warrior River. A first order intermittent stream runs northwest-southeast 80 m (262 ft) north and east of the site. Another first order intermittent stream runs 300 m (984 ft) south of the site. Repeated cultivation and minor gully cutting has destroyed most of the site.

Soil Type: Smithdale fine sandy loam.

Site Description: Site 1Tu442 is a multiple isolated find measuring 160 m (525 ft) north-south and 60 m (197 ft) east-west. The topsoil is typically a dark brown fine sandy loam underlain by a red clay loam. The northern portion of the site is currently used as pasture. The remainder is covered with scrub brush. The pasture grass cover provided moderate to poor surface visibility. A light duty private road crosses the site from the northwest.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Elora	1	9.8	Late Archaic/Gulf Formational
Middle Archaic Residual			Middle Archaic
Stemmed	1	2.5	
Scrapers			
Uniface Side/End			
Scraper	1	2.1	
Other			
Debitage-Fire Cracked			
Rock-Shatter	—	98.9	
Introduced Rock	—	28.4	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	1	7.[illegible]	Late Woodland

Cultural Affiliation: Middle Archaic, Late Archaic/Gulf Formational, Late Woodland.

Resource Evaluation: Site 1Tu442 is a large multicomponent prehistoric site without features or midden. No further work is warranted because most of the site has been destroyed by cultivation and gully cutting. It is unlikely that any undisturbed deposits are present.

Recommendation: No further investigation is recommended.

Site 1Tu443

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu443 is located on the Alluvial Fan floodplain, 400 m (1,312 ft) east of the Mill Creek. The site is on a small rise 60 m (197 ft) north of a first order intermittent stream. It is on the rear of the first terrace. Buried cultural deposits are unlikely due to erosion.

Soil Type: Shatta silt loam.

Site Description: Site 1Tu443 is a multiple isolated find measuring 100 m (328 ft) north-south by 80 m (262 ft) east-west. The topsoil present is typically a dark grayish or yellowish brown silt loam underlain by a yellowish brown silt loam. The eastern portion of the site is grass-covered, with large areas of bare eroding ground. The western edge of the site is wooded. The site is accessible by 5th Street immediately north of the site.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Decatur	1	2.4	Early Archaic
Gravers	1	1.1	
Scrapers			
Uniface Side Scraper	1	9.2	
Compound Chipped Stone Tools			
Uniface Side/End Scraper/Uniface Flake Knife	1	3.8	
Uniface Side Scraper/ Biface Flake Knife	2	5.8	
Pecked and Ground Stone			
Hammerstone	1	397.8	
Unidentifiable Ground Stone Fragments	1	55.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	85.6	
Introduced Rock	--	1,100.0	

Cultural Affiliation: Early Archaic.

Resource Evaluation: Site 1Tu443 is an Early Archaic site of intermediate size without intact midden or features. No further work is warranted because it is unlikely that any undisturbed deposits remain.

Recommendation: No further investigation is recommended.

Site 1Tu444

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 165 ft (50 m) AMSL.
Physiographic Location: Site 1Tu44 is on an isolated T-2 terrace remnant bordered on the south, west, and southeast by swamps. The site is 620 m (2,034 ft) north of the Black Warrior River. A first order intermittent stream is 120 m (394 ft) northeast of the site. Testing indicated the presence of buried cultural deposits in an unplowed matrix. Deeply buried deposits are unlikely.

Soil Type: Falkner silt loam.

Site Description: Site 1Tu444 is an intense artifact concentration with intact deposits measuring 220 m (722 ft) east-west by 130 m (426 ft) north-south. The A horizon is a medium to dark brown silty loam 10 cm (4 in) to 15 cm (6 in) thick. Most cultural material came from this stratum. A mottled gradual transition between the topsoil and subsoil indicates that this site has never been plowed. The B-1 horizon is an orange-brown silty clay loam 20 cm (8 in) thick containing pebbles and small iron and manganese nodules. The lower subsoil is a red-brown silty clay extending at least 70 cm (28 in). A concentration of fire cracked rock, possibly a feature, was located during the testing program.

The site is currently wooded with no surface visibility. The site is accessible by a light duty road 60 m (197 ft) west of the site and by an abandoned logging road immediately south of the site.

Investigation Procedure: Shovel tests. Six 50 cm by 50 cm test pits were placed at regular intervals.

Materials Recovered:

Provenience: Shovel Test.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Pecked and Ground Stone			
Hammerstone	1	196.0	

Provenience: Test Unit 1, Level 1 (0-15 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Wedges	1	7.0	
Pecked and Ground Stone			
Hammerstone	1	46.4	
Other			
Debitage-Fire Cracked Rock-Shatter	—	24.0	
Introduced Rock	--	70.0	

Provenience: Test Unit 1, Level 2 (15-30 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	1.6	
Introduced Rock	--	4.5	

Provenience: Test Unit 2, Level 1 (0-13 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Preforms			
Preform II	1	23.8	
Unidentifiable Chipped Stone Fragments	1	5.3	
Other			
Debitage-Fire Cracked Rock-Shatter	--	50.5	
Introduced Rock	--	256.0	

Provenience: Test Unit 2, Level 2 (13-32 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Unidentifiable Chipped Stone Fragments	1	0.8	
Other			
Debitage-Fire Cracked Rock-Shatter	--	2.7	
Introduced Rock	--	48.0	
OTHER			
Charcoal	--	1.0	

Provenience: Test Unit 3, Level 1 (0-15 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Proximal Fragment	1	5.9	
Other			
Debitage-Fire Cracked Rock-Shatter	--	59.0	
Introduced Rock	--	362.0	

Provenience: Test Unit 3, Level 2 (15-32 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	10.6	

Provenience: Test Unit 4, Level 1 (0-17 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	43.2	
Introduced Rock	--	87.7	

Provenience: Test Unit 4, Level 2 (18-21 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.8	
Introduced Rock	--	23.5	

Provenience: Test Unit 5, Level 1 (0-13 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Proximal Fragment	1	2.1	
Scrapers			
Uniface Side Scraper	1	9.4	
Uniface Side/End Scraper	1	3.7	
Other			
Debitage-Fire Cracked Rock-Shatter	--	380.0	
Introduced Rock	--	1,346.0	
OTHER			
Charcoal	--	2.0	

Provenience: Test Unit 5, Level 2 (13-31 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	122.2	
Introduced Rock	--	14.5	

	Count	Wt. (g)	Component
OTHER			
Charcoal	--	0.1	

Provenience: Test Unit 6, Level 1 (0-16 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	15.0	
Introduced Rock	--	31.0	
OTHER			
Charcoal	--	5.6	

Provenience: Test Unit 6, Level 2 (16-32 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	6.9	

Cultural Affiliation: Unknown prehistoric.

Resource Evaluation: Site 1Tu444 is a large intact midden in an unplowed matrix. No temporally diagnostic artifacts were recovered, but the absence of ceramics suggests an Archaic occupation. The site is located on a second terrace remnant overlooking a variety of first terrace backswamp environments, similar to Sites 1Tu308 and 1Tu438. The site's location above an abandoned channel of the Black Warrior River, a later channel of Mill Creek, and the Mill Creek alluvial fans, suggests that this site would have been occupied to exploit specific fluvial environments as they became available. The suggested Middle to Late Archaic occupation without overlying Woodland and Mississippian components makes this site even more unique and presents an unparalleled opportunity to investigate the Archaic settlement and exploitation of changing backswamp environments. Phase II testing of Site 1Tu444 to verify its component composition could yield valuable information concerning the nature and development of Archaic subsistence in the Black Warrior drainage.

Recommendation: Phase II testing.

Site 1Tu445

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu445 is located at the rear of the first terrace 650 m (2,132 ft) north of the Black Warrior River and 300 m (984 rt) east of Mill Creek. A T-2 terrace is located 40 m (131 ft) southeast of the site. Site 1Tu445 is located on a remnant of a Holocene colluvial deposit. A Mill Creek meander cut the north and west side of the site before it incised its present course.

Soil Type: Falkner silt loam.

Site Description: Site 1Tu445 is a multiple isolated find measuring 100 m (328 ft) north-south by 60 m (197 ft) east-west. The site is located at the base of a second terrace, where Pleistocene gravels have been exposed by erosion. Site 1Tu445 may represent a lithic procurement site. The soil is typically a dark yellowish brown silt loam. The site is currently planted in soybeans providing good surface visibility. The western one-third of the site has been planted in pines and was not collected. A light-duty dirt road crosses the site making it accessible from the east.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Preforms			
Preform I	1	18.5	
Preform II	1	7.4	
Preform II Fragment	1	5.5	
Drills			
Proximal Drill Fragment	1	5.4	
Gravers	1	1.5	
Scrapers			
Uniface End Scraper	1	2.9	
Uniface Side/End Scraper	1	2.5	
Unidentifiable Scraper Fragment	1	1.1	
Unidentifiable Chipped Stone Fragments	3	20.0	
Pecked and Ground Stone			
Muller	1	400.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	259.0	
Introduced Rock	--	2.2	

Cultural Affiliation: Unidentified prehistoric.

Resource Evaluation: Site 1Tu445 is an intermediate sized site with little possibility of intact midden or features. No temporally diagnostic materials were recovered, but the absence of ceramics suggests an Archaic occupation. The site's location adjacent to an exposed second terrace gravel bed and the high incidence of biface preforms suggests that Site 1Tu445 functioned as a lithic procurement station.

Recommendation: No further investigation is recommended.

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu446 is located on the rear of the T-1 terrace 550 m (1,804 ft) north of the Black Warrior River. The T-2 terrace is located 50 m (164 ft) east of the site. Mill Creek is located 300 m (984 ft) east of the site. The T-1 terrace on which Site 1Tu446 is situated is a colluvial deposit from the second terrace and delta deposit of Mill Creek

Soil Type: Falkner silt loam.

Site Description: Site 1Tu446 is a multiple isolated find measuring 100 m (328 ft) north-south by 60 m (197 ft) east-west. The site is located at the base of a second terrace, where Pleistocene gravels have been exposed by erosion. Site 1Tu446 may represent a lithic procurement site. The soil is typically a dark yellowish brown silt loam underlain by a mottled yellowish brown silty clay loam. The site is currently used for soybean cultivation, providing good surface visiblity. A light-duty dirt road to the east of the site makes the site accessible from the east.

Investigation Procedure: Surface colllection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Preforms			
Preform I	2	56.5	
Scrapers			
Uniface Side Scraper	1	5.1	
Pecked and Ground Stone			
Hammerstone/Core	1	321.5	
Other			
Debitage-Fire Cracked Rock-Shatter	--	29.3	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	6.5	Late Woodland

Cultural Affiliation: Late Woodland.

Resource Evaluation: Site 1Tu446 is an intermediate sized Late Woodland site without intact midden or features. The site's location adjacent to an exposed second terrace gravel bed suggests that Site 1Tu446 functioned as a lithic quarry.

Recommendation: No further investigation is recommended.

Site 1Tu447

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu447 is located on a small knoll on T-1 terrace 680 m (2,230 ft) north of the Black Warrior River and 600 m (1,968 ft) east of Mill Creek. A small first order intermittent stream occurs northwest of the site.

Soil Type: Falkner silt loam.

Site Description: Site 1Tu447 is an intensive artifact concentration which represents a historic house site with no remaining standing structures. The site is represented by a surface scatter measuring 100 m (328 ft) east-west by 60 m (197 ft) north-south. A structure is shown at this location on the Tuscaloosa Quadrangle 7.5' 1952 topographic map. The cultural deposit was recently buried. The soil type present is typically a dark brown to yellowish brown silt loam underlain by a yellowish brown, mottled, silty clay loam. The site is currently part of Kentuck recreational park.

Investigation Procedure: Surface collection and random shovel tests.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.2g	
OTHER			
Bone	--	0.2g	

HISTORIC ARTIFACTS

GLASS			
Mold Made			
Green			
Embossed	1	--	Early 19th-20th century
Clear			
Unidentified Body Sherds	1	--	Early 19th-20th century
Aqua			
Embossed	1	--	Middle 19th-20th century
CERAMICS			
White Ware			
Undecorated	1	--	c. 1820-1950+
METAL			
Wire Nail	1	--	c. 1855-1980
Unidentified Iron Fragments	3	--	

Cultural Affiliation: American.

Resource Evaluation: Site 1Tu447 is a historic house site destroyed by landscaping activities in Kentuck Park. No further work is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu448

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu448 is located on a small knoll on the T-1 terrace, 800 m (2,624 ft) north of the Black Warrior River and 480 m (1,574 ft) east of Mill Creek. A small first order, intermittent stream is located just east of the site.

Soil Type: Falkner silt loam.

Site Description: The site is a multiple isolated find measuring 80 m (262 ft) north-south by 60 m (197 ft) east-west. The soil type present is a dark brown-yellowish brown silt loam underlain by a yellowish brown, mottled, silty clay loam. The site is presently part of Kentuck recreational park. The site is currently grass covered, providing limited surface visibility.

Investigation Procedure: Surface collection, shovel tests.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Knives			
Uniface Flake Knife	1	5.0	
Scrapers			
Uniface Side/End Scraper	1	6.4	
HISTORIC ARTIFACTS			
METAL			
Wire Fragment	2	--	

Cultural Affiliation: Unknown prehistoric.

Resource Evaluation: Site 1Tu448 is a small minimal lithic scatter with no intact features or midden. It has been heavily impacted by landscaping activities on Kentuck Park. No further work is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu449

Project Area: Oliver Lock and Dam, proposed relocation area..
Elevation: 150 ft (46 m) AMSL.
Physiographic Location: Site 1Tu449 is located on a knoll on the T-2 terrace 1,100 m (3,608 ft) north of the Black Warrior River. First order intermittent streams are 200 m (656 ft) north and 270 m (886 ft) south of the site. Erosion due to cultivation has exposed the subsoil on the site.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu449 is a multiple isolated find measuring 80 m (262 ft) east-west by 60 m (197 ft) north-south. The soil is typically a dark yellowish brown fine sandy loam topsoil underlain by a yellowish red loam subsoil.

The site is currently used as a garden and is immediately east of an inhabited trailer. Surface visibility is good. The site is accessible from 5th Street to the north by a light-duty paved road.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Scrapers			
Scraper on Biface	1	5.9	
Pecked and Ground Stone			
Edge Ground Cobble	1	224.0	
Other			
Debitage-Fire Cracked Rock-Shatter	—	52.5	
Introduced Rock	--	22.8	
CERAMICS			
Grog Tempered			
Mulberry Creek Cord Marked var. Aliceville	1	2.0	Late Woodland

HISTORIC ARTIFACTS			
GLASS			
Mold Made Aqua Unidentified Body Sherd	1	--	
CERAMICS			
White Ware Undecorated	1	--	c. 1820-1950+
Utilitarian Ware			
Salt Glazed	1	--	c. 1820-1950+
Slipped	1	--	c. 1820-1950+
Porcelain Undecorated	1	--	

	Count	Wt. (g)	Component
METAL			
Clamp	1	--	

Cultural Affiliation: Late Woodland, American.

Resource Evaluation: Site 1Tu449 represents a small site without intact features or midden. The site has been adversely affected by erosion due to cultivation. No further work is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu450

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu450 is located on the first terrace overlooking Mill Creek 40 m (131 ft) east of the site. Two steeply entrenched first order, intermittent streams flow into Mill Creek 100 m (328 ft) south and 80 m (262 ft) north of the site. The terrace upon which Site 1Tu450 is located is a Holocene alluvial fan deposited by Mill Creek. Mill Creek later incised its present channel. Buried cultural deposits are potentially present because of continued overbank alluviation by Mill Creek.

Soil Type: Falkner silt loam.

Site Description: Site 1Tu450 is a minimal artifact concentration measuring 240 m (787 ft) north-south by 180 m (590 ft) east-west. Testing indicated that cultural material was predominantly confined to the plowzone with some subplowzone material recovered. The topsoil is a dark brown silty loam, 5 cm to 10 cm (2 to 4 in) thick. This is underlain by a light to medium brown silty clay loam. Cultivation in the past has caused the erosion of much of the silty loam topsoil, particularly in the southern portion of the site.

The site is currently wooded, but has been cultivated in the past. Surface visibility is poor. The site is accessible by two field or logging roads from the west.

Investigation Procedure: Five regularly spaced 50 cm by 50 cm test pits were excavated around the margins of the site.

Materials Recovered:

Provenience: Shovel Test.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Flint Creek	1	6.0	Late Archaic/Gulf Formational
Other			
Debitage-Fire Cracked Rock-Shatter	--	29.0	

Provenience: Test Unit 1, Level 2 (5 to 25 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	24.0	

Provenience: Test Unit 2, Level 1 (0-5 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	31.7	
Introduced Rock	--	348.0	

Provenience: Test Unit 2, Level 2 (5-40 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	21.0	

Provenience: Test Unit 3, Level 2 (5-25 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	6.6	
Introduced Rock	--	36.0	

Provenience: Test Unit 3, Level 3 (25-34 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.8	
Introduced Rock	--	7.8	

Provenience: Test Unit 4, Level 1 (0-13 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Distal Fragment	1	0.2	
Other			
Debitage-Fire Cracked Rock-Shatter	--	12.4	
Introduced Rock	--	168.0	

Provenience: Test Unit 4, Level 2 (13-28 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.5	
Introduced Rock	--	85.2	

Provenience: Test Unit 5, Level 2 (10-33 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	1.1	

Cultural Affiliation: Late Archaic/Gulf Formational.

Resource Evaluation: Site 1Tu450 is a large site that has been adversely affected by past cultivation and erosion. The location of buried Late Archaic/Gulf Formational deposits in an alluvial fan of Mill Creek has potential for documenting the rate of sedimentation during the Hypsithermal. The settlement pattern and resource utilization of these populations within this nonriverine backwater environment is also an important topic for further research. No intact midden or features were located. Some cultural material, however, was recovered in subplowzone deposits. The extent and density of the subplowzone deposits is insufficient to warrant further work.

Recommendation: No further investigation is recommended.

Site 1Tu451

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu451 is located at the rear of the first terrace and at the base of the second terrace, 600 m (1,968 ft) north of the Black Warrior River. A first order stream runs east-west 40 m (131 ft) south of the site.

Soil Type: Choccolocco silt loam.

Site Description: The site is a minimal artifact concentration measuring 220 m (722 ft) east-west by 100 m (328 ft) north-south. The soil is typically a dark brown silty loam topsoil underlain by a yellow brown silty clay loam subsoil.

The site is currently planted in soybeans providing good surface visibility. The terrace above the site has been extensively disturbed and is used for an airport runway platform. Airport service roads make the site accessible from the west.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
PP/K Medial Fragment	1	2.0	
Cores			
Amorphous Core	4	399.3	
Choppers	1	131.0	
Unidentifiable Chipped Stone Fragments	1	3.0	
Unidentifiable Ground Stone Fragments	1	95.0	
Other			
Debitage-Fire Cracked Rock-Shatter	—	257.0	
Introduced Rock	—	583.5	

HISTORIC ARTIFACTS

GLASS			
Aqua			
Free Blown	1	--	

Cultural Affiliation: Unknown prehistoric, American.

Resource Evaluation: Site 1Tu451 is a large lithic scatter that has been adversely affected by cultivation and airport landscaping activities. Further investigations of Site 1Tu451 are unwarranted.

Recommendation: No further investigation is recommended.

Site 1Tu452

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu452 is located on the edge of the T-2 terrace, 760 m (2,493 ft) north of the Black Warrior River. The site overlooks a first order stream and a swamp 140 m (459 ft) to the south. Airport landscaping activities and cultivation have destroyed the site.

Soil Type: Shatta urban land complex.

Site Description: Site 1Tu452 is a multiple isolated find measuring 180 m (590 ft) northeast-southwest by 80 m (262 ft) southeast-northwest. No subsurface cultural deposits are expected. The soil type present is typically a dark grayish or yellowish brown silt loam topsoil underlain by yellowish brown silt loam subsoil.

The site is currently cultivated in soybeans and grass covered, providing moderate surface visibility. The airport runway is 100 m (328 ft) northwest of the site. Airport service roads make the site accessible from the north. The site has been adversely affected by landscaping activities.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Knives			
Uniface Flake Knife	1	9.5	
Pecked and Ground Stone			
Muller Fragment	1	470.0	
Other			
Debitage-Fire Cracked Rock-Shatter	---	6.5	

Cultural Affiliation: Unknown prehistoric.

Resource Evaluation: Site 1Tu452 is a small lithic scatter without intact midden or features. The site has been heavily impacted by landscaping activites, intensive cultivation, and erosion of the second terrace.

Recommendation: No further investigation is recommended.

Site 1Tu453

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 145 ft (44 m) AMSL.
Physiographic Location: Site 1Tu453 is located on a T-1 Mill Creek levee, 500 m (1,640 ft) west of the junction of Mill Creek with the Black Warrior River. The site is 100 m (328 ft) southeast of a small swamp.

Soil Type: Choccolocco silt loam.

Site Description: Site 1Tu453 is a multiple isolated find measuring 50 m (164 ft) in diameter. Testing gave no indications of intact subsurface features or midden. The soil present is typically a dark brown silt loam, overlying a brown silty clay loam.

The site is currently wooded and may never have been plowed. The site is inaccessible by road; the nearest field road is located 220 m (722 ft) south. A power line crosses the southern border of the site.

Investigation Procedure: Two 50 cm by 50 cm test pits were excavated.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	101.0	

Provenience: Test Unit 1, Level 1.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Scrapers			
Uniface Side Scraper	1	22.2	
Other			
Debitage-Fire Cracked Rock-Shatter	--	19.0	
Introduced Rock	--	36.8	
OTHER			
Charcoal	--	0.8g	

Provenience: Test Unit 2, Level 1.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	6.5	
Introduced Rock	--	45.0	

Provenience: Test Unit 2, Level 2.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Pecked and Ground Stone			
Hammerstone	1	197.0	

Cultural Affiliation: Unknown prehistoric.

Resource Evaluation: Site 1Tu453 is a minimal lithic scatter site without midden or features, although testing indicates the site may never have been plowed. Further investigation of Site 1Tu453 is unwarranted.

Recommendation: No further investigation is recommended.

Site 1Tu454

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu454 is located on the first terrace of Mill Creek 480 m (1,574 ft) north of the Black Warrior River and 40 m (131 ft) west of Mill Creek. A small intermittent drainage runs into Mill Creek 60 m (197 ft) northwest of the site. The creek levee occupied by Site 1Tu454 is a Holocene alluvial fan deposited by Mill Creek. The delta was truncated by stream action when Mill Creek incised its present channel to the river.

Soil Type: Ellisville and Falkner silt loam.

Site Description: Site 1Tu454 is a multiple isolated find measuring 20 m (66 ft) in diameter. The topsoil A horizon is a dark to medium brown silty clay loam 20 to 25 cm (8 to 10 in) thick, underlain by a B horizon red brown clay loam. Cultural material was recovered from the topsoil layers. Testing indicated that the site was never plowed, although the land immediately to the east was once intensively plowed, as evidenced by still visible plow furrows. Erosion resulting from cultivation and from the deeply entrenched streams nearby may have destroyed the cultural context of this site. The site is currently wooded and is not accessible by road.

Investigation Procedure: Shovel tests and three 50 cm by 50 cm test pits were randomly placed and excavated.

Materials Recovered:

Provenience: Shovel test.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	—	31.7	

Provenience: Test Unit 1, Level 1 (0-25 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Flint Creek	1	6.0	Gulf Formational
Other			
Debitage-Fire Cracked Rock-Shatter	—	0.8	
Introduced Rock	—	78.0	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	2.0	Late Woodland

	Count	Wt. (g)	Component
Sherdlets - All Tempers	--	2.0	

Provenience: Test Unit 2, Level 1 (0-22 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	1.0	
Introduced Rock	--	2.4	

Provenience: Test Unit 2, Level 2 (22-45 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	1.0	

Provenience: Test Unit 3, Level 1 (0-28 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt.(g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	23.5	
Introduced Rock	--	15.5	
OTHER			
Charcoal	--	1.0	

Provenience: Test Unit 3, Level 2 (28-45 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt.(g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	1.4	
Introduced Rock	--	92.8	

Cultural Affiliation: Late Archaic/Gulf Formational, Late Woodland.

Resource Evaluation: Site 1Tu454 is a small site that appears to have never been plowed. Testing, however, revealed no indications of midden or features. The site is a very small multicomponent campsite located on the edge of Alluvial Fan AF-1a of Mill Creek. No further investigation of Site 1Tu454 is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu455

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 150 ft (46 m) AMSL.
Physiographic Location: Site 1Tu455 is located on the T-2 second terrace, 280 m (918 ft) south of the Black Warrior River. The site is located at the east side of an intermittent drainage, flowing into the river. A small manmade lake is 220 m (722 ft) northeast of the site. The soil profile at this site has been truncated by continued cultivation and erosion of this second terrace.

Soil Type: Smithdale fine sandy loam.

Site Description: Site 1Tu455 is an isolated find on a small rise measuring 40 m (131 ft) in diameter. The soil is typically a red brown fine sandy clay subsoil.

The site is currently part of a golf course and is accessible by golf course service roads.

Investigation Procedure: Surface collection and shovel testing.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Scrapers			
Uniface Side Scraper	1	8.2	
Other			
Debitage-Fire Cracked Rock-Shatter	—	209.0	
Introduced Rock	--	10.3	
HISTORIC ARTIFACTS			
CERAMICS			
Utilitarian Ware			
Black Glazed	1	—	c. 1820-1950+

Cultural Affiliation: Unknown prehistoric, American.

Resource Evaluation: Site 1Tu455 represents an intermediate sized site without intact features or midden. The site has been adversely affected by erosion and landscaping. No further investigations of Site 1Tu455 are warranted.

Recommendation: No further investigation is recommended.

Site 1Tu456

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu456 is located on the T-2 terrace, 200 m (656 ft) south of the Black Warrior River. The site is adjacent to a small manmade lake that was once an intermittent stream. Buried cultural deposits are unlikely due to erosion.

Soil Type: Smithdale fine sandy loam.

Site Description: Site 1Tu456 is a minimal artifact concentration which consists of a surface scatter of concrete which was probably the remains of George Morgan's 1920s cold storage plant. The scatter measures 60 m (197 ft) north-south by 30 m (98 ft) east-west. The concrete chunks are in disarray and may have been pushed by a bulldozer to their present location. The soil is typically a red-brown fine sandy loam. The site is currently located on a golf course and is accessible by golf course service roads.

Investigation Procedure: Photo.

Materials Recovered: No recovery.

Cultural Affiliation: American.

Resource Evaluation: Site 1Tu456 is a small historic site that has been adversely affected by erosion and landscaping. No further work at Site 1Tu456 is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu457

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: The site is located on the edge of the first terrace T-1c, 150 m (492 ft) south of the Black Warrior River. A small intermittent drainage running north into the river is located immediately east of the site. Buried cultural deposits are unlikely at this site.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu457 is a moderate artifact concentration consisting of a historic house site and a minimal prehistoric lithic scatter measuring 50 m (164 ft) in diameter. Fragments of a brick and mortar chimney are the only house remains left intact. The prehistoric component of this site consists of a few flakes scattered in the general vicinity of the house site. The site is not present on the 1911 Tuscaloosa County soil map or the 1924 15' Tuscaloosa Quadrangle map. The site has been heavily impacted by operation of an adjacent land fill. The soil is typically a dark brown to yellowish brown fine sandy loam underlain by a yellowish red loam.

Investigation Procedure: Photo and surface collection.

Materials Recovered:

Provenience: General Surface collection.

HISTORIC ARTIFACTS

GLASS	Count	Wt. (g)	Component
Clear			
Unidentified Body Sherds	4	—	Early 19th-20th century
CERAMICS			
Pearlware			
Undecorated	2	—	c. 1780-1830
Transfer Printed Blue	2	—	c. 1795-1840
Whiteware			
Undecorated	2	—	c. 1820-1950+

Cultural Affiliation: Unknown prehistoric, American.

Resource Evaluation: Site 1Tu457 represents a small site without intact midden or features. The site has been severely affected by erosion and land filling operations. Further investigation of Site 1Tu457 is unnecessary.

Recommendation: No further investigation is recommended.

Site 1Tu458

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu458 is located on the T-1c terrace, 200 m (656 ft) south of the Black Warrior River. The site is situated on the east bank of a small intermittent drainage running north to the river. The site has been eroded by cultivation and minor gully cutting.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu458 is a moderate artifact concentration measuring 60 m (197 ft) in diameter. The soil is typically a dark yellowish brown, fine sandy loam underlain by a yellowish red loam subsoil. The site is currently located within a land fill. The excavating activities of the dump have destroyed any *in situ* contexts of the site. The site is accessible from the land fill.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS			
LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Late Archaic Residual Stemmed	1	3.6	Late Archaic
Preforms			
Preform I Fragment	1	9.0	
Bifaces			
Biface Fragment	1	5.5	
Cores			
Core Fragment	1	16.4	
Unidentifiable Chipped Stone Fragments	5	11.5	
Pecked and Ground Stone			
Hammerstone	2	276.2	
Celt	1	451.1	
Celt Fragment	1	4.1	
Compound Pecked and Ground Tools			
Muller/Anvilstone	1	584.6	
Other			
Debitage-Fire Cracked Rock-Shatter	--	216.7	
Introduced Rock	--	44.1	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	4	11.0	Late Woodland
var. Unspecified	3	16.1	Late Woodland
Sherdlets - All Tempers	--	1.0	

	Count	Wt. (g)	Component
HISTORIC ARTIFACTS			
CERAMICS			
White Ware			
Transfer Printed			
Monochrome	1	--	
BUILDING MATERIAL			
Brick			
Cement Fragment	1	--	
FIBERGLASS			
Unidentified Fragment	1	--	

Cultural Affiliation: Late Archaic, Late Woodland, American.

Resource Evaluation: Site 1Tu458 is a small site without intact features or midden. The site has been severely affected by land filling operations. No further investigations are warranted.

Recommendation: No further investigation is recommended.

Site 1Tu459

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu454 is located on the T-2 terrace 280 m (918 ft) south of the Black Warrior River. Small intermittent drainages are 120 m (394 ft) west and 180 m (590 ft) east of the site. The site has been heavily impacted by cultivation and erosion.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu459 is a moderate artifact concentration measuring 140 m (459 ft) east-west by 50 m (164 ft) north-south. The soil is typically a dark yellowish brown, fine sandy loam underlain by a red clay loam subsoil. The site is currently located adjacent to a land fill. The bottoms of five large features were uncovered by surface stripping of topsoil in the landfill. These pits were excavated before they were destroyed. Two possible structures were located and mapped, but these were destroyed before salvage excavations could be initiated. The site is accessible from the land fill area.

Investigation Procedure: Surface collection. Excavation of exposed features.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Compound Pecked and Ground Tools			
Muller/Pitted Anvilstone	1	450.5	
Other			
Debitage-Fire Cracked Rock-Shatter	--	19.5	
CERAMICS			
Sand Tempered			
Ocmulgee Fields Plain	2	8.5	Historic
Grog Tempered			
Baytown Plain var. Roper	1	--	Late Woodland

The results of the salvage excavations are not included in this artifact inventory.

Cultural Affiliation: Late Woodland, Mississippian, historic Creek.

Resource Evaluation: Site 1Tu459 is an intermediate sized site severely affected by land filling operations. All intact features and/or midden have recently been destroyed. The site is important to historical reconstruction because of the recovery of one historic Creek sherd and the

presence of a small Mississippian settlement at this site. The significance of these dispersed settlement is discussed in Chapter III.

Recommendation: No further investigation is recommended.

Site 1Tu460

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 135 ft (41 m) AMSL.
Physiographic Location: Site 1Tu460 is located on the edge of the second terrace T-2, 160 m (525 ft) south of the Black Warrior River. Small intermittent drainages are 160 m (525 ft) west and 200 m (656 ft) east of the site.

Soil Type: Ruston fine sandy loam.

Site Description: The site is a multiple isolated find measuring 50 m (164 ft) east-west by 40 m (131 ft) north-south. The soil at the site is typically a dark yellowish brown fine sandy loam overlying a yellowish red loam subsoil. The site is currently located within a land fill area. Excavation activities at the dump have destroyed any in situ contexts. The site is accessible from the land fill.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Unidentifiable Ground Stone Fragments	1	5.6	
Other			
Ferruginous Sandstone Concretion (Paint Pot)	1	33.3	
Debitage-Fire Cracked Rock-Shatter	--	0.2	
Introduced Rock	--	0.8	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	4.0	Late Woodland
OTHER			
Charcoal	--	1.0	

Cultural Affiliation: Late Woodland.

Resource Evaluation: Site 1Tu460 is a small site without intact features or midden. The site has been heavily impacted by land filling operations. No further investigation of Site 1Tu460 is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu461

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 155 ft (47 m) AMSL.
Physiographic Location: Site 1Tu461 is located on a knoll on the second terrace T-2, 1,000 m (3,280 ft) north of the Black Warrior River. The site overlooks a large swamp 200 m (656 ft) to the south.

Soil Type: Shatta urban land complex.

Site Description: Site 1Tu461 is a minimal artifact concentration measuring 100 m (328 ft) in diameter. The soil is typically a dark grayish or yellowish brown silt loam, overlying a yellowish brown silt loam subsoil. Large portions of the second terrace have been stripped immediately west of the site. The site is bisected by a gas pipeline right-of-way. Site 1Tu461 is currently planted in soybeans, providing moderate surface visibility. The site is accessible by an airport service road immediately southwest of the site.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Pecked and Ground Stone			
Hammerstone	1	34.1	
Other			
Debitage-Fire Cracked Rock-Shatter	—	17.7	
Introduced Rock	--	109.7	
CERAMICS			
Grog Tempered			
Baytown Plain			
var. Roper	1	2.5	Late Woodland
var. Tishomingo	1	5.5	Late Woodland

Cultural Affiliation: Late Woodland.

Resource Evaluation: Site 1Tu461 is a small site without intact features or midden. The site has been heavily impacted by cultivation, erosion, airport land fill, and pipeline excavations. No further investigation is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu462

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 160 ft (49 m) AMSL.
Physiographic Location: Site 1Tu462 is located on a high knoll on the T-2 terrace, 1,200 m (3,937 ft) north of the Black Warrior River. The site is 450 m (1,476 ft) north of a large swamp. First order streams are 600 m (1,968 ft) north and 900 m (2,952 ft) to the east of the site. The presence of buried cultural deposits is unlikely.

Soil Type: Shatta urban land complex.

Site Description: Site 1Tu462 is a minimal artifact concentration measuring 180 m (590 ft) north-south by 100 m (328 ft) east-west. The prehistoric component of the site, Locus A, is on a rise at the west end of the site. The historic artifact scatter, Locus B, is concentrated near the northern end of the site and probably represents a house site. A house is indicated on the 1911 Tuscaloosa County soil map. The soil present is typically a dark grayish or yellowish brown silt loam, overlying a yellowish brown silt loam subsoil. The site is currently planted in soybeans, providing moderate surface visibility. The site is accessible from the north by an airport service road.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection, Locus A.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt.(g)	Component
Projectile Point/Knives			
Greeneville	1	4.0	Middle Woodland
Knives			
Uniface Flake Knife	1	10.5	
Unidentifiable Ground Stone Fragments	1	344.5	
Other			
Debitage-Fire Cracked Rock-Shatter	--	1.5	
Introduced Rock	--	2,599.0	
HISTORIC ARTIFACTS			
GLASS			
Mold Made			
Clear			
Embossed	1	--	Middle 19th-20th century
Unidentified Body Sherds	5	--	Early 19th-20th century
CERAMICS			
Pearlware			
Light Blue Glazed	1	--	c. 1780-1830
Transfer Printed Blue	1	--	c. 1795-1840

	Count	Wt. (g)	Component
White Ware			
Undecorated	3	--	c. 1820-1950+
Machine Painted	1	--	c. 182 -1950+

Provenience: General Surface Collection, Locus B.

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Debitage-Fire Cracked Rock-Shatter	--	8.8	
Introduced Rock	--	54.0	

HISTORIC ARTIFACTS

CERAMICS			
Pearlware			
Undecorated	3	--	c. 1780-1830
Transfer Printed Blue	2	--	c. 1795-1840
METAL			
Unidentified Iron Fragments	1	--	

Cultural Affiliation: Middle Woodland, American.

Resource Evaluation: Site 1Tu462 is a small site without intact midden or features. The site has been adversely affected by erosion due to cultivation. No further work is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu463

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 160 ft (49 m) AMSL.
Physiographic Location: Site 1Tu463 is located on the second T-2 terrace 1500 m (4,920 ft) north of the Black Warrior River. First order intermittent streams are 400 m (1,312 ft) east, 550 m (1,804 ft) southeast, and 600 m (1,968 ft) northwest of the site.

Soil Type: Shatta urban land complex.

Site Description: Site 1Tu463 is an intense artifact concentration measuring 120 m (394 ft) north-south by 80 m (262 ft) east-west. The artifact scatter represents a historic house complex but no portions of the houses remain standing. The southern half of the site complex is grown up in pines and shrubbery. The soil type present is typically a dark grayish or yellowish brown silt loam, overlying a yellowish brown silt loam subsoil. The northern half of the site is currently planted in soybeans providing moderate surface visibility. Two structures are indicated in this area on the 1911 Tuscaloosa County soil map. Wells and fireplace foundations may still be present in the dense underbrush on the south half of the site. The site is accessible from the northeast by an airport service road 20 m (66 ft) south of the site.

Investigation Procedure: Surface collection.

Materials Recovered:

Provenience: General Surface Collection.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Projectile Point/Knives			
Cotaco Creek	1	13.0	Late Archaic/Gulf Formational
HISTORIC ARTIFACTS			
GLASS			
Dark Olive Green			
Mold Made			
Unidentified Body			
Sherds	3	--	Early 19th-20th century
White			
Embossed	1	--	Early 19th-20th century
Clear			
Embossed	3	--	Middle 19th-20th century
Unidentified Body			
Sherds	11	--	Early 19th-20th century
Aqua			
Embossed	1	--	Middle 19th-20th century
Unidentified Body			
Sherd	1	--	

	Count	Wt. (g)	Component
Manganese Purple			
Machine Made			
Embossed	2	--	
Unidentified Body			
Sherds	7	--	c. 1850-1915
CERAMICS			
White Ware			
Undecorated	8	--	c. 1820-1950+
Transfer Printed	1	--	c. 1820-1950+
Molded Plain	1	--	c. 1820-1950+
Machine Painted	1	--	c. 1820-1950+
Utilitarian Ware			
Salt Glazed	1	--	c. 1820-1950+
White Bodied Slipped	1	--	c. 1820-1950+
Slipped	1	--	c. 1820-1950+
Porcelain			
Undecorated	1	--	
METAL			
Automobile-Tractor			
Associations	1	--	c. 1905-1980
BUILDING MATERIAL			
Brick	4	--	

Cultural Affiliation: Late Archaic/Gulf Formational, American.

Resource Evaluation: Site 1Tu463 is the remnants of a series of tenant farmer houses which were probably constructed during the early to middle twentieth century. The houses were abandoned and destroyed during the construction of the Tuscaloosa County Airport during the 1960s. No further work is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu464

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 160 ft (49 m) AMSL.
Physiographic Location: Site 1Tu464 is located on second terrace T-2, 1,100 m (3,608 ft) north of the Black Warrior River. The site overlooks a large swamp on the Mill Creek floodplain to the east.

Soil Type: Ruston fine sandy loam.

Site Description: Site 1Tu464 is an intense artifact concentration consisting of a currently inhabited twentieth century standing house and surrounding yard (Plate 5, Figure 7). The site measures 100 m (328 ft) east-west and 150 m (492 ft) north-south. The main portion of the house is 3.8 m (12.5 ft) east-west by 14.3 m (46.9 ft) north-south. An additional room was added to the northwestern corner of the house, measuring 4 m (13.1 ft) east-west by 4.5 m (14.8 ft) north-south. A porch is built along the northern end of the house. An old school bus has been converted to an additional structure 10 m (32.8 ft) east of the house. A small chicken coop, outhouse, and other outbuildings are south of the main structure. These structures are not located on the 1911 Tuscaloosa County soil map or the 1924 topographic map. The soil is typically a dark yellowish brown fine sandy loam topsoil underlain by a yellowish red loam subsoil. The site is accessible by a light-duty dirt road passing just north of the site.

Investigation Procedure: Oral interviews with inhabitants, measurements and photographs.

Materials Recovered: No recovery.

Cultural Affiliation: American.

Resource Evaluation: Further investigations are unlikely to produce any additional useful data concerning American occupation.

Recommendation: No further investigation is recommended.

Plate 5. Site 1Tu464 Facing Southeast.

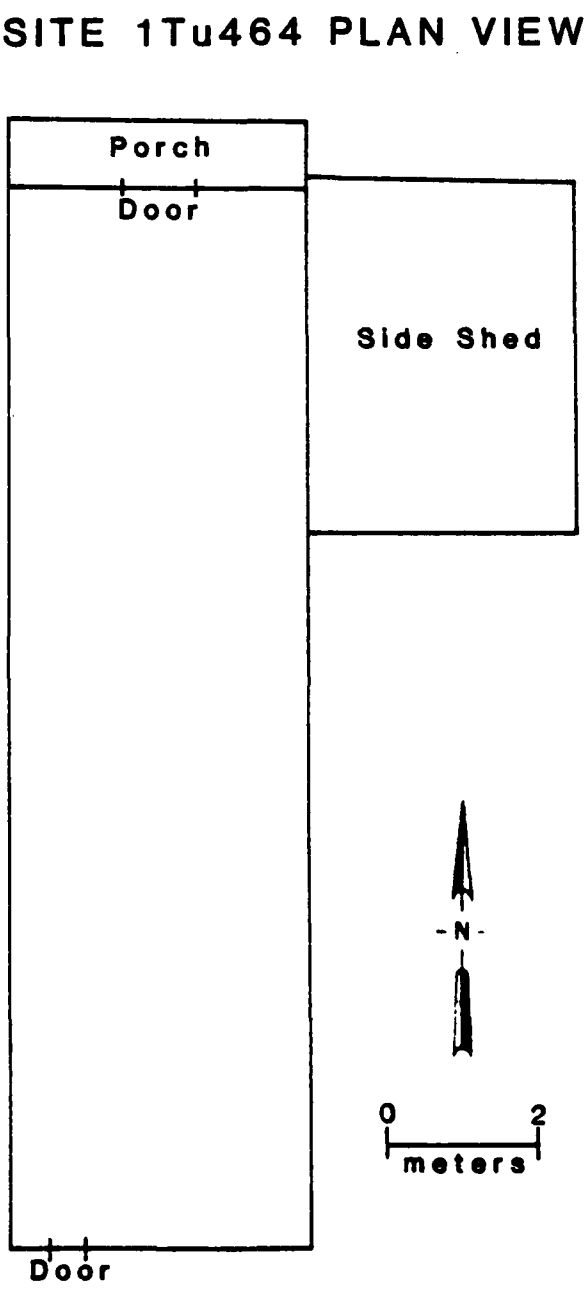

Figure 7.

Site 1Tu465

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 95-123 ft (29-37 m) AMSL.
Physiographic Location: Oliver Lock and Dam is located on mile 334 of the Black Warrior River. The dam is situated where the river leaves the bedrock formation of the Cumberland Plateau region, and where widespread terrace and floodplain formation begins.

Soil Type: Ellisville silt loam (on south bank).

Site Description: Oliver Lock and Dam was completed in 1940, replacing old Locks 10, 11, and 12. The site area encompasses the dam, locks, and ancillary structures such as moorings and rip-rap downstream from the dam site. The entire site complex encompasses an area 304.8 m (1,000 ft) north-south across the river and 304.8 m (1,000 ft) on both north and south banks of the river. It is significant in the development of the Warrior River as a navigable waterway. The dam is 220 m (722 ft) long north-south. The lock is 440 m (1,443 ft) east-west.

Investigation Procedure: Photo.

Materials Recovered: No recovery.

Cultural Affiliation: American.

Resource Evaluation: Oliver Lock and Dam is significant to the industrial development of the Warrior drainage. No further investigation is warranted.

Recommendation: No further investigation is recommended.

Site 1Tu466

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 140 ft (43 m) AMSL.
Physiographic Location: Site 1Tu466 is located on the second terrace T-2, 200 m (656 ft) south of the Black Warrior River. The site is located on the east bank of a small intermittent drainage. A manmade pond is 200 m (656 ft) east of the site. Stratified cultural deposits are unlikely.

Soil Type: Smithdale fine sandy loam.

Site Description: Site 1Tu466 is a multiple isolated find which represents a historically documented early nineteenth century tan-yard (Chapter III) presently in a wooded area. A surface scatter measures 80 m (262 ft) north-south by 50 m (164 ft) east-west. The soil is typically a dark brown fine sandy loam topsoil overlying a red loam subsoil. The site area is currently wooded, providing poor surface visibility. The site is accessible by service roads on the adjacent golf course to the east.

Investigation Procedure: Surface scatters of concrete blocks were cleared and photographed. Two 50 by 50 cm test pits were excavated.

Materials Recovered:

Provenience: Test Unit 1, Level 2 (5-20 cm).

PREHISTORIC ARTIFACTS

LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	0.1	

HISTORIC ARTIFACTS

CERAMICS			
Pearlware			
Light Blue Painted	1	1.5	c. 1780-1830

Cultural Affiliation: American.

Resource Evaluation: No standing structures remain at the site, but the location is confirmed from a detailed map of the area and from the presence of early nineteenth century pearlware ceramics recovered from test pits. Foundations, possible subterranean tanning vats, and equipment associated with tanning may be present. While the site is unplowed and the circumstances are conducive to the preservation of structural remains, the extensive shovel testing program did not locate any deposits which warrant further investigation. Further historical data concerning this site are found in Chapter III.

Recommendation: No further investigation is ecommended.

Site 1Tu467

Project Area: Oliver Lock and Dam, proposed relocation area.
Elevation: 135 ft (41 m) AMSL.
Physiographic Location: Site 1Tu467 is located on a low first terrace T-1a 20 m (66 ft) south of the Black Warrior River. First order intermittent drainages are 20 m (66 ft) east and 60 m (197 ft) west of the site. Buried cultural deposits are potentially present because of overbank soil deposition.

Soil Type: Ellisville silt loam.

Site Description: Site 1Tu467 is a multiple isolated find measuring 100 m (328 ft) east-west by 20 m (66 ft) north-south. Undisturbed midden and/or features may be present but were not detected during the testing. Soil profiles in the 50 by 50 cm test units indicated that the site area has never been plowed. The soil is a dark grayish brown topsoil 25 cm (10 in) deep overlying a dark brown silty clay loam.

The site is currently wooded and inaccessible by road. Site 1Tu467 is accessible only from an adjacent landfill to the east or an oil refinery to the southwest.

Investigation Procedure: Three 50 by 50 cm test units were randomly placed and excavated.

Materials Recovered:

Provenience: Test Unit 1.

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Unidentifiable Ground Stone Fragments	1	45.0	
Other			
Debitage-Fire Cracked Rock-Shatter	--	0.5	
Introduced Rock	--	157.5	
CERAMICS			
Grog Tempered			
Baytown Plain var. Roper	1	3.0	Late Woodland

Provenience: Test Unit 2, (0-25 cm).

PREHISTORIC ARTIFACTS LITHICS	Count	Wt. (g)	Component
Other			
Introduced Rock	--	31.0	

Cultural Affiliation: Late Woodland.

Resource Evaluation: Site 1Tu467 is an unplowed lithic and ceramic scatter with subsurface midden and/or features potentially present. The site

is potentially valuable for understanding Late Woodland horticultural subsistence practices. There is a good probablity that buried cultural deposits are present.

Recommendation: No further investigation is recommended.

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