



**PHASE I CULTURAL RESOURCES SURVEY OF THE
TVA SEQUOYAH NUCLEAR PLANT,
HAMILTON COUNTY, TENNESSEE**

DRAFT REPORT

March 2010



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LEAD AGENCY: TENNESSEE VALLEY AUTHORITY

DRAFT REPORT

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A handwritten signature in cursive script, reading "Larry McKee", with a horizontal line extending to the right from the end of the signature.

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March 2010

MANAGEMENT SUMMARY

Tennessee Valley Authority (TVA) requested TRC Environmental Corporation (TRC) to carry out a Phase I Cultural Resources (CR) survey of the approximately 594 acres making up the Sequoyah Nuclear Plant (SNP) in Hamilton County, Tennessee. The CR survey is one element of the current effort by TVA to get federal approval to renew the operating license for the plant. The goal of the survey was to document and assess archaeological and historic architectural resources located within the area of potential effects (APE) as defined by the entire area occupied by SNP. Archaeologically, the APE consisted of the approximately 594 acre SNP as shown on supplied project maps. The APE for architectural studies included a 0.8-km (0.5-mile) area surrounding the plant facility, as well as any areas where the project will alter existing topography or vegetation in view of a historic resource. Viewsheds to and from the project area were terminated where topography and vegetation obstructed lines of sight. The survey was conducted to document and assess archaeological and historic architectural resources located within the project's APE pursuant to their National Register of Historic Places (NRHP) eligibility status. The survey was conducted in compliance with Section 106 of the National Preservation Act (as amended) and its implementing regulations at 36 CFR 800.

Prior to initiating fieldwork, TRC conducted a preliminary records search at the Tennessee Division of Archaeology (TDOA) and the Tennessee Historical Commission (THC), located in Nashville, Tennessee. In addition, TRC reviewed TVA records associated with the acquisition of the property and construction of the nuclear plant. These records provided information on the location of historic period structures in addition to land use and details of changes to the study area during plant construction. The purpose of the records search was to identify previously recorded archaeological sites and architectural properties listed on, or eligible for inclusion in the NRHP. The review found two archaeological sites, 40HA20 and 40HA22, had been previously recorded on SNP, but both were destroyed during plant construction. In addition, a review of THC survey records revealed no previously recorded architectural resources located within the APE of the current project.

From February 18 to 26, 2010, a TRC crew conducted the archaeological survey of the plant property. The survey focused on examination of the extensive reservoir shoreline making up much of the property boundary and the limited amount of undeveloped land within the boundary away from the extensive plant facilities. The survey crew recorded a single archaeological site, 40HA549, and three isolated finds in the course of the survey. TRC recommends that these archaeological resources are ineligible for the NRHP.

TRC conducted its historic architectural survey of the APE on February 23, 2010, which resulted in the identification of two previously unrecorded architectural resources (HS-1 and HS-2). It is the opinion of TRC that these resources are ineligible for the NRHP due to the lack of historic and architectural distinction.

Based on the survey results, TRC recommends that no further investigation of cultural resources is necessary in connection with future undertakings at the plant.

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TRC would like to thank Richard Yarnell of TVA for providing information and maps regarding the project in a timely manner. Dennis Lundy, one of the supervisors of the TVA plant relicensing effort, helped us gain access to restricted areas of the plant and provided important documentation in regard to changes to the area during plant construction. At TDOA in Nashville, Suzanne Hoyal helped with the background research on the property and expedited the registration of the one new archaeological site found during the survey.

At TRC, Larry McKee served as Principal Investigator for the project. As such, Mr. McKee coordinated all aspects of the project, directed archaeological fieldwork, and coauthored this report with TRC Senior Preservation Planner Ted Karpy nec. Mr. Karpy nec was assisted by field technician Matt Logan in carrying out the architectural survey. Jeff Holland of the Nashville office of TRC assisted Mr. Karpy nec with archival research on the plant property and helped in producing the historic context included in this report. Field technicians Jeremy Galbraith, Katie Sutton, and Cory Green conducted the archaeological survey under the direction of Mr. McKee. TRC Lab Director Josh Tuschl provided oversight for the analysis of recovered archaeological remains.

I. INTRODUCTION

In January 2010, the Tennessee Valley Authority (TVA) contracted with TRC Environmental Corporation (TRC) to carry out a Phase I Cultural Resources (CR) survey of the approximately 594 acres making up the Sequoyah Nuclear Plant (SNP) in Hamilton County, Tennessee. The CR survey is one element of the current effort by TVA to get federal approval to renew the operating license for the plant.

The goal of the TRC CR survey was to document and assess archaeological and historic architectural resources located within the area of potential effects (APE) of the SNP property. Archaeologically, the APE consisted of the approximately 594 acre SNP as shown on supplied project maps. The APE for architectural studies included a 0.8-km (0.5-mile) area surrounding the plant facility, as well as any areas where the project will alter existing topography or vegetation in view of a historic resource. Viewsheds to and from the project area were terminated where topography and vegetation obstructed lines of sight. The survey was conducted to document and assess archaeological resources located within the project's APE pursuant to their National Register of Historic Places (NRHP) eligibility status. The survey was conducted in compliance with Section 106 of the National Preservation Act (as amended) and its implementing regulations at 36 CFR 800.

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Based on the survey results, TRC recommends that no further investigation of cultural resources is necessary in connection with future undertakings at the plant.

II. ENVIRONMENTAL SETTING

PROJECT SETTING

The TVA SNP is located within a gradual bend along the Tennessee River between river miles 482 and 486. The plant is located on an upper terrace at the base of the surrounding uplands. The associated lower floodplain has been inundated by the waters of Chickamauga Reservoir, created by the damming of the Tennessee River at River Mile 470 on the northeastern outskirts of Chattanooga, Tennessee.

As shown in Figure 2, most of the project area is an intensively developed industrial complex containing two nuclear reactors, a large steam turbine structure, cooling ponds and towers, waste storage facilities, channelized inlets for water intake and release, electrical substations, transmission line corridors, a strongly secured perimeter, numerous administration buildings, a helicopter landing pad, and extensive equipment yards and warehouses. The plant construction began in the late 1960s, and since its completion in the early 1970s a steady stream of additional construction projects and improvements has taken place.

Prior to the construction of the nuclear plant, the project area had already been extensively altered by reservoir inundation following the closing of the newly constructed Chickamauga Dam in 1940. Before inundation, the river in the vicinity of the SNP was entrenched at a level of approximately 640 ft AMSL. Current normal full pool level is 683 ft AMSL. This raising of the water level covered shoreline terraces and levees which would have likely been favored locations for both prehistoric and historic period occupations and resulting archaeological sites.

Approximately three quarters of the project area has been extensively altered by power plant and road construction. Construction of the nuclear plant has eliminated all traces of the two previously recorded large prehistoric sites (40HA20 and 40HA22) within the plant footprint. The extensive buildings, pavement, and water pooling areas now block the ability to carry out effective survey in the developed core of the property. The open area available for survey lay mostly at the north and southwestern edges of the property. At the north end, the survey area consisted of portions of three low ridges fronting the reservoir shore. In the southwestern undeveloped portion of the property, the survey area consisted of a broader undeveloped wooded area with both low ridges and swampy lowlands. Also in the southwestern portion of the project area is a separate small ridge crest just south of the only remaining cemetery on the property, named for the Igou family.

The project area also includes extensive reservoir shoreline along both the main river channel and along the large inlets formed by the inundation of former tributary stream courses. Two of these inlets are at the north end of the plant and two are in the southwestern portion of the property. Three other former stream channels nearer the center of the plant have been thoroughly altered, with one filled in near the heliport and

the other two reconformed to become the intake and outlet points for the plant cooling water system.



Figure 2. Aerial photograph of Sequoyah nuclear plant.



Figure 3. Exposed shoreline in northern portion of SNP.



Figure 4. Survey in upland wooded area in southwestern portion of SNP.

PHYSIOGRAPHY, TOPOGRAPHY, AND GEOLOGY

The project area is situated in the Ridge and Valley (or the Great Valley) province of eastern Tennessee (Figure 5) (Miller 1974). The Unaka Mountains bound this province on the east, and on the west it is bordered by the Cumberland Plateau. Parallel ridges and valleys approximately 40 miles in width characterize the region. Topographic relief ranges from 600–1000 feet AMSL, and is characterized by steep to rolling hilly uplands interrupted by numerous permanent and intermittent tributary streams.

The geological strata in the Ridge and Valley province are of Ordovician–Cambrian–Silurian age and include shales, limestones, and dolomitic limestones. These strata have been heavily folded, faulted, and weathered throughout time. The most common lithologic unit in East Tennessee is the Knox group (Ordovician–late Cambrian) appearing in southwest to northeast-oriented belts. The more weather resistant ridges are composed of calcareous sandstones and interbedded shale and sandstone. Knox-group dolomites contain large amounts of high- and low-quality chert. Formations comprising the Knox Group include Copper Ridge, Chepultepec, Longview, Kingsport, and Mascot.

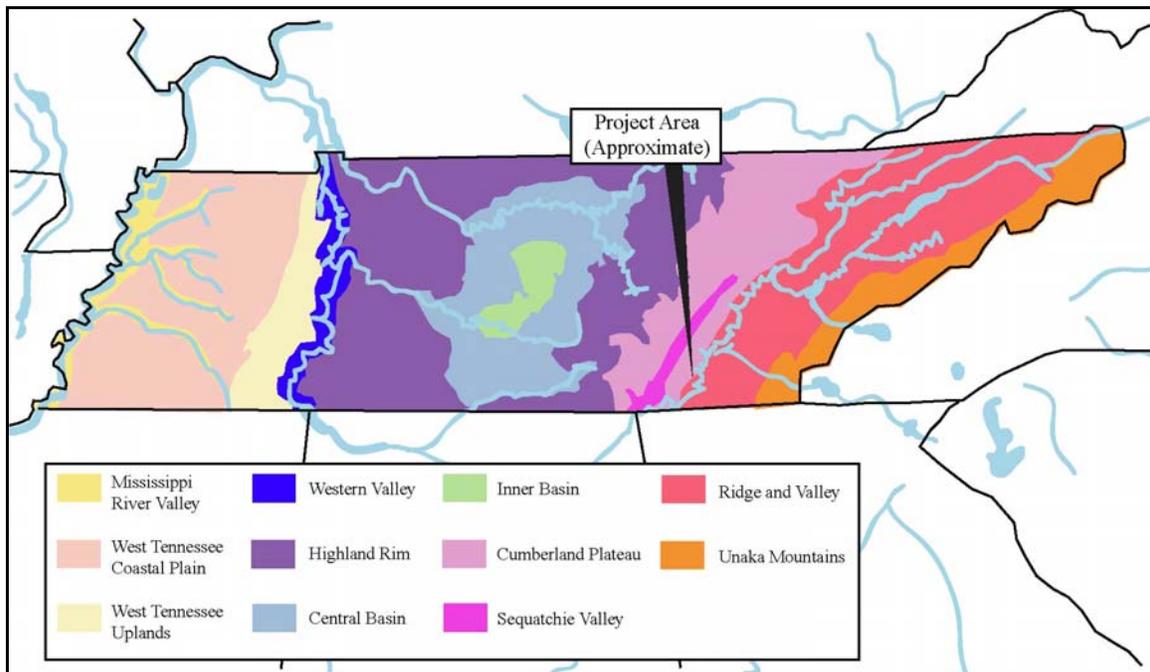


Figure 5. Generalized physiographic map of Tennessee and location of project area.

HYDROLOGY

The TVA SNP is located on the Tennessee River, which has been inundated in the vicinity to form Chickamauga Reservoir.

SOILS

Much of the original soil in the project area has been removed or developed and no longer reflect the original soil composition. The Hamilton County Soil survey (Jackson 1982) classifies the soils in the SNP as Colbert-Urban land complex.

CLIMATE

The climate in Hamilton County, Tennessee consists of cool winters and hot summers. The average winter temperature is 41⁰ F and the average summer temperature is 77⁰ F (Jackson 1982). Average annual precipitation is 52 inches.

FLORA AND FAUNA

The project area lies within the Mississippian Plateau section of the Western Mesophytic Forest Region (Braun 1950). Vegetation in the project area includes open grasslands and pasture as well as mixed hardwood forest and secondary forest growth. Mesophytic, deciduous hardwood tree varieties are found throughout the region and are represented by bodoc (Osage Orange), hickory, walnut, white oak, tulip-poplar, basswood, sugar maple, hemlock, yellow birch, beech, and persimmon. Rather large stands of coniferous species such as cedars and pines also are present.

The project region is also part of the Carolinian Biotic Province (Dice 1943). Fauna in the study area is typical of that found throughout middle and eastern Tennessee. White-tailed deer, turkey, raccoon, opossum, skunk, squirrel, rabbit, and gray fox comprise the majority of modern-day mammals. Species that are no longer present but would have been hunted during initial European colonization and prehistoric inhabitation included black bear, elk, bison, and cougar. Waterways are inhabited by several varieties of fish (e.g., crappie, bass, catfish, and drum). Buzzard, red-tailed hawk, crow, quail, dove, killdeer, and several varieties of ducks and geese represent avian species.

III. CULTURAL HISTORY

Human occupation in the vicinity of SNP is likely to have occurred continuously since at least 12,000 years before present. Over the course of this vast period both major and minor changes have taken place in various aspects of human behavior including technology, settlement patterns, subsistence strategies, population density, and social organization. Understanding the broad patterns of these changes and their specific regional trends helps investigators analyze the recovered information. Through comparison with local and regional data, it is possible to assign dates to certain artifacts and features, and to evaluate the nature and significance of site deposits.

The following discussion provides a general overview of the currently accepted trajectory of human development in the region. For organizational purposes, these 12,000 years are divided into two primary categories, Prehistoric and Historic Occupations. The discussion of the Prehistoric Period includes four generally recognized divisions: Paleoindian, Archaic, Woodland, and Mississippian. The chapter concludes with a discussion of historic occupations of Hamilton County and the study area.

PREHISTORIC OVERVIEW

Prehistoric occupation of the region surrounding the study area has been studied through archaeological research since the late nineteenth century. The first large-scale excavations in the Gunter'sville Basin of the Tennessee River occurred in the 1930s by the Works Progress Administration (WPA) and TVA, which provided detailed information on the long prehistoric sequence of the region (Webb and Wilder 1951). In Tennessee, the regional prehistory is understood largely based on intensive investigations in the Normandy Reservoir on the upper Duck River (Faulkner and McCollough 1973, 1974, 1977, 1978a, 1978b, 1982a, 1982b; McCollough and DuVall 1976; McCollough and Faulkner 1976) as well as excavations in the Tellico Reservoir (Chapman 1973, 1975, 1976, 1979, 1994; Davis 1990; Schroedl 1975, 1978). To a lesser extent, various archaeological projects undertaken to fulfill State and Federal environmental regulations have also contributed to our understanding of regional settlement patterns. The following discussion draws on these and other sources to provide a basic overview of the prehistoric period.

The Paleoindian Period (12,500–10,000 B.P.)

The chronology of the Paleoindian period has been the subject of much ongoing debate in recent years. Research on Paleoindian diagnostics for the Eastern Woodlands suggests that this period can be somewhat arbitrarily subdivided into three smaller subperiods, designated Early (ca. 12,500–10,900 B.P.), Middle (ca. 10,900–10,500 B.P.), and Late Paleoindian (ca. 10,500–10,000 B.P.) (Anderson 1990, 1995a, 1995b; Anderson et al. 1996). This tentative chronology is based primarily on changes in hafted biface morphology. In particular, these divisions coincide with occurrences of Clovis and eastern fluted lanceolate forms like Gainey or Bull Brook, fluted and unfluted lanceolate

forms with modified bases such as Cumberland, Quad, and Parkhill, and typically unfluted, notched, and unnotched lanceolate forms such as Dalton and Holcombe (Anderson 1995b; Morrow 1996).

Paleoindian adaptation throughout the region was likely characterized by small, highly mobile bands that moved from place to place as preferred resources were depleted and new supplies of resources were sought (Kelly and Todd 1988). During the Early and Middle Paleoindian periods these bands are thought to have hunted and gathered now-extinct megafauna, including mastodon (*Mammuth americanum*) and bison (*Bison antiquus*). The exploitation of Late Pleistocene faunal assemblages by the earliest inhabitants in the Southeast is attested by the Coates-Hines site (40WM31) in Williamson County, Tennessee, where mastodon remains were discovered in association with Paleoindian artifactual material (Broster and Breitburg 1995).

Paleoindian populations undoubtedly did not rely exclusively on megafauna for subsistence. Instead, they likely employed a mixed foraging strategy that included smaller terrestrial game, aquatic animals, and a variety of flora. As larger game animals began to suffer extinction as a result of intense hunting and rapid environmental changes, Late Paleoindian groups would have come to rely more on these other facets of their subsistence pattern.

South of the project area in Jackson County, Alabama, diagnostic Paleoindian artifacts were recovered from Russell Cave (1JA940) during excavations by the Smithsonian and National Parks Service (Miller 1957a, 1957b, 1965). Two preeminent Paleoindian sites in the region, Dust Cave and the Stanfield-Worley bluff shelter, are situated southwest of the current project area along the middle portion of the Tennessee River in Colbert and Lauderdale counties, Alabama. The Stanfield-Worley bluff shelter (1CT125) exhibits nearly 8,000 square feet of shelter floor and cultural material encompassing 8,000 years of aboriginal occupation, and has yielded radiocarbon dates as early as 9690±450 B.P. associated with Paleoindian artifacts (DeJarnette et al. 1962). Dust Cave (1LU496), a multicomponent habitation cave site near Florence, Alabama, has also yielded a stratified Late Paleoindian cultural assemblage dated from 10,500–10,000 B.P. (Driskell 1994, 1996).

Archaic Period (10000–2600 B.P.)

The Archaic Period is distinguished within the archaeological record by technological changes from the Paleoindian period. Most notably, the onset of the Archaic Period is distinguished by the cessation of fluted point manufacture, and the advent of numerous regional projectile forms and functions, as well as a variety of specialized artifact types. In general, the Archaic tradition is associated with environmental changes that occurred at the terminal Pleistocene/early Holocene transition, and the corresponding shift in adaptive strategies employed by human populations.

As the glaciers retreated northward, large game species became extinct or migrated north with the retreating tundra, and were replaced by modern faunal and floral species. Archaic populations adapted accordingly to rely on smaller mammals, including white-

tailed deer, turkey, squirrels, rabbits, and fish. Subsistence strategies also shifted to incorporate seasonal exploitation of vegetal resources such as nuts, berries, seeds, bulbs, and greens.

Intensive exploitation of local resources led to increased population growth throughout the Archaic Period in the Southeast, and a corresponding reduction in group territory size (Anderson and Hanson 1988). Archaic populations gradually became less mobile as villages began to be reoccupied annually. Intensive exploitation of food resources is reflected in substantial quantities of fire-cracked rock on many Archaic sites. This artifact class results from stone boiling techniques using skin bags or wooden bowls prior to the adoption of pottery (Goodyear 1988) and the construction of permanent, high-heat hearths at repeatedly used campsites.

The Archaic period is traditionally divided into three subperiods, based largely on temporal changes in projectile point types and styles. In addition to diagnostic hafted biface types, other markers provide means to subdivide the Archaic in the interior Southeast. These include types of ground stone artifacts, fragments of carved stone bowls, and various mortuary programs.

Early Archaic (10,000–8000 B.P.)

Early Archaic populations in northeastern Alabama continued to subsist in ways closely resembling those of earlier Paleoindian hunters and foragers. In contrast to Paleoindian adaptations, the Early Archaic appears to represent a shift to a more localized subsistence pool based on the seasonal harvest of plant and animal resources. Following the extinction of Pleistocene megafauna, Early Archaic populations hunted modern fauna such as white-tailed deer and wild turkey. Early Archaic sites, like Paleoindian occupations, tend to consist of light lithic scatters usually found in multi-component contexts. Diagnostic artifacts of the Early Archaic include chipped stone tools with side- and corner notched hafting elements such as Kirk Corner Notched, Palmer, Plevna, Lost Lake, Pine Tree, and some Big Sandy forms (Cambron and Hulse 1986).

Middle Archaic (8000–5000 B.P.)

The Middle Archaic is generally seen as a difficult time for prehistoric populations, coinciding with the warmer and drier Hypsithermal Interval. Beginning at about 8000 B.P. postglacial warming intensified, resulting in a series of environmental changes in parts of the East that influenced cultural developments. Local inhabitants throughout the Midwest and Midsouth may have experienced occasional long droughts during this period (Brackenridge 1984; Klippel and Parmalee 1982).

Middle Archaic material culture can be distinguished from the Early Archaic by an increase in ground stone tools, such as atlatl weights and notched “netsinkers,” and a more diverse stone tool kit. Supplemental use of shale, slate, quartz, and quartzite, in addition to non-local cherts, also characterizes Middle Archaic lithic assemblages. Diagnostic hafted bifaces of this period include Eva, Morrow Mountain (ca. 7500–6000 B.P.), Sykes/White Springs (ca. 6500–5500 B.P.), and Benton (ca. 5600–5000 B.P.) types.

Patterns of raw material use at late Middle Archaic sites trend toward locally available sources, and seem to reflect a reduction in territory size (Meeks 2000). The size and depth of the various Middle Archaic shell midden sites along the Tennessee, Tombigbee, and Green Rivers can be attributed to long-term or repeated seasonal occupation of the resource-rich, lower terrace formations (Meeks 2000). These sites probably served as seasonal meeting points for dispersed groups, habitation areas, and mortuary locations. Social aspects of seasonal aggregation likely also included trade, exchange of information, and taking marriage partners.

By the end of the Middle Archaic, there is overwhelming evidence of a complex late Middle Archaic trading/interaction network that likely extended from the Great Lakes to the Gulf Coast. This interaction network is adequately reflected in mortuary objects containing raw materials exotic to the region of final disposition (marine shell beads, nonlocal chert) and in the widespread occurrence of morphologically similar nonutilitarian artifacts (Deter-Wolf 2004a, 2004b). This phenomenon has been best documented for Northern Alabama by Johnson and Brookes (1989) and Peacock (1988), who describe a string of Benton phase sites in the upper Tombigbee drainage linked by the co-occurrence of Turkey Tails, oversized Bentons, and double-pointed bifaces manufactured from Fort Payne chert.

Late Archaic (5,500–3,000 B.P.)

During the Late Archaic, modern climatic conditions prevailed throughout North America. This environmental change resulted in increasingly moist conditions throughout the American Southeast, and a corresponding boom in local plant and animal life. Prehistoric peoples certainly took advantage of the new, lush conditions by living along major streams where water, plants, and animals were plentiful.

Hafted bifaces including Ledbetter, Wade, Little Bear Creek, and the Motley Cluster are considered diagnostic of the Late Archaic in the region. Other artifacts include large bifacial tools, ground stone tools (e.g., pitted manos and bannerstones), and steatite vessels. Exotic trade items including marine shell, copper, steatite, and distinctive chert appear in the archaeological record of the Late Archaic Southeast and suggest the beginnings of a complex regional trade network. Unfinished raw materials and utilitarian items (stone bowls and projectile points) were also widely exchanged.

Evidence of initial plant domestication is reflected in the appearance of cultigens in Late Archaic deposits throughout the Southeast. Evidence from sites in Illinois, Kentucky, and Tennessee demonstrates that squash, gourd, and sunflower were well established by 3,000 B.P. (Adovasio and Johnson 1981). Some of the earliest evidence of structural remains in the Southeast has been documented for the Late Archaic in the Upper Duck River valley, south of Nashville (Faulkner and McCollough 1974).

South of the project area along the Tennessee River, the Late Archaic period can be divided into two distinct cultural units or phases: the Lauderdale phase and the Bluff Creek phase. The Lauderdale phase represents the classic “Shell Mound Archaic” in this area, and may be in need of some refinement or subdivision as new data becomes

available. Along the western Middle Tennessee River, mussel beds provided abundant freshwater invertebrates for exploitation by prehistoric inhabitants. The Lauderdale phase shell mound sites in this vicinity are quite extensive, and are comprised of an organic midden of shell, cultural debris, and human interments accreted over many generations of successive occupation. Jenkins (1974) has suggested that these mound sites were occupied from early spring to early fall, when the local shellfish harvest would be optimum. Jenkins concludes that for the rest of the year, Lauderdale peoples would have moved into the uplands to exploit diverse game animals, plants, and nuts.

The Late Archaic Bluff Creek phase (3200–2500 B.P.) spans the traditional date of 3000 B.P. used to divide the Late Archaic from the subsequent Early Woodland period. The Bluff Creek phase is distinguished by fiber-tempered Wheeler series ceramics (ca. 3500–2800 B.P.) (Futato 1979; Walthall and Jenkins 1976). Ceramics first made their appearance on the Atlantic coastal plain in estuarial settings around 4500 B.P. However, it was not until quite later, around 3500–3000 B.P., that the Wheeler series made its debut in northern Alabama (Futato 1979; Jenkins 1975; Sassaman 2002).

Woodland Period (3000–1100 B.P.)

The Woodland period in the region is also divided into three sub-periods: Early (3000–2200 B.P.), Middle (2200–1650 B.P.), and Late (1650–1100 B.P.) Woodland. This period has been traditionally linked to sedentism, population growth, and organizational complexity as manifested in the intensive cultivation of crops, establishment of well-defined village settlements, the construction of ceremonial mounds, and the appearance of pottery. However, recent research has proven that all these traditionally Woodland cultural markers have more ancient roots dating back to the Archaic (see above for discussion of Wheeler ceramics; Fritz 1997; Sassaman 1993, 2002; Saunders et al. 1994). In this respect, the beginnings of the Woodland period in Alabama mark only a gradual transition from subsistence and settlement patterns of the Archaic. Undoubtedly this is because a similar deciduous forest environment was exploited throughout most of both periods. However, technological refinement and ideological changes clearly distinguish the Woodland period from its predecessor.

Early Woodland (3000–2200 B.P.)

This initial part of the Woodland period is more of a transitional time from the Late Archaic, as seen in the gradual adoption of ceramics and the shift in subsistence and settlement patterns (Anderson and Mainfort 2002). While a variety of indigenous cultigens had been exploited prior to 3000 B.P., the Early Woodland period saw the beginnings of intensive agriculture or horticulture (Watson 1989). Various plants, including goosefoot, maygrass, knotweed, sumpweed, little barley, and sunflower began to be systematically exploited, and in some cases show morphological variations suggesting the beginnings of domestication (Gremillion 1998, 2002).

The project area location along the Elk River is situated between two regional Woodland manifestations: The Watts Bar/Long Branch and Brickyard Phases of the Normandy Reservoir and the Alexander and Colbert Phases of the Middle and Upper Tennessee

River. In the Normandy region the earliest ceramics belong to the Watts Bar series, and appear around 2600 B.P. The Watts Bar phase (ca. 2700–2400 B.P.) is characterized by quartz tempered, fabric marked wares and rounded base (Adena) projectile points. The subsequent Long Branch phase (ca. 2400–2150 B.P.) is characterized by Limestone tempered fabric marked wares and triangular (McFarland-like) projectile points (Faulkner 1992).

In the area around the Tims Ford reservoir, an abrupt shift in artifact types and settlement patterns marked the onset of the Early Woodland (Faulkner 1968). It is possible that this dramatic shift corresponds with the movement of new peoples into the area bearing a fully developed Woodland culture. In the Tims Ford area this new Early Woodland manifestation is known as the Brickyard phase, and was defined by excavations at the type site (40FR13) located along the Elk River in Franklin County. Brickyard phase occupations utilize almost exclusively fabric-marked pottery, and exhibit little or no evidence for plant domestication (Faulkner 1968). Instead, these Early Woodland peoples probably engaged in intensive exploitation of the valleys and uplands reminiscent of earlier hunting and gathering economies.

Regional ceramic cultures identified for the Early Woodland along the Middle and Upper reaches of the Tennessee River include both the Alexander and Colbert Phases. Alexander ceramics (ca. 2500–2100 B.P.) are characterized as sand-tempered and may exhibit complicated decorative motifs (Heimlich 1952; Walthall 1973). Particularly characteristic of the Alexander tradition was the production of elaborately decorated incised, punctated, and noded pots. Lithic assemblages at Alexander sites include Flint Creek PP/Ks and numerous unifacially and bifacially flaked knives (Walthall 1980).

Diagnostic ceramic assemblages for the subsequent Colbert Phase (ca. 2300–1850 B.P.) include limestone-tempered plain, check-stamped, and fabric-impressed pottery types including Long Branch Fabric Impressed and Mulberry Creek Plain (Haag 1939, 1942; Heimlich 1952; Walthall 1980). Straight stemmed and medium triangular projectile point forms including the Upper Valley cluster also are associated with this phase. South of the project area along the Tennessee River, excavations at the Bellefonte site (1JA300) yielded two burials which contained large percentages of Long Branch Fabric Impressed and Mulberry Creek Plain ceramics (Futato 1977). Additional ceramics from Colbert deposits at that site included plain, fabric marked, and simple stamped examples of quartz and sand-tempered sherds. Temporally diagnostic PP/Ks from the Colbert occupation at Bellefonte included examples of the Copena Triangular, Camp Creek, Greenville, and Nolichucky types (Futato 1977).

Middle Woodland (2200–1650 B.P.)

The Watts Bar and Long Branch phases in the Normandy region are followed by the early Middle Woodland McFarland phase (ca. 2200–1800 B.P.). This geo-temporal unit subsumes the upper Elk and Duck River valleys on the Eastern Highland Rim (Faulkner 1988) and may also include areas along the upper Caney Fork River as well (Jolley 1979). Triangular projectile points similar to the Greenville and Camp Creek types occur with plain, simple stamped, and check stamped, limestone tempered pottery. A

wide array of non-local items found at McFarland phase sites include mica, copper, Flint Ridge chert, and non-local ceramics. Typical features uncovered at McFarland sites include earth ovens, large cylindrical storage pits, and circular pole living structures. Mortuary patterns consist of fleshed burials and cremations (Faulkner 1988). At 40CF5, a McFarland phase site in the Normandy Reservoir, a radiocarbon date of 2220 B.P. \pm 185 years was recorded for a pit feature containing a rectangular elbow pipe, atlatl handle, and a limestone tempered red filmed trade vessel (Bacon 1982).

The late Middle Woodland Owl Hollow phase along the upper Duck and Elk River valleys dates to ca. 1800–1300 B.P. and traverses the traditional Middle/Late Woodland division of 1650 B.P. The Owl Hollow phase was defined based on investigations of site 40FR7 in Franklin County (Faulkner 1968; Faulkner and McCullough 1973; Cobb and Faulkner 1978). Ceramic assemblages consisting almost exclusively of plain and simple stamped limestone-tempered ceramics provide the most effective indication of Owl Hollow phase occupations (Faulkner 1968). Lanceolate Expanded Stemmed and Lanceolate Spike cluster projectiles, as well as shallow side notched points are also distinctive of this phase (Faulkner 1988). An architectural complex of paired winter/summer houses allowing year-round occupations is associated with major occupation at the type site (Cobb and Faulkner 1978). Owl Hollow phase settlement at the type site consisted of a large circular midden ring, with earth lodges arranged around the periphery and summer dwellings on the interior arrayed around an open plaza area. The Old Stone Fort site in the Upper Duck River was maintained as a ceremonial center by Owl Hollow phase populations during the initial portion of the phase (Cobb and Faulkner 1978).

Excavations at 40FR7 indicated that Owl Hollow peoples exploited snails, mussels, and fish as a major part of their diet during the warm seasons of the year. Maize (corn) first appears at sites on the Highland Rim during the Owl Hollow Phase. At 40FR45, maize kernels from a large Owl Hollow phase storage pit were dated to B.P. 1520 \pm 60 years. At Eoff I in the Normandy Reservoir, maize was recovered from a large earth oven (Crites 1978). Samples from this feature returned a radiocarbon date B.P. 1535 \pm 60 years and an archaeomagnetic date of 1700 B.P. Along the Duck River at Shofner, maize excavated from a large refuse pit was dated to around 1500 B.P. While maize was probably known to earlier populations, evidence suggests that it was not intensively cultivated until the Owl Hollow phase.

The construction of earthen mounds, which had begun throughout the Southeast during the Middle Archaic period, saw rapid increase throughout the Middle Tennessee River valley during the Middle Woodland. South and west of the current project area, the Copena mortuary complex of the Middle Tennessee River valley features the greatest concentration of Middle Woodland burial mounds in the region (Anderson and Mainfort 2002).

Copena represents one of the most widespread Middle Woodland manifestations in the Southeast. Webb (1939) first described Copena occupations for the Wheeler Basin. Additional data arises from the Middle Tennessee Valley, where the Copena phase appears around 1,800–1,400 B.P. Copena is no longer regarded as a conventional cultural

phase, but rather a social-mortuary pattern shared by local social groups residing in the Middle Tennessee Valley (Cole 1981). Copena sites contain high frequencies of limestone-tempered, plain and carved, paddle-stamped ceramic sherds. Fabric-impressed, cord-marked, brushed, and rocker-stamped ceramics also occur, but less often.

Burial practices for Copena groups include accretional burials in earthen mounds, usually at some distance from the villages. Artifacts interred in Copena burials include copper ear spoons, bracelets, breastplates, greenstone celts, beads, marine shell cups and beads, and large steatite elbow pipes. Presumably, these finely crafted artifacts were placed with the dead as a means to note their achieved social rank. It is likely that the Copena mortuary cult peaked around 1600 B.P. (Walthall 1972). By around 1700 B.P., the Middle Woodland peoples of northern Alabama became increasingly isolated, as a result of an apparent breakdown in long-distance trade routes. By about 1500 B.P., Copena ways had vanished and the populations of northern Alabama were developing local economic adaptations and practicing less stylized burial ceremonialism.

Late Woodland (1650–1100 B.P.)

The Late Woodland period is less well defined in the region than earlier Woodland occupations. Traditionally, the Late Woodland has been seen as a time of turmoil, conflict, and cultural decline throughout the Midwest and Southeast (Dragoo 1976). However, recent research has indicated that Woodland cultural markers (i.e. ceramic production, mound building, intensive agriculture) in fact show no sign of retreat during the Late Woodland (Jefferies 1994; Nassaney and Cobb 1991; Wood and Bowen 1995).

Based on investigations at site 40FR8, Faulkner (1988) has suggested that members of a distinctive “Mason culture” may have inhabited portions of the eastern Highland Rim during the onset of the Late Woodland. Archaeological components dating to this era include the Hoover-Beeson rockshelter (40CN4), the Wiley (40PM90), Yearwood (40LN16), Mason (40FR8), and Hamby (40CF214) sites on the Elk River, and the Ewell III (40CF118) and Banks V (40CF111) sites in the Normandy region (Butler 1968, 1971; Childress and Buchner 1992; Cobb and Faulkner 1978; Faulkner 1968; Faulkner and McCollough 1974; McCollough and DuVall 1976).

Regionally, the Late Woodland seems to be a time of turmoil and conflict throughout the Midwest and Southeast. Evidence of regional interaction and trade as well as emphasis on burial ceremonialism cease, as cultural groups of this period apparently became more isolated and less complex (Dragoo 1976). Many late Woodland Villages appear to have been fortified. The shift from the larger projectile points of the previous periods to the smaller Madison and Hamilton types is thought to reflect the development of the bow and arrow during the Late Woodland.

Mississippian Period (1000–400 B.P.)

The Mississippian period has been the subject of much research throughout the Southeast. Its cultural manifestations began along the middle course of the Mississippi River between present-day St. Louis, Missouri and Vicksburg, Mississippi. Mississippian

culture underwent major development at the site of Cahokia in the American Bottom, and spread primarily along major river systems to all parts of the Southeast. From 1,000 B.P. until initial European contact about 400 years ago, Mississippian groups occupied local and regional territories along major rivers including the Tennessee, the Cumberland, and the Forked Deer Rivers.

Mississippian populations were substantial, and centered in permanent villages that far exceeded those of the Woodland period in size. These villages were primarily supported through the cultivation of maize in fertile alluvial valleys. The Northern Flint variety of maize seems to have been established in the region by around 1200 B.P. (Buikstra et al. 1988). In addition to maize, Mississippian populations relied on other domesticants, including beans and squash. Domesticated crops were further supplemented with wild foods that had contributed to aboriginal diets in the southeast for previous millennia, including wild plants and animals such as nuts, berries, greens, deer, turkey, and aquatic animals.

Maize floodplain agriculture was a leading factor in the trend towards a more sedentary life, and resulted in many social changes reflected during Mississippian times. The most evident change is the movement from an egalitarian society to a ranked, chiefdom-level society that peaked at the height of the Mississippian culture. In this system, control of subsistence resources likely fell under the monopoly of a few persons or lineages (Blitz 1993).

Ceramic traditions maintain some element of continuity from the Woodland Period to the Mississippian with the continuance of clay-tempered wares. However, the introduction of shell as an aplastic additive during the Mississippian Period ushered in a revolution in the manufacture of ceramic vessels. This process allowed for the construction of vessels with stronger, thinner walls that could be fashioned into a variety of never-before seen shapes (e.g., effigies, shouldered jars, and water bottles). By 1000 B.P., plain and surface-decorated shell-tempered ceramics were the dominant types in Mississippian assemblages.

Lithic assemblages during the Mississippian Period are much less complex than those of the previous cultural periods. This may result from an increased use of more perishable items such as bone, antler, and shell that typically do not survive well in the archaeological record. However, triangular points like Madison and Hamilton are prevalent as well as hoes manufactured out of both local and non-local chert. Mill Creek chert, native to central Illinois, was used in production of hoes that were apparently traded across wide regional boundaries. Other diagnostic artifacts include ground chunky stones, engraved shell items, mica, and galena.

The Mississippian Period saw a resurgence of shared regional religious icons similar to those manifested under Hopewellian influence during the Middle Woodland. This ideological assemblage is commonly referred to as the “Southeastern Ceremonial Complex” and is defined by a shared body of symbolism, artistic motifs, and artifact types (Waring and Holder 1945). Common motifs include the forked or weeping eye, the hand-eye, the bi-lobed arrow, the cross with a sunburst circle, and representations of

anthropomorphic beings. This iconography often appeared on shell gorgets, embossed copper and stone plates, pottery, stone maces, and a variety of other elaborate and specialized artifacts. While the structure of the Southeastern Ceremonial Complex centered on religious iconography and prestige goods, the complex seems to have also served the centralization of political authority in Mississippian cultures.

Status distinctions were also reflected in variation of Mississippian burials. Burials of higher status individuals usually occurred in conical mound earthworks. Distinctive stone box graves of the “Middle Cumberland culture” are considered regional markers of Mississippian mortuary activity (Dowd 2008; Smith 1992). These graves, lined with slabs of limestone, often include elaborate non-utilitarian funerary furniture and one or multiple human burials. Stone box graves also appear in earth mounds. These were apparently erected by arranging numerous stone box coffins in tiers or layers before piling up dirt to create a mound. Low status individuals were interred in family cemetery plots near their residences

South of the project area in Jackson County, Alabama, the Mississippian Period is well represented by sites such as Rudder (1JA180), located on a low ridge in the floodplain of the Tennessee River. Rudder includes two mounds, the larger of which (Mound A) revealed evidence of three large, rectangular wall trench structures and a large circular structure built on top of each mound construction stage. Twenty-four burials, most partially flexed, were recovered from this mound (Webb and Wilder 1951). Grave offerings included ceramic vessels, greenstone celts, and shell beads. The smaller mound (Mound B) yielded evidence of four-wall trench structures underlying the mound and 57 burials. Most of these burials were partially flexed, although four stone box burials were present as well. Grave offerings included shell- and sand-tempered ceramic vessels, greenstone celts, stone elbow pipes, sheet mica, galena, pearls, shell beads, and gorgets. The shell gorgets were engraved with Southeastern Ceremonial Complex motifs including the sun symbol, spider, pileated woodpecker, and eagle dancer (Futato 1979). Shell-tempered ceramic vessels recovered from Mound B include plain jars (some with strap handles), bowls, and bottles. Other vessels include a black-filmed bottle, opossum effigy bottle, and duck effigy bowl.

HISTORIC OVERVIEW OF HAMILTON COUNTY

Native American Occupation during the Historic Period

The earliest European contact with what is now Hamilton County was the De Soto expedition of 1540 and the Juan Pardo expeditions of 1566 and 1588. The towns that these expeditions visited reflected Mississippian culture, and although the expeditions merely passed through the area, their impact was significant. During the century that followed the Spanish explorations, European goods were incorporated into Native American trade. At the same time, disease and power struggles disrupted the old order. By the time English explorers began arriving in the Tennessee River valley, the Cherokee tribe had emerged as the dominant native group in the area, and had established control of a large area that included eastern Tennessee, western North Carolina, and northern

Georgia (Chapman 1985:97–99). One group of this tribe, known as the Overhill Cherokee, had their center of settlement along the Little Tennessee, Tellico, and Hiwassee rivers to the northeast. At this time, Hamilton County was essentially uninhabited, although a number of important Indian trails passed through what would become Chattanooga (Livingood 1981a:7–8).

The desire of the French and British to expand their empires led to increasing pressures on the Chattanooga country, and both sides courted the favor of the Cherokees in order to gain the advantage over their rivals. The British established Fort Loudoun on the Little Tennessee River in 1756 in an attempt to defend the East Tennessee country from the French during the French and Indian War. Although there was much dissatisfaction among the Cherokee with the British occupation, the eventual victory of the British in the war resulted in the Cherokees again accepting British control (Livingood 1981a:8).

Around 1769, American settlers began to push over the Blue Ridge into the Cherokee territory, angering many members of the tribe. During the American Revolution the Cherokee sided with the British, who promised to respect their land rights. With the American victory in the Revolution, many settlers began to arrive in the Tennessee country, assuming that with the British defeat the Cherokee had forfeited their land rights. In 1777, a number of younger members of the tribe, led by Dragging Canoe, seceded from the tribe in protest of older leaders' sale of the Cherokee lands. Dragging Canoe and his supporters settled in the valley of South Chickamauga Creek, where they became known as the Lower Cherokee, or the Chickamaugas. From this location they raided frontier settlements with the help of a trader named John McDonald, who secured guns and ammunition from the British (Livingood 1981a:9).

In 1779, a joint expedition organized by the governors of Virginia and North Carolina, was sent to subdue the Chickamaugas. They burned and looted 11 villages, one of which was located at the mouth of South Chickamauga Creek (40HA66). The Chickamaugas were not defeated, however, and retreated downriver to the west of Lookout Mountain where they established their villages under the protection of the mountains and continued to fight the western settlers until two years after Dragging Canoe's death in 1792 (Livingood 1981a:10–12).

The area that is now Hamilton County remained a part of Cherokee territory after the treaty of Tellico Blockhouse, and during the late eighteenth and early nineteenth centuries, the Cherokees adopted many Western ways. Some Cherokees accumulated a great deal of wealth, managed large plantations, and owned slaves. John and Lewis Ross established a ferry service and trading post on the Tennessee River, Ross's Landing, which was the future site of the city of Chattanooga. Other Cherokees established farms, operated stores and taverns, and practiced trades, such as milling and blacksmithing. By 1825, the Cherokee Nation had a written language and a constitutional government (Chapman 1985a:120; Ledbetter et al. 1987:276; Livingood 1981a:12–13).

Despite these concessions to European culture, the Cherokees' right to their native homeland was never accepted by the American public, which continued to clamor for further concessions. The constitutional government of the Cherokee Nation threatened

the sovereignty of the United States over Native Americans, and the discovery of gold in northern Georgia further whetted the appetite of United States citizens for Native American lands. In 1835, a treaty was obtained from a small group of Cherokees, none of whom were officials in their government, agreeing to remove to lands west of the Mississippi. John Ross, then chief of the Cherokees, refused to recognize the treaty, and resisted compliance, appealing to the Supreme Court for support. Although the Court supported the Cherokees who refused to recognize the bogus treaty, President Andrew Jackson, who was generally unsympathetic to Native American causes, refused to enforce the court's decision. Despite passive resistance by the Cherokees, by 1838 federal troops had rounded up most of the remaining tribe members and forced them over the Trail of Tears to Oklahoma (Livingood 1981a:16–19).

Early Euroamerican Settlement

Although closed to white settlement, the territory of what is now Hamilton County was included within the boundaries of Knox County, established in 1796. Subsequent subdivisions of the county into smaller units included this area, although it remained officially Cherokee territory. In 1819, the area from the Indian Line of 1805 (running due west from the mouth of the Hiwassee River) south to the Tennessee River was opened to white settlement, with the exception of several reservations set aside for Cherokees who had made improvements to the land. This area was organized as Hamilton County. The area south of the Tennessee River remained part of the Cherokee Nation.

In 1833, the jurisdiction of Hamilton County was extended across the river to the Georgia state line. Anticipating the removal of the Cherokee, whites began moving into the area as early as 1835. The strategic location of Ross's Landing at a transportation crossroads ensured its position as the commercial center of the region. In 1835, the Georgia legislature approved a state-owned railroad to run north from what was to become the site of Atlanta. Ross's Landing was likely to be the northern terminus of this line. The name Ross's Landing was considered too modest for the future of the town, and so in 1838 the name of the community was changed to Chattanooga, which had been the name for the point on Lookout Mountain (Armstrong 1931:137; Livingood 1981a:225–228). The population of Hamilton County was relatively low in the early part of the nineteenth century, but was growing steadily (Table 1). Early settlements included Dallas (the first county seat), Sale Creek, Mountain Creek, Soddy, and Hixson. Most of the settlers were of Scots-Irish, English, Irish, or German descent, and came from already settled counties to the north. Few whites in this area owned slaves. Agriculture was the main occupation of these settlers, with general stores, gins, gristmills, and blacksmiths established at small crossroads communities to serve the needs of the area farmers. Schools and churches were loosely organized around the ability to find teachers and pastors to administer them (Livingood 1981a:19–22).

Table 1. Population of Hamilton County (after Livingood 1981b:92, 472).

Year	Whites	Blacks		Total
		Free Blacks	Slaves	
1820	766	16	39	821
1830	2,136	25	115	2,276
1840	7,498	93	584	8,175
1850	9,216	187	672	10,075
1860	11,647	192	1,419	13,258
1870	13,053	4,188		17,241
1880	16,243	7,399		23,642
1890	35,765	17,717		53,482
1900	42,187	19,490		61,695
1910 ^a	67,957	26,518		94,477
1920	88,829	27,120		115,954
1930	123,342	36,155		159,497
1940	140,845	39,633		180,478
1950	165,699	42,556		208,255
1960	190,618	47,287		237,905
1970	207,236	46,397		254,236
1980				287,740

^a The 1910 population figures include those for James County.

The first Hamilton County courthouse was built of logs on the farm of Asabel Rawlings, on the west side of the Tennessee River. This place was later named Dallas in honor of Alexander James Dallas, the Secretary of the Treasury under President James Madison (Livingood 1981b:90). In 1840, a referendum resulted in the relocation of the Hamilton County courthouse to the east side of the river opposite Dallas. This place was named Harrison, for William Henry Harrison, the successful Whig presidential candidate in 1840 (Livingood 1981b:91). The locations of Dallas and Harrison, approximately 3.5 miles south of the project area, are now below Chickamauga Lake.

Harrison was the county seat from 1840 through 1870. During that time Chattanooga continued to grow. Given the condition of roads in the nineteenth century, a trip from Chattanooga to Harrison to conduct business at the court was a full-day affair (Armstrong 1940:74). To alleviate this problem, the state legislature established a law court in Chattanooga in 1858, but most other official transactions still had to be carried out in Harrison (Livingood 1981b:129).

The fortunes of Chattanooga rose rapidly with the completion of the Atlantic and Western Railroad from Atlanta in 1850. The Tennessee River valley was now connected to the Atlantic. The effect on trade in the region was dramatic, as corn, whiskey, flour, and cotton from Tennessee farmers piled up at the wharves to be transported to Savannah, and manufactured goods arrived to supply the frontier settlers with the items that they could not produce at home. Other railroads soon followed, including connections to Nashville and Memphis (Livingood 1981a:29–31).

By 1860 the population of Hamilton County stood at 13,258, of whom 192 were free blacks and 1,419 were slaves. Despite the growth of Chattanooga, less than 20 percent

were residents of the city, and the majority of household heads were farmers. In the city, there was a large population of Irish, primarily railroad workers, and Germans, who were generally craftsmen. Industry in the city centered on the processing of raw materials—mills, distilleries, and meat packing plants, for example. Although there were 22 industries listed in the 1860 census, only 210 people were employed in these industries, less than 10 percent of the population of the town (Livingood 1981a:33–37).

The Civil War

Like other counties in east Tennessee, Hamilton County was on the side of the Union when the question of secession arose. When the rest of the state voted to join the Confederacy, a number of Hamilton County residents left the area for fear of retribution, while others stayed on and tried to maintain their positions. For example, Daniel C. Trehitt, who had been practicing law in Harrison before the war and who was an outspoken Union supporter, went to Kentucky and served as lieutenant colonel of the 2nd Regiment of the Tennessee infantry volunteers. After the war, he returned to Harrison and served as a circuit judge until his death in 1891 (Livingood 1981b:227). There were, however, local supporters of the Confederacy. For example, three citizens of Harrison were taken prisoner by Union troops for having “aided the guerillas” (Livingood 1981b:199).

Because of its extensive railroad connections, Chattanooga became a somewhat unwilling participant in the conflict. In 1862, refugees from Nashville, which had fallen to the Union, found their way to Chattanooga, looking for rooms, food, and connections to other places. Putting additional strain on the town’s resources was the arrival of train cars full of wounded Confederate soldiers, who had been evacuated from Nashville hospitals and arrived without medical supervision or military authorities to take care of logistics. In July 1862, 27,000 troops under Gen. Braxton Bragg arrived in the city, where they were organized for Bragg’s Kentucky campaign. During the next year, until Bragg’s return, the city remained in control of Confederate military authorities (Livingood 1981a:42–44).

In August of 1863, however, Union troops appeared in northern Hamilton County, and began bombarding the city. Engagements took place at various locations in the vicinity of Chattanooga, including at Harrison’s Landing (Armstrong 1940:26). By early September, Chattanooga had been evacuated and was occupied by the Union. Federal troops pushed their advantage but were surprised at Chickamauga, where Confederate troops turned them back, surrounded Chattanooga, and held the Union under siege. With the county already ravaged by foraging parties from both armies, and with only one supply line open, Federal troops faced potential starvation. In October, however, a second line was opened over Walden Ridge and a plan was organized for the liberation of the city. A powerful Union command composed of Generals Blair, Grant, Hooker, Howard, Sheridan, Sherman, Slocum, Smith, and Thomas led victories at Lookout Mountain and Missionary Ridge, and the Confederates retreated to Dalton, Georgia, where they established winter camp (Livingood 1981a:44–45).

Chattanooga now became a forward base camp for organizing Sherman’s Atlanta campaign, which was launched in the spring of 1864. The city was a busy place until the

end of the war, attracting traders, camp followers, refugees, and freedmen. In October 1865, a civilian government was elected, and the process of rebuilding begun. The war years had taken a tremendous toll on the resources and spirit of the community, as trees had been stripped from the countryside, and buildings looted for supplies (Livingood 1981a:45–47).

Reconstruction and the New South

During the period of Reconstruction, Chattanooga became the seat of government in Hamilton County, as well as being its center of population and industry. In 1870, Tennessee's General Assembly passed an act permitting a popular election on the subject of moving Hamilton County's seat, and the result was overwhelming in favor of a move to Chattanooga (Armstrong 1940:74).

Chattanooga did not suffer greatly from Radical Reconstruction, owing perhaps to its Union sympathies during the war. In 1876 a local politician, David Key, was the first Southerner and first Union officer appointed to a Federal post, that of postmaster. Native sons who had joined the Union army returned to the area and rigorously promoted the business advantages of Chattanooga. The coal and iron deposits of the surrounding hills were eagerly exploited. Reconstruction and improvement of the railroads and waterways leading to the city were begun. The Cincinnati Southern Railway was completed from Chattanooga to Cincinnati in 1880 through the northern part of Hamilton County, contributing to growth along the western side of the Tennessee River. Railroads served as a vital key in Chattanooga's growth into the twentieth century (Cincinnati Southern Railroad 2009; Livingood 1981a:47–61).

The growth of Chattanooga left the rural areas of Hamilton County feeling underrepresented, and even before the Civil War there was talk of creating a new county from outlying areas. When the county seat was moved from Harrison to Chattanooga in 1870, people in Harrison and Ooltewah voted to withdraw from Hamilton County. The eastern portion of Hamilton County and a portion of Bradley County were combined as James County in 1871. The boundary between Hamilton and James counties ran north from Graysville, between Tyner and Ooltewah, to Harrison. James County was about 30 miles long and 5–6 miles wide along the bottomlands of the Tennessee River. Although Harrison had spearheaded the county's creation, Ooltewah was voted as the county seat. Located on the East Tennessee and Georgia Railroad, which was completed before the Civil War, Ooltewah had prospered in recent years, while Harrison had declined as river traffic decreased. The former courthouse in Harrison was torn down and the salvaged materials were used to build a new one in Ooltewah. This courthouse later burned down in 1913. From the beginning, James County's poor, rural population lacked the tax base to support the necessary infrastructure for the county such as roads and schools. Constantly struggling to remain solvent, the county finally went bankrupt in 1919 and decided to become a part of Hamilton County. At that time its population was only about 500 (Armstrong 1940:74–75; Livingood 1981a:12–13, 236, 370–371).

Chattanooga's development during the last quarter of the nineteenth century paralleled that of many other southern cities as utilities, public transportation, and other civic

improvements were promoted (Livingood 1981a:61). As the city grew and transportation improved, outlying suburbs arose, including Highland Park, Orchard Knob, Orange Grove, Ferger Place, Oak Grove Park, and Ridgedale. Growth of the city south of the river was more rapid than to the north, due to more convenient access (Livingood 1981a:81).

Most African Americans in Hamilton County in the early twentieth century lived in Chattanooga. In 1930, for instance, the population of blacks outside of Chattanooga was less than 3,000, with concentrations in certain areas. An African-American community called Turkey Foot was located along the road between Harrison and Tyner (Livingood 1981b:383).

When it was found that the region's coal deposits were inadequate for the production of high-quality steel, local investors began a process of diversification that served to keep the local economy vital. Textile plants, insurance companies, and a Coca-Cola bottling franchise were all important industries (Livingood 1981a:83).

The nation's growing demand for electric power, the huge potential of the Tennessee River to provide that power, and the need for transportation improvements on the river all combined to begin a new chapter in Tennessee history in the early twentieth century. Local congressman John A. Moon promoted the construction of a dam on the Tennessee River below the whirlpool rapids that had so long frustrated boat traffic. In 1913, the completion of the Hales Bar Lock and Dam (later removed by the TVA and replaced with Nickajack Dam downstream) marked the beginning of a long relationship between East Tennessee and hydroelectric power (Livingood 1981a:85–86).

In 1932, Franklin Roosevelt promised relief from the conditions of the Depression; a cornerstone of his plan was the development of the Tennessee River. In 1933 he created the Tennessee Valley Authority, which promised to rebuild the region's depressed economy (Livingood 1981a:94). The *Chattanooga News* announced that the "Tennessee Valley will be Exhibit A of the new America" (quoted in Livingood 1981a:95). Plans were approved in 1935 for the construction of Chickamauga Dam, which was completed in 1940 at a cost of \$39 million. The construction of the dam contributed jobs in engineering, archaeology, construction, and maintenance, and created a vital recreation and tourism industry in the county (Livingood 1981a:96–99).

The benefits of dam construction were not enjoyed equally by all. Entire towns, such as Harrison and Dallas, as well as various farms along the Tennessee River, were to be inundated. Sixty thousand acres of prime agricultural land were purchased, and the former residents were forced to relocate. Several cemeteries had to be relocated, including the Old Harrison Cemetery (Douthat 1986.:8–15). Roads had to be rerouted, and telephone, telegraph, and electrical lines had to be moved. The displaced residents of Harrison founded an upland settlement, "New Harrison," south of the original town (Armstrong 1940:192–193; Livingood 1981b:400).

After World War II, power demands outstripped the hydroelectric plants' ability to provide it, and the TVA began the development of coal-burning and nuclear power

plants. These projects pushed the Chattanooga suburbs to the north, and the area has expanded rapidly. Despite these changes, the eastern part of Hamilton County remained primarily rural. In recent years the emphasis has shifted from small family farms producing corn, wheat, and cotton, to larger commercial farms specializing in poultry, livestock, and dairy products (Livingood 1981a:100).

Historical Development of the Survey Area

Located adjacent to the Tennessee River, the project area was utilized primarily for timber and agricultural production during the historic period. The earliest road shown through the area is on an 1822 map of Tennessee and runs along the west side of the Tennessee River from Ross's Landing to the garrison at the mouth of the Hiwassee River (Lucas 1822). This road followed the approximate route of the current U.S. 27. By 1835, the first county seat of Hamilton County, Dallas, is shown on a map on the west side of the river between Chattanooga and the SNP site (Bradford 1835). Harrison replaced Dallas as the county seat in 1840, leading to the decline of the earlier town. Harrison is shown on the same site as Dallas on several antebellum maps, even though it was located on the opposite (east) side of the river and slightly downstream of Dallas (Cowperthwait and Company 1850; Mitchell 1857).

As a result of the Civil War, the countryside around Chattanooga was mapped in more detail. A map made in 1864 shows that a road led from Dallas to Igou's Ferry, which was located on the site of the current SNP (Biemann 1983: Plate 97:1). Another road approached the ferry from the northwest. The ferry connected with a road on the east side of the river that led to Cleveland, Tennessee, in Bradley County. A more detailed Civil War field map published online by the Library of Congress (1864) shows that the Igou residence was located not far from the ferry on the road toward Dallas, while two other residences, the Hall and Wallace houses, were located on the northwest road (Figure 6).

Igou Ferry was reportedly established by General Samuel Igou (1790–1856) on property he owned on the river. Igou is buried in the Igou cemetery, located on the Sequoyah Nuclear Plant site to the south of the main plant (Floyd 2006). The cemetery contains 44 graves based on a TVA survey in 1940. Members of the Igou, Jackson, Masterson, McReynolds, Skates, and Smith families are buried there. The oldest grave in the cemetery is that of Mary Ann Masterson, who died in 1844. The most recent grave dates to 1925 (TVA 1940).

During the Civil War, the Union Army maintained a guard at the ferry in 1863, with posts located one mile above and below the ferry connected by patrols (*Official Records of the Union and Confederate Armies* 1890:696–697, 769). They likely used the farmsteads near the crossing for their camp.

Dallas is not shown on a postal route map of Tennessee made in 1877 (Nicholson 1877), although Igou Ferry was still in existence, served by a postal route that followed the west bank of the Tennessee River from Chattanooga. Soddy, Melville (later Daisy), and several other communities located on the soon-to-be-completed Cincinnati Southern

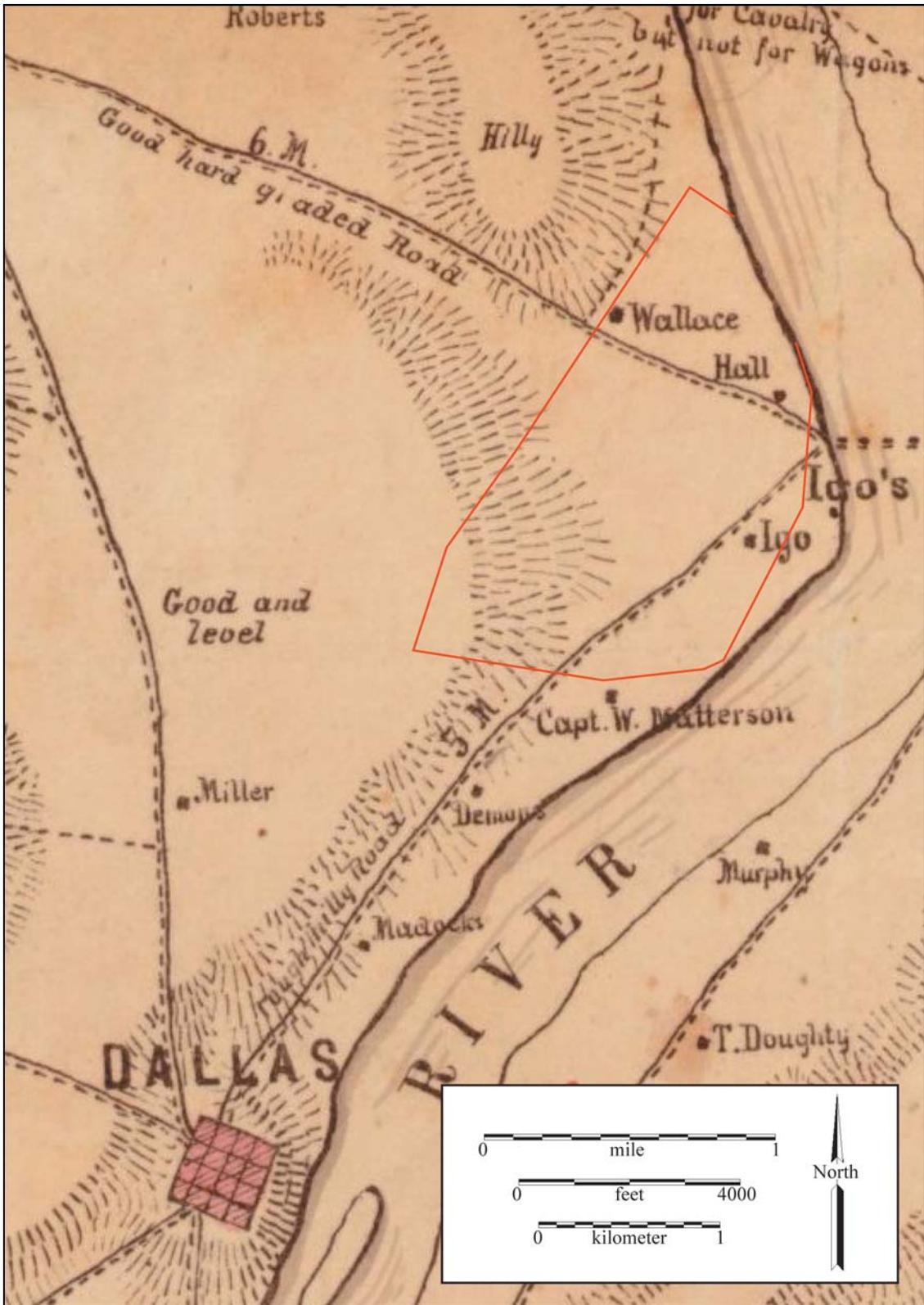


Figure 6. 1864 map of the project area illustrating the location of Igo's Ferry.

Railway were also stops on the postal route. Dallas is shown on an early twentieth century topographic map published by the Tennessee Geological Survey (1913), although it was likely little more than a relic name for a crossroads community. Igou's Ferry is shown on this map as well, with a symbol noting that the ferry was still operational.

The ferry does not appear to have been operating by 1936 when the TVA conducted its earliest surveys of the area. The planometric quadrangle map of the area made in that year (TVA 1936) shows an unimproved road leading to the site of Igou's Ferry, but no active ferry is indicated (Figure 7). The locations of residences within the survey area are also shown, with at least 13 in the survey area and 2 more in the area to be inundated by the reservoir.

When the Tennessee Valley Authority surveyed the area in 1937 in preparation for the creation of Chickamauga Reservoir, they documented the location of public and private roads, structures, fields, orchards, fences, property boundaries, cemeteries, land owners' names, and other cultural features. The acquisition map for the area now occupied by SNP is shown in Figure 8 (TVA 1937). By this time, the road to the ferry seems to have been little more than a track indicated by the notation of "old Igou Ferry road" along a property line. The old road divided properties owned by E. A. Jenkins to the north and B. P. Clift to the south. Other members of the Clift family owned parcels that are now part of the Sequoyah Nuclear Plant Reservation. John Igou owned the parcel to the south of the Jenkins tract, which contains the Igou cemetery. The other significant landholders in the survey area were the trustees of Fred H. Brown, who owned the southern portion of the project area, and John H. McGill, who owned a small tract at the north end of the plant property. Houses and farm buildings were located on the properties of Mrs. R. H. Clift, Ben J. Clift, J. R. Clift, Herbert Clift, E. A. Jenkins, B. P. Clift, John Igou, and Fred Brown trustees.

A second cemetery on the plant property was identified as the McGill Cemetery #1, located on the Mrs. R. H. Clift tract. The marked graves in the cemetery did not bear inscriptions, so it is not known who was interred there. The graves from this cemetery, totaling 11 in all according to the completion report for the SNP, were relocated to McGill Cemetery #2, across the river, prior to 1983 (TVA 1938b; TVA 1983:11, 110).

Ralph E. McGill, the editor of the *Atlanta Constitution* from 1942 until his death in 1969 and a significant figure in Southern journalism, was born at Igou Ferry in 1898 (Georgia Writers Hall of Fame 2006). His family moved to Chattanooga when he was 6, but the young McGill often spent summers at the family farm at Igou's Ferry, where his grandmother resided. His father, Ben, is listed as one of the living relatives connected to the McGill Cemetery #1 at the time of the original Chickamauga survey. McGill's maternal grandmother's maiden name was Clift, and his parents grew up on adjoining farms (Clowse 1998:9, 12–13; Douthat 1986).

Chickamauga Dam was completed in 1940 and the waters of the reservoir covered lands below the 683-foot contour level, including the site of Igou's Ferry. Most of the former house sites in the survey area were not inundated, but as a rule, structures on TVA lands

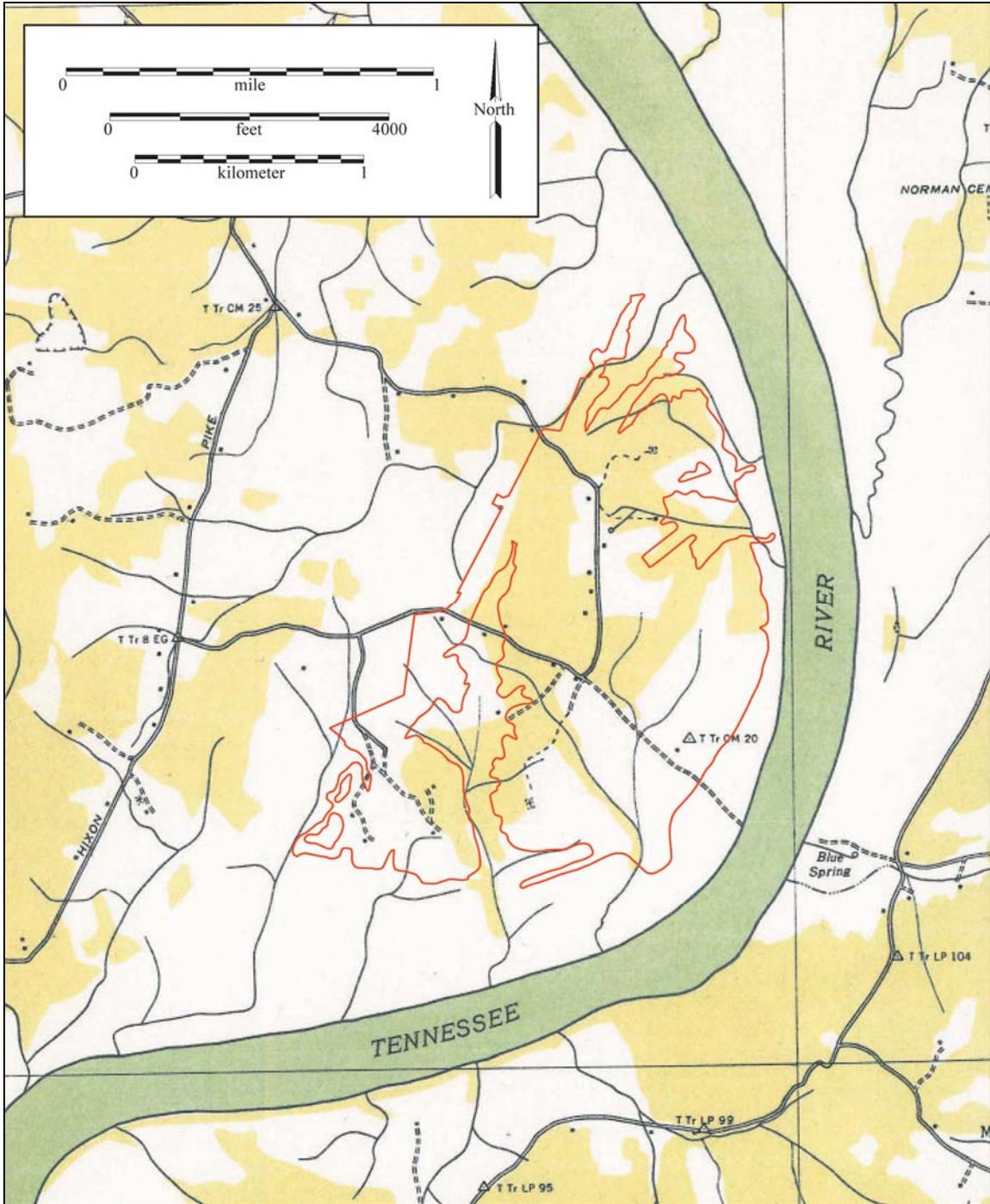


Figure 7. 1936 TVA planometric map of the project area.

were destroyed after acquisition. This is confirmed by the 1942 topographic map of the area (TVA 1942), which shows no structures in the survey area. The D-stage map of the site was made in 1959 and revised in 1967 (TVA 1967). It shows the property after the lake was created but prior to the construction of the SNP (Figure 9). A portion of the nuclear plant site was designated Sequoyah Steam Plant Reservation, indicating that a coal-fired steam plant had been planned for the site. A number of these



Figure 8. 1937 TVA acquisition map of the project area.

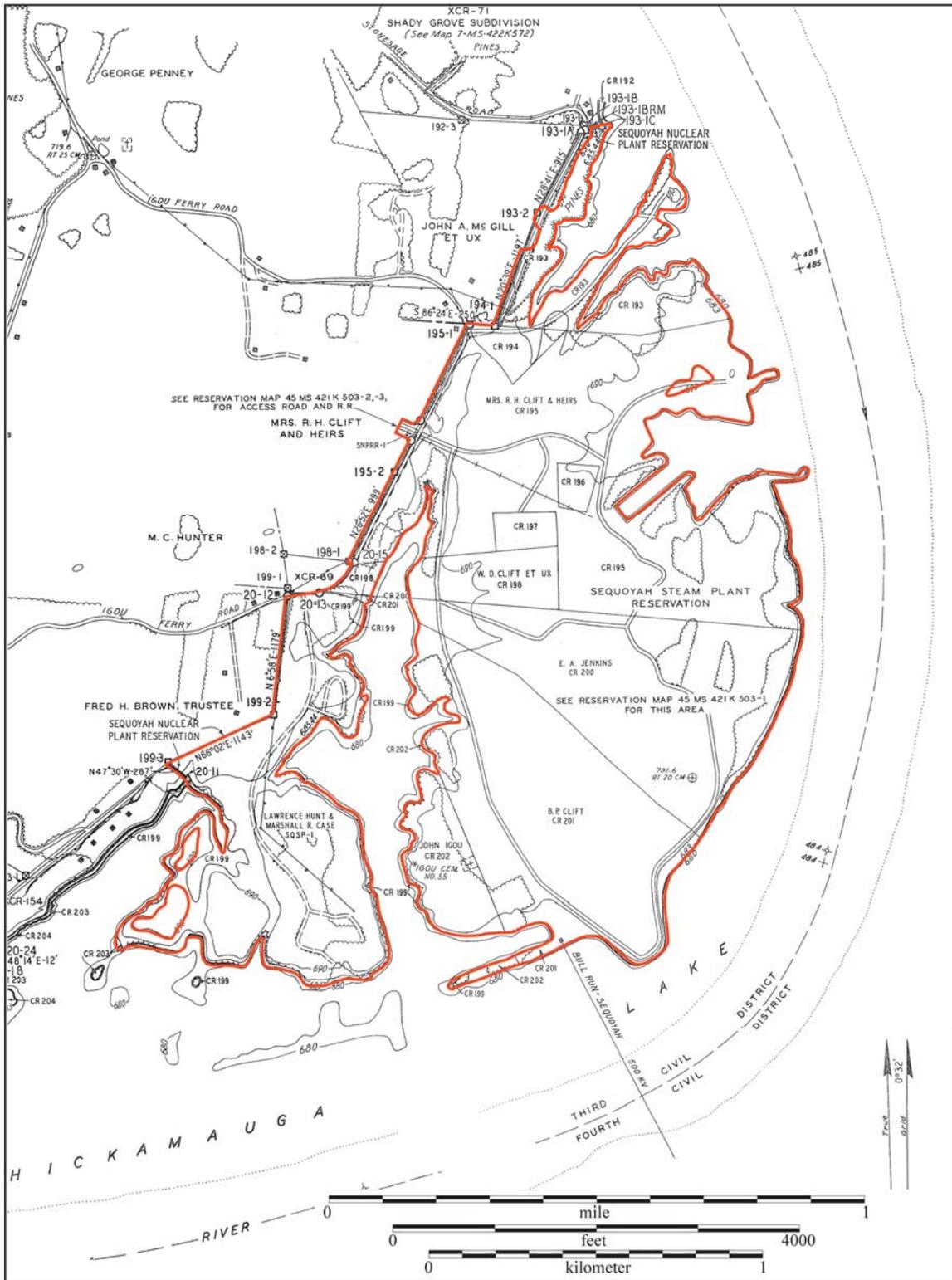


Figure 9. 1942 TVA topographical map of the project area revised in 1967.

steam plants were constructed in the 1950s and 1960s as power demands in the area exceeded the capacity of the hydroelectric facilities constructed along the Tennessee River. According to Ted Heater of the TVA Real Estate Division, the steam plant was never constructed, and in the late 1960s the plans were changed, and a nuclear plant was built instead. Existing roads were altered and new roads constructed for the nuclear power plant. Construction began in 1969 and full operation began in 1981 (TVA n.d.). The most recent topographic map (USGS 1980) indicates that the plant was still under construction. The extent of the site leveling and filling can be seen by comparing the 1980 map with the 1942 topographic map (Figure 10).

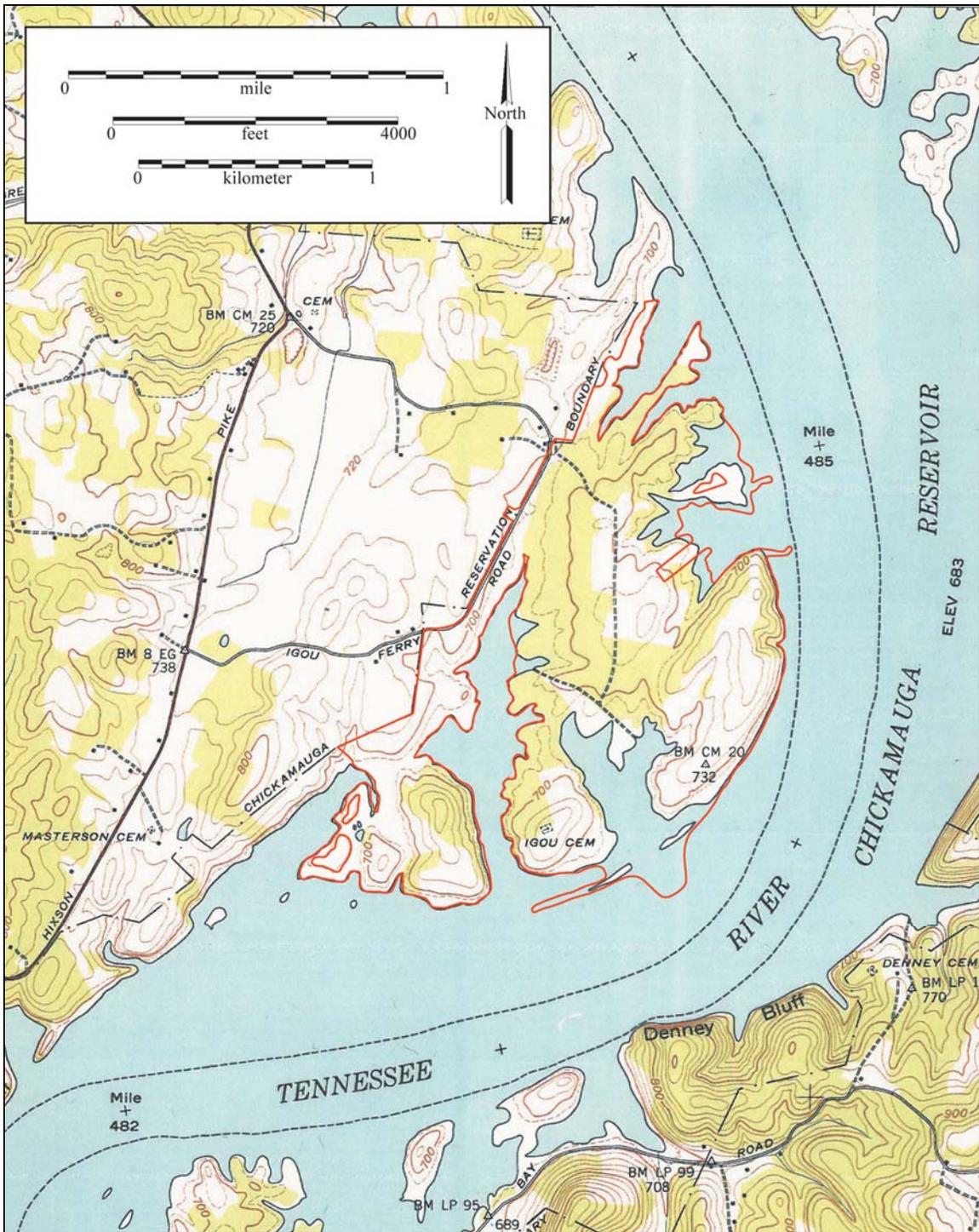


Figure 10. 1980 topographical map of the project area.

The name Sequoyah was apparently selected for the steam plant and retained for the nuclear plant when it was built instead. Sequoyah, or George Guess as he was known to whites, was the Cherokee tribesman who developed a written syllabary for the Cherokee language, a significant achievement that led to the creation of a newspaper, codified laws, and a constitution that was used to govern the tribe in the nineteenth century. Sequoyah

was born in the village of Tuskegee at the junction of the Little Tennessee and Tellico rivers. Besides the TVA Sequoyah Nuclear Generating Station, many other places and things have been named for Sequoyah, including high schools in Madisonville, Tennessee, Broken Arrow, Oklahoma, and Canton, Georgia; Sequoyah County in Oklahoma; Mt. Sequoyah in the Great Smoky Mountains, on the border of North Carolina and Tennessee; and the California Sequoia tree. According to long-time TVA archivist Arlene Royer of the National Archives and Records Administration, records were generally not kept regarding the naming process for TVA facilities (personal communication, 11 February, 2010).

IV. METHODS

BACKGROUND LITERATURE AND RECORDS SEARCH

A background literature and records search was undertaken to identify known historical and archaeological sites in the project area and to develop the historic context for the study area. The background search included research on the state archaeological site files at the TDOA, the NRHP listings and pending files, historic structures and buildings files located at the THC, and the Tennessee State Library and Archives in Nashville.

ARCHAEOLOGICAL SURVEY METHODS

TRC personnel surveyed the proposed APE on foot. The survey included a combination of systematic pedestrian examination of all exposed ground surfaces and shovel testing of areas having poor surface visibility. Pedestrian surface survey was undertaken in areas with greater than 50 percent ground surface exposure or greater than 15 percent slope. Pedestrian survey transects were spaced no more than 10 m (32 feet) apart. All portions of the APE were closely inspected for caves, quarries, benches, rock faces, and rock overhangs.

At all accessible points the crew also walked the exposed shoreline, carrying out visual survey in an effort to identify locations of eroding archaeological deposits.

Shovel testing was conducted in areas with less than 50 percent surface exposure and having 20 percent or less slope. Shovel tests consisted of 30 x 30-cm (11.8 x 11.8-inch) excavations into subsoil, and were excavated at 30-m (100-foot) intervals along a single transect through the APE. Fill dirt was screened through ¼-inch mesh hardware cloth to insure uniform artifact recovery. All shovel tests were immediately backfilled following recordation.

When archaeological materials were recovered, site boundaries were determined. If ground surface visibility exceeded 50 percent, the site was delineated by the lateral extent of surface artifacts. In areas where ground surface visibility did not exceed 50 percent, shovel testing was conducted in a cruciform pattern (north-south, east-west) across the site at 10-m (32.8-foot) intervals until two consecutive negative shovel tests were encountered or until the landform changed or became restricted by topography. All excavated dirt from delineation tests was screened through ¼-inch mesh hardware cloth, and all artifacts were segregated by provenience.

Identified sites were mapped using hand-held sub-meter GPS equipment, and Tennessee State Plane (NAD83, Feet) coordinates were recorded for a site datum, usually consisting of the first positive shovel test. Site boundaries were flagged using TVA-approved red fluorescent flagging tape with appropriate labeling, so as to be visible and understandable to transmission line construction crews. Each site was photographed using digital camera equipment, and standardized notes were taken on the site and landscape.

HISTORIC ARCHITECTURAL SURVEY METHODS

The historical and architectural survey was completed using guidelines provided by the THC and contained in *National Register Bulletin 24: Guidelines for Local Surveys* (Derry et al. 1985; THC 1991). The inventoried properties were photographed using a digital camera. Since the architectural resources have not been previously inventoried, TRC completed a Tennessee Historical and Architectural Resource form and documented the resource using 35 mm black-and-white photographs and color slides. A USGS quadrangle map was utilized to plot the location of the inventoried properties within the APE.

The purpose of the architectural survey was to identify properties within the project's APE that are listed, or eligible for listing in the NRHP. Federal regulations define an APE as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist" (CFR 2008a). For the current project, the APE was determined to be a 0.5-mile area surrounding the SNP. The APE includes areas that have a visual link to the proposed project. Viewsheds to and from the proposed project corridor were terminated where vegetation and/or topography obstructed lines of sight.

NRHP ELIGIBILITY CRITERIA

According to 36 CFR 60.4 (CFR 2008a), cultural resources eligible for listing on the NRHP are defined as buildings, structures, objects, sites, and districts that have "integrity," and that meet one or more of the criteria outlined below.

- Criterion A (Event). Association with one or more events that have made a significant contribution to the broad patterns of national, state, or local history.
- Criterion B (Person). Association with the lives of persons significant in the past.
- Criterion C (Design/Construction). Embodiment of distinctive characteristics of a type, period, or method of construction; or representation of the work of a master; or possession of high artistic values; or representation of a significant and distinguishable entity whose components may lack individual distinction.
- Criterion D (Information Potential). Properties that yield, or are likely to yield, information important in prehistory or history. Criterion D is most often (but not exclusively) associated with archaeological resources. To be considered eligible under Criterion D, sites must be associated with specific or general patterns in the development of the region. Therefore, sites become significant when they are seen within the larger framework of local or regional development.

"Integrity" is perhaps the paramount qualification of NRHP eligibility, and can be related to any or all of the following (CFR 2008a: 322-323):

- Location: the place where the historic property (or properties) was/were constructed or where the historic event(s) occurred;
- Design: the combination of elements that create the form, plan, space, structure, and style of a property (or properties);

- Setting: the physical environment of the historic property (or properties);
- Materials: the physical elements that were combined to create the property (or properties) during the associated period of significance;
- Workmanship: the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory;
- Feeling: the property's (or properties') expression of the aesthetic or historic sense of the period of significance; and
- Association: the direct link between the important historic event(s) or person(s) and the historic property (or properties).

For the purposes of archaeology, assessment of site integrity depends largely on the level of disturbance exhibited by archaeological deposits. The nature of deposits (intact, partially disturbed, obliterated, etc.) has direct bearing on the potential to view a site within the context of its past, and on the degree to which it can provide data based on the material record (NRHP 2002). In short, the integrity of a site (and thereby its potential for NRHP eligibility) is directly tied to its capacity to address research questions.

V. ARCHAEOLOGICAL SURVEY RESULTS

ARCHAEOLOGICAL RECORDS SEARCH

Prior to initiating fieldwork, TRC conducted a background literature and records search of the state archaeological files at the TDOA in order to identify the location and NRHP-status of all previously recorded archaeological sites within the APE. According to the site file research, two sites, 40HA20 and 40HA22, had been recorded and mapped along the reservoir shoreline within the project area. A third site, 40HA21, was recorded in an area now completely inundated by Chickamauga Reservoir to the east of the power plant cooling water outlet. Numerous other sites have been recorded along the river/reservoir shoreline in the vicinity of the project area.

Site 40HA20, also known as the McGill Site, is recorded as a Late Woodland/Early Mississippian mound complex. The McGill site was tested in the 1930s prior to inundation of Chickamauga Reservoir (Lewis and Lewis 1995). Analysis of the project findings indicated that the mounds are datable to the Hamilton Phase of the Mississippian Period of prehistory.

Site 40HA22 was recorded and tested by C. B. Moore in 1913. Moore's description of the site notes that it included an apparently undisturbed mound, 52 feet in diameter and 7.5 feet high, along with a "slight sprinkling" of midden in the surrounding cultivated field. His substantial excavation into the top of the mound encountered eight human burials, with the disturbed remnants of a ninth found off to the side of the mound. Moore apparently conducted only limited surface collection in the field near the mound (Moore 1915). The site was revisited in 1936 by Buckner. On the site form recording this visit (included in the TDOA site file on 40HA22), he reports the mound was apparently still visible, that there were ceramic fragments on the surface, and that the site was not flooded at the time of survey.

The mapped location of 40HA20 is on the north side of what is now the inlet leading to the cooling water intake area. This area of the plant was graded and the water course deepened and widened in creating the cooling water intake inlet and associated docking area. The mapped location of 40HA22 shows it to be both on the side slopes of a ridge and within a now inundated area. This is adjacent to a riprapped platform supporting a set of transmission line towers. In a short report (Calabrese et al. 1973) on a one day "inspection" survey of archaeological resources on the Sequoyah property, the authors note that both sites had already been "eradicated" during plant construction.

In carrying out the survey of SNP, TRC also made use of the original property acquisition map covering the project area. These maps were assembled by TVA in the 1930s, and show property tracts bought by the agency ahead of the planned inundation of the Chickamauga Reservoir. As well as property lines and the names of owners, the maps also show buildings and other improvements. The map of the vicinity of the Sequoyah plant area shows that prior to TVA acquisition, there were at least fourteen residences

and associated structures and orchards within the current plant boundaries. Only two of these are located outside of the developed core area of the property centering on the power plant.

ARCHAEOLOGICAL SURVEY RESULTS

A TRC crew conducted the archaeological survey between February 17 and 26, 2010. The survey work focused on the accessible stretches of shoreline and undeveloped areas within the plant boundary.

The reservoir level during the survey was at approximately 676 ft AMSL, typical for the winter draw down period. At this level, a relatively wide expanse of eroded shore is exposed, aiding visibility for the survey. TRC did not survey the approximate 1100 m (3600 foot) area between the cooling water intake and outlet points, where the bluff line leaves no exposed beach. Examination of the shoreline resulted in the discovery of two lithic scatters, Isolated Find 1 and 2. These are shown on Figure 1 and described below.

TRC followed standard archaeological survey protocol in examining the undeveloped upland areas of SNP. The crew walked and visually examined surface transects across all areas, and excavated shovel tests on the relatively limited level areas with no ground exposure. The surveyors encountered extensive disturbance even in the undeveloped areas, related to dumping of construction and domestic debris, transmission line route construction, and roads, trails and camping sites associated with recreational use of the shoreline. Survey of the upland areas resulted in the discovery of three lithic scatters, one recorded as an archaeological site, 40HA549, and the other two as Isolated Finds 2 and 3. These are shown on Figure 1 and described below.

The survey of the upland area in the southwestern corner of SNP property also focused on locating possible remains of two apparent residential complexes in the area, shown on the 1930s TVA property acquisition map (Figure 11). At these locations TRC's survey crew found traces of roads and a light scatter of surface debris. Shovel testing across the area found thin soils and limited artifacts, most dating to the 1930s and later. Apparently the residences here were established sometime after 1900, and given the limited material present may have been only seasonally or intermittently occupied. The recovered material did not warrant recording the area as an archaeological site or, given its recent age, as an isolated find.

Two historic period cemeteries, known as McGill and Igou, are recorded within the SNP boundaries. One goal of the survey was to relocate and evaluate the condition of these resources. TRC obtained copies of the original TVA survey forms and plans of each cemetery, dating to the 1930s and 1940s. Both cemeteries are shown on the 1942 edition of the USGS quad map of the area (Figure 12), but the McGill Cemetery location is absent from the 1964 edition (Figure 13). A geo-referenced overlay of the acquisition map on the current aerial photo of SPN shows that the McGill Cemetery location is now covered with pavement adjacent to an equipment warehouse (Figure 14). A search of TVA records indicated that during the SNP construction in the late 1960s burials at the

McGill Cemetery were disinterred and moved to another nearby cemetery associated with the same family.

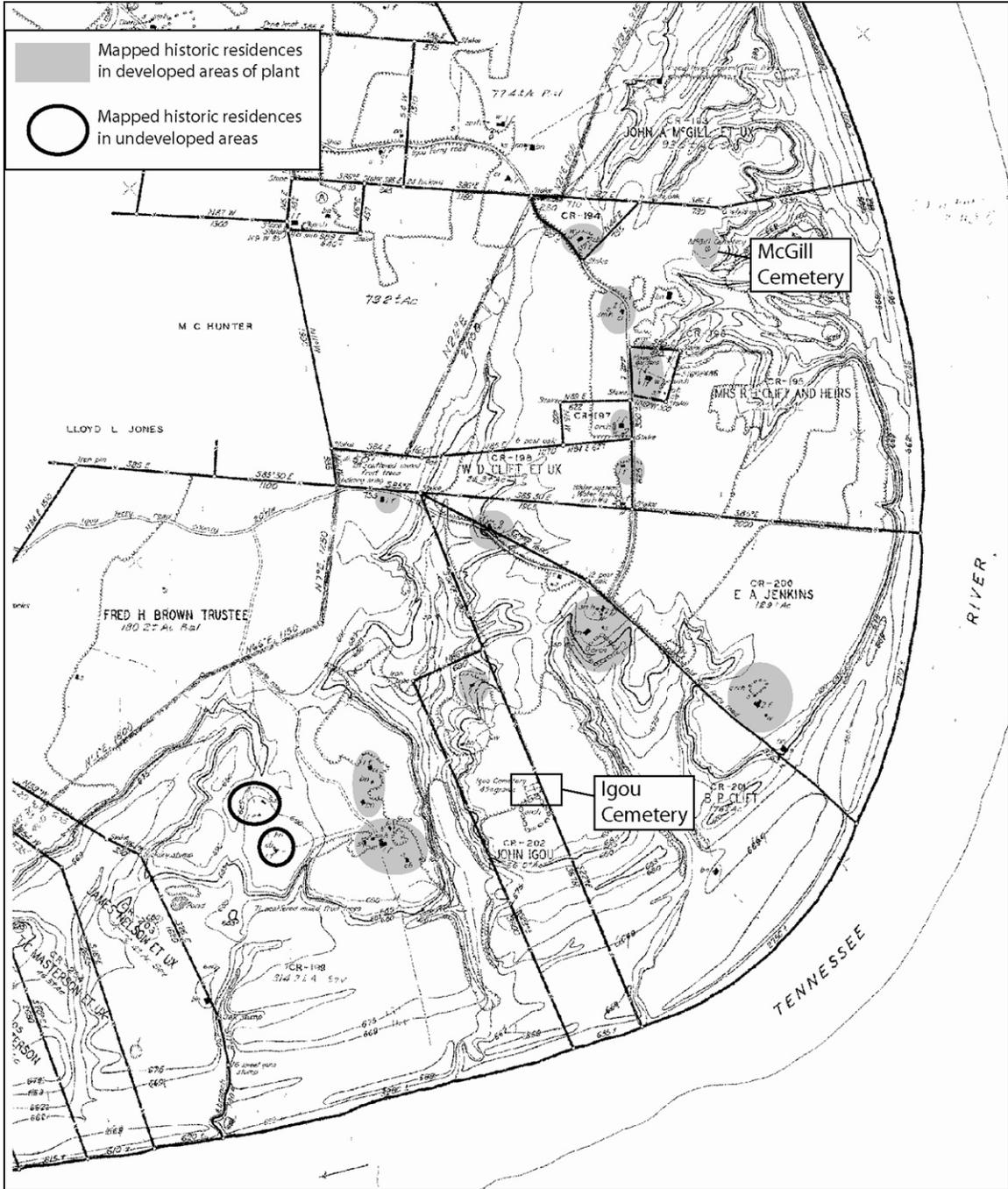


Figure 11. TVA 1937 acquisition map showing residences in developed and undeveloped areas.

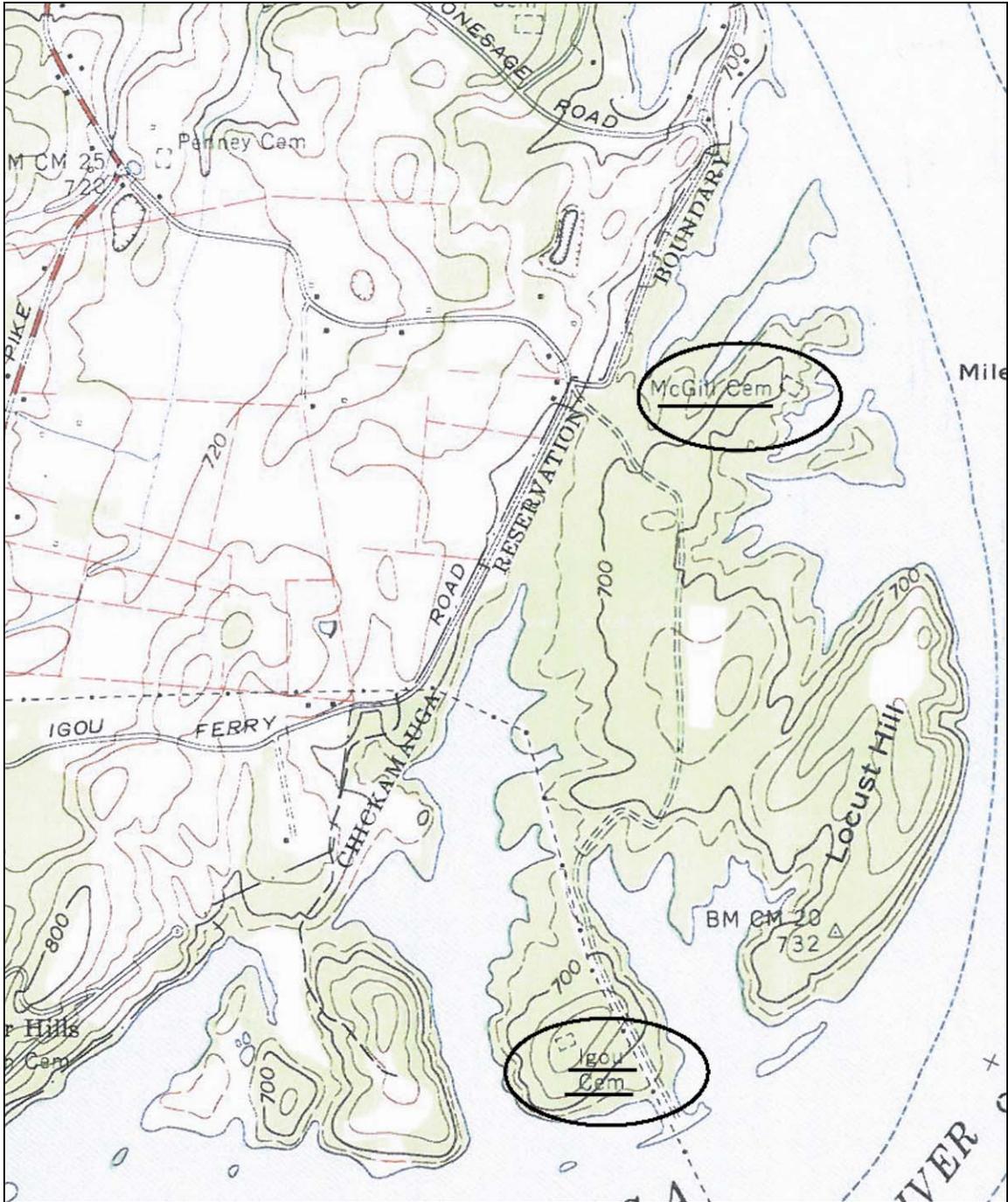


Figure 12. 1942 quad sheet showing locations of Igou and McGill cemeteries.

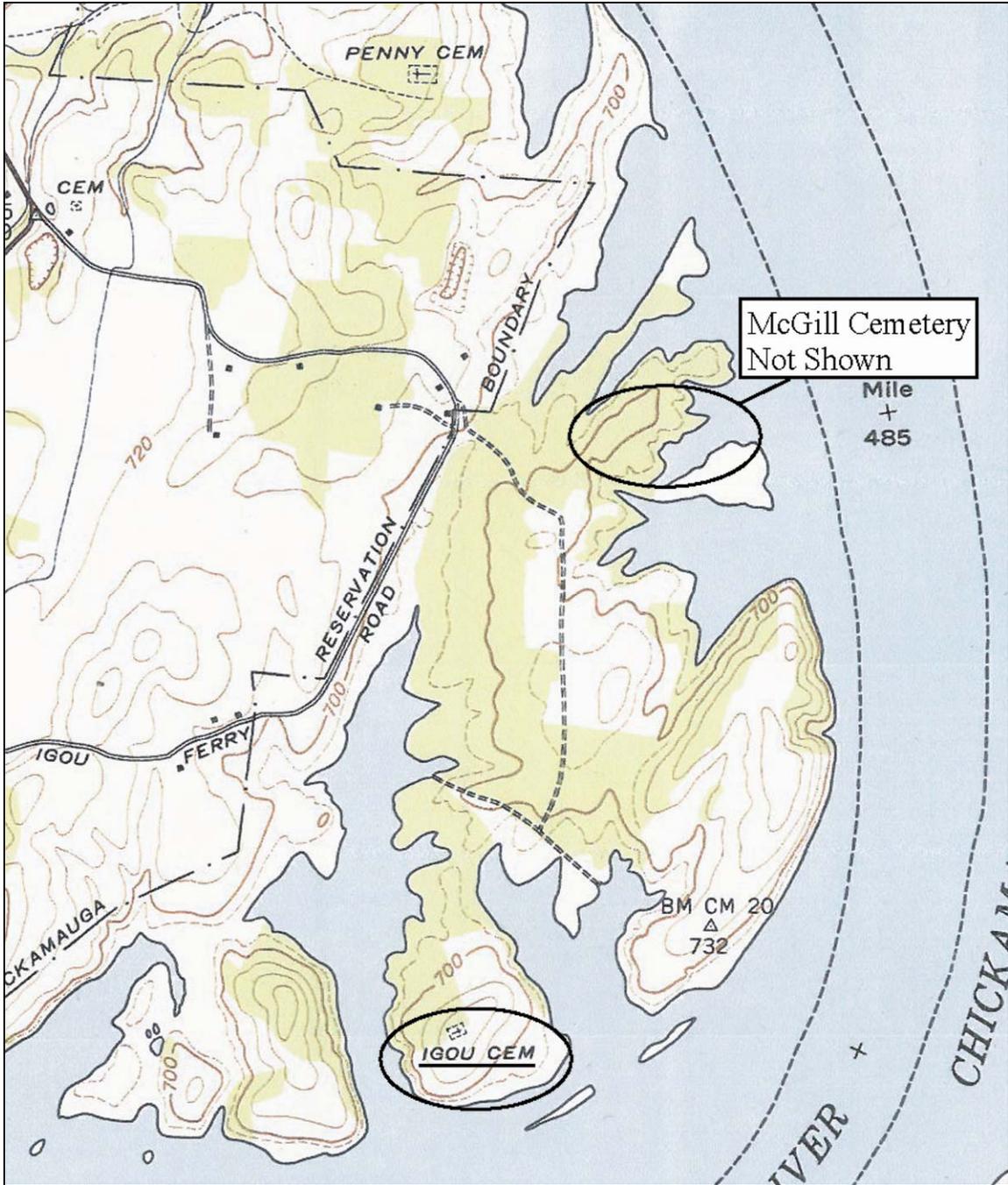


Figure 13. 1964 quad sheet showing Igou Cemetery but not McGill Cemetery.

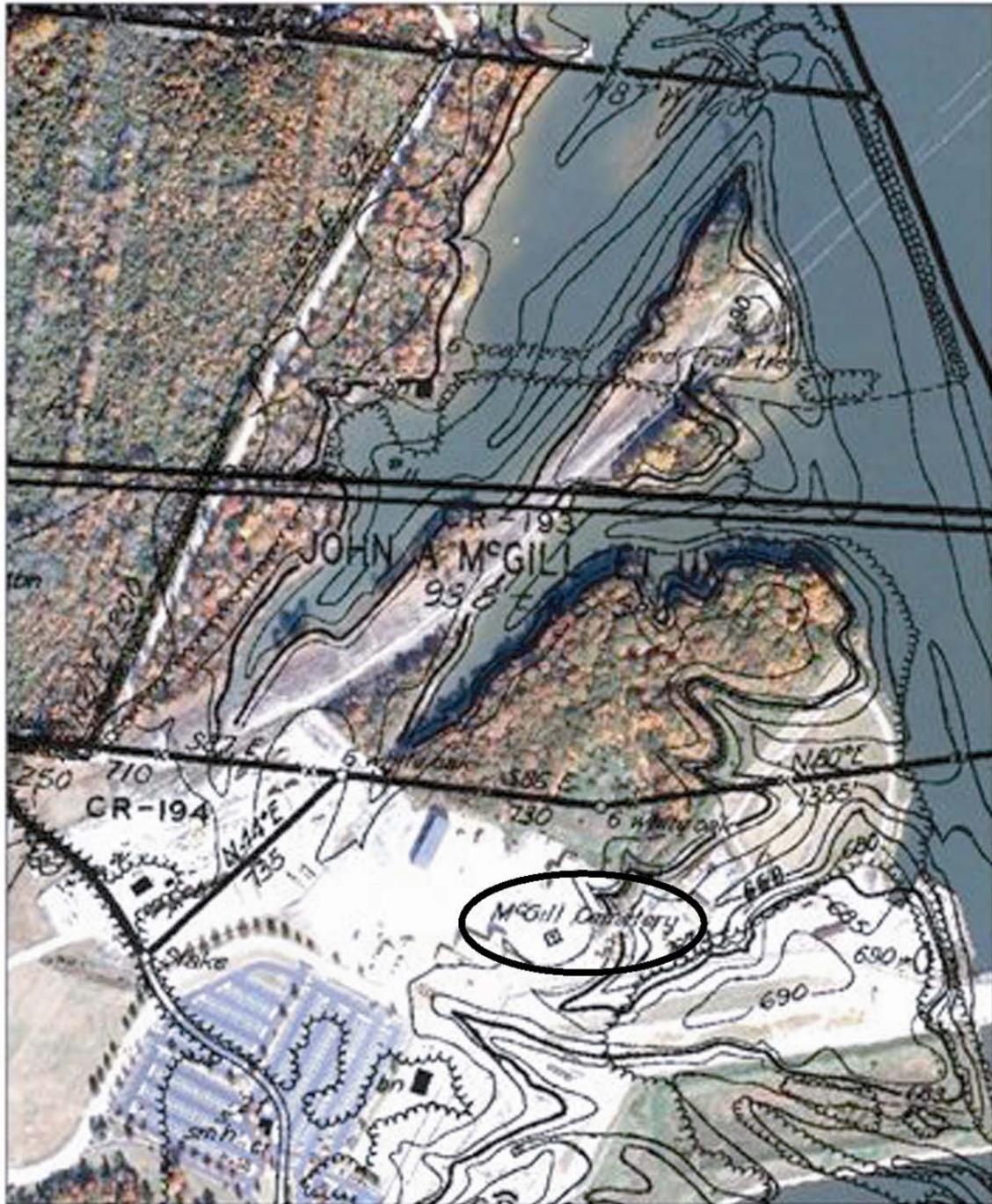


Figure 14. McGill Cemetery on TVA acquisition map transposed over current aerial photo.

TRC visited the Igou Cemetery and found that its boundaries and marked graves are more or less as represented on the original TVA property acquisition documentation (Figure 15). As seen in selected photographs (Figures 16, 17, and 18), the cemetery is currently in need of attention, in terms of grass cutting and removal of fallen trees and branches. It is in no danger of disturbance or destruction in connection with current SNP operations.

Survey crews working to the south of the cemetery, in a small largely undisturbed patch of woods on a fairly broad and level ridge crest, found no archaeological materials.

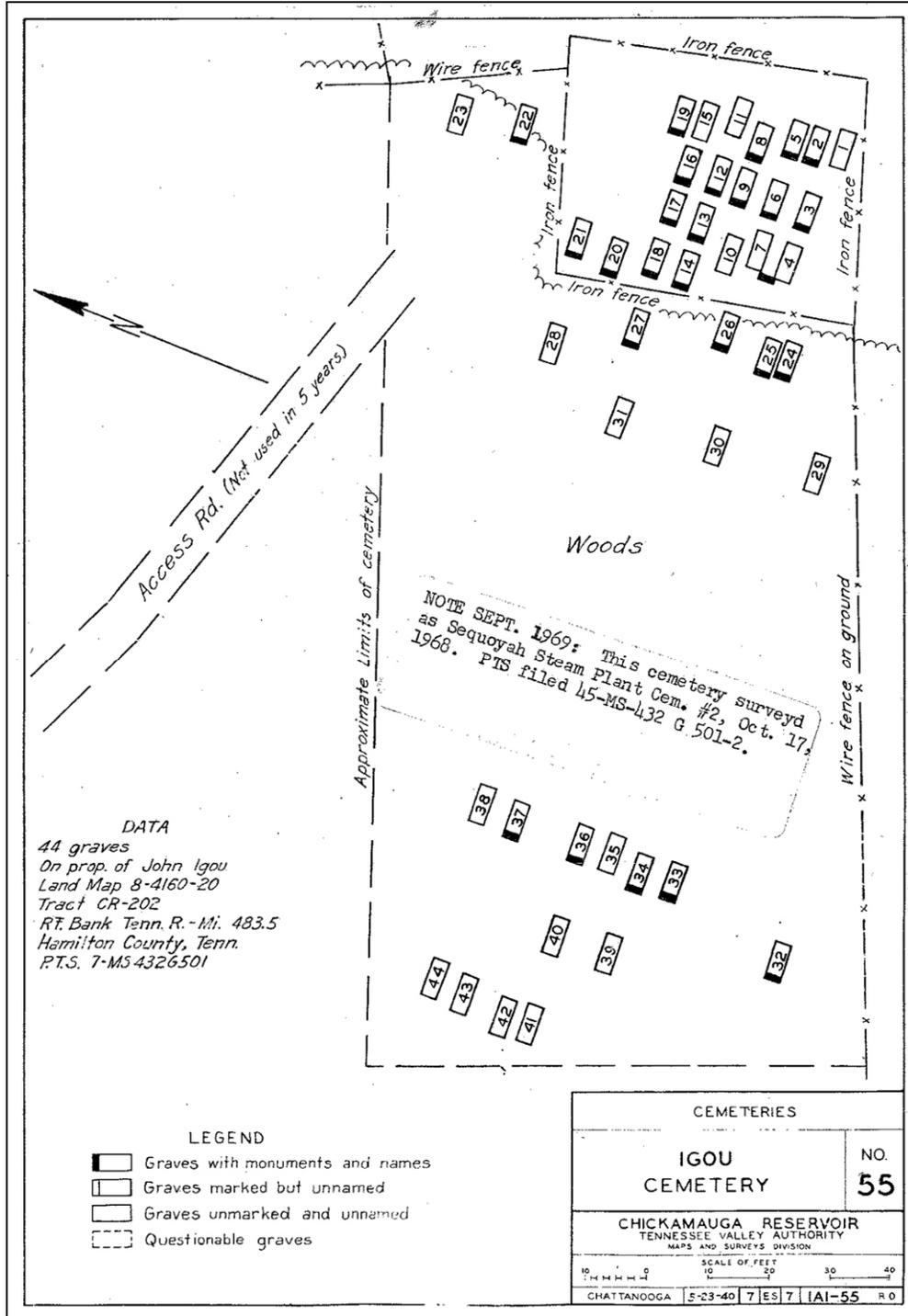


Figure 15. Plan of Igou Cemetery as recorded by TVA in 1940.



Figure 16. Igou Cemetery, fenced portion.



Figure 17. Igou Cemetery, western portion, graves marked by field stones and metal plaques.



Figure 18. Igou Cemetery, technician pointing to unmarked grave depressions.

Assessment of Previously Recorded Sites

As discussed above, the two previously recorded archaeological sites on SNP, 40HA20 and 40HA22, were described in a report by archaeologists inspecting the area in the early 1970s as having been destroyed during SNP construction (Calabrese et al. 1973). The location of 40HA20 is in an area of the plant where an inlet has been completely reformed to create the cooling water intake for the plant and as a docking area. Given the major alterations to the area, TRC was unable to search for traces of the site at this location.

Calabrese et al. 1973 reported that 40HA22 was destroyed in the course of construction of an array of transmission lines. The official TDOA site map shows 40HA22 to be mostly to the east-southeast of the riprapped and raised platform for the transmission line towers on the reservoir shoreline. The mapped location is shown to be partially within the current reservoir pool and partially on the southern side slopes of the same ridge landform occupied by the Igou Cemetery (Figure 1). TRC examination of this area found no trace of archaeological material either on the relatively steep slope or on the limited shoreline exposure at the base of the ridge. It seems likely that the TDOA map shows an incorrect location for the site. The core area of the site, consisting of the mound and associated occupation/midden deposits, was likely approximately 100 meters to the west-northwest, beneath what is now the transmission line tower platform.

Newly Recorded Archaeological Resources

40HA549

USGS 7.5' Quadrangle: Snow Hill, TN	Soil Type: Armuchee Silt Loam
Physiographic Division: Ridge and Valley	Vegetation: Secondary forest/brush
Site Type: Lithic Scatter	NRHP Recommendation: Ineligible
Cultural Affiliation: Early/Mid Archaic	Artifact Depth: 20 cmbs
UTM Coordinates: 16 E0673885 N3900865	Site Dimensions: 60-m N/S x 40-m E/W
Elevation: 690 feet AMSL	No. of Shovel Tests/Positive Shovel Tests: 2/7
Landform: Small knob on ridge crest	Artifacts: 3

Site 40HA549 is on a low knob in a wooded area along the south edge of the last peninsula extending into the Chickamauga Reservoir at the northern end of the SNP property (Figure 1, 19, 20, and 21). The shoreline of the adjacent reservoir at maximum pool level is approximately 20 meters to the south and 30 meters to the east of the site area. A wide transmission line corridor runs along crest of the peninsula/ridge to the north of the site area. The surface of the site is disturbed due to transmission line construction and ongoing active use of the area by fishermen. Surface visibility was near zero at the time of TRC's survey.

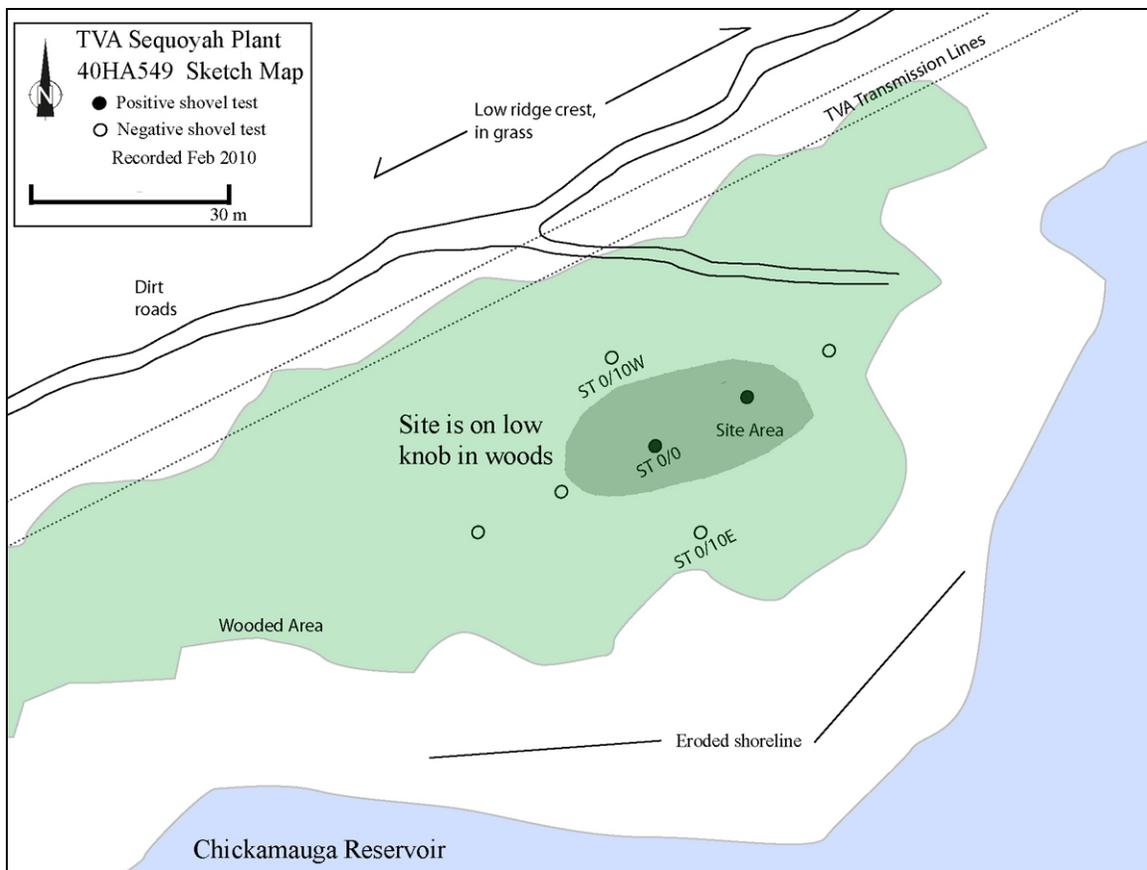


Figure 19. Sketch map of 40HA549.



Figure 20. View of 40HA549 location, in woods to right, looking northeast.



Figure 21. View of 40HA549, looking east.

The site was defined by shovel testing, conducted at 10 meter intervals following an initial positive test. Thorough surface collecting along the exposed shoreline (wide due to winter draw-down conditions) found only two artifacts, a flake and a retouched flake, both well away from the site on the shoreline to the southwest and recorded as Isolated Find 1. Visual examination of exposed areas on the ridge crest in close proximity to the positive shovel tests found no additional archaeological materials.

The location is being recorded as an archaeological site rather than an isolated find due to the unusual occurrence of the recovery of two complete PP/Ks (but no other artifacts) from one shovel test (Figure 22). Otherwise, shovel testing at ten meter intervals near the positive shovel test resulted in the recovery of one small quartz flake ten meters to the north. The points, a Kirk Serrated and a Buzzard Roost Creek, date to the early and middle Archaic Period of prehistory.

The soil profiles in the shovel tests at 40HA549 show a thin layer (averaging 7 cm) of disturbed topsoil over clay subsoil, suggesting long-term deflation as well as the recent disturbance. No midden or features were noted during the Phase I investigation at the site. The site possibly represents a short term open habitation at this location during the early to middle Archaic.

TRC recommends 40HA549 and the three recorded isolated finds as ineligible for listing on the NRHP. The limited artifact density and disturbed nature of each of the four resources make it unlikely that these will yield any significant information regarding archaeological research in the project region.

Table 1. Artifacts recovered from 40HA549

Artifact Description –	Count
Buzzard Roost Creek PP/K, ST 0/0	1
Kirk Serrated PP/K, ST 0/0	1
Flake Fragment, quartz, ST 10N/0	1
Total:	3

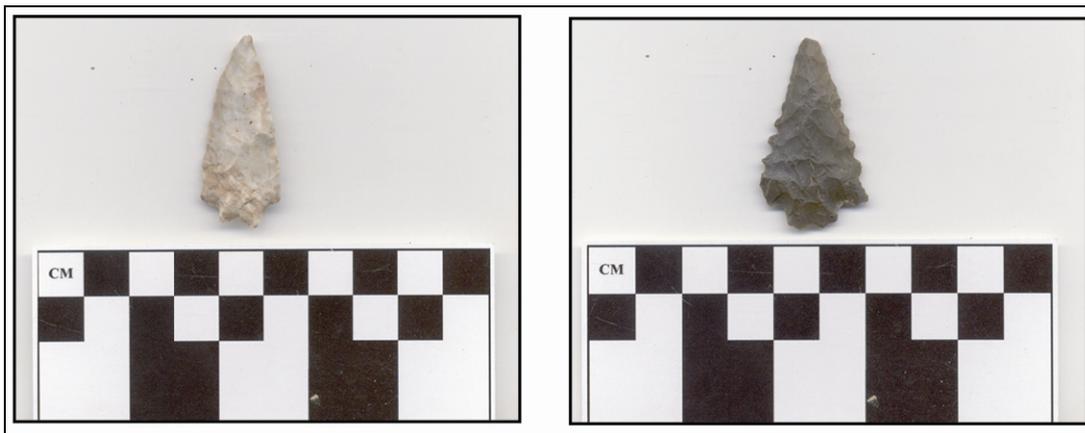


Figure 22. Buzzard Roost Creek (left) and Kirk Serrated PP/Ks from 40HA549.

Isolated Finds

Isolated Find 1 consists of a chert flake and a retouched chert flake found during surface collection along the reservoir shoreline to the southwest of 40HA549. Isolated Find 2 consists of a light scatter of debitage found during shoreline surface collection and limited shovel testing on the northernmost point of the same peninsula.

Isolated Find 3 consists of a light scatter of debitage found during shovel testing on a ridge toe along the shoreline south and across an inlet from 40HA549.

The locations of all three isolated finds are shown on Figure 1.

As with 40HA549, TRC recommends that the three recorded isolated finds are ineligible for listing on the NRHP. The limited artifact density and disturbed nature of the resources make it unlikely that these will yield any significant information regarding archaeological research in the project region.

Based on the archaeological survey results, TRC recommends that no further investigation of archaeological resources is necessary on SNP property in connection with future undertakings at the plant.

VI. ARCHITECTURAL SURVEY RESULTS

ARCHITECTURAL RECORDS SEARCH

Prior to initiating fieldwork, TRC conducted a background literature and records search of Hamilton County NRHP listings and pending files of architectural resources located at the THC in Nashville. The purpose of the records search was to identify the location and NRHP-status of all previously recorded architectural resources within the APE of the proposed improvements. Based upon information provided by the THC, a survey of Hamilton County architectural resources was conducted in 1993 by the Southeast Tennessee Development District; however, no previously inventoried architectural resources are located within the APE of the current study area.

ARCHITECTURAL SURVEY

TRC conducted a historic architectural survey of the APE on February 23, 2010, which resulted in the identification of two previously unrecorded architectural resources (HS-1 and HS-2). It is the opinion of TRC that these resources are ineligible for the NRHP due to their lack of historic and architectural distinction. Based on current project plans, no further investigation of aboveground properties is recommended in connection to the proposed undertaking.

HS-1

Located less than 0.1-miles west of the Sequoyah Nuclear Power Plant at 2703 Smith Thompson Road, HS-1 is a one-story, gable-front house that appears to have been constructed ca. 1930 (see Figure 1; Figures 23-26). The frame building features a roof covered with asphalt shingles, an exterior clad with asbestos shingle siding, and a continuous brick foundation. Facing east, the façade reveals a centrally placed door that is flanked to the north by a modern three-part picture window and a window opening to the south that contains horizontal two-over-two, double-hung wood sashes. Access to the façade door is achieved via a full-width porch. The porch is partially shielded by a projecting gable roof that is supported by two wood posts. A modern metal canopy provides further cover over the porch and is attached to the north porch support. The north elevation of the house is pierced by two pairs of windows and a band of three windows that contain horizontal two-over-two, double-hung wood sashes. Additional fenestration includes two casement sash windows near the eastern end of the elevation. Highlighting the south elevation are three window openings containing horizontal two-over-two, double-hung wood sashes. The west (rear) elevation of the house was not assessed due to owner objections.

Associated outbuildings include:

- A ca. 1950 concrete block shed. The structure is topped with a low-pitch gable-front roof covered with standing seam metal (see Figure 25);
- A ca. 1940 shed. The frame structure is topped by a gable roof covered with standing seam metal and features an exterior clad with vertical wood boards (see Figure 25).
- A modern prefabricated storage shed. The metal structure is capped with a gambrel roof and includes a pair of doors on the east elevation (see Figure 26);
- A ca. 1940 garage. The frame structure is capped with a low-pitch gable-front roof covered with standing seam metal and is clad with vertical wood boards. The garage faces east where a pair of swinging wood doors are located (see Figure 26);

NRHP Assessment: HS-1 is a typical example of an early twentieth-century gable-front house that fails to exhibit unique features of its architectural style or workmanship. In addition, the building has been altered through the application of asbestos shingle siding, the replacement of the original window sashes, and the modifications to the façade porch. Based upon the lack of architectural merit, as well as the inability to associate the house and/or its original owner(s) with an important historical event or series of events, it is the opinion of TRC that HS-1 is ineligible for the NRHP.



Figure 23. Property HS-1; view is southwest and features the façade and north elevation.



Figure 24. Property HS-1; view is northwest and features the façade and south elevation.



Figure 25. Property HS-1; view is west and features the associated outbuildings.



Figure 26. Property HS-1; view is northwest and features the garage and modern shed.

HS-2 (Igou Cemetery)

Located within the SNP is the Igou Cemetery (see Figures 1, 15; Figures 27–28). The cemetery contains 44 graves based on a TVA survey in 1940. Members of the Igou, Jackson, Masterson, McReynolds, Skates, and Smith families are buried there. The oldest grave in the cemetery is that of Mary Ann Masterson, who died in 1844. The most recent grave dates to 1925 (TVA 1940). Igou Ferry was reportedly established by General Samuel Igou (1790–1856) on property he owned on the river. Igou is buried in the cemetery (Floyd 2006).

The cemetery contains approximately 26 identifiable graves, the bulk of which are associated with the Igou Family. A review of Sumner County historical data revealed little information regarding those buried at the cemetery. The legible headstones consist of square and rectangular shaped tablets composed of marble and granite. In addition, two markers featuring diamond-shaped tablets and two obelisks are also present. The 1940 TVA survey identified at least 18 unmarked burials associated with the resource (see Figure 15). A portion of the cemetery is surrounded by a wrought iron fence.

NRHP Assessment: The Igou Cemetery is an example of a typical rural family cemetery that fails to exhibit unique features of its architectural style or workmanship. In accordance with NRHP Criteria Consideration D, cemeteries are normally not eligible for the NRHP unless they derive their primary significance from graves of persons of significant importance, from age, from architectural distinction, or are considered to be of historical importance. The cemetery features typical tablet markers commonly found in rural cemeteries. Historical research failed to indicate that those buried at the cemetery played an integral role in local historical events. For these reasons, it is the opinion of TRC that the Igou Cemetery is not eligible for the NRHP.



Figure 27. Igou Cemetery; view is southwest.



Figure 28. Igou Cemetery; view is west.

VII. SUMMARY AND RECOMMENDATIONS

This document reported on the Phase I CR survey of the SNP, carried out as an element of the TVA relicensing application for the facility. The survey was designed to document and assess archaeological and architectural resources located within the APE of the project area. Archaeologically, the APE consisted of the entire 594 acres within the SNP boundaries. The APE for architectural studies included a 0.8-km (0.5-mile) area surrounding the areas of the proposed improvements, as well as any areas where the project will alter existing topography or vegetation in view of a historic resource. Viewsheds to and from the project area were terminated where topography and vegetation obstructed lines of sight. The survey was conducted to document and assess archaeological resources located within the project's APE pursuant to their NRHP eligibility status. The survey was conducted in compliance with Section 106 of the National Preservation Act (as amended) and its implementing regulations at 36 CFR 800.

Prior to conducting fieldwork, TRC conducted a preliminary records search at the TDOA and the THC, located in Nashville, Tennessee. In addition, TRC reviewed TVA records associated with the acquisition of the property and construction of the nuclear plant for information on location of historic period structures and land use and details of changes to the area during plant construction. The purpose of the records search was to identify previously recorded archaeological sites and architectural properties listed on, or eligible for inclusion in the NRHP. The review found two archaeological sites, 40HA20 and 40HA22, had been previously recorded on SNP, but information included in the files indicate both were destroyed during plant construction. In addition, TRC review of THC survey records revealed no previously recorded architectural resources located within the APE of the current project.

From February 18 to 26, 2010, a TRC crew conducted the archaeological survey of the plant property. The survey focused on examination of the extensive reservoir shoreline making up much of the property boundary and the limited amount of undeveloped land within the boundary away from the extensive plant facilities. The survey crew recorded a single archaeological site, 40HA549, and three isolated finds in the course of the survey. TRC recommends that these archaeological resources are ineligible for the NRHP, and recommends that no further archaeological investigations will be necessary in the course of future development at SNP.

SNP is located along a stretch of the Tennessee River with a relatively dense distribution of significant archaeological sites. The two previously recorded but now destroyed sites on the property, 40HA20 and 22, each contained burial mounds and associated occupation middens. Archaeological investigation in the early part of the twentieth century (Lewis and Lewis 1995; Moore 1915) resulted in the recovery of useful but limited information on the archaeological record at each site. Additional investigations were not carried out at either prior to the destruction of the sites during SNP construction in the late 1960s. Clearly, additional work prior to construction would have resulted in a more thorough documentation and understanding of each site. It is also likely that additional smaller and less obvious prehistoric sites were located in the now developed

core area of the plant, and these too would have been destroyed as the result of the construction here.

The TVA acquisition maps from the 1930s show at least twelve farmsteads and residences within the developed area of the plant, most consisting of relatively well developed properties including dwellings, barns, sheds, smokehouses, and orchards. Archaeological traces of this richly settled historic period landscape have also been likely obliterated by construction within the core area of the plant.

TRC did find several archaeological resources within the undeveloped portion of SNP available for intensive survey. None were of obvious high quality in terms of archaeological potential, and TRC recommends all are ineligible for the NRHP. This distribution of archaeological resources on SNP property invites some speculation about patterns of land use in the area. The apparent limited human use in prehistoric and historic times of these currently undeveloped areas suggests these areas were unattractive for settlement, or at least considered as second rank in comparison to other nearby locations. Reasons for this undesirability likely include the common factors of terrain, such as slope, and access, in terms of getting to and from the locales and proximity to water and food resources. It is interesting that some of the same selection criteria were apparently still at work when it came time to select a site for the power plant complex. Unfortunately, in terms of cultural resources, the use of the “better” land for construction of the plant means that much of what had been a rich archaeological record on the property has already been destroyed.

TRC conducted a historic architectural survey of the APE on February 23, 2010, which resulted in the identification of one previously unrecorded architectural resource (HS-1). It is the opinion of TRC that this resource is ineligible for the NRHP due to its lack of architectural distinction and loss of integrity caused by modern alterations. Based on current project plans, no further investigation of aboveground properties is recommended in connection to future undertakings at SNP.

REFERENCES

- Adovasio, James M., and W. C. Johnson
1981 Appearances of Cultigens in the Upper Ohio Valley: A View from Meadowcroft, Rockshelter. *Pennsylvania Archaeologist* 51(1-2):63-80
- Anderson, David G.
1990 The Paleoindian Colonization of Eastern North America: A View from the Southeastern United States. In *Early Paleoindian Economies of Eastern North America*, edited by Barry Issac and Kenneth Tankersley, pp. 163-216. *Journal of Economic Anthropology Supplement No. 5*.
- 1995a Paleoindian Interaction Networks in the Eastern Woodlands. In *Native American Interactions: Multiscalar Analyses and Interpretations in the Eastern Woodlands*, edited by Michael S. Nassaney and Kenneth E. Sassaman, pp. 3-26. University of Tennessee Press, Knoxville.
- 1995b Recent Advances in Paleoindian and Archaic Research in the Southeastern United States. *Archaeology of Eastern North America* 23:145-176.
- Anderson, David G., and Glen T. Hanson
1988 Early Archaic Settlement in the Southeastern United States: A Case Study from the Savannah River Valley. *American Antiquity* 53:262-286.
- Anderson, David G. and Robert C. Mainfort, Jr.
2002 An Introduction to Woodland Archaeology in the Southeast. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 1-19. The University of Alabama Press, Tuscaloosa.
- Anderson, David G., Lisa D. O'Steen, and Kenneth E. Sassaman
1996 Environmental and Chronological Considerations. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 3-15. University of Alabama Press, Tuscaloosa.
- Armstrong, Zella
1931 *The History of Hamilton County and Chattanooga, Tennessee, Volume I*. Overmountain Press, Johnson City, Tennessee.
- 1940 *The History of Hamilton County and Chattanooga Tennessee, Volume II*. Overmountain Press, Johnston City, TN.
- Bacon, Willard S.
1982 Structural Data Recovered from the Banks III Site (40-CF-108) and the Parks Site (40-CF-5), Normandy Reservoir, Coffee County, Tennessee. *Tennessee Anthropologist*. 7(2):176-197.

- Blitz, John H.
 1993 Big Pots for Big Shots: Feasting and Storage in a Mississippian Community. *American Antiquity* 58:80–96.
- Brackenridge, G. Robert
 1984 Alluvial Stratigraphy and Radiocarbon Dating along the Duck River, Tennessee: Implications Regarding Floodplain Origin. *Geological Society of America Bulletin* 95:9–25.
- Bradford, Thomas G.
 1835 Tennessee and Kentucky. American Stationer's Company, Boston.
- Braun, Lucy E.
 1950 *Deciduous Forests of Eastern North America*. Blakiston Press, Philadelphia.
- Broster, John B., and Emanuel Breitburg
 1995 *Preliminary Archaeological Investigations at 40WM31: A Possible Paleoindian/Mastodon Association in Middle Tennessee*. Paper presented at the 7th Current Research in Tennessee Archaeology meeting, Nashville.
- Buikstra, J.E., W.O. Autry, E. Breitburg, L. Eisenberg, and M. Van der Merwe
 1988 Diet and Health in the Nashville Basin: Human Adaptation and Maize Agriculture in Middle Tennessee. In *Diet and Subsistence: Current Archaeological Perspectives*, edited by B.V. Kennedy and G.M. LeMoine. Proceedings of the 19th Annual Chacmool Conference. University of Calgary.
- Butler, Brian M.
 1968 The Brickyard Site (40FR13). In *Archaeological Investigations in the Tims Ford Reservoir, Tennessee, 1966*, edited by C. H. Faulkner, pp. 142-213. University of Tennessee, Department of Anthropology, Report of Investigations 6.
 1971 *Hoover-Beeson Rockshelter, 40CN4, Cannon County, Tennessee*. Tennessee Archaeological Society Miscellaneous Paper No. 9.
- Calabrese, J. A., Victor P. Hood, and Gary R. Leaf
 1973 Preliminary Archaeological Survey of the Sequoyah Nuclear Power Plant Area. Manuscript report on file with TVA, Chattanooga, Tennessee.
- Cambron, James W., and David C. Hulse
 1986 *Handbook of Alabama Archaeology, Part I: Point Types*. Third printing. Alabama Archaeological Society, Huntsville.
- Chapman, Jefferson
 1973 *The Icehouse Bottom Site-40MR23*. University of Tennessee, Department of Anthropology, Report of Investigations No. 13. Knoxville.

- 1975 *The Rose Island Site and the Bifurcate Point Tradition*. University of Tennessee, Department of Anthropology, Report of Investigations No. 14. Knoxville.
- 1976 The Archaic Period in the Lower Little Tennessee River Valley: The Radiocarbon Dates. *Tennessee Anthropologist* 1(1):1–12.
- 1979 *The Howard and Calloway Island Sites*. University of Tennessee, Department of Anthropology, Report of Investigations No. 27. Knoxville.
- 1994 *Tellico Archaeology: 12,000 Years of Native American History*. University of Tennessee Press, Knoxville.
- 1985 *Tellico Archaeology: 12,000 Years of Native American History*. Tennessee Valley Authority, Publications in Anthropology No. 41. University of Tennessee Press, Knoxville.

Childress, Mitchell R., and C. Andrew Buchner

- 1992 *Prehistoric Archaeology of the Atkins (40PM85), Bilbrey (40PM89), and Wiley (40PM90) Sites*. Garrow & Associates, Inc., Memphis. Submitted to Tenneco Oil Company, Houston

Cincinnati Railroad Company

- 2009 Cincinnati Southern Railway Historical Timeline.

<http://cincinnati-southern-railway.org/about/historical-timeline.php>

Clowse, Barbara Barksdale

- 1998 *Ralph McGill: A Biography*. Mercer University Press, Macon, Georgia.

Cobb, James E., and Charles H. Faulkner

- 1978 *The Owl Hollow Project: Middle Woodland Settlement and Subsistence Patterns in the Eastern Highland Rim of Tennessee*. Submitted to the National Science Foundation.

Code of Federal Regulations (CFR)

- 2008a *Protection of Historic Properties*. Title 36, Part 800, Section 16, p. 108. Available online at: <http://www.gpoaccess.gov/cfr/>. Site accessed September 17, 2009.

- 2008b *National Register of Historic Places: Criteria for Evaluation*. Title 36, Part 60, Section 4, pp. 322-323. Available online at: <http://www.gpoaccess.gov/cfr/>. Site accessed September 17, 2009.

Cole, Gloria

- 1981 *The Murphy Hill Site (1MS300): The Structural Study of a Copena Mound and Comparative Review of the Copena Mortuary Complex*. Office of Archaeological Research, Research Series No. 3. University of Alabama, Tuscaloosa.

- Cowperthwait & Company
1850 A New Map of Tennessee. Thomas Cowperthwait and Company, Philadelphia.
- Crites, Gary
1978 Plant Food Utilization Patterns During the Middle Woodland Owl Hollow Phase in Tennessee: A Preliminary Report. *Tennessee Anthropologist* 3:79-92.
- Davis, R.P.S., Jr.
1990 *Aboriginal Settlement Patterns in the Little Tennessee River Valley*. University of Tennessee, Department of Anthropology, Report of Investigations No. 50. Knoxville.
- DeJarnette, David L., E. Kurjack, and J. Cambron
1962 Excavations at the Stanfield–Worley Bluff Shelter. *Journal of Alabama Archaeology* 8(1–2):1–124.
- Derry, Anne, H. Ward Jandl, Carol D. Shull, and Jan Thorman
1985 *Guidelines for Local Surveys: A Basis for Preservation Planning*. National Register Bulletin 24, U.S. Department of the Interior, National Park Service, Washington D.C. Located online at:
<http://www.cr.nps.gov/nr/publications/bulletins/nrb24/>. Accessed March 18, 2010.
- Deter-Wolf, Aaron
2004a The Ensworth School Site (40Dv184): A Middle Archaic Benton Occupation Along the Harpeth River Drainage in Middle Tennessee. *Tennessee Archaeology* 1(1) pp. 18–35.

2004b *The Ensworth School Site (40Dv184) and Late Middle Archaic Benton Occupations along the Harpeth River Drainage in Middle Tennessee*. Paper presented at the 61st annual meeting of the Southeastern Archaeological Conference, St. Louis, MO.
- Dice, Lee R.
1943 *The Biotic Provinces of North America*. University of Michigan Press, Ann Arbor.
- Douthat, James L.
1986 *Chickamauga Reservoir Cemeteries*. Mountain Press, Signal Mountain, Tennessee.
- Dowd, John T.
2008 The Cumberland Stone-Box burials of Middle Tennessee. *Tennessee Archaeology* 3(2):163–180.
- Dragoo, Don W.
1976 Some Aspects of Eastern North America Prehistory: A Review 1975. *American Antiquity* 41(1):3–27.

Driskell, Boyce N.

1994 Stratigraphy and Chronology at Dust Cave. *Journal of Alabama Archaeology* 40(1-2):17-34.

1996 Stratified Late Pleistocene and Early Holocene Deposits at Dust Cave, Northwestern Alabama. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 315-330. University of Alabama Press, Tuscaloosa.

Ehle, John

1988 *Trail of Tears: The Rise and Fall of the Cherokee Nation*. Anchor Books, New York.

Faulkner, Charles H.

1968 The Mason Site (40FR8). In *Archaeological Investigations in the Tims Ford Reservoir, Tennessee, 1966*, edited by C. H. Faulkner, pp. 142-213. University of Tennessee, Department of Anthropology, Report of Investigations 6.

1988 Middle Woodland Community and Settlement Patterns on the Eastern Highland Rim, Tennessee. In *Middle Woodland Settlement and Ceremonialism in the Mid-South and Lower Mississippi Valley*, edited by Robert C. Mainfort, pp. 77-98. Mississippi Department of Archives and History Archaeological Report No. 22. Jackson.

1992 *Terminal Archaic-Early Woodland Community Patterns in the Eastern Highland Rim of Tennessee*. Paper presented at the 12th Annual Mid-South Archaeological Conference, Mississippi State University.

Faulkner, Charles H., and Major C. R. McCollough

1973 *Introductory Report of the Normandy Reservoir Salvage Project: Environmental Setting, Typology, and Survey*. University of Tennessee, Department of Anthropology, Report of Investigations 11.

1974 *Excavations and Testing, Normandy Reservoir Salvage Project: 1972 Season*. University of Tennessee, Department of Anthropology, Report of Investigations 12.

Faulkner, Charles H., and Major C. R. McCollough (editors)

1977 *Fourth Report of the Normandy Archaeological Project*. University of Tennessee, Department of Anthropology, Report of Investigations 19.

1978a *Fifth Report of the Normandy Archaeological Project*. University of Tennessee, Department of Anthropology, Report of Investigations 20.

1978b *Sixth Report of the Normandy Archaeological Project*. University of Tennessee, Department of Anthropology, Report of Investigations 21 and Tennessee Valley Authority Publications in Anthropology 19.

1982a *Seventh Report of the Normandy Archaeological Project*. University of Tennessee, Department of Anthropology, Report of Investigations 23 and Tennessee Valley Authority Publications in Anthropology 29.

1982b *Eighth Report of the Normandy Archaeological Project*. University of Tennessee, Department of Anthropology, Report of Investigations 33 and Tennessee Valley Authority Publications in Anthropology 30.

Floyd, Lana

2006 Igou Cemetery Partial Listing.

<http://www.tngenweb.org/hamilton/cemetery/igoucem.htm>.

Fritz, Gayle J.

1997 A Three–Thousand–Year–Old Cache of Crop Seeds from Marble Bluff, Arkansas. In *People, Plants, and Landscapes: Studies in Paleoethnobotany*, edited by Kristin J. Gremillion, pp. 42–62. University of Alabama Press, Tuscaloosa.

Futato, Eugene M.

1977 *The Bellefonte Site: 1Ja300*. University of Alabama, Office of Archaeological Research, Research Series 2. University of Alabama, Tuscaloosa.

1979 *Cultural Resources Reconnaissance in the Wheeler National Wildlife Refuge, Alabama*. Office of Archaeological Research Report of Investigations No. 6, University of Alabama, Tuscaloosa.

Georgia Writers Hall of Fame

2006 Ralph Emerson McGill. University of Georgia Libraries, Athens. Online document, <http://www.libs.uga.edu/gawriters/mcgill.html>. Accessed 22 February 2010.

Goodyear, Albert C.

1988 On the Study of Technological Change. *Current Anthropology* 29:320–323.

Gremillion, Kristin J.

1998 Changing Roles of Wild and Cultivated Plant Resources among Early Farmers of Eastern Kentucky. *Southeastern Archaeology* 17:140–157.

2002 The Development and Dispersal of Agricultural Systems in the Woodland Period Southeast. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 483–501. The University of Alabama Press, Tuscaloosa.

Haag, William G.

1939 Pickwick Basin Pottery Type Descriptions. *Southeastern Archaeology Conference Newsletter* 1(1):1–17.

1942 Pickwick Basin Pottery. In *An Archaeological Survey of Pickwick Basin in the Adjacent Portions of the States of Alabama, Mississippi, and Tennessee*, edited

by William S. Webb and David L. DeJarnette, pp. 509–526. Bulletin 129, Bureau of American Ethnology, Washington, D.C.

Heimlich, Marion D.

1952 *Guntersville Basin Pottery*. Geological Survey of Alabama Museum Paper 32. University of Alabama, Tuscaloosa.

Jackson, Bedford W.

1982 *Soil Survey of Hamilton County, Tennessee*. United States Department of Agriculture, Soils Conservation Service.

Jefferies, Richard W.

1994 The Swift Creek Site and Woodland Platform Mounds in the Southeastern United States. In *Ocmulgee Archaeology, 1936–1986*, edited by D.J. Hally, pp. 71–83. University of Georgia Press, Athens.

Jenkins, Ned J.

1974 Subsistence and Settlement Patterns in the Western Middle Tennessee Valley during the Transitional Archaic–Woodland Period. *Journal of Alabama Archaeology* 20:183–193.

1975 The Wheeler Series and Southeastern Prehistory. *Florida Anthropologist* 18(1): 17–26.

Johnson, Jay K., and Samuel O. Brookes

1989 Benton Points, Turkey Tails, and Cache Blades: Middle Archaic Exchange in the Midsouth. *Southeastern Archaeology* 8:2.

Jolley, Robert L.

1979 Archaeological Reconnaissance in the Headwaters of the Caney Fork River in Middle Tennessee. *Tennessee Anthropologist* 4:32-62.

Kelly, Robert L., and Lawrence C. Todd

1988 Coming into the Country: Early Paleoindian Hunting and Mobility. *American Antiquity* 53:231–244.

Klippel, Walter E., and Paul W. Parmalee

1982 Diachronic Variation in Insectivores from Cheek Bend Cave and Environmental Change in the Midsouth. *Paleobiology* 8(4):447–458.

Ledbetter, R. Jerald, W. Dean Wood, Karen G. Wood, Robbie F. Ethridge, and Chad O. Braley

1987 Cultural Resources Survey of Allatoona Lake Area, Georgia. Volume 1: Final Report. Southeastern Archeological Services, Inc., Athens.

Lewis, T.M.N., and M.D. Kneberg Lewis

1995 The McGill Site. In *The Prehistory of the Chickamauga Basin in Tennessee*, ed. by L.P. Sullivan, pp. 295-300. University of Tennessee Press, Knoxville.

Library of Congress

- 1864 [Map of the environs of Chattanooga, showing roads, railroads, towns, houses, names of residents, drainage, and relief by hachures]. Reference *Civil War Maps: An Annotated List of Maps and Atlases in the Library of Congress*, by Richard W. Stephenson. 2nd ed. Library of Congress, Washington, D.C. Published online, <http://hdl.loc.gov/loc.gmd/g3964c.cws00165>.

Livingood, James W.

- 1981a Hamilton County. In *Tennessee County History Series*, edited by Joy Bailey Dunn and Charles W. Crawford. Memphis State University Press, Memphis, Tennessee.

- 1981b *A History of Hamilton County, Tennessee*. Memphis State University Press, Memphis, Tennessee.

Lucas, Fielding

- 1822 Geographical, Statistical and Historical Map of Tennessee. Carey and Lea, Philadelphia.

McCollough, C. R., and Glenn DuVall

- 1976 Results of 1973 Testing. In *Third Report of the Normandy Reservoir Salvage Project*, edited by C. R. McCollough and C.H. Faulkner, pp. 27-140. University of Tennessee, Department of Anthropology, Report of Investigations 16.

McCollough, C. R., and Charles H. Faulkner (editors)

- 1976 *Third Report of the Normandy Reservoir Salvage Project*. University of Tennessee, Department of Anthropology, Report of Investigations 16.

Meeks, Scott C.

- 2000 *The Use and Function of Late Middle Archaic Projectile Points in the Midsouth*. University of Alabama Museums Office of Archaeological Services Report of Investigations 77. University of Alabama Museums, Moundville.

Miller, Carl F.

- 1957a Field Impressions of the Archaeology of Russell Cave, Northern Alabama. *Eastern States Archaeological Federation Bulletin* 16:10-11.

- 1957b Radiocarbon Dates from an Early Archaic Deposit in Russell Cave, Alabama. *American Antiquity* 23(1):84.

- 1965 Paleo-Indian and Early Archaic Projectile Point Forms from Russell Cave, Northern Alabama. *Anthropological Journal of Canada* 3(2):2-5.

Miller, Robert A.

- 1974 *The Geologic History of Tennessee*. Tennessee Division of Geology, Bulletin 74. Nashville.

- Mitchell, Samuel Augustus
1857 A New Map of Tennessee. Charles Desilver, Philadelphia.
- Moore, Clarence B.
1915 *Aboriginal Sites on Tennessee River*. Academy of Natural Sciences, Philadelphia, Pennsylvania.
- Morrow, Juliet E.
1996 *The Organization of Early Paleoindian Lithic Technology in the Confluence Region of the Mississippi, Illinois, and Missouri Rivers*. PhD. Dissertation, Department of Anthropology, Washington University, St. Louis.
- Nassaney, Michael S., and Charles R. Cobb
1991 Patterns and Process of Late Woodland Development in the Greater Southwestern United States. In *Stability, Transformation, and Variation: The Late Woodland Southeast*, edited by Michael S. Nassaney and Charles R. Cobb, pp. 285–322. Plenum Press, New York.
- National Register of Historic Places (NRHP)
2002 *How to Apply the National Register Criteria for Evaluation*. National Register Bulletin 15, U.S. Department of the Interior, National Park Service, Washington D.C. Located online at:
<http://www.cr.nps.gov/nr/publications/bulletins/nrb15/>. Accessed March 17, 2010.
- Nicholson, W. L.
1877 Postal Route Map of the State of Tennessee. U.S. Postmaster General, Washington, D.C.
- Official Records of the Union and Confederate Armies
1890 *The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies*. Series I, Volume 31, Part I. Compiled by Robert N. Scott. Government Printing Office, Washington, D.C.
- Peacock, Evan
1988 Benton Settlement Patterns in North-Central Mississippi. *Mississippi Archaeology* 23(1):12–33.
- Sassaman, Kenneth E.
1993 *Early Pottery in the Southeast: Tradition and Innovation in Cooking Technology*. University of Alabama Press, Tuscaloosa.

2002 Woodland Ceramic Beginnings. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 398–420. The University of Alabama Press, Tuscaloosa.
- Saunders, Joe W., Thurman Allen, and Roger T. Saucier
1994 Four Archaic? Mound Complexes in Northeast Louisiana. *Southeastern Archaeology* 13:134–153.

Schroedl, Gerald F.

1975 *Archaeological Investigations at the Harrison Branch and Bat Creek Sites.* University of Tennessee, Department of Anthropology, Report of Investigations No. 10. Knoxville.

1978 *The Patrick Site, Tellico Reservoir.* University of Tennessee, Department of Anthropology, Report of Investigations No. 25. Knoxville.

Smith, Kevin E.

1992 *The Middle Cumberland Region: Mississippian Archaeology in North Central Tennessee.* Ph.D. dissertation, Department of Anthropology, Vanderbilt University, Nashville.

Tennessee Geological Survey

1913 Topographic Map Showing Outcrops of Rockwood Iron Ore Beds in Southeast Tennessee. Tennessee Geological Survey, Nashville.

Tennessee Valley Authority (TVA)

n.d. Sequoyah Nuclear Plant. Online document, <http://www.tva.gov/sites/sequoyah.htm>. Accessed March 3, 2010.

1936 Snow Hill, Tennessee, 7.5-minute quadrangle map. Advance Sheet. TVA and U.S. Geological Survey, Washington, D.C.

1937 Chickamauga Reservoir Land Map, 8-4160-20. TVA Real Estate Division, Chattanooga, Tennessee.

1938 McGill Cemetery. Cemetery Relocation Files, Chickamauga Reservoir, RG 142, Records of the Tennessee Valley Authority, National Archives and Records Administration, Southeast Region Branch, Morrow, Georgia.

1940 Igou Cemetery. Cemetery Relocation Files, Chickamauga Reservoir, RG 142, Records of the Tennessee Valley Authority, National Archives and Records Administration, Southeast Region Branch, Morrow, Georgia.

1942 Snow Hill, Tennessee, 7.5-minute quadrangle map. TVA and U.S. Geological Survey, Washington, D.C.

1967 Chickamauga Reservation, Sheet 20-D. Photorevised. Originally surveyed in 1959. TVA Real Estate Division, Chattanooga, Tennessee.

1983 *Final Cost of Sequoyah Nuclear Plant Units 1 and 2.* Tennessee Valley Authority, Chattanooga, Tennessee. On file, TVA library, Chattanooga.

Walthall, John A.

1972 The Chronological Position of Copena in Eastern States Archaeology. *Journal of Alabama Archaeology* 28(2):137–151.

- 1973 *Copena: A Tennessee Valley Middle Woodland Culture*. Unpublished Ph.D. dissertation on file, University of North Carolina, Chapel Hill.
- 1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama and the Middle South*. University of Alabama Press, Tuscaloosa.
- Walthall, John A., and Ned J. Jenkins
1976 The Gulf Formational Stage in Southeastern Prehistory. *Southeastern Archaeological Conference Bulletin* 19, Memphis.
- Waring, A.S., and P. Holder
1945 A Prehistoric Cultural Complex in the Southeastern United States. *American Anthropologist* 47:1-34.
- Watson, Patty Jo
1989 Early Plant Cultivation in the Eastern Woodlands of North America. In *Foraging and Farming: The Evolution of Plant Exploitation*. Unwin Hyman, London.
- Webb, William S.
1939 An Archaeological Survey of Wheeler Basin on the Tennessee River in Northern Alabama. *Smithsonian Institution Bureau of Ethnology Bulletin* 122. Government Printing Office, Washington, D.C.
- Webb, William S., and Charles G. Wilder
1951 *An Archaeological Survey of the Guntersville Basin on the Tennessee River in Northern Alabama*. University of Kentucky Press, Lexington.
- Wood, W. Dean and William R. Bowen
1995 *Woodland Period Archaeology of Northern Georgia*. Laboratory of Archaeology Series Report No. 33, Department of Anthropology, University of Georgia, Athens.



TENNESSEE HISTORICAL AND ARCHITECTURAL RESOURCE

Tennessee Historical Commission
Department of Environment and Conservation
Nashville, Tennessee 37243-0442

HISTORIC DATA

1. County/Survey Number MA - H15111
2. Historic Name
3. Common Name
4. Address 2703 LIGON FERRY ROAD 5. City SPIDERS-DARBY *vicinity*
6. Owner
7. Quad Map 8. Other Maps
9. UTM
Zone Easting Northing
10. Longitude Latitude
11. Date of Construction 1930 12. Bulder
13. NR Eligible N - Y
Y/N Surveyor Staff Opinion Consensus Formal Listed
1 2 3 4 5

Comments: _____

14. Comprehensive Planning Themes: Theme 1 Theme 2 Theme 3 Theme 4 Other _____

Early Exploration 01	Early Settlement 02	Agriculture 03	Commerce and Industry 04
Transportation 05	Religion/Philosophy Movements & Leaders 06	Political/Government 07	Military Affairs 08
Education 09	Science & Technology 10	Art & Architecture 11	Society & Customs 12
			Other 99

15. Ethnic Affiliation Other _____

Anglo-American 1	Afro-American 2	Hispanic 3	Asian-American 4	Native American 5	Other 9
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45. Foundation Configuration Other _____ Continuous _____ Piers _____ Other _____
1 2 3

46. Plan Other _____

- | | | | | | |
|-------------------|------------------|-----------------|---------------------------|---------------------|-------------|
| One Room
01 | Double-pen
02 | Dog-Trot
03 | Central Hall
04 | Hall & Parlor
05 | |
| Rectangular
06 | Square
07 | Irregular
08 | Standard Commercial
09 | T-Shaped
10 | Other
99 |

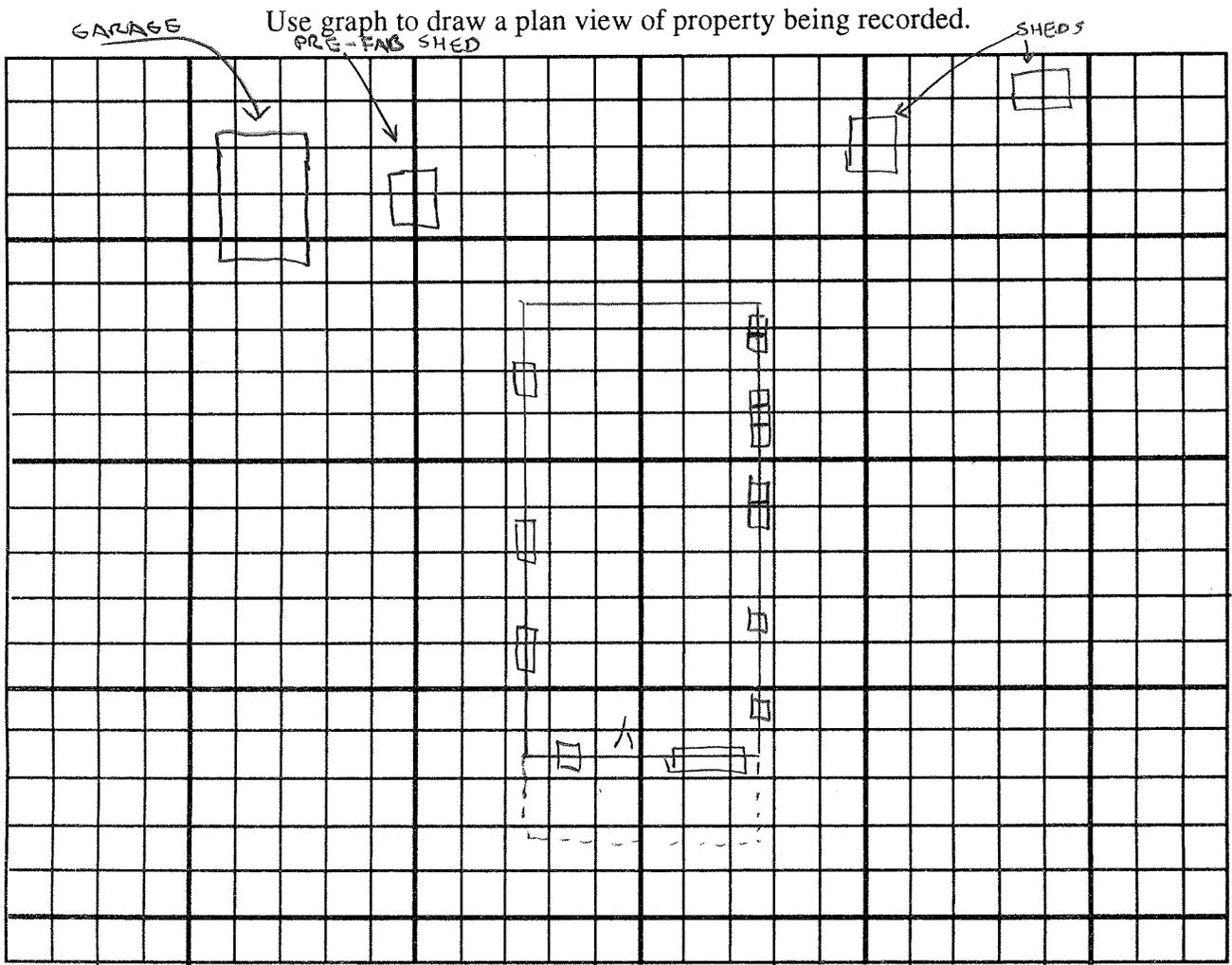
47. Wings and Additions: Primary Secondary Other _____

- | | | | | | | | |
|----------------|-------------|-------------|-----------|-----------|------------------|-------------------------|------------|
| Rear Shed
1 | Rear L
2 | Rear T
3 | Side
4 | Prow
5 | Other Front
6 | Additional Stories
7 | Other
9 |
|----------------|-------------|-------------|-----------|-----------|------------------|-------------------------|------------|

48. Landscape Feature Y/N

- | | | | | | |
|-------------|---------------|--------------------|-----------------|------------------------|------------|
| Garden
1 | Cemetery
2 | Park/Statuary
3 | Rural/Farm
4 | Planned Community
5 | Other
9 |
|-------------|---------------|--------------------|-----------------|------------------------|------------|

49. Comments: _____





TENNESSEE HISTORICAL AND ARCHITECTURAL RESOURCE

Tennessee Historical Commission
Department of Environment and Conservation
Nashville, Tennessee 37243-0442

HISTORIC DATA

1. County/Survey Number 14A - 45-2
2. Historic Name _____
3. Common Name IGOU CEMETERY
4. Address SEQUOYAH NUCLEAR PLANT 5. City SODDY-DAISY
6. Owner _____
7. Quad Map 112 NE 8. Other Maps _____
9. UTM _____
Zone Easting Northing
10. Longitude _____ Latitude _____
11. Date of Construction c. 1844-1925 12. Builder _____
13. NR Eligible Y-N Surveyor Staff Opinion Consensus Formal Listed
Y/N 1 2 3 4 5

Comments: CEMETERY CONTAINS ABOUT 44 GRAVES,
ONLY 26 HEADSTONES ARE EXTANT, BUREAUX WAREHOUSES
ASSOCIATED WITH THE IGOU FAMILY

14. Comprehensive Planning Themes: Theme 1 02 Theme 2 _____ Theme 3 _____ Theme 4 _____ Other _____

Early Exploration 01	Early Settlement 02	Agriculture 03	Commerce and Industry 04
Transportation 05	Religion/Philosophy Movements & Leaders 06	Political/Government 07	Military Affairs 08
Education 09	Science & Technology 10	Art & Architecture 11	Society & Customs 12
			Other 99

15. Ethnic Affiliation Other _____

Anglo-American 1	Afro-American 2	Hispanic 3	Asian-American 4	Native American 5	Other 9
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31. Construction Frame Log Brick Stone Other _____
1 2 3 4 9

32. Height (Stories)

33. Roof Configuration Other _____
Gable 01 Gable With Parapet 02 Clipped Gable 03
Salt Box 04 Hip 05 Pyramid 06 Gambrel 07 Mansard 08 Belcast 09 Flat 10

34. Roof Material Other _____
Asphalt Shingles 1 Metal 2 Wooden Shakes 3 Slate 4 Tile 5 Other 9

35. Roof Original?
Y/N

36. Window Configuration Other _____
Double-hung 1 Triple-hung 2 Stationary 3 Casement 4 Other 9

37. Lights/Panes -

38. Principal Porch Configuration Other _____
Full 1 3/4 2 1 Bay Central 3 1 Bay Other 4 Wrap-around 5 Other 9

39. Principal Porch Height (Stories)

40. Principal Porch Integrity Other _____
Original 1 Altered 2 Removed/No Replacement 3 Reconstruction 4 New Construction 5 Other 6

41. Wallcovering Other _____
Log 01 Weatherboard 02 Board & Batten 03 Brick 04 Brick Veneer 05 Stone 06 Stone Veneer 07
Synthetic Siding 08 Stucco 09 Other 99

42. Chimney Placement A B C D Other _____
Exterior End 1 Interior End 2 Exterior other than End 3 Interior Central 4 Other Interior 9

43. Chimney Construction Material A B C D Other _____
Brick 1 Stone 2 Brick & Stone 3 Wood (Mud Cat) 4 Other 9

44. Foundation Material Other _____
Wood 1 Stone 2 Brick 3 Cast Concrete 4 Concrete Blocks 5 Other 9

45. Foundation Configuration Other _____ Continuous _____ Piers _____ Other _____
 1 2 3

46. Plan Other _____

- | | | | | | |
|-------------------|------------------|-----------------|---------------------------|---------------------|-------------|
| One Room
01 | Double-pen
02 | Dog-Trot
03 | Central Hall
04 | Hall & Parlor
05 | |
| Rectangular
06 | Square
07 | Irregular
08 | Standard Commercial
09 | T-Shaped
10 | Other
99 |

47. Wings and Additions: Primary Secondary Other _____

- | | | | | | | | |
|----------------|-------------|-------------|-----------|-----------|------------------|-------------------------|------------|
| Rear Shed
1 | Rear L
2 | Rear T
3 | Side
4 | Prow
5 | Other Front
6 | Additional Stories
7 | Other
9 |
|----------------|-------------|-------------|-----------|-----------|------------------|-------------------------|------------|

48. Landscape Feature —
 Y/N

- | | | | | | |
|-------------|---------------|--------------------|-----------------|------------------------|------------|
| Garden
1 | Cemetery
2 | Park/Statuary
3 | Rural/Farm
4 | Planned Community
5 | Other
9 |
|-------------|---------------|--------------------|-----------------|------------------------|------------|

49. Comments: CEMETERY IS LOCATED WITHIN THE
BOUNDARIES OF THE SEQUOYAH NUCLEAR PLANT

Use graph to draw a plan view of property being recorded. *SEE ATTACHED PLAN*

