

**ARCHAEOLOGICAL RESEARCH DESIGN AND DATA RECOVERY PLAN
FOR SITE 9ME24,
PROPOSED OXBOW MARINA,
COLUMBUS, GEORGIA**

7 November 2003

Introduction

The City of Columbus plans to construct a marina at the confluence of Upatoi Creek and the Chattahoochee River (see attached location map, Fig. 1). The construction of the marina would involve an entrance channel paralleling Upatoi Creek, a boat landing, drystack and wet slip storage, parking lots, and a walking path. As originally planned, the proposed marina would have adversely impacted three archaeological sites 9ME14, 9ME24, and 9ME877 which have been determined to be eligible for the National Register of Historic Places (NRHP). Reconfigured designs for the proposed Marina by the City of Columbus's engineering consultant has minimized the impact of the project to only one site, 9ME24. In order to mitigate the impacts to 9ME24, data recovery should be conducted at the site. This document presents a research design for the data recovery of 9ME24.

Archaeological Investigative History of the Oxbow Marina

David Chase, an archaeologist and the first director of the National Infantry Museum at Fort Benning, conducted the first archaeological surveys of the Columbus/Fort Benning area in the late 1950s and early 1960s. In 1958, Chase recorded several sites in this area, including sites 9ME14 and 9ME24, both of which are within the bounds of the Oxbow Marina's area-of-potential-effect (APE).

The initial survey of the proposed Oxbow Marina was conducted by Southern Research, Historic Preservation Consultants, Inc. in 1999 (Cowie 1999) as part of the City of Columbus' effort to acquire a Section 404 permit. The survey examined 84 acres, on which two previously-recorded (9ME14 and 9ME24) and two new sites (9ME876 and 9ME877) were documented. Site 9ME14 and 9ME24 were recommended as potentially eligible for the NRHP, while 9ME876 was recommended ineligible for the NRHP. Due to unclear property boundaries and the presence of residences near the site, 9ME877 was not thoroughly investigated and defined, and no recommendation could be made as to its NRHP eligibility.

In 2001, Southern Research returned to survey an additional 41 acres and to conduct additional investigations of sites 9ME24 and 9ME877 (Wood 2001). No new sites were recorded. The boundaries of Site 9ME877 were defined through shovel testing, establishing the site as approximately 190 x 115 m in size; the site was recommended as eligible for the NRHP. At 9ME24, six trenches were excavated, the site boundaries were revised from the 1999 determination, and the site was recommended as significant.

As a result of these studies, four sites have been identified within the APE of the Oxbow Marina. Site 9ME876 is ineligible for the NRHP, while the remaining three sites, 9ME14, 9ME24, and 9ME877 are eligible for the NRHP. According to the current plan of construction for the Oxbow Marina (see Fig. 3 dated June 30, 2003) 9ME14 and 9ME877 will be avoided, while 9ME24 cannot be avoided. A detailed examination of site 9ME24 follows.

Background of 9ME24

9ME24 is located on the north bank of Upatoi Creek, just upstream from its confluence with the Chattahoochee River (see attached archaeological site location map, Fig. 2). David Chase originally recorded the site through a limited surface collection in the late-1950s, and identified it as the center occupational area of a Lamar village; he also reported an Early Woodland component (Georgia Archaeological Site Files 1958). Chase may have excavated test units at the site, for on the state site form he reports a buried midden visible in the bank of the creek; Elliott (2003 personal communication) also reported seeing a relatively thick midden in the exposed soil stratigraphy of the creek bank. In 1998, Frank Schnell of the Columbus Museum conducted two surface collections of the site. The collections from these previous investigations are housed at the Columbus Museum.

In 1999, Southern Research conducted an archaeological investigation of Site 9ME24 as part of a survey for the proposed Oxbow Marina (Cowie 1999). This investigation determined that the site has been somewhat disturbed by modern activities such as the implanting of sewage pipe and associated landform modification, yet deep and intact cultural deposits were identified. Investigation involved the examination and inventory of the collections housed at the Columbus Museum, the excavation of 23 shovel tests

(although these were ineffective due to the extremely compacted soils and the disturbance), a systematic surface collection, and the excavation of three backhoe trenches. Site size was determined to be 100 x 240 meters. Trenching resulted in the recordation of several probable Mississippian cultural features, such as middens, postmolds, and pits, including evidence for a structure. Trench 1 contained the most significant remains, as a dark brown loamy silt midden was identified adjacent to a series of unexcavated postholes which appear to represent a portion of a rectangular structure. The midden extended from the southern end of the trench (closest to the creek) approximately 14 or 15 m, where it feathered out a couple of meters short of the postholes. Lamar Plain and Lamar Incised sherds were recovered from surface of this midden. A possible midden was identified in Trench 3 as well, as was a possible feature containing daub, a single Lamar Incised sherd, and plain sherds. The investigation indicated that the western portion of the site contained significant archaeological deposits, while the portion of the site east of Trench 3 contained very sparse and disturbed remains. An Early to Middle Woodland Cartersville component, and Lamar and Fort Walton phase components of the Late Mississippian period were identified. In addition, Cowie (1999) suggested a possible Abercrombie or Blackmon phase component of the Late Mississippian/Protohistoric period based on the recovery of a small number of shell tempered ceramics.

In 2001, Southern Research returned to 9ME24 in order to determine which areas of the site contained intact cultural deposits and which areas had been adversely impacted by the modern pipe-laying activities, as well to further refine the eastern and southern boundaries of the site (Wood 2001). In order to accomplish these goals, six backhoe trenches totaling 132 linear meters were excavated at the site. Trenches 4, 5, 7, 8, and 9 were placed along the crest of the alluvial terrace which extends into the proposed marina channel. No significant archaeological deposits or features were found in these trenches. The sixth trench, Trench 6, was placed so as to continue Trench 1 which was excavated in 1999; Trench 6 ran northeast-southwest across the proposed marina channel. Trench 6 exposed a midden and five possible cultural features (four pits and a postmold) below the plowzone. Although the features were not excavated, they had distinct boundaries and artifacts contained within them, indicating a cultural origin. Based on the 2001 investigation, the eastern portion of the site as defined by Cowie (1999) was determined to not be part of 9ME24; the revised boundaries of 9ME24 measure approximately 125 x 125 m. The site was recommended as significant (Wood 2001).

Cultural Background

Two cultural components are believed to account for most of the archaeological remains at 9ME24: an Early -Middle Woodland check stamped Cartersville component and a Late Mississippian Lamar component. Several shell tempered sherds may belong to the Lamar component, or may represent the remains of a protohistoric Native American component.

Cartersville

Dating from approximately 300 B.C. to 500 A.D., the Cartersville culture is defined and recognized archaeologically primarily by check stamped pottery, while simple stamped and plain wares occur within a Cartersville assemblage as well (Stanyard n.d.; Wood and Bowen 1995). While hunting and gathering were the primary subsistence strategies, the economic base was supplemented with the practice of horticulture. Cartersville peoples established permanent to semi-permanent villages, typically along stream terraces, and numerous Cartersville sites in Georgia have yielded structural footprints. For instance, at the Hickory Log site in Cherokee County in the Piedmont, Cartersville structures were found to be of circular single-post construction, and ranged in diameter from 5 to 8 meters (Webb 2000). At the Cane Island site in Putnam County, Wood (1981) identified two oval structures measuring approximately 5 x 7 m. Apart from postmolds, a variety of features occur at Cartersville sites, including fire pits, hearths, and subterranean pits (Wood and Bowen 1995; Stanyard n.d.).

Check stamping on Cartersville ceramics can be quite variable, in regards to the size and shape of the checks (Wauchope 1966). Checks may be square or rectangular in shape, and may occur in zones or in a linear arrangement (referred to as linear check stamped). Cartersville pottery may be sand or sand/grit tempered, and may occasionally contain mica. Jars and bowls with straight or flaring lips occur, and usually have round or subconoidal bases and podal supports (Williams and Thompson 1999).

Lamar

Cultural manifestations during the Late Mississippian period in the project area are subsumed under the Lamar tradition. Lamar culture was widespread, covering all of Georgia and extending into portions of Florida, Alabama, Tennessee, North Carolina, and South Carolina. Within the upper portion of the Lower Chattahoochee River Valley, Lamar began at approximately A.D. 1400 (Schnell 1990; Schnell and Wright 1993). This tradition has been broken down into phases based primarily on chronotypological and cultural differences manifested in the material culture (Schnell 1990; Schnell and Wright 1993).

Within the project vicinity, the Bull Creek focus is the earliest manifestation of the Late Mississippian Lamar period. The type site for the Bull Creek focus is the Bull Creek site (9Me1), which is located approximately 6.3 kilometers north of 9ME24 at the confluence of Bull Creek and the Chattahoochee River. During the Late Mississippian period, the site was situated at the boundary of two distinct ceramic traditions: Lamar complicated stamped pottery to the west and the Fort Walton incised and punctated tradition to the south (Ledbetter 1996, 1997). The site was investigated during the WPA era in 1936-37 by Frank Lester and Mrs. Isabel Patterson, in 1950 by A.R. Kelly (1950), and during the late-1950s by Frank Schnell, Jr. (1959, 1963); Ledbetter (1997) prepared a compilation and synthesis of these previous investigations in mitigation for the Columbus Riverwalk's adverse effects to the site.

The most defining characteristic of Bull Creek phase ceramics from the Bull Creek site is a coarse, garnet-rich grit tempering (Ledbetter 1997; Schnell and Wright 1993). Of the assemblage recovered from the Bull Creek site, 37% was plain, 60% was stamped, and 3% exhibited incisions and/or punctations (Schnell 1959; Schnell and Wright 1993). Essentially, decorative motifs are a blending of Lamar and Fort Walton motifs. Many of the ceramics exhibit a washed light surface, indicative of oxidation firing (Schnell and Wright 1993).

Based on frequencies of the various surface treatments from Chattahoochee River Valley site assemblages, Schnell (1986, 1990) split the Bull Creek focus into early and late phases. The early phase, known as the Bull Creek phase, is believed to date primarily to the fifteenth century (A.D. 1400-1475). Assemblages of this phase contain more than 50% complicated stamped pottery and low percentages of incised/punctated wares. The later phase, known as the Stewart phase, is thought to date predominantly to the sixteenth century (A.D. 1475-1550). Plain wares make up more than 50% of Stewart phase assemblages, while complicated stamping decreases to about 20% and incised/punctated increases to as much as 15%. Check stamped wares are a minority type of both phases (Ledbetter 1996, 1997).

Following the Stewart phase, the Abercrombie phase (A.D. 1550-1650) exhibits continuity with the Bull Creek focus, yet also shows cultural ties to the Dallas culture of northwestern Georgia and eastern Tennessee, as well as to the Alabama River phase in central Alabama (Knight and Mistovich 1984; Ledbetter 1997). Pottery assemblages from this phase include Lamar Complicated Stamped in low percentages, and bold incised and Fort Walton zone punctate wares as majority types. Shell tempering of some vessels occurs (Ledbetter 1996, 1997).

Blackmon phase ceramics, dating from A.D. 1650 to 1715, include Chattahoochee Brushed, Ocmulgee Fields Incised, Kasita Red Filmed, and coarse and fine plain wares. Chattahoochee Brushed pottery is made with fine to medium sand/grit temper, and the temper often protrudes from the surface (Williams and Thompson 1999:21). Ocmulgee Fields Incised is a grit-tempered ware characterized by poorly executed incisions which are usually smoothed over. Vessel forms include Cazuela bowls and open bowls (Williams and Thompson 1999:87). Over time, incised motifs became more complicated and the incised lines very narrow (Ledbetter 1996, 1997). Kasita Red Filmed is a thin red-filmed grit-tempered ware; this type is occasionally painted with black and/or white color. Designs are typically curvilinear, although rectangular and triangular designs do occur. The dominant vessel form is a flattened globular shape with a flaring rim, yet plates and cups were produced as well (Williams and Thompson 1999:61).

Research Issues

Ceramic chronology: As the ceramic sequence of the area is somewhat patchy, the site may provide a good opportunity for strengthening the Early-Middle Woodland and Late Mississippian material chronology. Specific issues concerning the ceramic assemblage which should be addressed are:

- ◆ What is the nature of the check-stamped wares? As pointed out by Elliott et al. (1995:121) in their synthesis of data from Fort Benning, the type names Cartersville and Deptford are both used to define check stamped wares in the area. This situation has developed due to the location of the project area at the interface between the Coastal Plain, where the Deptford tradition originated, and the Piedmont, where the Cartersville tradition has been defined. At the Carmouche site, Gresham et al. (1985) tended to associate the check stamped pottery with the Cartersville tradition to the north due to its occurrence there with Dunlap fabric-marked wares and since Dunlap fabric marked wares are relatively uncommon in the Coastal Plain (Wood 2003, personal communication). How does the check stamped component compare to the Piedmont adaptation (i.e., Cartersville) and to the Coastal Plain adaptation (i.e., Deptford)? Is it more closely related to one than to the other? Further confusing the matter are the other check stamped pottery types which may occur in the area: the Late Woodland/Early Mississippian Wakulla check-stamped and, most particularly, the Late Mississippian check stamped ware variously referred to as Mercier check stamped or Leon check stamped variety Mercier (Ledbetter 1997:182; Scarry 1985:225; Schnell and Wright 1993). Given the small percentage of check stamped wares in the assemblage from the site, could they possibly be a minority ware of the Lamar component? Measurements and detailed physical characterizations of the check stamped wares should be conducted, including information such as check size, shape, and depth; paste color and composition; and sherd thickness. This data should be used for comparison with the various check stamped types found in the region.
- ◆ What is the chronological position of the shell tempered wares? Are they, as Cowie (1999) suggests, evidence of a post-contact Abercrombie or Blackmon phase? Or could they possibly represent earlier Mississippian occupations, perhaps related to the Standley, Rood, or Singer phases defined (Schnell and Wright 1993) for the central zone of the Lower Chattahoochee River Valley located downstream from the project area? If the shell tempered ceramics are from a post-contact occupation, what is the associated material culture? What does the presence and frequency of shell tempered ceramics suggest for the site and the region in terms of Mississippianization?
- ◆ Can the plain wares be primarily attributed to one of the occupations? What are the physical characteristics (e.g., paste, color, thickness) of the plain wares? Can the morphological differences between temporally-identified plain ceramics be used to distinguish them if they were not temporally-identified? That is, are there any temporally or culturally significant groupings of plain wares based on morphological characteristics?

To this end, a primary goal of data recovery should be the acquisition of absolute dates from contexts containing the various ceramics represented at the site. Dependent upon the datable materials encountered, a variety of dating procedures should be used, such as Accelerator Mass Spectrometry (AMS), thermoluminescence, Oxidizable Carbon Ratio (OCR), and radiocarbon. Diagnostic artifacts and features should be targeted for dating. For comparative purposes, a given sample/provenience should be dated using more than one dating method if possible. The contractor should familiarize themselves prior to data recovery with the specific acquisition and handling methods for the various dating techniques in order to ensure quality control.

Site layout: Where possible, the spatial organization of the remains of each component of the site should be investigated. Such analysis would involve an examination of the distribution of features and artifacts. For instance, are there any features (e.g., postmolds) or remains (e.g., daub) which indicate the presence of a structure? If so, what types of features are they and how are they distributed? Are there discernible differences in the distribution of the various artifact categories (e.g., utilized flakes, ceramics, FCR), and, if

so, can discrete activity areas be defined? Does the Lamar component layout follow the Square Ground layout described by Bartram (in Waselkov and Braund 1995) for the later historic Creek towns (cf. Hudson 1976:213) and recognized archaeologically at the Ochiltee Creek site located upstream along Upatoi Creek (Cowie 2001)? What does the site layout inform us of concerning site function and population size? How does the site layout compare to other contemporaneous sites in the project vicinity and the region?

Subsistence: Depending upon the quantity and quality of the subsistence remains recovered during data recovery, the subsistence strategies of the groups which occupied the site should be examined. Did the Cartersville peoples practice horticulture? If so, to what degree and how did this affect the traditional hunting and gathering economic base? Were the Lamar peoples practicing intensive agriculture, and what role did hunting and gathering have in this society? What does the faunal and floral assemblage reveal about the environment at the time of the occupations? What does the assemblage reveal about seasonality of occupation? In order to address these issues, data recovery methods should be designed to maximize the recovery of faunal and floral remains, and specialized analyses (e.g., zooarchaeological, ethnobotanical) should be conducted by qualified individuals.

Scope of Work

Recommended Fieldwork Methodology

Data recovery at Site 9ME24 should be designed to address the research issues discussed above. Fieldwork should be conducted to meet or exceed current standards for archaeological data recovery projects, as mandated by state and federal guidelines. Additionally, all excavations in this project should conform to current OSHA safety and health requirements for construction job sites. The Principal Investigator (PI) and Project Archaeologist (PA) are ultimately responsible for ensuring that site data and integrity are preserved. During the fieldwork, a field log or journal should be maintained detailing the work accomplished, findings, and observations, impressions, and other pertinent information needed for site interpretation. Field forms will be used as appropriate to record the various kinds of data obtained (i.e., photo logs, level forms, artifact bag lists, etc.). The log or journal and all field forms will become a part of the permanent project records to be curated.

As the entire site will be impacted and destroyed by the construction of the proposed marina channel, the site should be completely excavated. This would essentially involve stripping the site to the subsoil in order to expose cultural features. Mechanical stripping may be accomplished by a backhoe or similar machine, with the use of a smooth, not toothed, blade. In the areas with known midden, such as the southern portion of Trench 1, the overlying non-midden soil may be removed mechanically, and the midden should be excavated by hand.

Individual hand excavated units should be no more than 1 x 1 m in size; unit levels should be no greater than 10 cm in thickness. In order to provide a more controlled and fine-grained data sample, at least 20% of the units should be excavated in 5-cm levels, particularly in areas of deep midden, dense artifacts, and/or adjacent to identified structural remains. Hand-excavated units will be excavated in natural and/or arbitrary vertical levels, depending on the soil conditions encountered in the field. If a different soil stratum is encountered within an arbitrary level, then the level should be terminated rather than extending into the different stratum, and a new one begun. Where possible, individual excavation units will be contiguous to form excavation blocks in order to provide a large-scale view of the cultural remains. Furthermore, the 1x1 m units within each block should be excavated concurrently using the same datum, ensuring a uniform and comparable depth throughout the block. The large blocks and the maintenance of a similar vertical level across each block will help to reveal any contemporaneous artifact and feature associations which are present. Each unit should be excavated to the base of the cultural occupation zone.

As one of the research issues concerns the subsistence practices of the occupying groups, special soil samples should be recovered from the midden and features. From each feature and from each level of each 1x1 m unit, a two-liter sample of unscreened fill should be recovered for ethnobotanical and zooarchaeological analysis, and a one-cup sample for pollen and phytolith analysis should be collected; these samples should be collected and stored separately. In the case where the volume of a feature is less

than two liters, then all of the fill should be saved, making sure to collect a pollen/phytolith sample from the fill as well. Additionally, at least 50% of the 5-cm-level units and all feature fill (excepting the samples) should be screened using fine screen (e.g., window screen) in order to maximize recovery of faunal and floral remains. All hand-excavated midden soil not collected as a sample or processed as described above for maximum recovery of ethnofaunal, ethnofloral, or microartifactual remains, may be passed through screen no greater than 0.25" in size. The contractor should familiarize themselves with the various procedures of the collection and storage of such samples in order to ensure that the various analyses will not be compromised.

Features are anticipated and should be carefully mapped, photographed, and excavated; detailed records should be kept concerning form, function, and any association with artifacts and other features. When possible, large-scale plan photographs showing the layout of features (i.e., in association with others) should be taken, both prior to and after excavation.

Sufficient color photographs will be taken to document the site area and record significant data and information. Unit and feature photographs will contain an appropriate scale, north arrow, and a legible photo board identifying the site, provenience, date, and subject. Photo logs will minimally contain the following information: roll number, photograph number, name of photographer, direction of view, subject matter, and date. All photo prints will contain the above information on each individual photo.

Artifacts will be bagged by the appropriate provenience for laboratory processing. Large quantities of certain artifacts, such as fire-cracked rock (FCR), due to their bulk, may require weighing and discarding in the field; in such cases, records of artifact types and weights will be kept.

A map will be prepared of the site using a laser transit with data collector. The locations of all test pits, grid data, trenches, and prominent cultural and natural features will be included on the map, as will the contours at no greater than a 40 cm interval. Wherever possible, shovel tests, test units, trenches, features, and datums established during survey and testing of the site will be mapped and included on the site map that documents the results of the data recovery. Where it is not possible to precisely relocate these earlier units, the earlier maps will be reproduced in the data recovery report, and a best estimate of the units will be depicted in relationship to the data recovery units.

Public/Heritage Archaeology

The site's association with the City of Columbus and the Columbus Water Works, and its proximity to Oxbow Meadows Environmental Learning Center, which is affiliated with the Columbus State University and the Muscogee County School District, could provide an excellent learning opportunity for the public. The project provides the citizens of the Columbus community with an opportunity to learn about the area's past. The public outreach component of this project could be tied to the Oxbow Meadows Environmental Learning Center. If agreeable to the center, the project could tailor educational activities to forums already provided by Oxbow Meadows. For example, project outreach could be easily adapted to Oxbow Meadows' Education and Outreach Program of tours, workshops and conferences, teacher training, Second Sunday series, and summer camps. Teachers, students, retirees, and the general public could be invited to discover what Native American life was like almost a thousand years ago along the Chattahoochee River

For example, researchers could create specialized "behind-the-scenes" tours of the excavation for students (from schools, universities, and colleges) and other groups (scouts, organizations, civic groups) during fieldtrips. The project could also include engaging workshops and conferences aimed at environmental educators, city planners, university scientists, or other groups. Another possibility would be a hands-on teachers' workshop that focuses on the Native American site, including using prehistory and archaeology to teach science and other subjects based on state Quality Core Curriculum standards. The archaeology project and its results would be well-suited to public Powerpoint presentations and hands-on examination of artifacts, for a forum such as the center's Second Sunday Series. If excavations are conducted during the summer, public outreach could include visitations and viewings of the excavation administered through Oxbow Meadows' camp program and created and directed by the contractor.

Laboratory Procedures

After excavation and field cataloguing, all artifacts and other records should be taken to a secure and climate-controlled laboratory for cataloguing, cleaning, analysis, conservation, and stabilization. Artifacts and field records should be integrated into the quality control system.

Field forms and maps should be copied onto acid-free paper and checked against one another to ensure accuracy. Site maps and plans should be scanned into a digital computer graphics program and used to generate an exact electronic rendering. Original maps and a hard copy of the electronic maps will be filed in acid-free folders to await shipment to an approved government facility at the project's completion.

Artifacts will be handled under accepted standard laboratory procedures. Provenience information will be kept with all artifacts at all times. All artifacts that can withstand washing will be washed in room temperature tap water and allowed to air dry. Those artifacts not able to undergo the washing process will be dry-brushed if possible and set aside for further analysis. Artifacts that are deemed unstable for storage in their present condition will be conserved using an accepted archaeological method. Special samples such as bone, floral remains, soil, and flotation samples will be stored separately and, where necessary, will be sent to an independent expert in the pertinent field.

Artifact analysis should be carried out following standard accepted procedures, and the artifact classification system used should be fully defined and referenced in the project documentation. Regional typologies and references (e.g., Cambron and Hulse, Coe 1964; Wauchope 1966; Whatley 2002; Williams and Thompson 1999) should be used to aid in the categorization of all prehistoric diagnostic artifacts such as ceramics and lithic projectile points/knives.

Curation and Documentation Standards

The artifacts, notes, photographs and other records from this project will be permanently curated at a federally-approved curation facility. Artifacts will be prepared for permanent curation by storage in 4-mil polyethylene zip-lockable plastic bags. Exceptionally large or unusually-shaped artifacts may require different methods but should be stored using archivally-stable materials. Along with corresponding acid-free labels, artifacts should be placed in acid-free sealable bags which are permanently labeled on the outside with site and provenience information. Artifact storage boxes should be of a standard size and must be made of archivally-stable materials. Artifacts should be packed in such a way as to avoid crushing or otherwise damaging them; all packing material should be archivally-stable as well. Artifact storage boxes should be accompanied by a complete inventory of their contents; inventory sheets should track artifacts by box and provenience.

A complete photograph log notebook should accompany all photographs taken during the project. All photographic material should be minimally labeled with the site, provenience, and catalogue number using archivally-stable methods. Field and laboratory forms and notes should be submitted on acid-free paper and placed within acid-free folders. Electronic data should accompany the documentation along with a statement describing the system and the computer software used, as well as the contents. Electronic data that is expected to be generated by this project includes word processing, spreadsheet and relational database files, electronic images, and GPR data.

Potential for Human Remains and NAGPRA Concerns

Human burials were recorded by David Chase at the Averett site (9ME15), which is located northeast of the project area adjacent to South Lumpkin Road. Given the late prehistoric age of the archaeological deposits at 9ME24, it is possible that human burials are present. In addition to human remains, there is the possibility that funerary objects, sacred objects, or objects of cultural patrimony, as defined by NAGPRA, may be found. Additionally, it is possible that such remains could be inadvertently discovered not only during archaeological excavation, but during construction and/or development of the marina.

If human remains happen to be discovered, all of the parties involved will adhere to the following procedures. All of the work associated with human remains should be conducted under the direct supervision of a person or persons meeting professional qualifications (as outlined below). At all times, human remains will be treated in accordance with the cultural, ethnic, and religious affiliation of the deceased individual(s), and with the utmost respect for human dignity. Reinterment of human remains will be at a site determined through consultation. Consultation will be with Tribes listed in the Muscogee Technology Park Memorandum of Agreement (MOA) between the U.S. Army, the Advisory Council on Historic Preservation, and the SHPO.

If definite or possible human remains are encountered, all machine excavation within 50 feet and hand excavation within 10 feet of the site of discovery shall be stopped immediately, and the site superintendent shall be notified. The county coroner and the police should be notified to help determine if the remains represent a crime scene. The area containing the remains shall be flagged and protected from further disturbance.

If it is determined that a criminal investigation is required, then the site will be secured until the investigation is complete and the City releases the site. If it is determined that no criminal investigation is required, the City will submit documentation of the discovery to the SHPO of the Historic Preservation Division of the Georgia Department of Natural Resources. Said documentation will consist of a detailed description of the remains, the context in which they were found, security actions taken to protect the remains, and any conditions affecting continued protection of the remains. In addition, the Principal Investigator will also be responsible for determining whether the remains are American Indian or of American Indian ancestry. If the Principal Investigator determines the remains to be American Indian or of American Indian ancestry, and the SHPO concurs, then the City will notify the Tribes within three days of SHPO concurrence.

If the remains are determined to be American Indian or of American Indian ancestry, the City will initiate good faith consultation with the Tribes. A plan will be prepared by the Principal Investigator, which will include information about the context, location, and circumstances of discovery of the remains. The plan will describe methods for either preservation-in-place or relocation of the remains, actions necessary for continued protection of the remains, and will include a schedule for all proposed work. If the City wishes to preserve the remains in place, and the land disturbance in the immediate vicinity of the remains is to be stopped, then the plan shall identify specific actions to be taken to restore the site-of-discovery and to provide long-term protection from additional impact. The plan will be submitted to the SHPO and the Tribes with a request for comment within 10 days. Comments may be submitted by telephone or facsimile and followed by mailed notice. The City will consider all comments, with revisions to the plan as needed; the revised plan and a summary of all comments will be submitted to the SHPO for final review. The City will then respond to any comments from the SHPO, make the necessary revisions, and provide the final copy to the Tribes and the SHPO. Following SHPO concurrence, the Principal Investigator will proceed to implement the plan.

If the plan calls for preservation-in-place of the remains, then the Principal Investigator will proceed with site restoration and protection. The City will document its actions, and will provide this documentation to the Tribes and the SHPO.

If the plan calls for disinterment and relocation of the remains, then the City will apply for a permit for such work through the Superior Court of Muscogee County, in accordance with the provisions of Georgia law as set forth in Section 36-72-5 of the OCGA. The City will modify its plan as necessary in response to comments or requests for additional information from the Superior Court. The City will proceed with implementation of the plan upon issuance of the permit, and will notify the Tribes and the SHPO of the work schedule. The Tribes and the SHPO will have the opportunity to inspect the site under conditions agreed upon during consultation. The City will document its actions and submit a final report to the Tribes and the SHPO.

The Principal Investigator may resume excavations in the area of discovery upon SHPO's final review of the implementation of the plan.

Reporting

The results of the data recovery will be presented in a detailed technical report. Adhering to the Secretary of the Interior's "Standards and Guidelines" (Federal Register 48:44734-44737), the report will be formatted in an accepted professional style, such as that outlined in the "Style Guide" for *American Antiquity* (1988). The report should minimally contain the following:

- Title page;
- Management summary;
- Table of contents;
- List of figures, plates, and/or tables
- Introduction
- Environmental description of the project area
- Cultural context and previous archaeological investigations
- Relevant historical documentation and background research
- Research design
- Research methods
- Curation statement
- Analysis and results (with appropriate photographs, tables, charts, and graphs)
- Project summary
- References cited
- Appropriate appendices

Graphic representations in the report, such as photographs, maps, tables, and charts should be included in the report in as close proximity as reasonably possible to their reference in the text.

After review, reports will be edited to include recommendations and a final version will be produced. Finalized reports will then be converted to a Portable Document File (PDF) format using Adobe Acrobat 4.0. This conversion will enable the reports to be placed on CD-ROMS to be accompanied by the Acrobat Reader program. The PDF format can be read by both IBM and Macintosh as well as UNIX and OS-2 systems. PDF files, which are fully searchable, can be displayed and read on screen or a hard copy printed that maintains the on-screen format. The report should be made available to the academic community and interested public. The report and/or project findings may be distributed through a variety of avenues, including distribution to libraries, archival repositories, and technical clearinghouses and publication in professional journals. The report may also be made available on the Internet for free download.

Professional Qualification Standards

Archaeological data recovery at 9ME24 will be performed and supervised by qualified professional personnel. Agencies, institutions, corporations, associations, or individuals will be considered "qualified" when they meet the Secretary of the Interior's Professional Qualifications Standards (36 CFR 61 and *Federal Register* 48:44739).

The minimum professional qualifications for an Archaeologist are a graduate degree in archaeology, anthropology, or closely-related field, plus:

- ◆ At least one year of full-time professional experience or equivalent specialized training in archaeological research, administration, or management; and
- ◆ At least four months of supervised field and analytic experience in general North American archaeology; and demonstrated ability to carry research to completion.

The Principle Investigator (PI) is the individual responsible for the planning and investigating cultural resources and for ensuring the validity of the material present in cultural resource reports. **All**

archaeological investigation must be carried out under the direction of the PI, who minimally will meet the qualifications as an Archaeologist outlined by the Secretary of the Interior (above) and:

- ◆ Have at least one year of full-time supervisory experience in the study of related resources;
- ◆ Have at least six months of archaeological data recovery experience in the southeastern United States; and
- ◆ Be certified by the Register of Professional Archaeologists (RPA 2003).

In addition, the PI should have the following qualifications:

- ◆ Previous experience in western middle Georgia, preferably in the Fall Line Hills area near Columbus; and
- ◆ Previous experience in the excavation of prehistoric sites.

The Project's Field Director should be an Archaeologist who meets the following minimal qualifications:

- ◆ Graduate training in archaeology (or equivalent);
- ◆ At least 12 months of full-time archaeological experience/training in the Southeast; and
- ◆ Proven ability to complete satisfactory archaeological field work.

The Project's Laboratory Director should be an Archaeologist who meets the following minimal qualifications:

- ◆ Graduate training in archaeology (or equivalent);
- ◆ At least 12 months of full-time archaeological experience/training on southeastern sites; and
- ◆ Proven ability to complete satisfactory archaeological laboratory work.

Archaeological field and laboratory technicians hired for the project should hold a Bachelor's degree in anthropology, history, or a closely-related field and have previous field and/or laboratory experience.

Specialized Analysis

Specialized analysis will be necessary for certain aspects of the data recovery investigation at 9ME24, such as zooarchaeology, ethnobotany, and absolute dating. Other special analysis may be necessary depending upon the findings of the project. Persons conducting these special studies should meet basic professional qualifications in their respective fields. This includes specific training as well as previous experience conducting studies in the southeastern United States.

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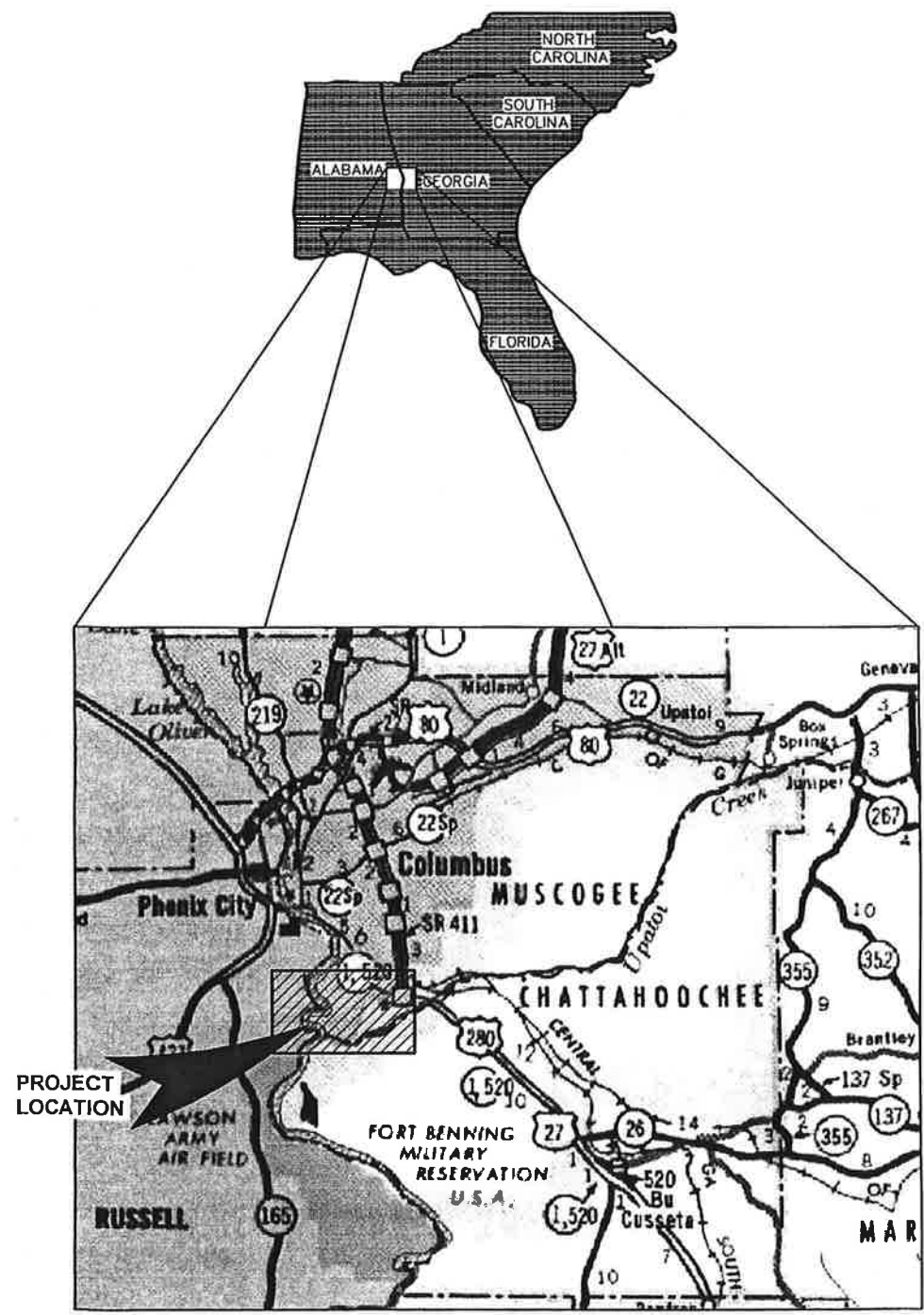
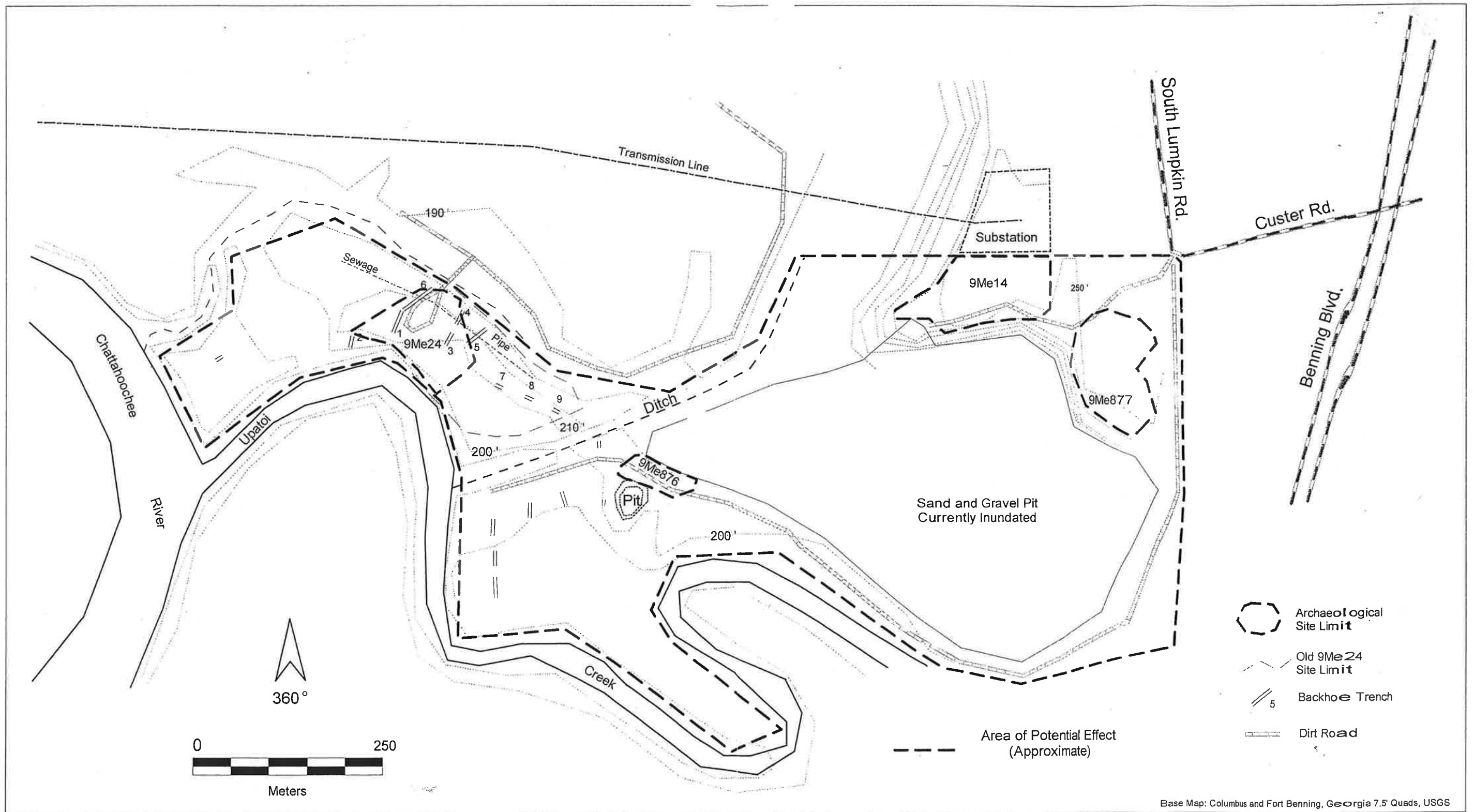


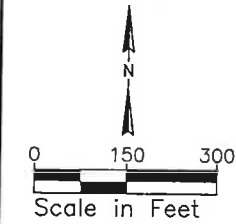
FIGURE 1
LOCATION MAP
OXBOW MARINA
COLUMBUS, GA





Archaeological Sites within the Proposed Oxbow Marina's Area of Potential Effect.

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NOTES:
 CULTURAL RESOURCES SURVEY
 PERFORMED BY SOUTHERN RESEARCH.
 SURVEY BOUNDARY PERFORMED BY
 W.K. DICKSON ON JAN. 31, 2002.

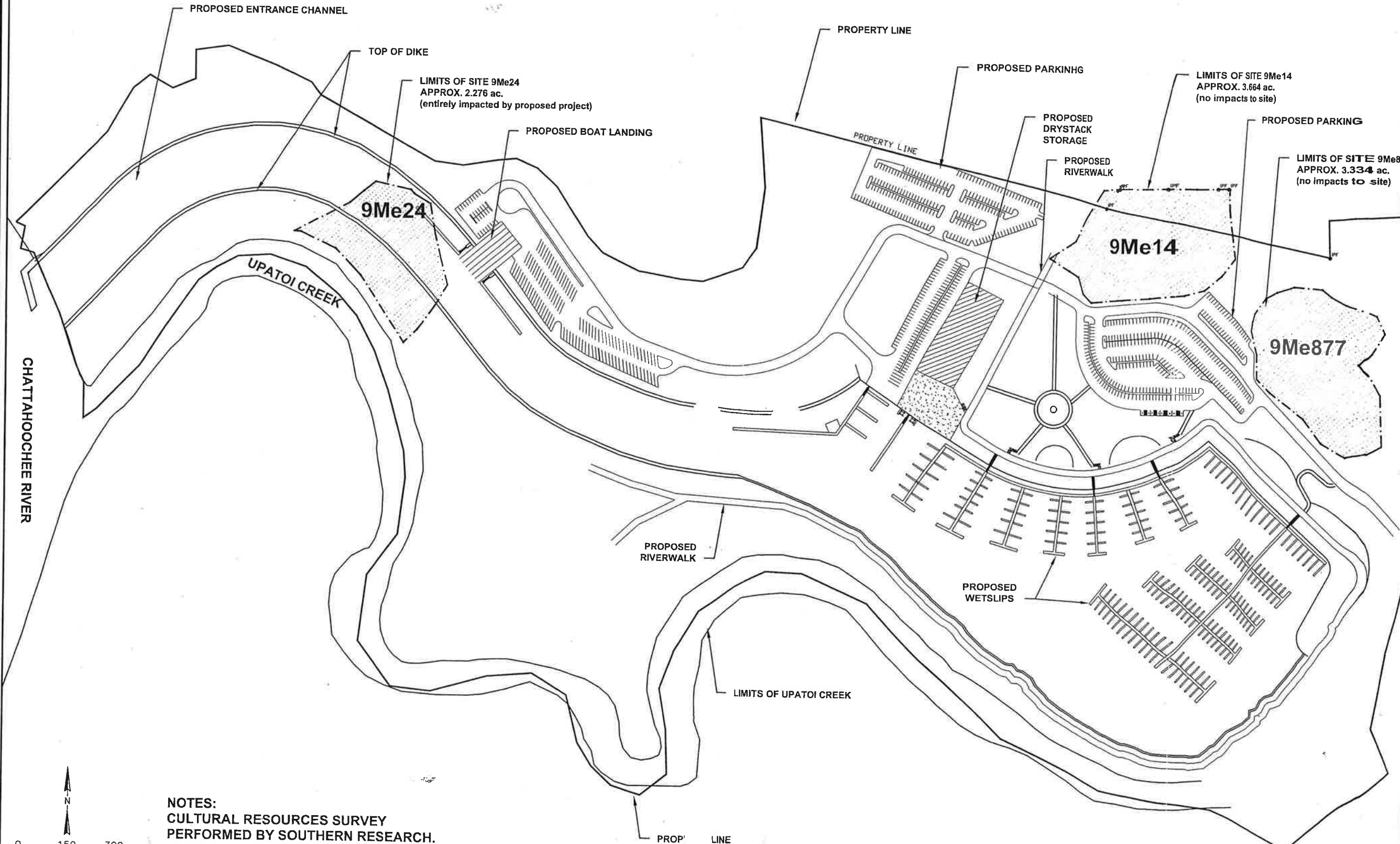


FIGURE 3

Revisions	Drawn by:	Checked by:	Date:	Sheet No.
			6/30/2003	1
IMPACTS TO CULTURAL RESOURCE SITES AT THE PROPOSED MARINA AT OXBOW MEADOWS COLUMBUS CONSOLIDATED GOVERNMENT COLUMBUS, GA				
For:				

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