

KNOXVILLE SOUTH WATERFRONT, TENNESSEE

PUBLIC IMPROVEMENTS



Cultural Context, Archaeological Research Design, and Phase I Survey Results for Cherokee Trail Connector/Spring Water Center and Baker Creek Landing, Knoxville South Waterfront Project



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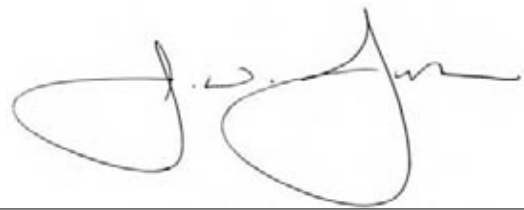
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Water Center and Baker Creek Landing,
Knoxville South Waterfront Project,
City of Knoxville, Knox County, Tennessee

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MANAGEMENT SUMMARY

The City of Knoxville, Knox County, Tennessee, has developed a plan for developing and enhancing areas south of the Tennessee River/Fort Loudon Lake. Known as the Knoxville South Waterfront Public Improvement Project, this plan represents a multi-year revitalization effort that will include 12 locations along the riverfront and adjacent uplands. The proposed undertakings require federal permitting from the Tennessee Valley Authority, which serves as the lead federal agency for the project, and US Army Corps of Engineers. As part of the permitting process, New South Associates, Inc., has developed cultural contexts for the Knoxville South Waterfront and compiled information on previously recorded cultural resources in the project vicinity. In addition, New South developed a research design for conducting Phase I archaeological and historic architectural surveys of the individual project sites. The research design characterizes the general archaeological sensitivity of the project vicinity and provides historical overviews and proposed survey strategies for each location.

This report also describes the methods and results of Phase I archaeological survey of three project sites: Cherokee Road Connector/Spring Water Center (Sites 1 and 12) and Baker Creek Landing (Site 11). Combined, these three areas contained 5.9 hectares (14.6 acres). These three project areas exhibited substantial disturbance from prior grading and road construction as well as erosion. They also showed excessive slopes in uplands and poor drainage in valley bottoms. Surface inspection and shovel testing, where warranted, resulted in the identification of a single archaeological site, 40KN299, representing an abandoned railroad spur probably dating to the twentieth century. This feature lacks a strong research potential and therefore is recommended not eligible for the National Register of Historic Places. Except for this lone resource, the project area possesses a low potential for additional archaeological resources. Consequently, New South recommends no further archaeological study for these three project areas.

A qualification to this recommendation relates to parcels on the west side of West Blount Avenue in the Cherokee Trail Connector project area. The owner of these parcels refused permission to enter the property and they still require survey.

Finally, the report provides recommendations for backhoe trench survey in two project sites: the River Road and River Plain Park (Site 9) and Lincoln Street Landing (Site 10). These sites are to be included in a pending permit application. Due to scheduling concerns, it cannot be surveyed ahead of the permitting process, and it is recommended that archaeological fieldwork be conducted at the time of construction. Protocols should be established for proceeding with construction in the event that any sites are found.

ACKNOWLEDGEMENTS

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I. INTRODUCTION

The City of Knoxville, Tennessee is planning and designing a series of rehabilitation projects along the south side of the Tennessee River/Fort Loudon Lake. The City of Knoxville Council adopted the Knoxville South Waterfront Vision and Action Plan in 2006. The 20-year goal of the plan is to transform the south side of the downtown riverfront with a careful balance of development, preservation and enhancement. The plan proposes to revitalize the under-valued, predominantly industrial properties and improve the riverfront's environmental, recreational, cultural resource, civic, and economic qualities. Implementation steps that have been taken include the City's establishment of a Redevelopment District and the adoption of Form-based Development Codes for the South Waterfront.

The City is now shifting from a long-term planning focus to short-term project design and implementation. The Action Plan identified and budgeted several public improvement projects that would assist in achieving the City's goals in the next 5 years. These public projects were selected based on their ability;

- to improve roads and open space hand-in-hand with development by property owners
- to be separable in case funding is not available or the market changes,
- to geographically distribute equitably between neighborhoods,
- to set benchmark standards for years to come.

The initial Knoxville South Waterfront proposes 12 individual projects to choose from depending on priorities, funding and land owner consent. If implemented together the projects include;

- over 7 acres of new roads and road improvements that can help water quality,
- over 16 acres of new waterfront open space created from private land that will connect to other trails and greenways,
- over 10 acres of improvements to existing public land that opens up the use of the best water of all - the quarry,
- over 23 acres of private development potential unlocked in the short-term,
- an "urban wild" full of diversity and surprise,
- an everyday getaway for residents, citizens and visitors to enjoy waterfront living.

These projects are collectively known as the Knoxville South Waterfront project; further information about the project may be obtained at <http://www.cityofknoxville.org/southwaterfront/default.asp>.

Public improvements planned for the South Waterfront project included roads, streetscapes, riverwalks, and open space/parks. The City of Knoxville has contracted with Hargreaves and Associates to serve as the planner/designer for this waterfront improvement project. The City of Knoxville is currently planning Phase I, which involves 12 locations: Cherokee Trail Connector, Goose Creek Landing, Pedestrian Bridge, City View, Henley Gateway, Shoals Riverwalk, Gay Street Stair, Sevier Street & Council Place, River Plan Park, Lincoln Street Landing, Baker Creek Landing, and the Springs Outdoor Center. Project efforts may also involve the Gay Street and Henley Street bridges (Figure 1).

The proposed actions will require federal permitting from the Tennessee Valley Authority (TVA) and/or the U.S. Army Corps of Engineers. For this project, the TVA will serve as the lead federal agency. Permitting requirements of the South Waterfront project will require compliance with the National Historic Preservation Act (NHPA) and Section 106, which requires that archaeological sites and historic structures that may be affected by federally permitted undertakings be identified, assessed for their eligibility for nomination to the National Register of Historic Places (NRHP), and that if National Register eligible properties are identified, that the project's effects be taken into consideration. To facilitate compliance with the NHPA, Hargreaves and Associates has contracted with New South Associates (New South) to prepare this Research Design. This document presents the environmental, prehistoric, and historic contexts of the South Waterfront, identifies known archaeological sites and historic properties in the area, presents research topics that will guide archaeological survey, and describes each of the Phase I project areas along with recommended survey approaches for each. While this document is specifically written in response to the current phase of proposed waterfront improvements, the cultural background is intended for use on future projects along the waterfront.

Of the 12 initial development projects, archaeological survey has been completed for the City View project (Koch 2005) and no further action is required for this location. Archaeological survey has also been performed for the Cherokee Trail Connector/Spring Water Center projects and the Baker Creek Landing project. These surveys are described in this report. Investigations are planned for the River Plain/Lincoln Landing projects as well. These investigations are scheduled to coincide with construction.

The remainder of this document is organized as follows: Chapters II to IV present environmental, prehistoric and historic overviews of the South Knoxville area. Chapter V describes the Existing Resources, including archaeological sites and historic structures/districts that are known for the project area. Chapter VI presents the Archaeological Research Design, which establishes the questions to be asked at the survey phase. Chapter VII provides the Phase I Project Area Histories and Survey Approach, which outlines what is known about each of the Phase I project areas and the recommended techniques for conducting the archaeological survey. Chapter VIII describes the methods and results of Phase I survey in selected project sites. Finally, Chapter IX provides a summary of the work and recommendations regarding further historic preservation activities. References Cited follow Chapter IX.



Figure 1.
Knoxville South Waterfront Phase I Project Locations

II. ENVIRONMENTAL CONTEXT

Knox County lies within the Southern Appalachian Ridges and Valleys physiographic province. The region is characterized by northeast-southwest trending mountain ranges created by extreme faulting and folding events, as well as differential erosion, mass wasting, fluvial erosion, and transport and deposition. Ridges and valleys are roughly parallel throughout the region and exhibit a variety of widths, heights, and geologic materials. Rock units formed during the Paleozoic Era consist of a mosaic of marine deposits of Lower Cambrian clastic rocks and a mixture of marine deposits of Cambrian, Lower Ordovician, and Mississippian ages. Specific minerals include limestone, dolomite, shale, siltstone, sandstone, chert, mudstone, and marble (McNab and Avers 1994; US Environmental Protection Agency 2002).

The south side of the Tennessee River Valley in the project area exhibits variable terrain. Upland zones encompass high, narrow ridges divided by deep, steep-walled valleys. Terraces of the Tennessee River show little relief and elevations are at about 250 meters (830 ft) asl.

Soils mapped the project area reflect upland formation processes, as well as those associated with alluvial activity and urban development. In upland portions of the project area, notably the Cherokee Trail/Spring Water project areas, soils are primarily of the Coghill-Corryton Complex on 12 to 25 percent and 25 to 65 percent slopes. These soils are very deep, well-drained and clayey materials that formed in residuum derived from interbedded sandstone and shale. They are on ridge tops, shoulders, and side slopes, while the steeper components of this complex are on foot slopes and toe slopes. The soils contain channers and gravel of sandstone and shale. In the bottomland along Goose Creek Steadman silt loam dominates. These soils consist of very deep, moderately well-drained material on floodplains and low terraces. The parent material of these soils consists of mixed alluvium from shale and limestone. The seasonal water table ranges from 50 to 100 centimeters (1.5-3.0 ft) and the soils are occasionally flooded (Hartgrove 2006). These soils have different implications for archaeological survey. The upland soils formed in residuum, and therefore archaeological materials would tend to lie at or near the present ground surface. The alluvial soils in the bottomland have a potential for buried deposits, but the tendency for flooding and high water table implies that locations associated with these soils would not be attractive for human occupation (Hartgrove 2006).

Along the Tennessee River terraces, soils are mostly classified as Urban land, consisting of areas in which the natural soil has been altered and covered by impervious materials that do not permit observation of the underlying soil. This classification indicates the degree of disturbance that has taken place on these landforms, particularly cutting and filling. Other soils that have been mapped along the river occur in narrow strips at the edge of the T1 terrace. These include Etowah loam (2-5% slopes), Loyston-Talbat Rock outcrop complex (15-50% slopes), Shady loam (2-5% slopes), and Waynesboro loam, 12-25% slopes). Etowah loam is a well-drained soil that formed in alluvium or colluvium commonly underlain by limestone residuum. It occurs on high stream terraces, alluvial fans, and foot slopes. The Loyston-Talbot rock outcrop complex consists of well-drained materials on shoulders, side slopes, and backslopes. Areas in this mapping unit include limestone outcrops

that occur as individual rocks, ledges, or bluffs. Shady series soils are deep, well-drained materials on stream terraces. These soils formed in alluvium weathered from sandstone, limestone, and shale. Finally, Waynesboro soils are well-drained materials on high stream terraces that formed in old alluvium (Hartgrove 2006).

The nature of the soil on the floodplains has implications for archaeological sensitivity. Well-drained soils are most commonly associated with human occupation of any duration. Moreover, the presence of alluvial soils suggests the possibility that buried cultural deposits might exist in the project area. In locations mapped as Loyston-Talbat Rock outcrop, there is the possibility of rock faces or landforms that might attract prehistoric settlement. Urban land is difficult to assess with respect to archaeological potential. While cut areas generally have a low potential for archaeological resources, locations containing fill might possess buried cultural deposits.

The region has a moderate density of small to medium perennial streams and associated rivers. The principal rivers and streams form a trellis drainage pattern (McNab and Avers 1994; Hartgrove 2006). The project areas lie in the Tennessee River drainage basin. Most of the project sites lie immediate adjacent to the Tennessee. The Cherokee Trail/Spring Water project areas, however, are associated with Goose Creek, a mid-order Tennessee River tributary that empties into the larger watercourse approximately 0.3 kilometers (0.2 miles) northwest of the project area.

The region contains a diverse biotic community. The dominant vegetation once consisted of a mixed oak-chestnut forest (Braun 1950). Logging and decimation of American chestnut, however, have produced a greatly changed landscape in which oak and hickory dominate the forests with poplars, hemlock, and other hardwoods in localized stands where conditions favor them. The region also exhibits characteristics of mixed Appalachian forests, which are diverse complexes that combine overlapping communities, the precise mix of which depends on factors such as elevation, terrain, or other influences. The Cove Forest is a unique community in the Appalachian region and is dominated by White Basswood, Carolina Silverbell, Tuliptree, Yellow Buckeye, Sugar Maple, Red Maple, Yellow Birch, and over 20 other species (Kircher 1988:71-73).

These diverse habitats provided a rich source of plant resources for prehistoric and historic human populations, and also supported animals having economic significance for people. Among the species that are or were present in the region, and that might provide food or other products for human consumption, are mammals including white tailed deer, black bear, squirrel, and raccoon. Bird species include wild turkey, ducks, and migratory waterfowl. The Tennessee River and larger tributaries contain numerous fish, native species including brook trout, sucker, rock bass, and smallmouth bass.

III. PREHISTORIC OVERVIEW

The Tennessee River has witnessed successive occupations of varying intensities during prehistory. This chapter provides an overview of the prehistory of the area surrounding Knoxville, which sets the stage for archaeological research questions regarding prehistoric settlement and recommended survey strategy.

PRE-CLOVIS/PRE-PALEOINDIAN PERIOD (>12,000 B.P.)

Prehistoric occupations predating diagnostic Clovis occupations in the Southeast (pre-Clovis) have been highly debated for decades. The climate during this period was characterized by full glacial conditions of the Pleistocene, and the Southeast was much colder and drier than present. Traditionally, it was thought that no prehistoric peoples occupied the Southeast during this time span (Anderson and Sassaman 1996:8). However, deeply buried sites along the Atlantic littoral have increasingly revealed evidence of possible pre-Clovis occupations. Pre-Clovis/pre-Paleo Sites that have been investigated in the eastern U.S. include Meadowcroft Rockshelter (36WH297), Page-Ladson (8JE591), Topper (38AL23), Cactus Hill (44SX202), Little Salt Spring (8SO18), and Saltville (44SM37) (Anderson 2005). Ongoing research at these sites suggests that there was one or more occupation(s) that predated the Paleoindian period in the Southeast. Greater accuracy and variety of absolute dating methods, along with sampling of deeper deposits, have advanced comprehension of this occupation (as has been suggested in South America).

Currently, there is no defined artifact type that is diagnostic of the pre-Clovis occupation. The absence of diagnostic artifacts implies that pre-Clovis materials can be easily overlooked. Nonetheless, in the absence of readily recognizable artifacts, other sources of evidence seem to suggest Pre-Clovis occupation.

The Page-Ladson site, located south of the current project area in the Florida panhandle, shows stratified deposits of late Pleistocene and early Holocene animal bones associated with artifacts. Dates of these deposits range from 14,500 to 12,500 B.P. Judging from this evidence, the earliest dates for artifacts recovered from Page-Ladson are roughly 1,500 years before the advent of the Clovis culture (Brown 1994).

The Topper site, which also contains possible pre-Clovis material, is located in the Coastal Plain of South Carolina, not far below the Fall Line. Excavations at the Topper site extended below a Clovis layer, through a red paleosol zone, and exposed white Pleistocene alluvial sands (Pleistocene terrace), which are believed to be the pre-Clovis zone for this site. Within this Pleistocene layer, small flakes, some with bend break fractures, were recovered. Two radiocarbon samples were submitted from the Topper site, which resulted in dates of 50,300 B.P. and 51,700 B.P. (Goodyear 2005).

Proponents of the Clovis-first hypothesis (after Meltzer 1991) argue that the pre-Clovis artifacts reported from these sites are the results of other factors such as bioturbation and displacement from overlying Paleoindian deposits. The Clovis-first hypothesis relies more heavily on rapid migration and occupation through North and South America over a period of approximately 1,500 years. Proponents of this hypothesis criticize the samples dated from pre-Clovis contexts, stating the dates are skewed by contamination; however, the growing data for a pre-Clovis population that relied on a blade technology and exploited a variety of food resources is mounting and the existence of a pre-Clovis culture is gaining greater acceptance within the archaeological community.

PALEOINDIAN PERIOD (12,000 TO 10,000 B.P.)

The earliest documented prehistoric occupation of Tennessee is the Paleoindian period, generally dated as 12,000 to 10,000 B.P. In spite of increasing research on the Paleoindian period, there are few systematically excavated sites in the Southeast that have produced diagnostic Paleoindian artifacts (particularly Clovis types) and even fewer such sites that contain more than surface materials. Given the current level of information available, Anderson (2005) suggests that at least some people were in the region prior to the widespread occurrence of Clovis technology, and that the Paleoindian tool assemblage is the radiation of an earlier reproductively viable culture. To date, interpretation of the early inhabitants has been highly debated (e.g. Anderson and Sassaman 1996). There is consensus that the Paleoindian period is a time of great environmental and cultural change in the Southeast, as climate shifts were reflected by cultural change.

Increasing knowledge of climate change during the Late Pleistocene/Early Holocene transition has provided greater comprehension of the related sub-regional cultural developments in the Southeast. During this cultural period, the drier, colder conditions of the Late Pleistocene gave way to the warmer, wetter conditions of the Early Holocene. These shifts were not in place until the terminal Paleoindian period, when in areas north of the 33° N latitude, "patchy" enclaves of xeric boreal forests were replaced with mesic oak-hickory forests. These climate changes shaped the biotic resource structure and influenced prehistoric group size, technological organization, and mobility patterns (Cable 1982, Anderson and Hanson 1988, Anderson et al. 1990:5). The boreal forest environment was suited for a logistical strategy (after Binford 1980) using a highly developed toolkit. By the Early Holocene, climate change resulted in the expansion of the oak, hickory, and southern pine forests in the Piedmont and Ridge and Valley provinces.

Researchers in the Southeast have suggested that high mobility, low population density, and hunting characterized Paleoindian occupations in the region (Anderson and Joseph 1988). Of the intact Paleoindian contexts, several models of settlement have been proposed. These models focus on specific economic strategies utilized within a given environment and emphasize one of the following variables:

1. High-quality lithic resource distribution (e.g., Gardner 1983);
2. Exploitation of specific habitat zones and staging areas (e.g., Anderson 1995);
3. (Semi-)Nomadic movement closely related to availability of large game primarily Pleistocene mega fauna (e.g., Kelly and Todd 1988).

However, continuing research indicates that these visions of the early Southeastern inhabitants are overly simplistic. This recent research has indicated that to solely contribute mobility and settlement to one variable is impractical for a sustained existence where resources, subsistence, and social networking all played a role in the Paleoindian lifeways (e.g. Anderson and Sassaman 1996). Paleoindian peoples probably practiced a hunting and gathering subsistence pattern relying on the collection of wild plant foods and small game (Hollenbach 2005; Sassaman et al. 1990; Walker 2000) in addition to the hunting of Pleistocene megafauna such as mammoth, mastodon, and bison. Although Chapman (1985:34) notes that while the remains of mastodon and mammoth have been found in Tennessee, neither has been found in association with humans, recent excavations have shown a connection. Breitburg and Broster (1995) have discovered the remains of a partially butchered mastodon eroding out of a ravine in Williamson County. Artifacts collected include a bone projectile point imbedded in the remains as well as numerous associated tools and resharpening flakes. These limited findings are significant, but the paucity of evidence suggests that megafauna resources did not fully supply the Paleoindian diet.

Correspondingly, new interpretations have argued against the traditional view of settlement patterns caused by the nomadic searching and following of large game herds. Though settlement/mobility patterns during the Paleoindian period remain vague, the current paradigm supports a combined foraging and logistical strategy (Binford 1980). Recent models built upon increasing knowledge of environmental change suggest a less mobile population selecting choice areas of settlement to colonize and expand into sub-regional populations. The pattern of numerous diffuse lithic scatters at open locations and more intensive occupations at rock shelters and caves (such as Dust Cave and Meadowcroft Rockshelter) supports the theory of inter-regional habitation and mobility. This is supported by Mason (1962), who suggests settlement strategies were focused on base camps situated in ridge top barrens close to bottomland swamps and prairies. These ecotonal locations would have provided a diversity of subsistence resources for longer-term occupation.

The Paleoindian lithic tool kit utilized a highly refined flake and blade technology. The tool kit is characterized by occurrences of fluted and unfluted lanceolate points such as the well-known and widespread Clovis and Cumberland types. According to Chapman (1985:34), the Cumberland fluted type projectile point is an eastern variant of the Clovis type, and is found in Tennessee.

The widespread occurrence and uniform nature of Paleoindian assemblages (unrelated to regional density), plus the reproductive viability of low-density populations during this time period, indicates that sophisticated information exchange networks must have been in place (Anderson et al. 1990). The later Simpson/Suwannee/Quad variations of lanceolate projectile points/knives are stylistically different than preceding Clovis forms. The emergence of these stylistic variants may be the result of somewhat more restricted movement and the formation of social networks within habitual use areas (Anderson et al. 1992; Anderson 1995). During the Late Pleistocene/Early Holocene transition, the expansion of the mesic oak-hickory forests favored a foraging strategy in the upper latitudes, as Paleoindians found modern flora and fauna replacing larger extinct species, and there developed the need for adaptation to a new resource base. This climatic shift is paralleled by the emergence of the Dalton type and evidence for extensive re-sharpening of lithic tools. Researchers have suggested that this technological shift reflects more highly mobile groups (Anderson 2005) that were adapting to a changing environmental regime with unknown lithic resources in new ranges, and a changing subsistence base that incorporated increased hunting of whitetail deer.

In addition to lithic technology, the Paleoindian toolkit included wood, bone, and antler implements. In Florida sands, these materials have been recovered from well-preserved contexts and represent numerous tool types including: projectile points, foreshafts, leisters, awls, and needles (Milanich and Fairbanks 1980). However, the interior Southeast has acidic soils that do not typically preserve these organic materials. Therefore, given that similar lithic technology is evident throughout the Southeast, it follows that other tool types would have been present during contemporaneous timeframes, despite their lack of recovery.

ARCHAIC (10,000 TO 3,000 B.P.)

The Archaic period is dated from 10,000 to 3,000 B.P. and represents a timeframe of ongoing shifts and expansion from the economic and social patterns of the earlier late Paleoindian period. Extensive Early Holocene environmental changes to a mesic oak-hickory-pine forest canopy (Delcourt and Delcourt 1985) and the extinction of the large herbivores caused greater emphasis placed on hunting smaller animals, particularly white-tailed deer (Anderson and Hanson 1988). Watts (1980), for example, has suggested that the Early Archaic period corresponds with the time that closed-canopy hardwood forest became established in the Southeastern United States. Discrete changes in the environment have not been established to the point that Watts' (1980) hypothesis can be substantiated within the study region. However, given the broader implications of climate-cultural shifts during the Paleoindian period, it is reasonable to apply this model to smaller shifts seen in cultural manifestations. In fact, the broad similarities observed across the pan-eastern spectrum have led to the Archaic being defined by subsistence practices (Cable et al. 1997:51). Therefore, the following discussion outlines the environmental and cultural shifts evidenced during the three sub-periods of the Archaic period as populations became increasingly better adapted to logistically procuring resources: the Early Archaic, Middle Archaic, and Late Archaic.

EARLY ARCHAIC (10,000 TO 8,000 B.P.)

The onset of the Archaic period is termed the Early Archaic period. Most researchers believe that the Archaic period marks a pronounced adaptation to the climate stabilization and generally warmer, wetter weather that occurred during the Early Holocene, which was established by 8,000 B.P. (Delcourt and Delcourt 1985) and which was roughly contemporaneous with a shift in cultural technology evidenced by settlement and subsistence. Indicators of this cultural shift are discussed below.

Archaeologists continue to argue over the extent and kind of mobility experienced by Early Archaic peoples. The scattered distribution of fairly small Early Archaic campsites suggests that the people were highly mobile, utilizing both uplands and lowlands for resources. Anderson (2005) has suggested that the Early Archaic peoples used most of the landscape, continuing the strategy of land use that began with Dalton during the Late Paleoindian period (Griffin 1952). A few larger Early Archaic sites along the more prominent creeks could represent periodic aggregation camps, perhaps re-occupied on a seasonal basis. Nonetheless, Anderson and Hanson (1988) argued that Early Archaic bands ranged far in their annual rounds, adjusting the frequency and distance of their movements to seasonal changes in economic and social demands and opportunities such that periodic aggregation occurred (Elliot and Sassaman 1995:138).

Similar to Paleoindian organization, Early Archaic groups were organized into small bands that exploited a particular geographic region, such as a major river segment, for a given time of year. These bands likely came together at specific locations for the purposes of mate exchange, raw material trade, subsistence, and other reasons. These "aggregation camps" appear clustered at the Fall Line and river mouths (Espenshade et al. 1998), suggesting that water movement played some role in activities. Band migration, whether seasonal or otherwise, along river corridors offered fresh water, fish, and shellfish and a constant source of subsistence resources. However, O'Steen's (1983) work in the Georgia Piedmont suggested that productive shoal habitats could have supported Early Archaic bands for extended periods. Instead of implying seasonal rounds then, the occurrence of extra-local raw material at these semi-permanent camps implies long-distance exchange. More recently, again based on the recovery of extra local lithic raw materials, Daniel (1994) showed that movement also occurred between major drainages and across inter-riverine upland divides. It is also possible that Early Archaic populations were mobile and integrated through an exchange network. These two variables are not viewed as mutually exclusive and undoubtedly shifted over time and space during the Early Archaic as needed.

Dietary patterns during the Early Archaic were expanded to include an even wider variety of mammals and reptiles. Birds, fish, whitetail deer, and shellfish constituted the bulk of the population's dietary needs while evidence to the north indicated that nutmeat comprised at least a portion of the Early Archaic diet (Chapman 1985).

Lithic technology is the best marker of the Early Archaic period and shows use-wear indicative of meat processing and woodworking. Other lithic items characteristic of the Archaic are tools manufactured from prepared cores such as blades (Bense 1994), as well as groundstone implements. This discussion focuses on well-recognized lithic tools; however, other materials and types were a part of the tool kit, such as those made from organic material that not well preserved in the region.

Notched and stemmed triangular hafted bifaces, some with serrated edges, characterize the Early Archaic. These points include Kirk corner notched, Decatur, LeCroy bifurcated stem, Kanawha stemmed, and St Albans side notched (Chapman 1985, Bass 1977). Other lithic artifacts include pitted stones indicating plant processing, scrapers, and drills. The appearance of a variety of notched bifaces across the Southeast during the beginning of this period suggests that not only were populations distributed throughout the region by 10,000 B.P., but that regional traditions had already developed (Sassaman et al. 1990). The bifurcate based points identified for the Early and early Middle Archaic period have a geographic spread over much of eastern North America, particularly within the eastern deciduous forests (Chapman 1985). These artifacts are restricted to the hilly areas above the Fall Line where the deciduous forests persisted during this timeframe (Chapman 1985). Some archaeologists, such as Fitting (1964), have suggested that the bifurcate "tradition" might provide a horizon marker, especially in an area thought to be associated with oak-hickory forests.

MIDDLE ARCHAIC (8,000 TO 5,000 B.P.)

Archaeologists have generally accepted that warmer and drier weather characterize mid-Holocene conditions, the Hypsithermal period, and resulted in subsistence and settlement shifts during the Middle Archaic period (8,000 to 5,000 B.P.). It does not appear that the Hypsithermal strongly affected the vegetation of the interior Southeast as the lowland hardwood and upland pine forest

were well established by this time. However, coastal environments reflect a replacement of the oak scrub by pine forests and swamps in some areas. This is paired with an overall lack of water such that modern lakes were dry unless connected by springs or other aquifer (Watts et al. 1996).

In contrast to the pollen record (Watts et al. 1996), sedimentation rates during the Early to Middle Archaic show a regional divergence in the Piedmont region (Espenshade et al. 1994:241-244). This divergence is reflected by high sedimentation rates at sites such as 9BL69, Doerschuk, Gaston, Rae's Creek, and Nipper Creek located within the Piedmont and Fall Line regions of the southeastern states. High sedimentation occurred during the Morrow Mountain phase, with an overall drop in sedimentation rates during the subsequent late Middle to Late Archaic sub-periods. Espenshade et al. (1994) argue that local sedimentation rates are indicative of high rainfall and severe flooding during at least part of the Middle Archaic sub-period within the Piedmont province, which may also have taken place within the Ridge and Valley including East Tennessee. Yet, within the East Tennessee region, Middle Archaic sites are found along the same river terraces as the previous Early Archaic occupations (Chapman 1985:48) suggesting some level of microregional environmental stability. To date, it is unknown how the Hypsithermal period conditions specifically affected the interior Southeast, as it appears to vary greatly by region and local environment.

The onset of the Middle Archaic period appears to mark a constriction of group mobility range and cultural divergence between the Piedmont/Ridge and Valley and the Coastal Plain. Overall, there is a decrease in Middle Archaic sites throughout the Southeast. This is interpreted as smaller mobility range, which is inferred from the occurrence of site clusters in a particular region/waterway as well as cultural barrens between clusters where Middle Archaic sites are uncommon or unknown. Shell midden sites begin to dot the landscape, suggesting an increased reliance on riverine/coastal resources. However, littoral location may have been submerged during this timeframe due to increased sea level.

Restricted mobility of this population is supported by the prevalence of local materials and expedient tools such as flake tools and debitage, crude bifaces, bifacial cores, and relatively few curated tools. The expedient lithic technology and lack of formalized tools during the Middle Archaic period are suggestive of a foraging strategy similar to the Late Paleoindian and (possibly) imposed by environmental stress. However, this generalized view of the Middle Archaic may prove overly simplistic with further research.

During the Middle Archaic, stemmed points replaced earlier notched points. The Middle Archaic period saw the introduction of notched river cobble "net sinkers" and atlatl weights. The widespread Kirk and Morrow Mountain stemmed and Sykes-White Springs hafted bifaces suggests the environmental conditions did not impede the overall logistic strategy, including periodic aggregation. In addition to chert, slate and quartz were used for tool manufacture. The Middle Archaic sub-period also has increased evidence of bone and ground stone tools, including atlatl weights (boatstones), axes, and grinding implements (Coe 1964).

LATE ARCHAIC (5,000 TO 3,000 B.P.)

The Middle to Late Holocene shift is best characterized as the change to modern climate conditions including increased precipitation. This return to a wetter climate appears to be the most distinguishing climate shift during the Late Archaic. Stabilization of climate conditions and modern

vegetation matrix (Delcourt and Delcourt 1987) parallels increased social complexity, the earliest ceramic technologies (in the interior Coastal Plain), and more intensive plant cultivation (Clafin 1931, Fairbanks 1942, Griffin 1943).

The onset of the Late Archaic period is marked by a general increase in site density and cultural innovation/diffusion in the southeastern United States. The Ridge and Valley populations began heavily exploiting river valleys during the Late Archaic. In East Tennessee, rock-filled fire pits/hearths are found along the first river terraces, suggesting longer-term occupations of single-family and multi-family sites (Chapman 1985:5153). Previously underutilized areas, such as upland rock shelters and ponds, also seem to be used more intensively during the Late Archaic (Sassaman et al. 1990). Overall, archaeologists agree that seasonal dispersion of small camps into narrow inter-riverine upland areas augmented aggregation base camps next to higher order streams in the bottomlands (Ledbetter 1992). Therefore, the Late Archaic is best characterized by a high quantity of dispersed sites across the landscape, as a formerly highly mobile population increased with the stabilization of wet and warm conditions.

Compared to the Middle Archaic subsistence, the Late Archaic period marks a shift to aquatic resources and a more entrenched logistical mobility strategy. The most apparent shift is the drastic increase in shellfish exploitation as seen at shell midden sites in the Southeast (Styles and Klippel 1996) in addition to fishing tools such as bone hooks and foreshafts. Although organic tools do not often survive in the acidic Ridge and Valley soils, exploitation of fish resources during the Late Archaic is evidenced by the appearance of net sinkers in the region. At the Iddins Site (40LD38), a large number of notched stone cobbles have been identified as net sinkers and associated with fishing, although their exact function has been debated (Chapman 1981, 1985). In addition, continued exploitation of a large variety of mammals, reptiles, birds, and amphibians was practiced and likely utilized hunting and trapping techniques. Whitetail deer and turkey were heavily exploited and may have been exploited within "kept habitat" areas where broad open landscapes were maintained for hunting (e.g. Hudson 1976).

Late Archaic peoples performed opportunistic harvesting of particular plants, including nuts and berries. The use of cultigens varied by region, but among the most commonly identified are squash and gourds (Chapman 1985). Limited evidence for cultigens has been recovered from rockshelters in the Eastern Woodlands including sunflower, maygrass, and erect knotweed (Cowan 1985), which suggests that Late Archaic people were modifying forest environments to encourage the growth of starchy seeds and cucurbits. This is supported at the Bacon Bend (40MR25), a Late Archaic site where squash and maygrass were identified as domesticated plants. Hickory nuts, walnuts, and acorns were also utilized illustrating continued reliance on forest resources (Chapman 1981). Further evidence for plant collection is supported by distinctive food storage pits characteristic of the Late Archaic sub-period in addition to an increase in grinding tools indicative of plant processing.

Diagnostic hafted bifaces include an assortment of large points with straight, contracting, or expanding stems, as well as smaller stemmed and side-notched types. These include characteristic Savannah River/Appalachian Stemmed and Iddins types. Morphologically similar types including Elora, Ledbetter/Pickwick, Otarre, and Paris Island reflect broader regional variation in the Southeast (Cambron and Hulse 1975, Justice 1987, Whatley 2002).

Soapstone and steatite vessels (ca. 4,170 B.P.) make their initial appearance in the Piedmont and Ridge and Valley towards the latter half of the Late Archaic, approximately 900 years after the very first appearance of fiber-tempered ceramic containers (ca. 4,450 B.P.) in the Savannah River valley (Sassaman 1997). The use of soapstone and steatite versus pottery is the most significant difference between the inland Coastal Plain and the upland Piedmont/Ridge and Valley regions during the Late Archaic. The regional difference represented in vessel types may not be based in technology, but may have been motivated by political, economic, and/or social concerns (Sassaman 1991, 1993). A differentiation in point types between the two physiographic regions supports this suggestion. The appearance of soapstone/steatite vessels from the central Piedmont in addition to marine shell and copper artifacts in East Tennessee reflects the far-reaching trade network established during the Late Archaic.

WOODLAND PERIOD (3,000 TO 1,000 B.P.)

The Woodland period (3,000 to 1,000 B.P.) was a time a significant cultural change in the southeastern United States. The general cultural framework for the Woodland period in East Tennessee is marked by regional manifestations whose complexities have yet to be resolved. The material record left behind emphasizes these cultural shifts and indicate the manifestations, influences, and networks practiced by these Native Americans. Primarily, the change from the Archaic Period to the Woodland is marked by the increased appearance of ceramics, the beginnings of agriculture, and the construction of burial mounds.

EARLY WOODLAND (3,000 TO 1,850 B.P.)

The Early Woodland period (100 B.C. to A.D.100, 3,000 to 1,850 B.P.) in eastern Tennessee is characterized by a continuation of many Late Archaic period behaviors. The Early Woodland peoples practiced subsistence strategies that were similar to Archaic and to later Middle/Late Woodland cultural manifestations with differences reflected in magnitude (Bowen 1977, Chapman and Shea 1981, Cowan et al. 1981, Marquardt and Watson 1976). In addition, many architectural forms and subsistence activities appear to be consistent between the Terminal Late Archaic and the Early Woodland periods as observed within the Tellico Reservoir (Chapman 1981, McCollough and Faulkner 1973). This evidence suggests that there were many cultural similarities among these prehistoric groups that utilized a pattern of repetitive short-term floodplain occupation by smaller family-sized groups seasonally to exploit specific resources.

Early Woodland seasonal relocation that relied on useable stone, faunal and botanical resources, and accessibility to water gave way to more multi-seasonal semi-sedentary habitation. There was an increased reliance on cultigens and storage thereof, which would have increased the stability of food resources available to a community (Davis 1990). The carbonized remains of cultigens and forest resources show a mixed horticultural and foraging strategy that included wild chenopod, acorn, sunflower, and other cultigens reflecting seasonal use in the region. Increased dependence on horticulture meant that the potential growing season probably influenced when specific sites were occupied and heavily influenced settlement strategy.

There is a two-fold settlement pattern recognized in East Tennessee during the Early Woodland period. Small encampments are characterized by repeated occupation by a limited number of multifamily groups (Davis 1990). In contrast, there are large aggregation areas, frequently located

on the large floodplains of higher order drainages (Wetmore 2002). These settlements emphasize a pattern of aggregation during some times of the year and dispersal into smaller groups during other periods.

The invention and diffusion of pottery technology is frequently seen as the benchmark for the beginning of the Early Woodland period. Ceramic vessels did not immediately replace the steatite, sandstone, and woven vessels produced during the Late Archaic, but pottery use gradually increased through the Early Woodland period. In East Tennessee, the crushed quartz tempered wares of the Watts Bar type and distinctive lack of fiber-tempered wares reflect the Early Woodland sub-period. Watts Bar surface decorations include plain, Cord Marked, and Fabric Marked impressions (Whatley 2002).

Early Woodland stone tools include stemmed hafted bifaces, knives, large triangular and stemmed bifaces, and ground slate celts (Lewis and Kneberg 1957) though none characterize the Early Woodland of East Tennessee. Hafted biface preferences shifted from stemmed points of the Late Archaic including Motley, Otarre, Swannanoa Stemmed, and Plott Short Stemmed (Bass 1977) to triangular unstemmed points typical of the Middle Woodland (Chapman 1985). Other artifacts associated with the Early Woodland include biconical pipes, birdstones, and gorgets (Wetmore 2002:258).

MIDDLE WOODLAND (1,850 TO 1,350 B.P.)

Middle Woodland period (A.D. 100 to 600, 1,850 to 1,350 B.P.) cultural manifestations from the Ridge and Valley Physiographic Provinces of East Tennessee are poorly understood as very few Middle Woodland period sites have been thoroughly investigated (Herrmann et al. 2000). However, Middle Woodland sites illustrate the development of one or more wide-ranging interaction spheres. These interaction spheres are evidenced by the presence of widely dispersed artifact types and artifacts manufactured from non-local materials suggestive of trade networks extending across the eastern half of the United States. Many of these artifacts share common forms and designs that are frequently referred to as Hopewellian (Bense 1994:142-143, Chapman and Keel 1979). In East Tennessee, the Pigeon and Connestee Phases are the most commonly found Middle Woodland material traditions.

The subsistence strategy focused on similar faunal and botanical resources as previous Late Archaic and Early Woodland inhabitants. Yet, there was an increase in the harvest of freshwater molluscs (Lafferty 1981, McCollough and Faulkner 1973) and use of cultigens. These crops include squash, sunflower, and gourd that thrive in disturbed environments suggesting a culturally maintained landscape (Butzer 1971, Bonnicksen 2000, Vale 2002, Anderson 2005). Limited evidence of maize remains were recovered from Middle Woodland contexts at Icehouse Bottom in Monroe County, Tennessee (Wetmore 2002) and sites from the central Tennessee Duck River region (Faulkner 2002).

Evidence of Pigeon Phase deposits along the French Broad River, the Smoky Mountains, and the Blue Ridge Mountains are very comparable to the Middle Woodland forms found in the Appalachian Summit region of Western North Carolina (Bass 1977, Keel 1976). Settlement patterns indicate that semi-permanent encampments were occupied for extended periods (Davis 1990). This is supported by evidence of post holes that suggests at least semi-permanent structures were utilized (Chapman 1985:71-72). A variety of smaller encampments have been encountered

emphasizing periodic (seasonal?) dispersal of the population. These campsites emphasize exploitation of a variety of resources around a single location or focus on the acquisition of a single resource (such as a chert deposit). Population dispersal was probably a key component to the widespread trade networks discussed above.

The Middle Woodland sub-period is characterized by hafted bifaces including Camp Creek, Greenville, Bradley Spike, Nolichucky, and Pigeon Side Notched. Some contact with Hopewellian groups in the Midwest is noted at the Icehouse Bottom site, where artifacts such as Ohio chert blades and Hopewellian pottery sherds were recovered from excavations. Pottery types reflect cultural exchange via trade or diffusion from the Carolinas to Alabama and include Pigeon, Connestee, Swift Creek, Candy Creek, and Wright Check Stamped (Bass 1977). Limestone tempered Candy Creek and Wright Check Stamped forms were not developed locally; rather they probably diffused into the region from the south and west (Haag 1939, Lewis and Lewis 1995:95), which illustrates a broad cultural network. In addition, artifacts resulting from trade or in imitation of the Hopewell material culture appear in the region (Chapman and Keel 1979, Stoltman 1998).

LATE WOODLAND (1,400 TO 1,000 B.P.)

The Late Woodland period (A.D. 600 to 900, 1,400 to 1,000 B.P.) rarely appears as a unique cultural horizon in many portions of East Tennessee. Artifact assemblages dating to the Late Woodland period are virtually indistinguishable from their Middle Woodland period predecessors. It is possible that the Middle Woodland period survived long enough in East Tennessee to acculturate the Mississippian period lifestyle without an interstitial form. For example, Keel (1976) has suggested that the Middle Woodland Connestee Phase Culture was directly ancestral to the Mississippian Pisgah Phase peoples.

Two cultural trends hallmark the Late Woodland period. First, subsistence focuses on specific environments. The appearance of "numerous notched pebble sinkers [in the archeological record] suggest that fishing may have supplied the main protein food" (Lewis and Lewis 1995:31). McCollough and Faulkner (1973) noted that sites were placed to better exploit riverine resources and increase horticultural production. These locations and their associated lifeways imply a greater level of sedentism among the populace (Lewis and Lewis 1995). Second, settlement patterns shift from nucleated to dispersed households. Smaller hamlet-sized communities situated along rivers and streams replaced the large nucleated villages of the Middle Woodland sub-period. This settlement reorganization took advantage of fertile land and aquatic resources for the smaller settlements (National Park Service 2006). Webb (1938) describes Late Woodland period sites as clusters of dwellings with associated trash/storage pits, some of which include burial mounds. The presence of these latter structures implies that a centralized socio-political structure was present and able to command resources to engage in community development projects.

Two phases, Hamilton and Candy Creek, are represented in East Tennessee. The Hamilton phase is a Late Woodland manifestation generally associated with the southern aspects of East Tennessee's Ridge and Valley Province. Within the Chickamauga Basin, Hamilton phase sites tend to be distributed along higher order streams (Lewis and Lewis 1995). They are rarely found in more upland settings. Hamilton Series pottery is the diagnostic horizon marker for the phase. Lewis and Lewis (1995:28) describes this pottery as "...rather coarse and utilitarian ware tempered with crushed limestone." Surface decorations include Cord Marked, Check-stamped, Fabric Marked, plain and complicated-stamped.

Candy Creek Phase sites appear to be contemporaneous to Hamilton Phase, even occupying different aspects of the same landscape. In the Chickamauga Basin, for example, Candy Creek Phase sites are located along more upland streams and less along the larger, higher order waterways, which were occupied by Hamilton Phase Native Americans (Lewis and Lewis 1995). Candy Creek Phase has its origins in the Middle Woodland period. It not only survives, but appears to have diversified over a greater portion of the landscape during the Late Woodland (Keel 1976). There are virtually no Late Woodland period assemblages in East Tennessee that are devoid of Candy Creek materials.

Large bell-shaped pits are found in many Candy Creek Phase sites. There were likely used to store foodstuffs and would have enabled the population to remain in one location for greater periods of time. Some of these pits contain layers of fire-cracked rock at their bases, implying that they may have been used to food preparation. Emptied pits were subsequently used for waste disposal or as mortuary receptacles. Non-local shell and steatite artifacts have been recovered indicating that far-reaching exchange networks were still in place. Mississippian period-like elbow pipes appear at Candy Creek Phase sites. Candy Creek Series pottery is found on Candy Creek Phase sites. Decorative forms include those seen on Middle Woodland sites with Fabric Marked sherds being the dominant form. Basal sherds frequently exhibit podal supports. Candy Creek Phase vessels tended to be used as storage or food preparation containers.

MISSISSIPPIAN (1,050 TO 350 B.P.)

The continued stability of climatic conditions allowed for continued increases in cultural complexity during the Mississippian period across much of the Southeast. Conventionally, this period of significant population growth is defined by the presence of flat-topped mounds, open plazas, defensive palisade walls, permanent occupation, agriculture based subsistence, and new ceramic types. Although mound centers are the most noticeable Mississippian sites, these larger centers played a role within a large settlement pattern of smaller sites. The Mississippian period (A.D. 900-1600, 1,050 to 350 B.P.) is generally identified by the following characteristics: earthen platform mounds arranged around central plazas; an increased stable population; territoriality and warfare associated with chiefdoms; ceremonialism; a dependence on corn agriculture; and changes in ceramic styles (Chapman 1985). However, archaeologists are leaning away from defining the period with mandatory architectural and cultural categories, and toward new levels of cultural development in the "pan-southeastern interaction sphere" (Schnell and Wright 1993) based on widespread cultural differentiation between sites. As with the Archaic and Woodland periods, the Mississippian is subdivided into Early, Middle, and Late subperiods.

EARLY MISSISSIPPIAN (1,050 TO 950 B.P.)

The Early or Emergent Mississippian period is identified by the Martin Farm phase (A.D. 900 to 1000, 1050 to 950 B.P.) in East Tennessee. Larger populations settled along the first terraces of rivers in permanent villages relying on a predictable subsistence strategy of hunting, gathering, and agriculture. Species exploitation did not significantly change from the earlier Woodland subperiods. Whitetail deer, squirrel, turtle, turkey, fish, and freshwater bivalves/gastropods are all fauna that are seen in the foodways at the Martin Farm site (40MR20), located approximately 40 miles southwest of Knoxville (Bogan and Bogan 1985). Cultigens and domesticates included cucurbits, sunflowers, maypop, goosefoot, knotweed, maygrass, maize, squash, beans, and others

(Schroedl et al. 1985:411-456). The material culture reflected an Early Mississippian sites is similar to that of the Late Woodland, with the exception of shell-tempered ceramics. Architectural evidence reflects square or rectangular wall-trench houses having a central hearth. The platform mound traditionally characteristic of Mississippian occupations is observed occasionally at these emergent sites (Schroedl et al. 1985, 1990).

MIDDLE MISSISSIPPIAN (950 TO 650 B.P.)

In contrast to the Early Mississippian floodplain settlements, Middle Mississippian sites are found in more upland areas and reflect nucleated settlements with defense structures. This Middle Mississippian timeframe (A.D. 1000 to 1300, 950 to 650 B.P.) is not as heavily documented as that of the Early and Late Mississippian manifestations of East Tennessee; however, some overarching trends are observed.

Culturally, East Tennessee Middle Mississippian sites Hiawassee Island phase of the upper Tennessee River, but other influences from western Tennessee and the Appalachian Summit region. Subsistence strategies relied more heavily agriculture with maize, squash, beans, and likely complemented by cultigens, masts, and fruits. Exploitation of faunal species was similar to previous periods, showing a focus on riverine and terrestrial ecozones. In addition to relocating to more upland areas, Middle Mississippian sites are often fortified with a stockade surrounding an open plaza with mounds on either end having civil structures (Schroedl et al. 1990). Structures are circular or rectangular wall trench structures of wattle and daub, showing a mixture of Woodland and Mississippian architectural practices.

LATE MISSISSIPPIAN (650 TO 350 B.P.)

The Dallas culture characterizes the Late Mississippian period (A.D. 1300 to 1600, 650 to 350 B.P.) in the Little Tennessee River Valley, located southwest of Knoxville. This East Tennessee phase has been the focus of extensive archaeological research at sites such as Citico, Toqua, and Bussel Island that were dominant Dallas culture villages in the valley (Chapman 1985), and which illustrate a return to the large lowland floodplains. Subsistence during the Late Mississippian sub-period made use of the same base of plant and animal species, but likely more heavily exploited these resources due to population stress along the floodplain.

Population stress is further evidenced at Toqua, which was a palisaded village surrounded by garden plots governed by a stratified social organization headed by a chief (Polhemus 1987). Within the village were two earthen mounds, one larger and more centrally located. The larger mound was constructed over a period of 200 to 350 years within which civic structures were built and subsequently destroyed, either ritually, through warfare, or merely by accident. High status individuals were identified by the rich grave goods, and were interred in the mound in the late stages of its use, suggesting that the socio-political organization was intertwined with the ideology and afterlife. Between the mounds was a pebble-surfaced plaza, presumably the center of public life and ceremony. Lining the plaza were individual square homes having roof supports and made of wattle and daub construction (Chapman 1985).

Although many aspects of the Late Mississippian are characterized by increased quantity, the material culture of this timeframe reflects increased diversity. Ceramics identified at Toqua include a variety of forms and decorations. Shell, grit, limestone, quartz, and sand tempered ceramics were noted in shapes such as beakers, wide mouthed bottles, long necked bottles, simple bowls, compound bowls, effigy bottles, and hooded bottles. Decorations include cord and fabric impressing, check stamping, rectilinear complicated stamping, red filming, and painting (Dickens 1976, Polhemus 1987). Personal adornment artifacts were also identified, including shell ear pins, shell and bone beads, carved gorgets of marine conch shell, bone hairpins, and rattles made of turtle shell (Chapman 1985). These artifacts show the diversity of tools, ornaments, decorative ideas, and raw materials exchanged throughout a Southeastern network.

PROTOHISTORIC AND HISTORIC NATIVE AMERICAN (950 TO 300 B.P.)

The Protohistoric period in Tennessee ranges from circa A.D. 1500 to 1650 (950 to 300 B.P.) beginning with the first European contact in the Southeast. It is unknown to what extent Native Americans were indirectly affected by European contact prior to the summer of 1540, when Hernando De Soto entered Tennessee from North Carolina. De Soto's path, although debated, generally led from North Carolina, through East Tennessee, and continued into North Georgia (DePratter et al. 1985). This contact (direct and indirect) led to significant changes in the lifeways of East Tennessee Native Americans, as it did across the Southeast. Generally speaking, the material culture changed to include minor quantities of metal and glass items including but not limited to beads, firearms, and axes. The addition of European domesticated animals, particularly swine, illustrates a slow but progressive acculturation of native groups. This acculturation process resulted in a Historic Native American pattern in East Tennessee.

The Historic Cherokee occupation has been extensively studied in East Tennessee. A number of large-scale excavations at Cherokee sites such as Tomotley, Mialoquo, and Chota-Tanasee have been conducted. These excavations, together with ethnographic-historic accounts of the groups, give a picture of Cherokee village life in the eighteenth century after European contact.

In these sites, Cherokee village life was focused on the plaza, the townhouse, and the summer pavilion. The townhouse has been described in ethnographic accounts as a large wooden earth covered structure that would be capable of holding 500 people for public affairs. The summer pavilion was an open roofed less substantial structure. The plaza was lined with domestic structures, which might be of four types, although the most common has been called a winter house (Chapman 1985). Two townhouses were identified at Chota-Tanasee, including an earlier smaller structure with four roof supports and a later, larger townhouse supported by eight posts. Both structures contained central hearths and bench furniture (Schroedl et al. 1986).

Ceramic types associated with historic Cherokee occupations include Qualla simple stamped, Overhill check stamped, Overhill plain, Overhill complicated stamped, and Overhill cob roughened (Chapman 1985). At both Tomotley and Mialoquo, ceramics were identified from both the Cherokee period and the preceding Mississippian period. Lithics were also identified as being of Mississippian period types, although at Tomotley, Archaic period lithics were noted (Baden 1983, Russ and Chapman 1983). These traditional technologies persisted; however, European goods also were apart of the Cherokee material culture. For example, at Tomotley (40MR5) located 40 miles southwest of Knoxville, European containers including brass kettles, iron plates, bottles, and stoneware were recovered (Guthe and Bistline 1978:206).

A detailed account of Cherokee-European acculturation is not explored within this study. However, suffice it to say that the pattern of increased adoption of European lifeways and materials characterized East Tennessee. Increasing pressure from European settlers in East Tennessee forced the relocation of numerous Cherokee households and settlements over time. This was followed by the Cherokee-British alliance during the Revolutionary War during the late eighteenth century. The American defeat of the British in 1781 encouraged encroachment of Cherokee lands. Pressure for further land cessions culminated in the Treaty of Holston in 1791 that ceded a large portion of northeastern Tennessee, including the Knoxville area, to the United States (Rothrock 1946). This treaty would result in the historic settlement of the area (the subject of Chapter III) and an end to the Native American occupation.

IV. HISTORIC OVERVIEW

The Knoxville South Waterfront Redevelopment Project is located in South Knoxville, which developed late in Knoxville's urban history as an industrial waterfront with adjacent working class neighborhoods. Prior to the construction of a toll bridge at Gay Street in 1874, South Knoxville was isolated from the rest of the city and virtually undeveloped aside from isolated homes and farms. The area grew slowly in the 1880s and 1890s, and by the early decades of the twentieth century the waterfront featured several notable industries, including a lumber mill, a slaughterhouse, a sand and gravel yard, and other operations. The working class residential neighborhoods of South Knoxville grew up next to these manufacturers, served by a commercial area along Island Home Avenue (Sevierville Pike). The construction of a new Gay Street Bridge in 1898 and the Henley Street Bridge in 1932 increased access and encouraged further industrial and suburban development in South Knoxville. The mixed industrial and residential character of the South area's waterfront remains evident today.

The history of South Knoxville and the waterfront is tied to the history of the City. This chapter presents a historic overview of Knoxville's development, as well as the changing face of the south side of the river. Site histories for each of the Phase I project areas are included in Chapter VI.

FOUNDING AND SETTLEMENT OF KNOXVILLE

Knoxville was founded in 1786 as White's Fort by James White, a Revolutionary War veteran who obtained a 1,000-acre land grant between First and Second Creeks on the north side of the Tennessee (then Holston) River. In 1786, White moved his family to the tract, where he oversaw the construction of a fort and where a cluster of fortified cabins formed (Garrow 1996:24). In 1791, after the Treaty of Holston freed the area of White's settlement from Cherokee claims, White's Fort was made capitol of the Territory South of the River Ohio (Southwest Territory) and was renamed Knoxville in honor of Secretary of War Henry Knox. The next year White laid out the original town plan in 30 square blocks of 64 half-acre lots (Figure 2) (Wheeler 1998:507; Angst and Kocis 2004:15).

Between its founding frontier phase and the middle of the nineteenth century, Knoxville grew into a bustling river town. The settlement's early economy was driven by the fur trade with local Native American tribes, in which furs were traded for wagonloads of goods from Richmond, Baltimore, and Philadelphia. Knoxville had overland and water trade routes with other parts of the country but was not as easily accessible as other burgeoning settlements in the Ohio and Mississippi valleys, and its growth lagged for much of the nineteenth century (Garrow 1996:25). By 1796, the town featured "40 wooden buildings that included four stores, a printing office, several taverns, a tanyard, a mill, and a blacksmith's shop as well as private residences" (Angst and Kocis 2004:16). The population and local economy grew modestly through the next several decades. In 1810 the local population numbered 730, which climbed to 2,076 by 1850 and to almost 5,000 by 1860 (Wheeler 1998:507).

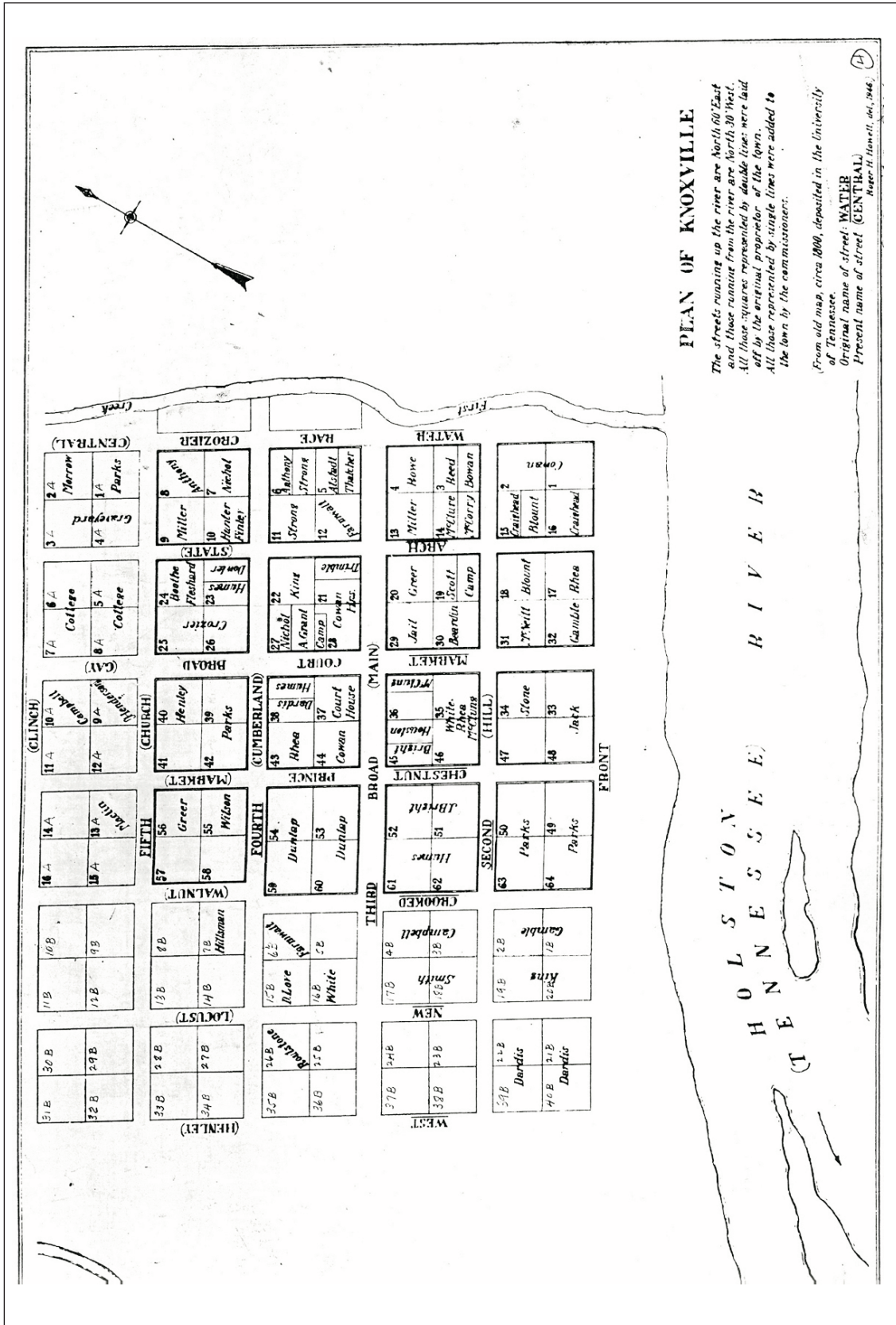


Figure 2.
 The Plan of Knoxville, circa 1800

Source: Knoxville County Archives

EARLY COMMERCE AND INDUSTRY

Early industries appeared in Knoxville by the 1830s, including cotton-spinning factories, sawmills, a brass foundry, blacksmiths, distilleries, cabinetmakers, and coach and wagon makers. The budding factories served the local market through small shopkeepers and retailers in town. In 1837, McClung and Wallace opened Knoxville's first wholesale house to serve both in-town retailers and country stores in surrounding rural areas. According to W. Russell Briscoe, former executive vice-president of J. E. Lutz and Company, the McClung and Wallace wholesale operation "marked the beginning of what was to make Knoxville the great southeastern jobbing market which it became after the Civil War" (Briscoe 1976:410).

By 1850, steamboat trade and growing industries spurred civic improvements that transformed Knoxville into a prosperous East Tennessee town. Gay and Prince Streets were paved with river rock and cobblestones in 1853-54. The city signed a 40-year contract with Knoxville Gas and Light Company in 1855, and over the next two decades organized both a fire department and public water supply (Angst and Kocis 2004:18). Most promising for the future was the arrival of the East Tennessee and Georgia Railroad in 1855, which set Knoxville on the course to become a major commercial center in the region. The advent of the Civil War, however, delayed the town's progress.

THE CIVIL WAR

Knoxville and East Tennessee were separated culturally and geographically with the rest of Tennessee and the other southern states, factors that set the area apart during the Civil War. In contrast to the plantation and cotton economies of the middle and western portions of the state, East Tennessee was populated by small farmers and tradesmen. The steep terrain and rocky soil of the region prevented plantation agriculture, which created a different economic and political environment in the mid nineteenth century that tended to support the Whig-Republican tradition rather than the Democratic Party of Andrew Jackson. With its pro-Union stance on the eve of the Civil War, "Knoxville was alone among Southern urban centers in its sentiments" (Garrow 1996:27). In February, 1861, the citizens of Knox County voted ten to one against considering secession from the Union.

For the next two years of the war, Knoxville was heavily garrisoned by Confederate forces. During this same period, most of Middle and West Tennessee fell to Union forces, especially after the fall of Forts Henry and Donelson in February of 1862. The Confederate invasion of Kentucky in August and September of 1862 was designed to help correct that situation, and the initial wing of the invasion, under Edmund Kirby Smith, was based out of Knoxville. When the invasion ultimately failed and Confederate forces retreated back to Tennessee, they did so through the Cumberland Gap and Knoxville.

Although the Confederate invaders failed to hold Kentucky, the invasion did allow the Confederates to reposition themselves in the southern half of Middle Tennessee, a position they held for the next six months. It was not until June of 1863 that William Rosecrans's Union army, based in Nashville and Murfreesboro, began a push toward Chattanooga. By the end of August 1863, Rosecrans was across the river from Chattanooga, and another Union army under Ambrose Burnside was making for Knoxville from its camps in Kentucky.

Both Chattanooga and Knoxville fell to Federal forces in early September 1863. The Confederates retreating from Knoxville fell back to the main Confederate army, then south of Chattanooga. This was followed by the huge battle of Chickamauga (September 19-20), during which Rosecrans's army was routed and forced back to Chattanooga. This led to the Confederate siege of Chattanooga, with Braxton Bragg's forces positioned on top of Missionary Ridge.

Union troops under General Ambrose E. Burnside were greeted by crowds of welcoming Knoxvilleians when they captured Knoxville on September 3, 1863. The town was a key target for the Union army due to its commercial strengths and position on the Confederates' railroad supply lines. Confederate General Braxton Bragg reacted to Knoxville's invasion shortly after his victory at Chickamauga, and he detached Lieutenant General James Longstreet to retake the town. This move was also designed to draw Federal troops out of their fortifications at Chattanooga.

Longstreet sealed off the western and northern railroad approaches to Knoxville in an effort to starve the occupying Federal garrison into submission. The main Federal defenses were centered at Fort Sanders, an old Confederate fort on the western edge of Knoxville. Federals also occupied the high ridges on the south side of the Tennessee River, in what is now South Knoxville, at Fort Stanley and an adjacent line of ridge-top defensive works (Figure 3). Photographs made at the time from this vantage point show Federal troop tents on the hillside and a commanding view of Knoxville to the north (Figures 4 and 5).

Longstreet attacked Fort Sanders on November 29, led by Major General Lafayette McLaws. The assault failed completely and lasted less than 20 minutes. The Confederates misjudged the depth of an eight-foot defensive ditch ringing Fort Sanders, which when jammed with their forces became a slaughter pen for the Federal defenders perched on the walls above. Confederates were also hindered by wire emplacements, believed to be the first time this had ever been tried in battle. Finally, the walls of the fort were slippery with ice from water poured on them the night before by Federal troops, making it impossible for Confederate troops to climb them. Confederate casualties totaled 813 compared to five dead and eight wounded Union troops. On December 4, Longstreet ended the siege of Knoxville and withdrew his troops to winter quarters in upper East Tennessee (Angst and Kocis 2004:18-19, Wheeler 1998:507, Groce 1998:509-510).

By this time, Confederate fortunes were doing poorly throughout all of East Tennessee. In one of the most remarkable Federal victories of the war, Federal forces in Chattanooga, now under the command of Ulysses S. Grant, marched right up Missionary Ridge and crushed the center of the Confederate encirclement (November 25). This forced Braxton Bragg's whole army to fall back into north Georgia. This news, plus the repulse in front of Fort Sanders, forced Longstreet to retreat northeastward, toward Virginia. There would be no more attempts to take Knoxville. Even though the war would last another year and a half, Confederate forces would never again seriously threaten East Tennessee.



Source: Davis, 1983

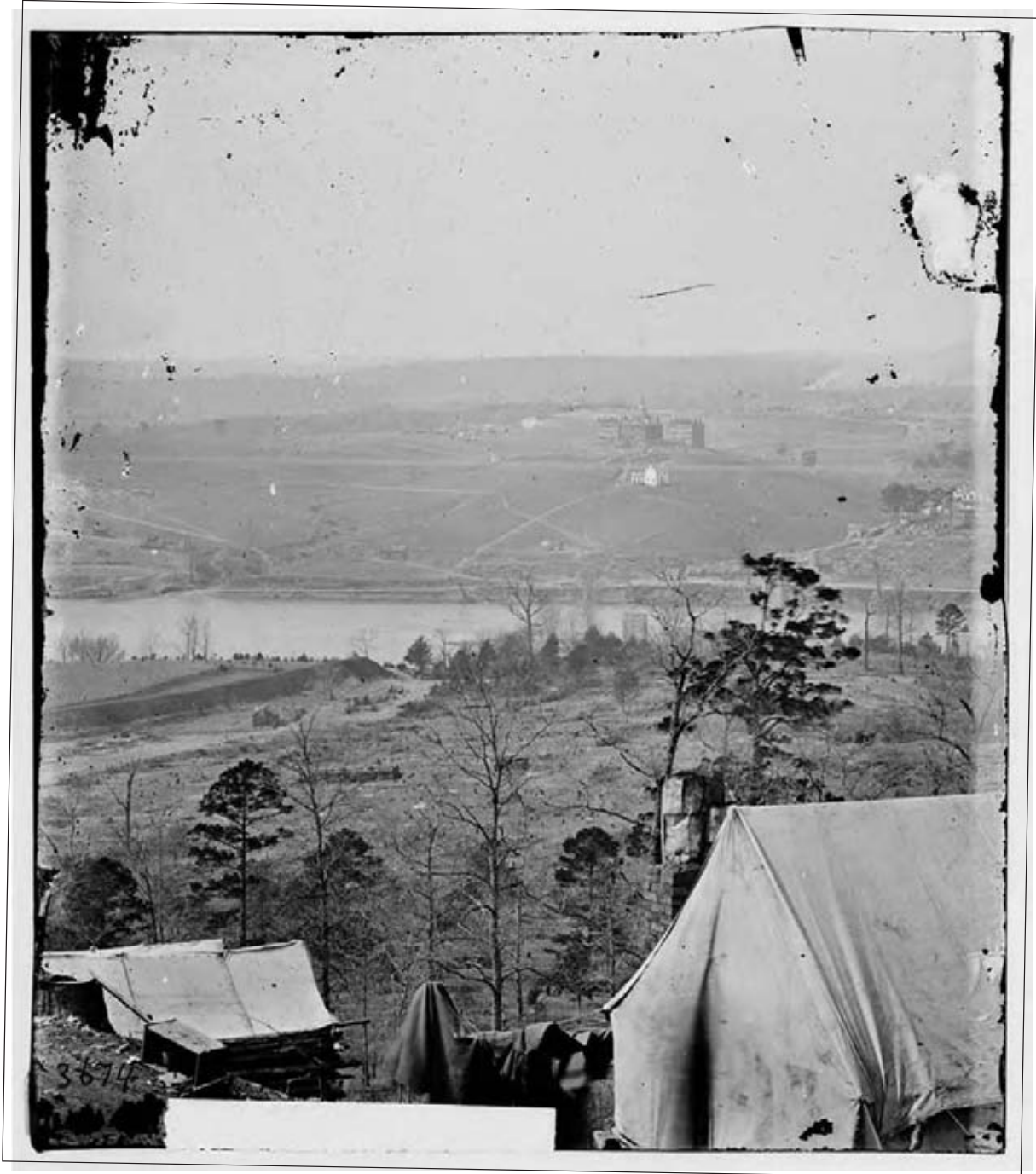
Figure 3. Topographic Map Showing Union and Confederate Forces During the Battle of Knoxville, 1863



Source: David Rumsey Collection, Internet

Figure 4.
1864 Panoramic Photograph of Knoxville Looking North from Fort Stanley on the South Side of the Tennessee River

Figure 5.
Photographic View Toward Knoxville Showing Civil War Encampments
and the South Knoxville Landscape



POST-WAR ECONOMIC GROWTH

Following the Civil War, Knoxville combined the forces of railroad transportation, manufacturing, and commerce to transform itself from a small East Tennessee town into a regionally significant city. Between 1870 and 1900 the population of Knoxville quadrupled from 8,682 to 32,673 (Garrow 1996:32). Building on the legacy of the earlier McClung and Wallace wholesale house, Knoxville in the post-war period became a major southern distribution center for all types of goods. As additional railroad lines opened new markets throughout the region, Knoxville businessmen opened more than 50 wholesale houses in the city, many located along Gay Street between Union and Jackson Avenues. Here the local “merchant princes” distributed a variety of dry goods including clothing, hardware, agricultural tools, and medicine. In 1885, the Tennessee Commissioner of Agriculture stated that Knoxville ranked as the fourth-largest wholesale center among southern cities (Rothrock 1946:220-221; Wheeler 1998:508). The town retained its place as a major distribution center until the 1920s when the automobile and improved roads changed the transportation dynamics of the market.

The late nineteenth century also witnessed the continued growth of Knoxville’s manufacturing sector, especially during the 1870s and 1880s. During this time, “97 new factories turned out iron and railroad products, textiles, shoes, clothing, and processed food products” (Wheeler 1998:508). East Tennessee’s plentiful natural resources also played a prominent role in the rise of industry, as Knoxville added a number of iron, lumber, and marble manufacturers. The earliest leading manufacturing plant of the period was the Knoxville Iron Company, established in 1867. By 1905 the factory employed 850 people (Rothrock 1946:223). Most of Knoxville’s industries were located in the north and northwestern parts of the city, “where land was generally inexpensive and where access to the important railroad lines was easy” (McDonald and Wheeler 1983:21).

Knox County and East Tennessee developed a national reputation for the quality of its native marble, which was processed by a number of firms in the decades following the Civil War. By 1882, there were 11 quarries in Knox County that employed 300 people, and by 1906 the industry reportedly had annual revenue of almost a million dollars (Rothrock 1946:223).

The manufacturing boom contributed to significant population growth in Knoxville, especially during the decade 1880-1890. By 1900 Knoxville’s population had increased to over 32,000 people, many of those African-Americans who left the farms and few plantations of East Tennessee during the Civil War (Wheeler 1998:509). Along with the city’s population growth came the development of middle and upper class suburbs around downtown, the largest of which were North and West Knoxville, both annexed to the city in 1897 (Deaderick 1976:n.p.). The town of West Knoxville was built on top of the Fort Sanders area and contained many gracious mansions of the wealthy. Worker housing was built around the city’s factories by owners and private developers, so that by the 1880s Knoxville was ringed by a collar of mill villages, including Mechanicsville, Brookside Village, and Lonsdale.

SOUTH KNOXVILLE

The area now known as South Knoxville was not considered a part of the larger city for most of the nineteenth century and was not annexed until 1917. Originally cut off from the rest of the city by the Tennessee River with little or no bridge access, South Knoxville was largely unsettled aside from a

few scattered farms. In fact, most nineteenth-century maps of Knoxville do not show the area south of the river at all. It was not until the construction of the Gay and Henley Street Bridges in the late nineteenth and early twentieth centuries that the area was opened for industrial and suburban development.

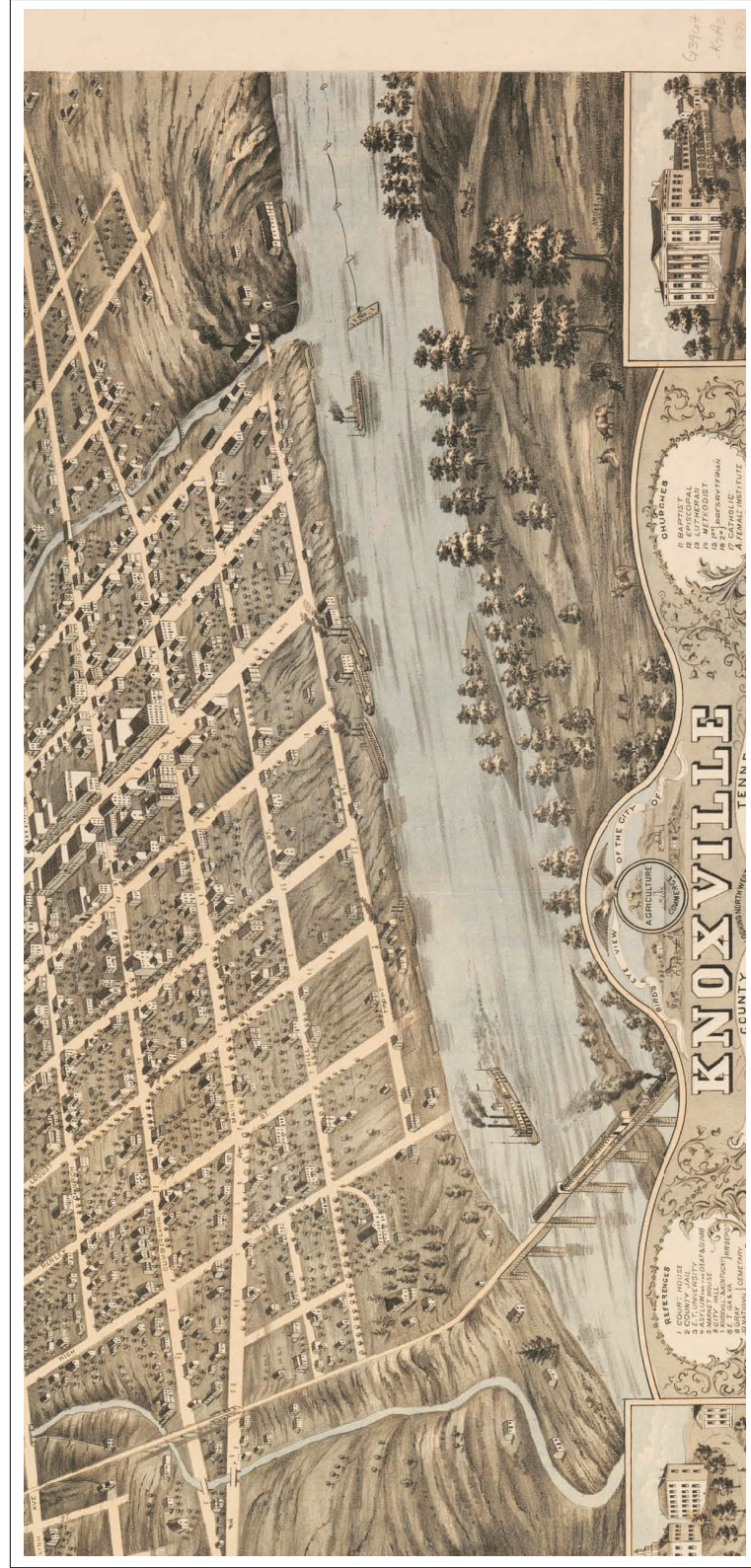
The 1863 map of the Battle of Knoxville shows a limited network of wagon roads and a few buildings in the South Knoxville area (see Figure 3). Another early illustration of the area is on the 1871 Bird's Eye view map of the city, which shows large trees and cattle grazing on the south bank of the river (Figure 6).

The 1871 Bird's Eye view map shows that the Knoxville and Augusta Railroad Bridge (later known as the Southern Railway) crossed the river on its way south by that time. The first Sanborn maps of Knoxville in 1885 showed only one building on the south side of the river across from downtown, the D. M. Rose Saw and Planing Mill. The mill, located directly across the river from the end of State Street, was illustrated on the Sanborn's front index page but no further details of its construction or surroundings were included in the additional pages. The mill is also illustrated at the foot of the Gay Street toll bridge on the 1886 Bird's Eye view map of the city (Figure 7). The D. M. Rose mill eventually grew into one of South Knoxville's largest and longest running industries.

South Knoxville was opened for development in the late nineteenth century by a series of four bridges that were built from Gay Street across the river. The first bridge to cross the river was a military pontoon bridge built by Union troops during their occupation of Knoxville from 1863-1865. This bridge washed away during the infamous Holston River flood of 1867 (*Macon Weekly Telegraph* 1867). Knox County replaced the military bridge in 1874 with a covered bridge, but it too was blown away the next year by a violent rainstorm and swift river currents. A third wooden truss bridge was built across the river at Gay Street in 1879. By 1894, however, the city was investigating options for a permanent masonry bridge, but the cost of such a structure was prohibitive. The city then accepted bids for a steel arch truss structure, and the Gay Street Bridge opened in 1898 (Irwin 1998).

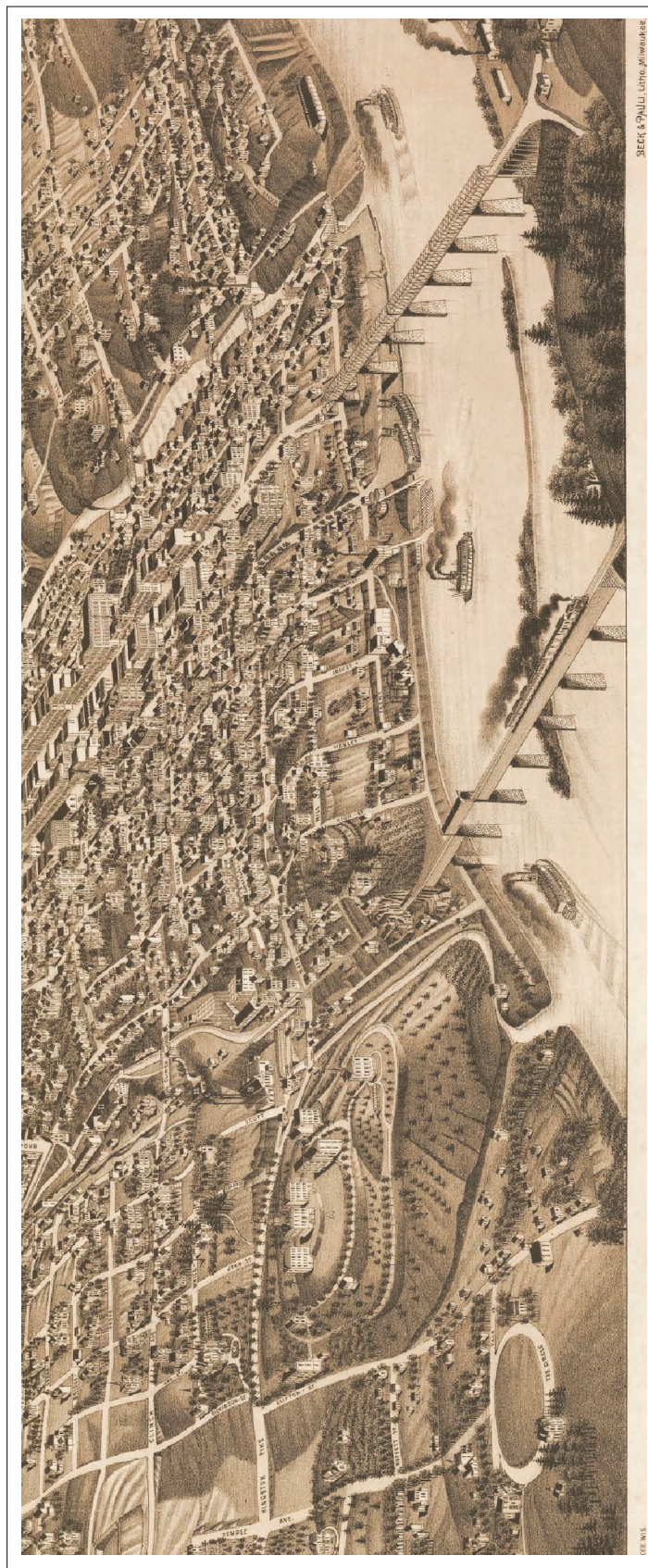
The series of Gay Street bridges had a direct impact on the industrial and residential development of South Knoxville. Sanborn maps show that by 1890 there were four industrial complexes located on the south bank, including the D. M. Rose & Company Lumber Mill, the Alexandria Lumber Mill, the Knoxville Furniture Company Sawmill and Planing Mill, and the Knoxville Butchers Association Slaughter House (later known as the East Tennessee Packing Company). These properties were not shown on the 1890 maps' index page but were included on additional sheets in the rear of the volume (Figure 8). More detail on the D. M. Rose & Company Lumber Mill can be found in a 1910 aerial drawing of the mill (Figure 9).

Further information about the development of South Knoxville and its relationship to the rest of the city appears on Pill's 1895 "New Map of Knoxville, Tennessee and Suburbs" (Figure 10). This map is perhaps the earliest representation of the whole area since it opened for development. The map also shows landowner names. S. B. Luttrell owned a large tract that stretched south from the riverbank between the Gay Street Bridge and the Knoxville and Augusta Railroad line. The 1895 Knoxville City Directory reveals that Samuel B. Luttrell owned a hardware store at 613 Gay Street and took his residence at 413 Wall Street. Luttrell's undeveloped riverfront parcel was later known as Luttrell Park before it was made the site of the East Tennessee Baptist Hospital in 1948.



Source: Library of Congress

Figure 6.
Bird's Eye View of Knoxville, Looking North, 1871



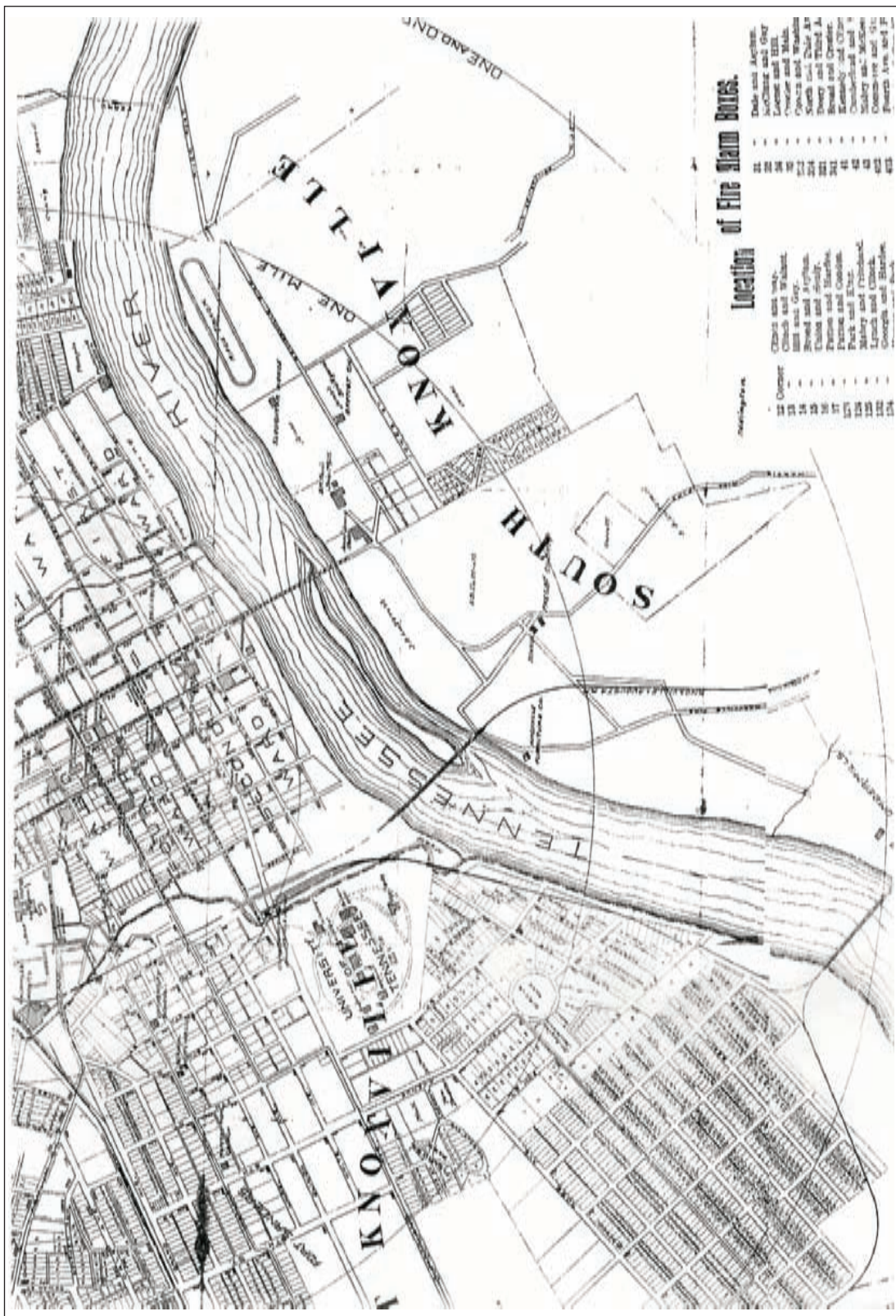
Source: Library of Congress

Figure 7.
Bird's Eye View of Knoxville, Looking North, 1886



Source: McClung Historical Collection, East Tennessee History Center

Figure 9.
Aerial View Drawing of the D. M. Rose Sawmill, circa 1910



Source: Knox County Archives

Figure 10. John R. Pill's "New Map of Knoxville, Tennessee and Suburbs"

The other prominent South Knoxville landowner on the 1895 Pill map was shown simply as “Jones,” who owned the Knoxville Butchers Association Slaughter House property, as well as a livery stable, a brick yard, and what appears to be the area’s first residential subdivision along the winding Miller Avenue. Miller Avenue is today known as Sherrod Road and still contains some of the area’s earliest residences.

The Pill map also illustrates the area’s early industries and their spatial relationships to each other, the railroad lines, and downtown Knoxville. From west to east, the map shows the Alexandria Lumber Mill complex on either side of the Marietta and North Georgia railroad just west of Goose Creek; the Knoxville Furniture Company west of the Knoxville and Augusta Railroad; the Jones Livery Stable at the southern end of the Gay Street Bridge; the D. M. Rose Saw Mill; the “slaughter house;” and an oval racetrack. According to Danette Welch, Reference Assistant at Knoxville’s McClung Historical Collection,

the race track in South Knoxville was well known in its day, and was quite important, at least to those with an interest in horse racing and/or breeding. This track was the one where Knoxville’s Fall Races were held each year in association with the city’s annual fair. The purses were not particularly large, but great deals of money were wagered and Knoxville’s races attracted owners and spectators from several states. Perhaps the most memorable of these Fall races was the series from 1882, during which the O’Conner-Mabry Killings on Gay Street in downtown Knoxville resulted (Welch 2007).

Although it does not say so on the Pill map, the South Knoxville racetrack was probably owned by the Jones who was discussed above. The area appears on later maps as the subdivided “Jones Addition,” which developed into a residential neighborhood in the early twentieth century.

The basic mixed industrial/residential land use pattern shown on the Pill map continued to shape the South Knoxville waterfront through the twentieth century. Sanborn maps show that by 1903 the area had a developed road system, as well as the beginnings of a real neighborhood including a Baptist Church, Presbyterian Church, a high school, and a number of small homes. By the 1920s residential sections were well developed south of the D. M. Rose Lumber Mill and on the former racetrack property to the west. A commercial strip had developed by this time along Island Home Avenue (also called Sevierville Pike) with gas stations, churches, and stores that served the surrounding area. The steep topography of the area had significant impact on the shape of these neighborhoods and confined houses to low areas along the waterfront and between hills. This neighborhood placement also had the effect of cramming houses right up next to the industries located in these same areas, which produced the mixed residential/industrial character of the area that remains today.

The construction of the Gay and Henley Street Bridges paved the way for the annexation of South Knoxville in 1917 and opened the area for the development of middle and upper class suburbs such as Island Home Park and Lindbergh Forest. Island Home Park was a streetcar suburb that first developed around 1910 on land adjacent to the original entrance drive to prominent local citizen Perez Dickinson’s estate, Island Home. Lindbergh Forest developed in 1929 as one of South Knoxville’s earliest automobile suburb at the intersection of Chapman Highway and Woodlawn

Pike. Suburban development continued through the twentieth century on either side of the Chapman Highway in areas like Vestal and Lake Forest.

The Tennessee Valley Authority (TVA) completed the Fort Loudon Dam on the Tennessee River at Lenoir City, below Knoxville, in 1943. The dam created Fort Loudon Lake, which submerged the river shoals in Knoxville and changed the city's shoreline. The dam provides almost 400 miles of shoreline and 14,600 acres of water surface. It has a generating capacity of 155,600 kilowatts of electricity and provides numerous recreational opportunities (Tennessee Valley Authority 2007).

SUMMARY

For much of the nineteenth century, South Knoxville was sparsely occupied and home to a few farms. The occupation of the area increased dramatically during the Civil War and the Union's occupation of Knoxville, and the south side of the Tennessee River was also the focus of the Battle of Knoxville. By the late nineteenth century, bridges across the Tennessee River spurred the economic growth of the south side of the river, which was characterized by a series of industries that hugged the river's edge and were backed by working class neighborhoods. By the early twentieth century, the residential mix of South Knoxville had grown to include middle and upper class suburbs such as Island Home Park and Lindbergh Forest. The area retains much of this mixed - residential and industrial - character. In recent years, the area has begun to see an influx of residential condominium developments, spurred in part by the City of Knoxville's plans for the South Waterfront.

V. PREVIOUSLY RECORDED CULTURAL RESOURCES

This chapter discusses known cultural resources within the project area, and is divided into two sections: Archaeological Resources and Historic Resources. This overview of existing resources serves to identify if there are any known sites or structures that may be impacted by the South Waterfront Project, and also informs the assessment of the potential of the Phase I projects.

ARCHAEOLOGICAL RESOURCES

There are 31 previously identified archaeological resources within and surrounding the Knoxville South Waterfront Phase I project areas (Figure 11). The Tennessee State Site Files housed at Tennessee Division of Archaeology (TDOA), Nashville, was searched for archaeological resources within both a one and two-mile radius of the Gay Street Bridge, which is centrally located within the designated project areas. This two-fold approach was performed given the nature of prehistoric and historic site dispersal. Previously identified prehistoric sites showed greater dispersal in the area, likely due to historic disturbance and lack of archaeological survey. In order to gain a perspective of prehistoric occupations in the Knoxville area, prehistoric sites within a two-mile radius were researched in addition to five sites located immediately west of this radius. A concentration of previously defined historic resources exists within and near downtown Knoxville that provides significant information about city occupants and urban growth. Historic sites were researched within a one-mile radius, which consists of significant urban and early rural cultural resources.

Below is a summary of these findings, which are discussed by prehistoric and historic timeframes, respectively. Although numerous sites have been recorded, many are minimally documented due to lack of archaeological records and/or archaeological fieldwork. All sites are described within Tables 1 and 2; however, more detailed discussion is provided of specific sites that are considered significant to research of the Knoxville South Waterfront project areas.

PREHISTORIC ARCHAEOLOGICAL RESOURCES AND CULTURAL STRATIGRAPHY

A total of seven previously identified prehistoric resources have been documented within a two-mile radius of the project area in addition to five resources located immediately west along the Tennessee River/Fort Loudon Lake banks (Figure 11, Table 1). These sites include Archaic, Woodland, and Mississippian period occupations found along the floodplain of the Tennessee River (Figure 11). The majority of these sites has been disturbed or lack sufficient information to justify detailed discussion. However, several resources provide a glimpse of the local prehistoric occupations. Local prehistoric sites are characterized by buried cultural surface horizons (Delcourt 1980), which is significant to archaeological testing and research in the region. Therefore, the cultural stratigraphy revealed during archaeological testing is also discussed in this section.

Table 1. Previously Identified Prehistoric Cultural Resources in Project Vicinity

Site No./Name	Site Type	Cultural Affiliation	Source	Eligibility
40KN4/Looney Island	Village midden, several concentrations	Middle Woodland	Fisher and Wise 1953-site form	Unknown
40KN6	Scattered midden along river	Early Woodland and Middle Mississippian	Fisher 1952-site form	Unknown
40KN15/B.D. Bradson Site	Mound opposite Looney Island (40KN4), village midden with shell areas	Middle Woodland	Fisher and Wise 1953-site form	Unknown
40KN16/ Experiment Station Mound	Mound and village site	Early Woodland	Fisher and Wise 1950-site form	Unknown
40KN39	Small habitation site and shell midden	Early Woodland	McNutt and Fisher 1962-site form	Unknown
40KN45*	Large prehistoric artifact and shell scatter, historic artifact scatter, Confederate ferry crossing	Archaic-Mississippian, Unknown Historic	Angst 2005, 2007	Eligible
40KN68*/James White home and McCammon property	Prehistoric artifact scatter; house site(s), historic artifact scatter	All prehistoric periods; Early to Mid 19 th Century	Faulkner 1981-site form, Faulkner 1984	Eligible?
40KN57	Disturbed lithic scatter/open habitation	Late Archaic	DuVall 1976-site form	Ineligible
40KN58	Disturbed lithic and ceramic scatter	Early-Middle Woodland	DuVall 1976	Ineligible
40KN113*	Open habitation, Prehistoric artifact scatter	Archaic - Mississippian, Early 19 th – Mid 20 th Century	Roberts 1984-site form, Marcel 2004, Angst 2005	Ineligible
40KN243	Prehistoric artifact and shell scatter	Undetermined Prehistoric, Mississippian	Charles 1999-site form	Unknown
40KN276*	Open Habitation, subsurface features, historic fill and associated debris	Early Archaic, Early Woodland, Mid to Late 20 th Century	Marcel and Kocis 2004; Angst and Kocis 2004; Angst 2006-site form	Ineligible

* Historic component

Site 40KN45 is a large multi-component ephemeral site located on a large floodplain and terraces that flank the south side of the Tennessee River/Fort Loudon Lake (Angst 2005:189) (Figure 11). Testing at this site included mechanical coring and geophysical studies, revealing buried archaeological deposits including subsurface features (Angst 2005, 2006). Multiple prehistoric cultural components were identified, including Early Archaic, Woodland, and Mississippian period occupations. Angst (2005) identified an intact Woodland midden at the site that was buried beneath 50 centimeters of historic alluvium along the lower terrace and overlaid a potential Archaic component. Deposits related to the Mississippian component (Dallas and Hiawasee) were located along the higher terrace at 40KN45 and approximately 30 to 50 centimeters below surface. Two paleosols containing prehistoric cultural material were recognized at different locations along the landform at 94 and 60 centimeters below surface. Features were most heavily associated with the Mississippian component located along the higher terrace (Angst 2005).

BACK OF TABLOID

Features included postmolds, clay-lined hearths, a burial, and fire-cracked rock concentrations. Three structures and a palisade were recognized at 40KN45. Structure 1 was an Early Mississippian storage facility/isolated homestead. Structures 2, 3, and the palisade were associated with a Late Mississippian hamlet or small village (Angst 2005:189-190).

Site 40KN45 represents a significant prehistoric site on a large floodplain and related terraces within the local research area. Site 40KN45 is also the location of a Confederate ferry crossing. A scatter of historic artifacts and archival research suggests that the site was used historically from the late eighteenth century through at least the middle nineteenth century.

At 40KN68, the focus of previous excavations was the home of James White, discussed below. However, a scatter of prehistoric artifacts was recovered at 40KN68 illustrates temporal depth in the local area. Faulkner (1984:206) does not discuss these components in detail, although it appears that the terrace was utilized as an ephemeral camp/activity area (in the area tested) throughout all prehistoric periods. Prehistoric inhabitants likely found the bottomland location and adjacent spring favorable to occupation (Figure 11).

Site 40KN243 is located east of the current project area along a narrow terrace of the Tennessee River (Figure 11). Stratigraphy revealed at this site provides information as to the depth of cultural components within the alluvial environment. Excavation results showed deep historic/modern alluvial deposits of 30 to 70 centimeters below surface and overlying a buried A horizon and cultural midden. Recovery of intact Mississippian artifacts beneath the alluvium suggests potential for deeply buried intact prehistoric deposits along the local Tennessee River terraces.

Site 40KN276 is an Early Archaic and Early Woodland artifact located on a terrace of the Tennessee River/Fort Loudon Lake (Figure 11). Similar to 40KN243, excavations at this site revealed a buried A horizon below an alluvial cap of 30 centimeters (Marcel and Kocis 2004:23). Associated with the buried A horizon were a minor quantity of artifacts from 30 to 260 centimeters below surface. In addition, a cultural feature comprising of a fire cracked rock cluster was encountered. Archaeological and geomorphological results illustrate the potential for deeply buried intact cultural deposits and historic/modern fill episodes in the local area.

During testing of the 40KN276 area, multiple trench excavations were performed to test for deeply buried archaeological deposits. The findings from these trench excavations are pertinent to understanding the local alluvial and historic fill episodes (Marcel and Kocis 2004:23-30). Three trench excavations (Trenches 1, 2, and 6) are chosen as representative of two differing depositional areas along the first and second terraces of the Tennessee River.

Trench 1 was located along Terrace 2 and east of 40KN276. The stratigraphy showed distinct historic/modern fill episodes reaching a depth of approximately 1.8 meters below surface. The fill was characterized by the presence of historic artifacts and modern material. Below these fill episodes was a buried surface deposit of dark grey loamy fine sand that lacked cultural material. The water table was encountered at 3.2 meters below surface and testing was terminated. Similar to findings in Trench 1, Trench 6 showed historic/modern fill episodes to a depth of 2.2 meters below surface. Deeper testing was not possible due to trench instability and no evidence of buried surface deposits were observed. Interestingly, Trench 6 is located eight meters south of 40KN276 on a small rise, but did not reveal any prehistoric material.

Trench 5 was placed at the Terrace 1 location of 40KN276 along the Tennessee River. Therefore, this trench excavation provides an example of local floodplain stratigraphy. This excavation revealed five distinct depositional layers within one meter of the ground surface. The first layer was modern/historic alluvial fill to a depth of 30 centimeters below surface. Below this fill, a buried surface horizon was revealed from 30 to 47 centimeters below surface that lacked cultural material. From 47 to 87 centimeters below surface, two weakly developed horizons were exposed and underlain by a second buried surface deposit (87 to 100 cm below surface) containing a nondiagnostic small rock cluster cultural feature exposed at 100 centimeters below surface. Excavation was terminated at one meter below surface (Marcel and Kocis 2004:36).

Phase II Archaeological Testing conducted at 40KN276 of the deeply buried surface horizons showed a minor quantity of artifacts associated with the buried surface horizons (Angst and Kocis 2004). An additional three cultural features were identified, including a cluster of fire-cracked rock, a historic/modern post mold, and an indeterminate dark stain associated with two Early Woodland sherds. In addition, an Early Archaic component was represented by a Kirk hafted biface and additional Archaic deposits were anticipated (Angst 2006-site form). Angst and Kocis (2004) determined that 40KN276 contained intact cultural deposits, but was unlikely to generate significant archaeological data through further excavations and the site was therefore recommended ineligible for nomination to the NRHP.

HISTORIC ARCHAEOLOGICAL RESOURCES

A total of 24 historic archaeological resources have been previously identified within or immediately adjacent to a one-mile radius of the proposed Knoxville South Waterfront project areas (Figure 11, Table 2). These sites show a diversity of historic components representing residences, businesses, industries, and military activities. In relation to the current research focus, selected historic archaeological sites are discussed in greater detail below due to association with waterfront and Civil War activities. Research of these sites illuminates the potential for similar site types within the current project area.

Table 2. Previously Identified Historic Cultural Resources in Project Vicinity

Site No./Name	Site Type	Cultural Affiliation	Source	Eligibility
40KN45*	Large prehistoric artifact and shell scatter, historic artifact scatter, possible ferry crossing	Archaic - Mississippian, Unknown Historic	Angst 2005, 2007	Eligible
40KN52/Blount Mansion	House, garden, and office of William Blount	18 th Century	Polhemus 1973; Faulkner 1984-site form	Listed
40KN63/ Weaver & Bro. (Knoxville Pottery Company)	Historic pottery and waste debris, brick warehouse	19 th - Early 20 th Centuries	Smith-site form	Ineligible
40KN68*/James White home and McCammon property	Prehistoric artifact scatter; house site(s), historic artifact scatter	All prehistoric periods; Early - Mid 19 th Century	Faulkner 1981-site form, Faulkner 1984	Eligible?
40KN112	Disturbed historic house and artifact scatter	Late 19 th - Early 20 th Century	Roberts 1984- site form, Angst 2007	Ineligible

Site No./Name	Site Type	Cultural Affiliation	Source	Eligibility
40KN113*	Open habitation, Prehistoric artifact scatter	Archaic - Mississippian, Early 19 th – Mid 20 th Century	Roberts 1984-site form, Marcel 2004, Angst 2005	Ineligible
40KN128/Sovran Bank	Perez Dickenson house and outbuildings	Mid - Late 19 th Century	Bentz 1988-site form, Bentz 1990	Not Accessed
40KN139/Whittle Communications	Numerous historic structures and artifact scatter	Mid 19 th - Mid 20 th Centuries	Bentz 1989-site form	Unknown
40KN140	Historic commercial site	Late 19 th - Early 20 th Centuries	Faulkner 1990	Not Assessed
40KN142/Sevierville Hill	Historic rural house, military encampment with earthworks	Civil War - 20 th Century	Bentz 1993	Unknown
40KN144/Mabry-Hazen	Union and Confederate headquarters in house, Union entrenchment	Civil War	Kim 1993-site form, Yong 1993	Structure eligible
40KN145	Disturbed urban house and commercial buildings	Late 18 th Century - Present	Unknown-site form, Garrow 2000	Not Accessed
40KN146	Historic commercial	Mid - Late 19 th Century	Unknown-site form	Not Accessed
40KN149	Historic commercial and residential	Mid - Late 19 th Century	Garrow 1995-site form, Bentz 1998	Eligible
40KN152/Hyatt Regency	Urban residential and dump, Flint Hill Civil War battery	Civil War, Mid 19 th -Early 20 th Centuries	Kim 1995-site form	Ineligible
40KN212/Old Knoxville City Hall	Historic public building complex, Tennessee School for the Deaf	Mid 19 th - Early 20 th Centuries	Unknown-site form	Listed
40KN217/Fort Dickerson	Civil War fort, encampment, battlefield, and earthworks	Civil War, Mid 19 th Century	Nance and Smith 1997-site form	Not Accessed
40KN218/Fort Stanley	Civil War fort, encampment, and earthworks	Civil War, Mid 19 th Century	Nance and Smith 1997-site form	Not Accessed
40KN220/Fort Higley	Civil War fort and entrenchments	Civil War	Nance and Smith 1997-site form	Not Accessed
40KN222/Turner House	Urban residential	Late 19 th Century- 1920+	Faulkner 1997-site form, Faulkner 1999	Not Accessed
40KN223	Urban domestic, industrial, and transportation	Mid 19 th – 20th Centuries	Faulkner 1997-site form	Not Accessed
40KN229/Servants Quarters and Cowan-Briscoe Estate	Urban domestic	Mid 19 th Century -1933+	Avery 1999-site form	Not Accessed
40KN286/ Bowlus, Miner, and French Pottery	Historic pottery company	Mid-late 19 th Century	Smith 2005-site form	Unknown
40KN276*	Open Habitation, subsurface features, historic fill and associated debris	Early Archaic, Early Woodland, Mid to late 20 th Century	Marcel and Kocis 2004; Angst and Kocis 2004; Angst 2006-site form	Ineligible

* Prehistoric Component

Site 40KN68 represents a residence associated with two prominent Knoxville families. During the late eighteenth to early nineteenth-century James White, a pioneer of Knoxville, built a house here and established a plantation. In 1852, the McCammon family dismantled the original structure and built elsewhere on the property. Archaeological research at this site concentrated on White's log cabin (Faulkner 1981, 1984).

Site 40KN113 contained multiple prehistoric and historic components mixed in plow zone soils. Deposits related to the historic component were extensively eroded and found along a high terrace adjacent to the Tennessee River/Fort Loudon Lake (Angst 2005:187) (Figure 11). Historic cultural features related to an early nineteenth century isolated homestead and a mid-twentieth century component of unknown function. An early nineteenth century cellar feature (Feature 1) was identified and intruded into prehistoric deposits containing a ground stone celt and other lithic material. The cellar contained the possible remnants of a chimney pad (Angst 2005). Postmolds found during excavation were interpreted as fence lines associated with the nineteenth-century component.

Site 40KN149 is located north of the Tennessee River and railroad tracks within downtown Knoxville (Figure 11). This site was extensively tested and illustrates the growth of a small section of the city during the industrial period of the mid nineteenth to mid twentieth centuries (Bentz 1998:180). Archaeological and archival data showed that the site location was utilized for residences during this era and was later used for a warehouse. The original occupants at 40KN149 were prosperous, but the advent of public transportation in the early twentieth century led to the boom of wealthy suburbs and a poverty-stricken inner city. It was during this timeframe that occupants of a low socioeconomic level resided along the northern waterfront of the city of Knoxville. According to Bentz (1998:187), the "area [40KN149] rapidly deteriorated economically from the relatively prosperous neighborhood in the 1890s to an urban slum by the 1920s." Refuse deposits associated with industrial growth, railroad construction, and a former warehouse capped the residential deposits and reflected the evolution of the local landscape and its alteration associated with the growth of Knoxville.

In close proximity to 40KN149 is 40KN152, located atop a landform historically known as Flint Hill. This landform was utilized during the Civil War as a military position and a battery gun emplacement with associated earthworks (Kim 1995-site form). Late nineteenth-century (and later) urban development destroyed much of the Civil War remains. This urban development was a residential neighborhood for upper middleclass merchants and professionals. Comparable to 40KN149, by the 1930's the majority of the middle-class homes were subdivided into apartments reflecting occupants of a lower socio-economic level supporting descriptions made by Bentz (1998). The homes were demolished during the late twentieth century due to disrepair.

Site 40KN286 is the probable location of a Knoxville pottery and store primarily owned by Lewis Bowlus, Samuel Miner, and Hugh French from 1866 to 1867 (Smith 2005-site form). This pottery and store occupied a previously standing building "at the foot of Gay Street, immediately west of the current Gay Street Bridge" (Smith 2005-site form). Nathan Smith likely ran the store for approximately one year, as the owners are not documented as potters by trade. A significant flood of the Tennessee River in 1867 destroyed numerous properties along the waterfront of downtown Knoxville. Given the absence of the building in an 1885 photograph, it is presumed that the pottery and store was destroyed at this time.

HISTORIC PROPERTIES

There are no properties listed on the NRHP within the Knoxville South Waterfront Phase I project areas, and no comprehensive survey of properties 50 years or older has occurred within the project area boundaries or in the greater South Knoxville area. There are, however, five historic resources within one mile of the project areas (Table 3, Figure 11). Three NRHP historic districts are located in South Knoxville, including the Island Home Park Historic District, the Tennessee School for the Deaf Historic District, and the Lindbergh Forest Historic District. Additionally, both the Gay and Henley Street bridges are eligible for the NRHP. Knox Heritage, Inc., the local non-profit historic preservation advocacy organization, began writing NRHP nominations for the two bridges in 1999 but these were never completed; the draft nominations are on file at the SHPO. The two railroad bridges in the area, the L&N Bridge and the Southern Railway Bridge, date to the nineteenth century but have not been evaluated for historic significance.

Table 3. Previously Identified Historic Cultural Resources in Project Vicinity

Site Name/Number	Type	Location	Eligibility
Island Home Park Historic District	Early 20 th Century Residential	Island Home Blvd., Fisher Place, Spence Place, Maplewood	Listed
Tennessee School for the Deaf Historic District/40KN212	School	2725 Island Home Blvd.	Listed
Lindbergh Forest Historic District	Early 20 th Century Residential	SE corner Capman Hwy. and Woodlawn Pike	Listed
Gay Street Bridge	Bridge	S. Gay Street across river	Eligible
Henley Street Bridge	Bridge	S. Henley Street across river	Eligible
L&N Bridge	Bridge	West of Southern Railway Bridge	Unknown
Southern Railway Bridge	Bridge	West of Henley Street Bridge	Unknown
Fort Dickerson/40KN217	Civil War Fort	3000 Fort Dickerson Rd.	Locally Designated

HISTORIC DISTRICTS

All information in this section is drawn from NRHP nominations and other documentation on file at the Tennessee Historical Commission (THC).

Island Home Park Historic District

The South Waterfront project's Phase I Site 11 (Baker Creek Landing) is located immediately west of the Island Home Park Historic District, the largest historic district in South Knoxville. The eastern boundary of Site 11 meets the western boundary of the historic district along Island Home Avenue. The historic district is a five and one-half block residential neighborhood containing 91 properties along Island Home Boulevard, Spence Place, Fisher Place, and Maplewood Drive. The neighborhood was nominated to the NRHP under the "Suburban Growth and Development, 1861-1940" context of the *Multiple Resources Documentation Form for Historic and Architectural Resources in Knoxville and Knox County, Tennessee*. As an early twentieth-century streetcar suburb,

the district meets NRHP Criterion A for its association to Community Planning and Development. Its collection of Bungalow and Craftsman style homes makes it significant under Criterion C.

According to the NRHP nomination, “the Island Home neighborhood was named for the model farm and second home of Perez Dickinson. Mr. Dickinson was a prominent merchant, banker, and educator in Knoxville and Knox County. He owned Island Home from 1875 to approximately 1899, when the Island Home Park Company took control of the property. Prior to that time, Island Home served as a summer cottage, a guesthouse, and an agricultural and horticultural center. The Island Home Park Historic District occupies land that originally formed the western approach to the Island Home house, and Island Home Boulevard follows the estate’s original entrance drive.

After the construction of Gay Street Bridge in 1898 the area became easily accessible from Knoxville. After a streetcar company installed tracks across the Gay Street Bridge and along Island Home Boulevard, the privately-owned park property became a public gathering place and picnic area. Around 1910 the Island Home Park Company began developing the property into a subdivision of middle and upper class homes in the Craftsman, Bungalow, Tudor Revival, and Colonial Revival styles. The NRHP nomination states, “it is the dominance of the Bungalow styling that contributes greatly to the significance of the Island Home Park Historic District. Although there are other areas in Knoxville with Bungalows, there is no other area where the Bungalows are this large or elaborate, or where there are this many of them.”

The Tennessee School for the Deaf Historic District

Located immediately east of the Island Home Park Historic District, the Tennessee School for the Deaf (TSD) Historic District lies on the original estate grounds of Island Home. The TSD was established in 1844 by the Tennessee Legislature and was housed in rented property in East Knoxville. In 1846 the school received two acres of land in downtown Knoxville where it built a facility now known as the Knoxville City Hall (listed on the NRHP). In 1923, the school put up five buildings at the former Island Home estate to create the TSD campus. The new structures included Cottage Dormitories A, B, and D; the Administration and Classroom Building (Ward Building); and the Gymnasium. Perez Dickinson’s 1846 Italianate home became a house for the school’s administrator. Renowned architect and TSD alumnus Thomas S. Marr designed the Ward Building.

Lindbergh Forest Historic District

The Lindbergh Forest Historic District is located about one mile south of the Tennessee River and southeast of the Chapman Highway and Woodlawn Pike intersection. The district is a five-block residential neighborhood that was first developed in 1929. It was nominated under NRHP Criteria A and C because it exemplifies twentieth-century suburban growth and expansion in Knoxville and exhibits distinctive architecture. The neighborhood was nominated to the NRHP under the “Suburban Growth and Development, 1861-1940” context of the *Multiple Resources Documentation Form for Historic and Architectural Resources in Knoxville and Knox County, Tennessee*. Nine of 57 buildings and one site contribute to the district’s significance. Architectural styles are dominated by the revival styles of the early twentieth century, with Tudor Revival being most prevalent. Bungalow, Minimal Traditional, Modern, and Mission styles are also represented. The district also contains two prefabricated metal Lustron Houses built after World War II to meet the era’s housing shortage.

CIVIL WAR RESOURCES

Fort Dickerson Park

Fort Dickerson is an earthen military fortification that formed part of the defensive perimeter around Knoxville during the Civil War. Fort Dickerson Park is located on a hilltop east side of the project area between the Chapman Highway and the Southern Railroad line. The park is a locally designated historic site that interprets the history of the 1863 Battle of Knoxville. Site 12, the Spring Water Center, lies within the boundaries of the park.

HISTORIC BRIDGES

Gay Street Bridge

The 1898 Gay Street Bridge was the fourth in a series of bridges built in this location across the Tennessee River into South Knoxville (Figure 12). The Tennessee SHPO determined the bridge was eligible for the NRHP under the "Suburban Growth and Development, 1861-1940" context of the *Multiple Resources Documentation Form for Historic and Architectural Resources in Knoxville and Knox County, Tennessee*. It is a steel cantilevered truss bridge designed by engineer Charles Evans Fowler, who strived to join beauty and utility in his designs. The bridge and its predecessors opened South Knoxville for industrial and residential growth and contributed to the development of suburbs such as Island Home Park (c.1910) and Lindbergh Forest (1929). The bridge meets NRHP Criteria A and C for its significance to Knoxville transportation and engineering.

Henley Street Bridge

As with the Gay Street Bridge, the Tennessee SHPO determined the Henley Street Bridge eligible for the NRHP, though the nomination for the property was never completed (Figure 13). It relates to the "Suburban Growth and Development, 1861-1940" context of the *Multiple Resources Documentation Form for Historic and Architectural Resources in Knoxville and Knox County, Tennessee*. The Henley Street Bridge was constructed between 1930-1932 after Knoxville produced a comprehensive master plan for the city that included major streets and thoroughfares, as well as a new bridge to South Knoxville. The structure was designed by Marsh Engineering of Des Moines, Iowa, and built by Booth and Flinn Company of Pittsburgh, Pennsylvania. Its historic significance relates to its contributions to Knoxville's vehicular transportation and relationship to the growth of early twentieth century suburbs in South Knoxville. The bridge was also envisioned as a gateway to the Great Smoky Mountain National Park, which was developed around the same time. This historic resource meets NRHP Criterion A for Community Planning and Development. It also meets Criterion C for engineering because it represents an example of a concrete open spandrel arch bridge.

Louisville and Nashville Bridge

The L&N railroad bridge is located at the western end of the project area and crosses the Tennessee River between South Knoxville and the University of Tennessee campus. The bridge dates to the late nineteenth century, but its exact construction date is unknown. It was the second railroad bridge to cross the river, after the circa 1870 Southern Railway bridge. The L&N Railroad Bridge has not been recorded and its NRHP eligibility is unknown.

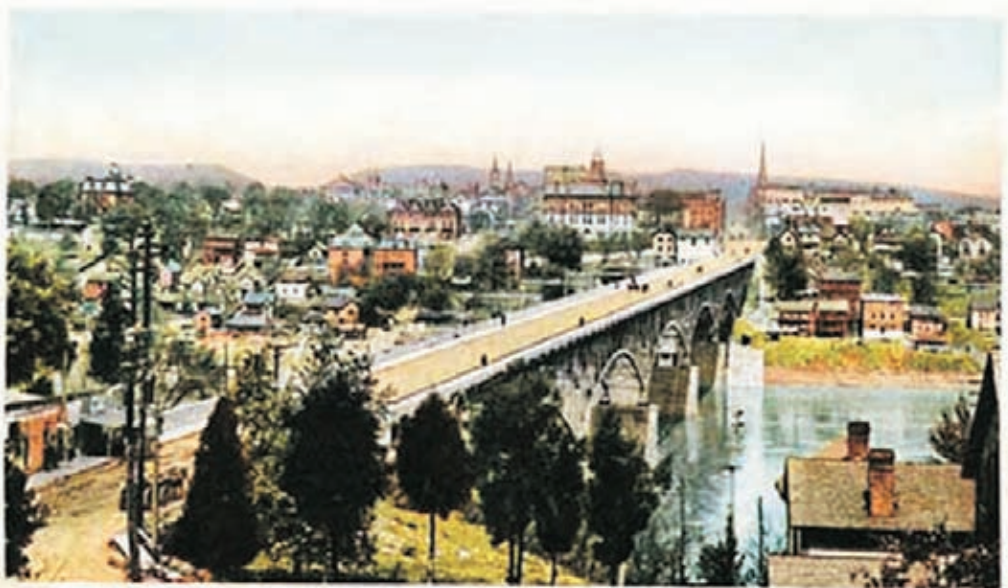
The Southern Railway Bridge

The Southern Railway bridge was completed shortly after the Civil War and is visible on the 1871 Bird's Eye view map of Knoxville (Figure 6). It crosses the Tennessee River just west of the Henley Street Bridge and leads to the Southern Station on the north end of downtown. The Southern Railway Bridge has also not been surveyed and its NRHP eligibility is also unknown.

Figure 12.
Two Historic Postcard Views of the Gay Street Bridge



NEW COUNTY BRIDGE ACROSS TENNESSEE RIVER AT KNOXVILLE.
Completed July 1st, 1908. 109 feet in length, 42 feet in width, 105 feet above low water mark. cost, all complete, \$227,500.



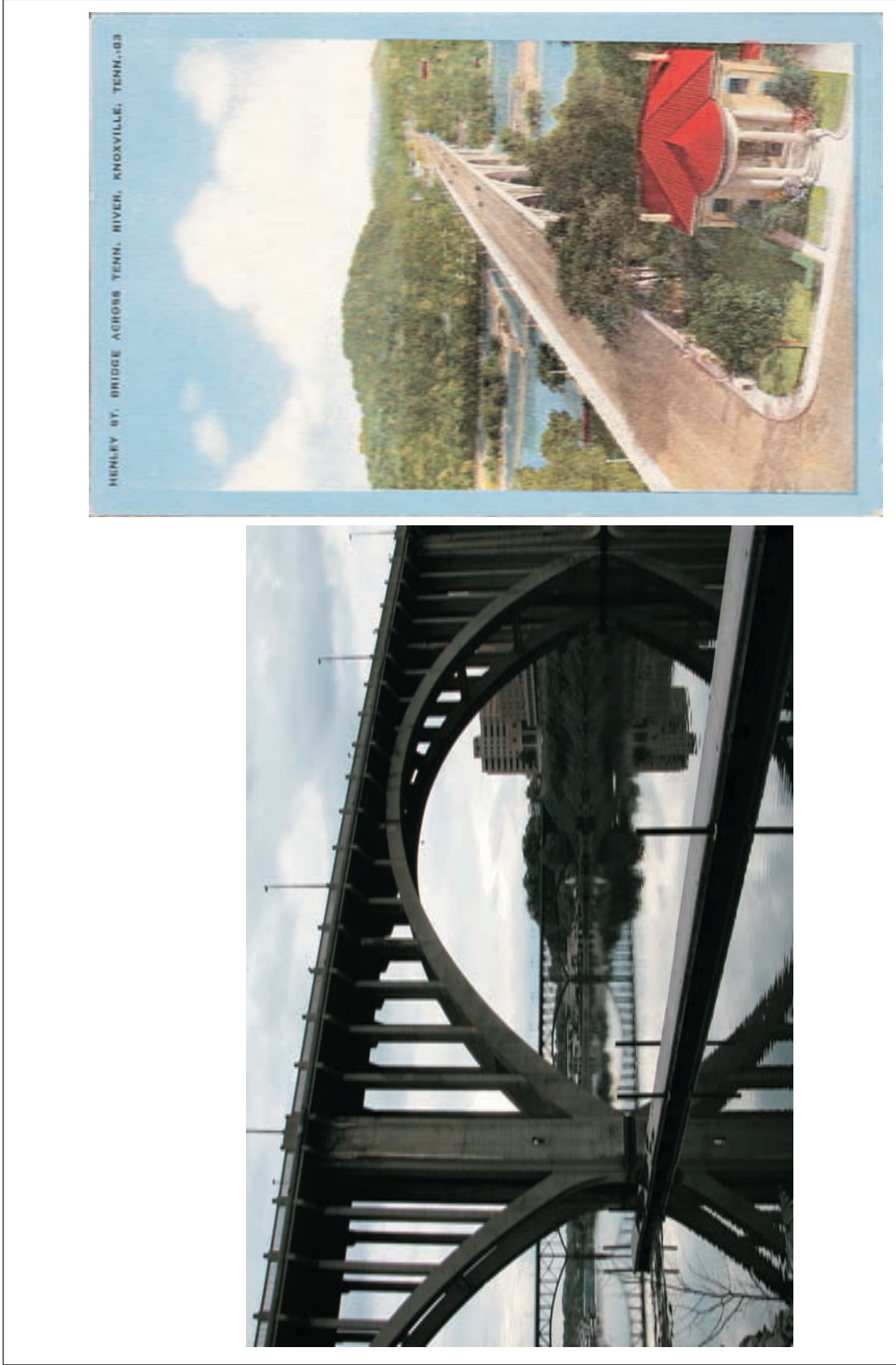


Figure 13.
Henley Street Bridge in Current and Historic Postcard Views

VI. ARCHAEOLOGICAL RESEARCH DESIGN

Based on background research of the Knoxville South Waterfront project areas and surrounding landscape, there is potential to encounter specific site types during Phase I Archaeological Survey. Site types are outlined by prehistoric and historic timeframes due to differentiation in the cultural landscape through time. Findings of the outlined site types or other intact cultural deposits not predicted within the scope of this preliminary research have the potential to contribute to the archaeological record and knowledge of the local cultural landscape.

PREHISTORIC

Previously defined prehistoric archaeological sites cluster along the first and second terraces of the Tennessee River/Fort Loudon Lake and are often deeply buried by alluvium. These sites are primarily located along the first terraces and show exploitation of these floodplain areas. All prehistoric cultural timeframes are represented; however, Archaic and Woodland periods are most heavily represented in the way of artifact scatters and long-term occupations. In addition, two Woodland/Mississippian mounds (40KN15 and 40KN16) and evidence for a Late Mississippian hamlet/small village (40KN45) illustrates that the local research area was heavily occupied during late prehistoric timeframes. A prevalence of shellfish remains at previously identified sites suggests that information pertaining to subsistence and local exploitation is present.

Though floodplains were heavily utilized during prehistory, bluffs and rock faces provide additional short-term shelter. Rockshelters and caves have been documented in the local area and tested archaeologically. No cultural resource has been identified for this shelter type; however, the potential for cultural deposits at these locations exists.

Given this brief synopsis of prehistoric occupations in the local area, the current project areas have potential for the following site types and stratigraphy within the context of specific landforms.

- There is a high potential for deeply buried intact cultural deposits along Terrace 1 in the proposed project areas.
 - Depth of cultural deposits could range from 30 to 250+ centimeters below surface and reveal stratigraphically segregated cultural components separated by noncultural fill episodes.
 - Cultural deposits are likely to yield living surfaces containing cultural features and middens.
- There is a low potential to locate prehistoric sites along Terrace 2 or highly sloped reaches of the project areas.

- Terrace 2 is characterized by deep historic/modern fill episodes at other locations; however, testing of these locales within the current project areas is needed to determine nature of deposits.
- Highly sloped areas fall into two categories including bluffs/rock faces and hill-slope.
 - Bluffs/rock faces along the river have the potential for prehistoric cultural resources within rock shelters and caves.
 - Hill-slope, characterized by steep (>15% slope) and often eroded deposits, contains few if any intact prehistoric cultural deposits.

HISTORIC

Urban and rural residences, commerce, and industry characterize historic archaeological sites previously defined within the local research area. The majority of these resources are in association with the first settlers and urban Knoxville on the north side of the Tennessee River. Civil War sites dot both sides of the river. Existing Civil War resources (40KN217, 40KN218, and 40KN220) located along the south side of the Tennessee River are strategically located atop landforms roughly 0.5 kilometer from the river and not specifically associated with the waterfront or the current project areas. There is the potential for Civil War campsites and earthworks along the river. The mid to late nineteenth-century summer home of an upper class Knoxville resident located on the south side of the river illustrates that, prior to infrastructure improvements, this area may have been the location of scattered residences/farms. This is supported by the isolated homestead and agricultural evidence at 40KN113. Late nineteenth- and early twentieth century infrastructure improvements (Gay and Henley bridges) encouraged growth of South Knoxville. This growth is observed by the TSD, Island Home Park, and Lindbergh Forest districts established during the early twentieth century. Although residential development occurred, little is known of any commercial/industrial growth within South Knoxville.

Two sites types are not represented within the archaeological record that are often associated with rural to urban/industrial centers along rivers and nearby tributaries including piers/wharves and mills. As the current project areas are closely associated with the river waterfront and confluences with Goose and Baker creeks, there is a potential of encountering these cultural remains.

This brief synopsis of historic occupations in the local area outlines the potential for the following site types within the context of specific landforms.

- Terrace 1 and 2 on the south side of the Tennessee River has a high potential for small Civil War sites such as camps, batteries, and earthworks.
 - Sites may occur on small landforms along Terrace 1 or 2 that offered a strategic advantage.
 - Potential for these Civil War sites is highest in project areas in the vicinity of the Gay and Henley bridges due to nearby forts.

- There is potential, though limited, to identify late nineteenth-century (or earlier) residences/farms along Terrace 2 and upland reaches of the current project areas at and near confluences.
- Mill sites, often located along tributaries in rural areas, may be located along Terrace 1 and 2 of related project areas.
- Terrace 1 and 2 have a high potential to yield cultural resources associated with the late nineteenth- and early twentieth-century growth of South Knoxville.
 - Site types expected along Terrace 1 include transportation including piers/wharves and bridge construction debris.
 - Terrace 2 and uplands may yield early residential sites.
 - Commercial/industrial sites may be located along Terrace 2 particularly near Gay and Henley bridges.

Further discussion of historic site potential is provided in the individual project area site histories, in the following chapter.

VII. PHASE I PROJECT AREA HISTORIES AND SURVEY APPROACH

SITE 1 – CHEROKEE TRAIL CONNECTOR AND SITE 12 – SPRING WATER CENTER

SITE HISTORY

These two sites are adjacent to one another on the western end of the project area and so are discussed together. The Cherokee Trail Connector site straddles Goose Creek in a narrow gap between two steep hills. This gap was one of the few openings in the chain of hills lining the south side of the valley here and emerged early in the area's history as the location for wagon roads and later as a route for railroad lines. The 1863 Battle of Knoxville map shows a wagon road and the unfinished line of the Southern Railroad (the Knoxville and Charleston Railroad then). The map also shows an apparently substantial riverside farmstead north of Cherokee Trail (see Figure 3).

The steep slopes of the area and distance from downtown Knoxville and the riverfront discouraged early development here, and as a result it was not mapped in detail until the twentieth century. The 1942 USGS topographic map shows the area remained primarily a transportation corridor with one surface road, Blount Avenue, and two rail lines. The map shows a handful of buildings lining the west side of Blount Avenue. By the time of the 1978 quad map, little had changed in the area's physical appearance (Figures 14A, 15B).

The Spring Water Center lies immediately east of the Cherokee Trail Connector and is located within the boundaries of Fort Dickerson Park, which contains Civil War fortifications. Fort Dickerson is a locally designated historic site that interprets the 1863 Battle of Knoxville. The project area is located uphill from the Goose Creek gap and is composed of an inundated quarry site and adjacent hillside. The quarry site appears on the Civil War map as a hollow between Fort Dickerson to the north and a smaller ridge with a line of Federal defensive works. By 1942 this hollow contained a short road lined with eight buildings that led up to the current location of the quarry. The quarry first appears on the 1953 topographic map (Figure 14B). By the 1978s the buildings and road are gone and the quarry is expanded but not yet inundated (Figure 15B).

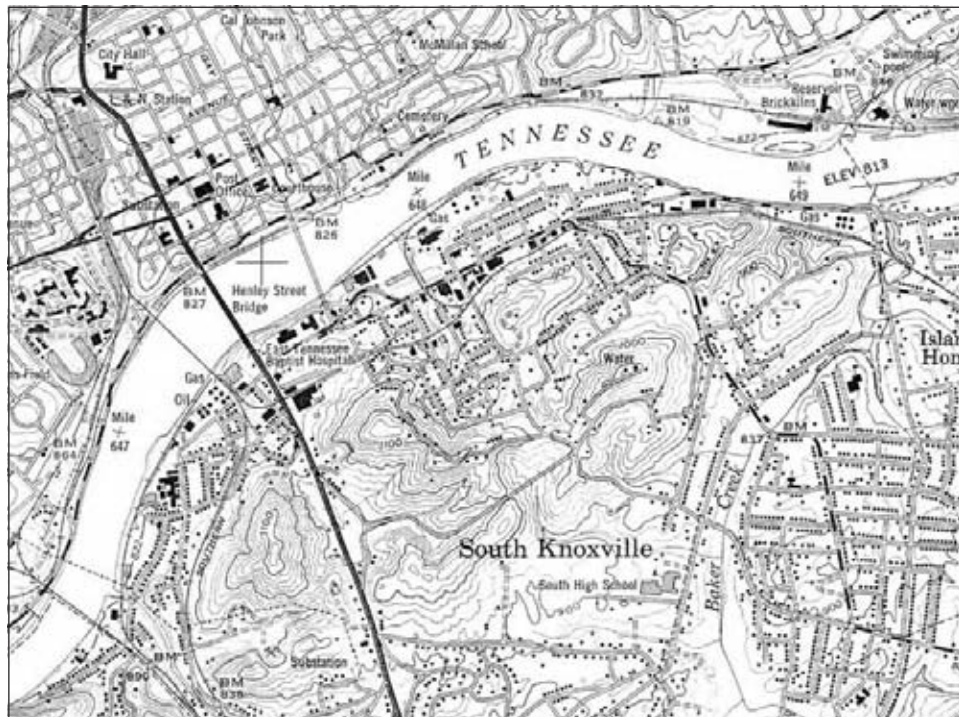
RECOMMENDED ARCHAEOLOGICAL SURVEY APPROACH

The Cherokee Trail Connector/Spring Water Center project area covers a gap and adjacent ridge slopes in the uplands (Figure 16). The project area is judged to have a low potential for prehistoric archaeological sites, except for rock shelters, and a moderate potential for historic sites. Historic site types in the area would include houses shown on the 1942 topographic map (Figure 14A), as well as potential sites associated with Civil War Forts Dickerson and Higley, to the west.

Figure 14.
USGS Topographic Maps Showing South Knoxville: 1942 and 1953

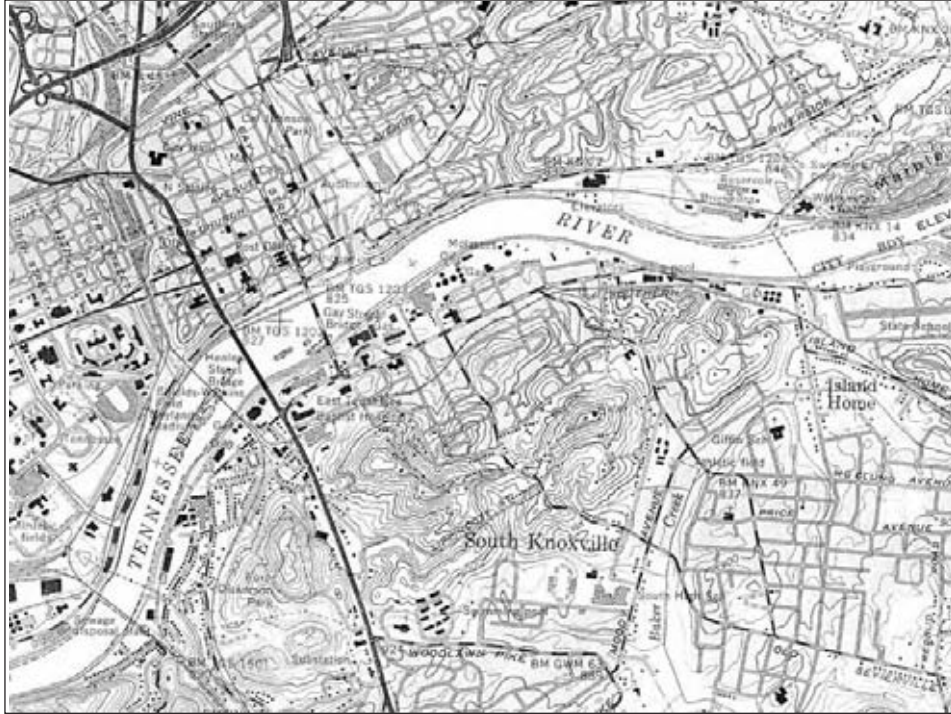


Knoxville, 1942

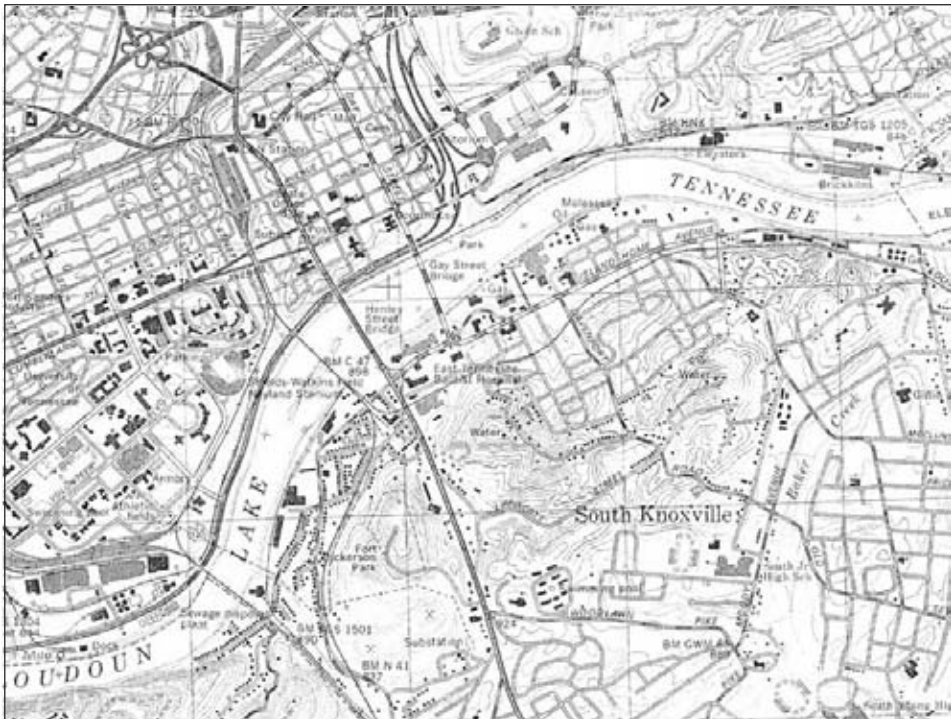


Knoxville, 1953

Figure 15.
USGS Topographic Maps Showing South Knoxville: 1966 and 1978



Knoxville, 1966



Knoxville, 1978

Disturbance is limited to water lines and road and railroad cuts. The Goose Creek gap might have been used for troop movements to and from Fort Dickerson, and the adjacent slopes could contain rifle pits and artillery batteries meant to guard this pass. Rock overhangs overlooking natural game trails were used by prehistoric peoples, and any shelters in the project area have a prehistoric site potential. The extent of disturbance associated with the houses shown on the 1942 USGS topographic map is unknown, but archaeological deposits related to them, as well as older house/farm sites may exist.

For Phase I archaeological survey, shovel testing is recommended in areas of less than 11-degree slope, along with a walk-over survey of the hillsides to look for rifle pits, earthworks, and/or potential rock shelters. If rock shelters are found, they should be shovel tested to determine if they were used as sites. If rifle pits are found, they should be photographed and sketched, and their locations recorded using GPS. All soil from shovel tests should be screened through ¼-inch mesh hardware cloth for artifact recovery.

SITE 2 – GOOSE CREEK LANDING AND SITE 3 – PEDESTRIAN BRIDGE

SITE HISTORY

These adjacent sites lie on the south bank of the Tennessee River in the western portion of the project area. Goose Creek Landing (Site 2) covers the east bank of the creek mouth and extends northeast along the riverbank to the site of the proposed pedestrian bridge. The 1863 battle map shows this area as a low floodplain with a cluster of buildings to the east (Figure 3). The 1903 Sanborn map indicates this building cluster was either replaced or expanded into the Riverside Woolen Mills, (by 1917 renamed the Jefferson Woolen Mills). The mill appears in a circa-1900 photograph taken west of the project area on Cherokee Bluff (Figure 17). The mill complex remained here through the 1960s, but was torn down and replaced with another large building as shown on the 1978 USGS topographic map (Figure 15B). The mill was located east of the proposed boundary lines of Sites 2 and 3, but archaeological resources associated with it might lie within the site boundaries.

Just upstream from the woolen mill was the Knoxville Sangravel Material Company, a sand and gravel distribution yard that moved their product on barges up and down the Tennessee River. The 1917 and 1924 Sanborn maps and in aerial photographs from around 1920 show this establishment, along with the unpaved streets and modest houses of the adjacent South Knoxville neighborhood (Figures 18 and 19).

The proposed Pedestrian Bridge (Site 3) spans the Tennessee River and meets the north bank adjacent to the University of Tennessee campus. This is the only project site on the north side of the river. The proposed bridge would connect South Knoxville's Clancy Avenue Southwest with Lake Loudon Boulevard.

This area on the north side of the river was historically known as West Knoxville and later developed into a part of the university campus. The 1863 Battle of Knoxville map (Figure 3) shows a Federal barracks and defensive line in the vicinity of the project area boundary. By 1895 residential development had spread through this area (Figure 10). The 1942 USGS topographic map shows the area crisscrossed by rail lines and containing a handful of small buildings. The 1953 map shows a paved road (now Neyland Drive) along the riverfront (Figure 14). Today, the area remains characterized by mixed industrial, transportation, and university uses.



Source: McClung Historical Collection, East Tennessee History Center

Figure 17. Circa 1900 Photographic View Up the Tennessee River Showing Knoxville on the Right. The Riverside Woolen Mill is Visible Over the Right Side of the Railroad Arch.

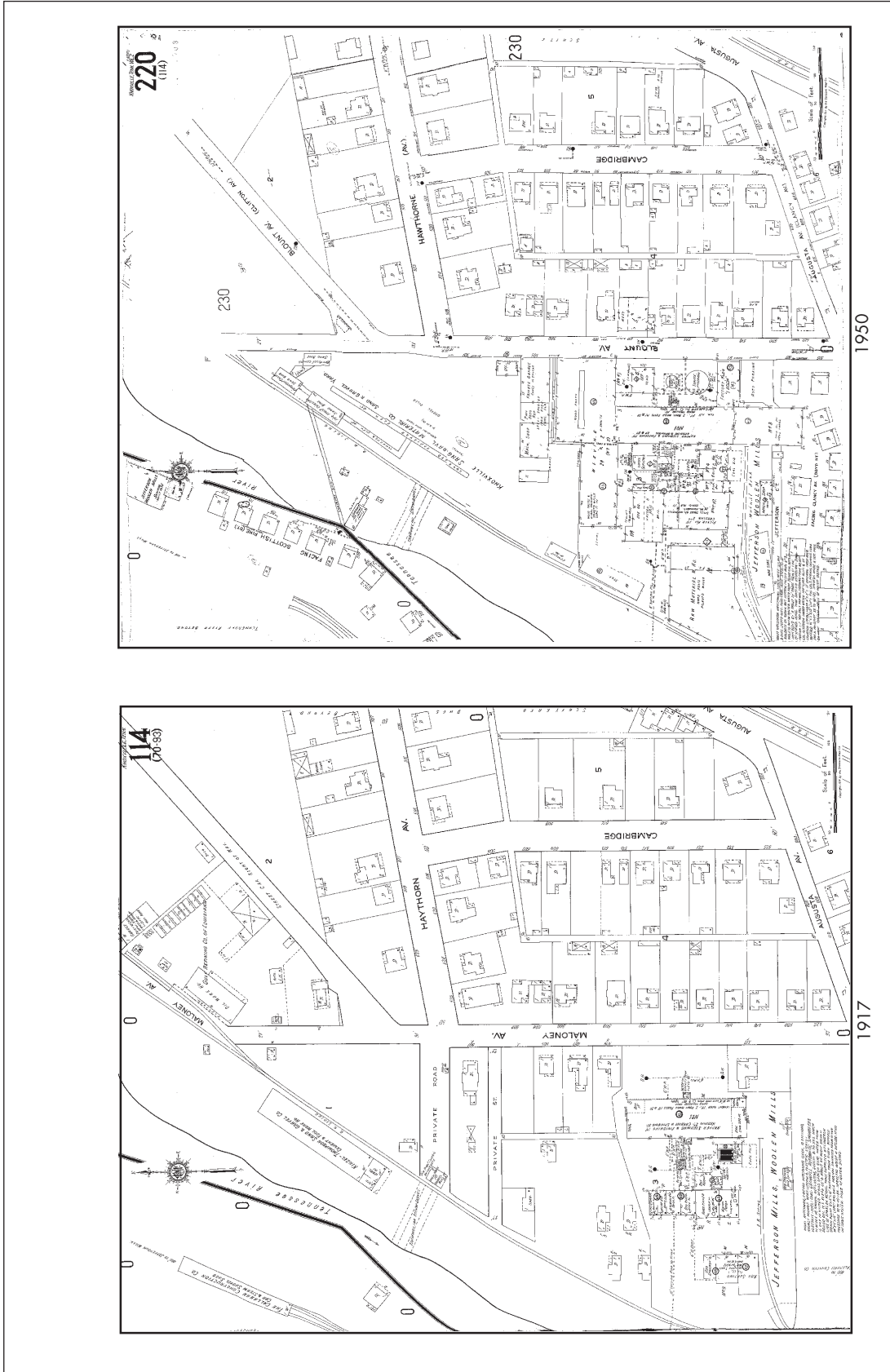


Figure 18. 1917 and 1950 Sanborn Fire Insurance Maps of South Knoxville Showing the Knoxville Sand and Gravel Company and the Jefferson Woolen Mills.

Source: Map Library, The University of Tennessee



Source: McClung Historical Collection, East Tennessee History Center

Figure 19.
Aerial Photograph Showing South Knoxville and the Knoxville Sand and Gravel Company, circa 1920

RECOMMENDED ARCHAEOLOGICAL SURVEY APPROACH

The Goose Creek Landing has a high potential for prehistoric and historic archaeological sites. This project area consists of a floodplain section at the confluence of a large tributary and the Tennessee River, a setting that is sensitive for prehistoric sites from the Archaic to Mississippian periods. This area was also near a mid nineteenth-century farm and may have been used as a Union Army military camp. After the war, the Goose Creek Landing area was at the margin of various industrial sites, the most prominent being the Riverside/Jefferson Woolen Mill.

Transmission, gas, and sewer lines cross the Goose Creek Landing project area (Figure 20). The latter has impacted the archaeological potential of the area, where it parallels the river and then turns to meet a station on the river (Figure 21A). Railroad bridge abutment remains cross Goose Creek in the project area (Figure 21B), and the location of the railroad running parallel to the river can be seen (Figure 22A). Along this rail line are remnant building pads and structural debris, including concrete block, which could indicate former buildings associated with the woolen mill (Figure 22B). Shoreline areas and the mouth of Goose Creek have undergone erosion (Figure 23).

Because the Goose Creek Landing project area is located in a floodplain with the potential for deeply buried deposits, cultural deposits may be as deeply buried as 2.0 to 2.5 meters below surface. Therefore, a backhoe test trench survey is recommended to determine if deeply buried cultural deposits are present and to assess the project area's geomorphological structure. Trenches should measure 10 meters in length by one meter wide, and should be dug according to OSHA standards. One profile of each trench wall should be photographed and drawn to scale. Ten-liter soil samples should be recovered from each stratum in the profile and screened through ¼ inch mesh hardware cloth for artifact recovery. Once sampling and recording is complete, trenches should be backfilled.

The Pedestrian Bridge has a moderate potential for intact archaeological sites on the north side of the river and a high potential on the south. On the north side, impacts associated with Neyland Drive and other construction probably disturbed any archaeological remains here. The south side locations can be investigated during the Goose Creek Phase I survey, as outlined above. It is recommended that the north side location be investigated with a backhoe test trench after the land has been acquired and becomes available for survey.

SITE 4 – RIVERWALK & BLOUNT AVENUE AT CITY VIEW, SITE 5 – HENLEY GATEWAY RIVERWALK, SITE 6 – SHOALS RIVERWALK, SITE 7 – GAY STREET STAIR, AND SITE 8 – SEVIER AVENUE AND COUNCIL PLACE IMPROVEMENTS

SITE HISTORY

Sites 4 to 8 adjoin one another on either side of the Henley Street Bridge and therefore their history and resource potential are discussed together (see Figure 1). The 1895 Pill map (Figure 10) shows the Knoxville Furniture Company located in the area of Site 4, but the 1903 Sanborn map does not show any development here, suggesting the furniture mill was short-lived (Figure 24). The Site 4 area remained lightly developed for much of the early twentieth century.

Figure 21.
Photographs of the Goose Creek Project Area

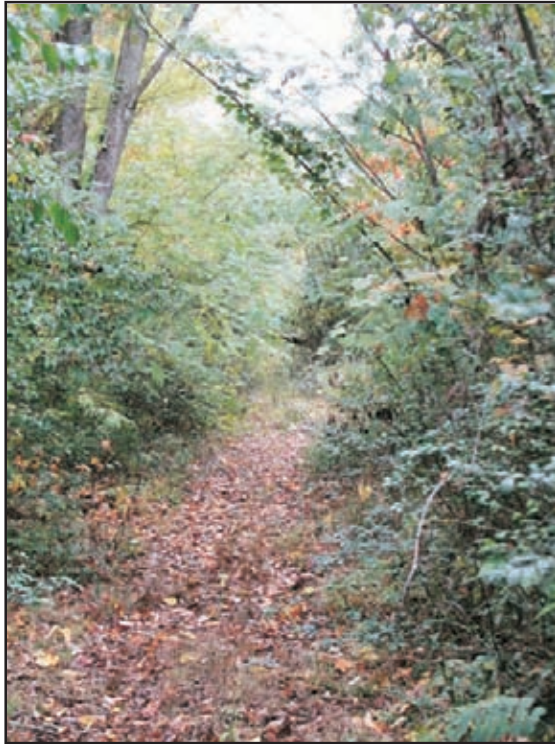


21A. Transmission Lines in Project Area



21B. View of Bridge Abutments Crossing Goose Creek

Figure 22.
Photographs of the Goose Creek Project Area



22A. Former Location of Railroad Line in the Goose Creek Project Area Paralleling the Tennessee River/Fort Loudon Lake

22B. Building Pad in the Goose Creek Project Area (Note Demolition Debris to the Right)



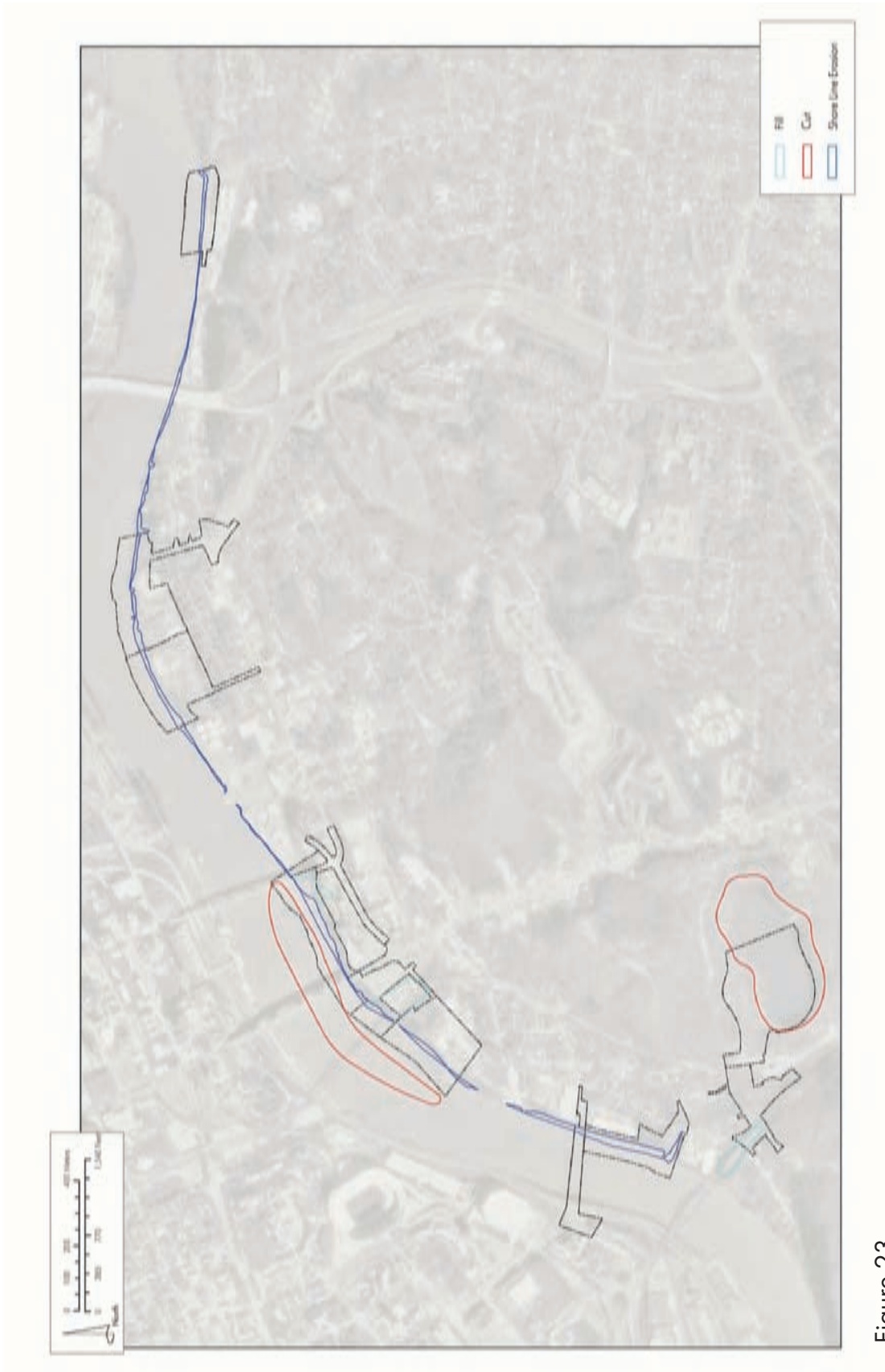


Figure 23.
Aerial View of the Knoxville South Project Locations Showing the Locations of Historic Cut and Fill Actions
as Well as the Extent of Shoreline Erosion

Sanborn maps show that by 1950 Site 4 was home to the Gulf Refining Company Bulk Plant, which stored gasoline, oil, and kerosene in a complex of cylindrical tanks. The property also contained an office building and a "Bulk Oil Warehouse" (Figure 25). The refining company appears on the 1953, 1966, and 1978 topographic maps (Figures 14 and 15). At present a hotel, marina, and condominium complex (the Riverwalk Complex) are under construction at this site.

Sites 5, 6, 7, and 8 cluster together and formed part of the property owned by Samuel B. Luttrell in the 1890s (Figure 10). This property became Luttrell Park around 1900 and remained undeveloped until the construction of the Henley Street Bridge in 1932. In 1948 the remainder of Luttrell Park located east of the bridge became the location of East Tennessee Baptist Hospital.

The 1950 Sanborn map shows a shipping and bottle warehouse located on Site 5. This warehouse also appears on the 1953 and 1966 topographic quad maps, but is gone by the 1978 quad. Today, site is a surface parking lot with a tree buffer along the riverfront.

The East Tennessee Baptist Hospital was built on Site 6 in 1948. Prior to that time the site was an undeveloped part of Luttrell Park. The portion of Site 6 proposed for the riverwalk consists of steep and rocky riverbank.

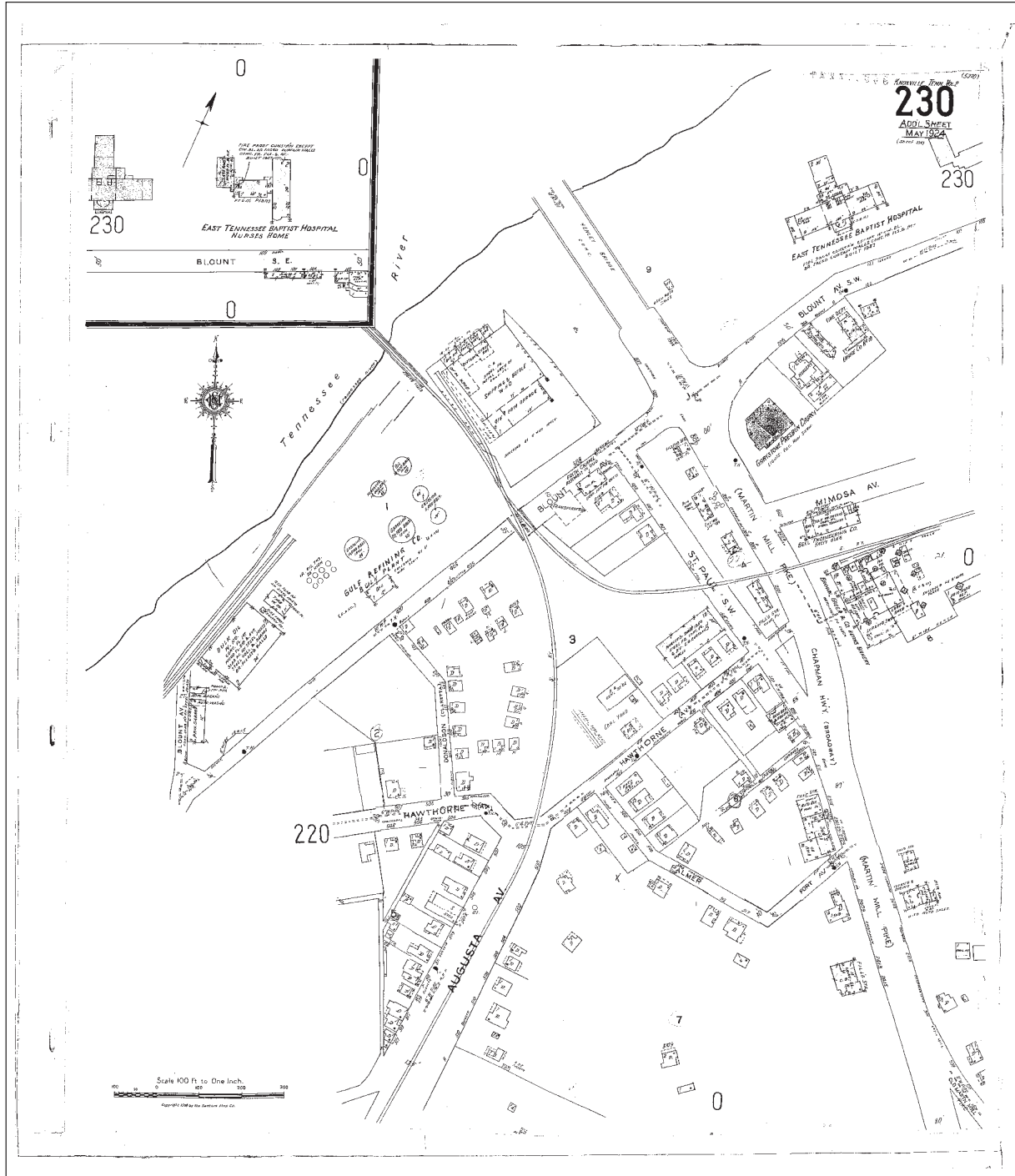
The intersection of South Gay Street and Sevier Avenue (Site 8) was the first major intersection in South Knoxville after the first Gay Street toll bridge was built in 1874. Council Place first appears in the 1903 Sanborn maps of the area as an unnamed "Road" that detoured around the base of a hill before it rejoined Sevier Avenue on the other side. The road was previously known as Island Home Pike and Rose Place.

The intersection of South Gay Street and Sevier Avenue/Council Place featured a number of commercial establishments through the early twentieth century, many of which were located in the Site 7 area. The 1895 Pill map shows the Jones Livery Stable at the foot of the bridge. The 1917 Sanborn map shows the livery stable along with an automobile repair shop and four small shops north of the South Gay Street and Island Home Pike intersection (Figure 26). The 1950 Sanborn map shows the livery building still standing, but a row of four commercial buildings supplanted the auto repair shop (Figure 27). None of these buildings remains extant and the site contains surface parking lots and grassy hillside.

RECOMMENDED ARCHAEOLOGICAL SURVEY APPROACH

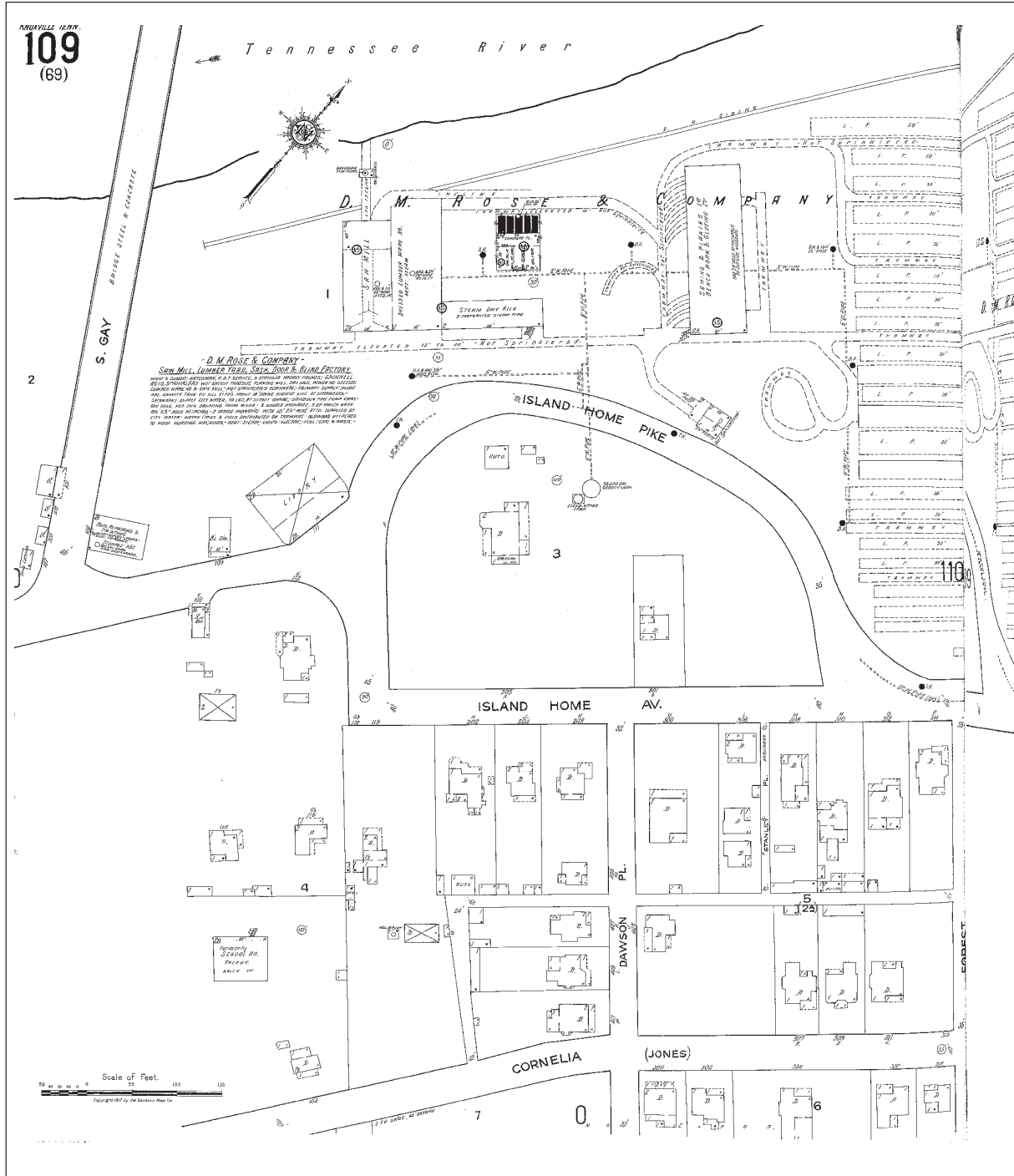
Site 4, Riverwalk and Blount Avenue, was previously surveyed by Terracon (Koch 2005). This work involved a geo-archaeological assessment by the University of Tennessee's Archaeological Research Laboratory (Kocis and Sherwood 2005), followed by an intensive archaeological survey that included backhoe test trenching. Kocis and Sherwood (2005:12) determined that the project area consisted largely of "made-land" created during the twentieth-century industrial development of the site. They identified one intact landform in the eastern portion of the project area, which coincided with the historic location of Blount Avenue. Koch's (2005) Phase I survey failed to identify any archaeological sites, however, and he recommended archaeological monitoring of the initial construction in the area that Kocis and Sherwood identified as having moderate site potential. Presumably, monitoring did not identify any archaeological sites.

Figure 25.
1950 Sanborn Fire Insurance Map Showing the Gulf Refining Company Bulk Oil Plant, a Shipping and Bottling Warehouse, and the East Tennessee Baptist Hospital



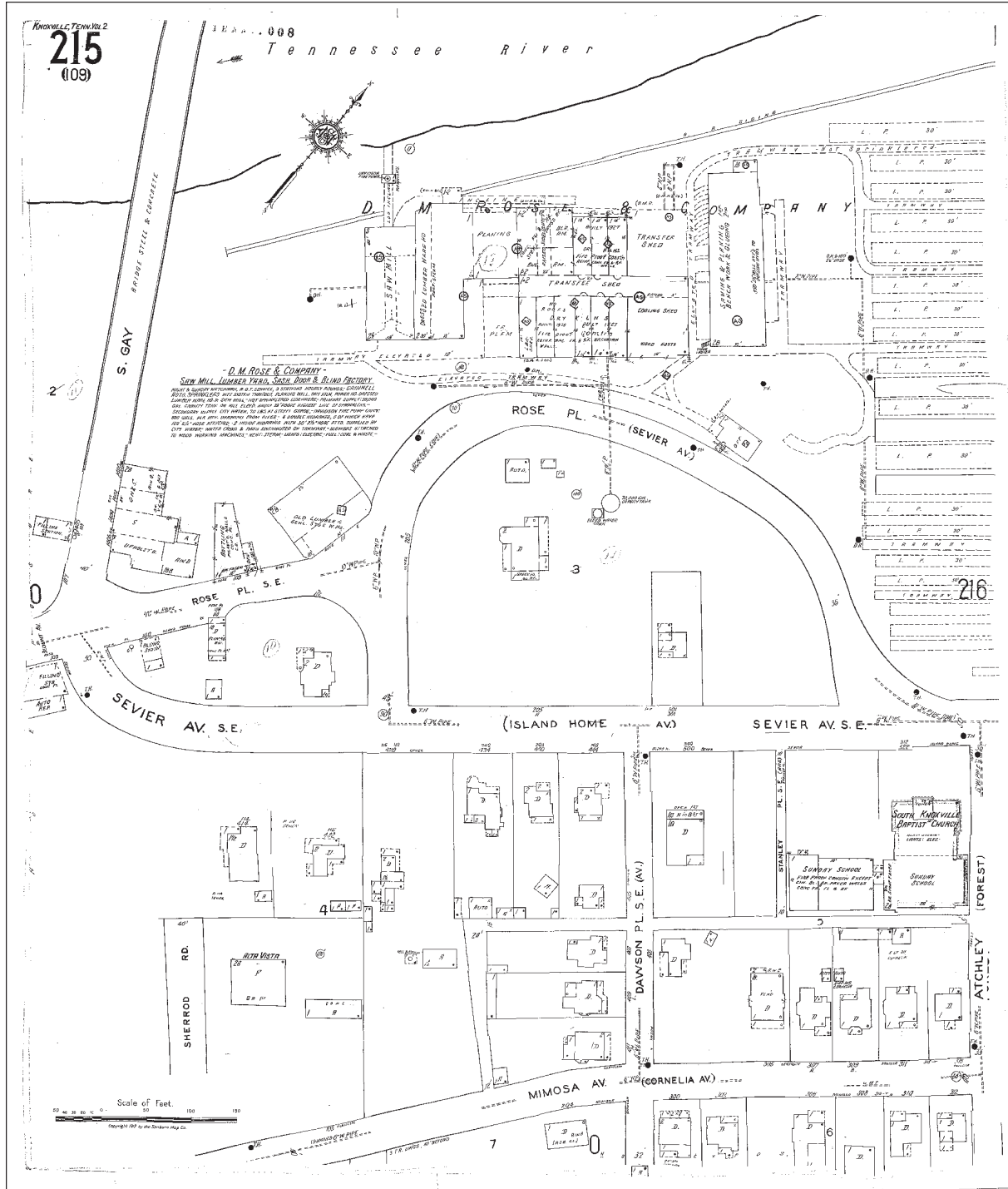
Source: Map Library, The University of Tennessee

Figure 26.
1917 Sanborn Fire Insurance Map Showing the Intersection of
South Gay Street and Island Home Pike



Source: Map Library, The University of Tennessee

Figure 27.
1950 Sanborn Fire Insurance Map Showing the Intersection of
South Gay Street and Island Home Pike



Source: Map Library, The University of Tennessee

According to the 1942 USGS topographic map, Site 5 encompassed a road and three dwellings at that time (Figure 14A). By 1950, this site contained a shipping and bottling plant (Figure 20). This site is currently used as paved parking for East Tennessee Baptist Hospital. The topography of this site is shown as sloping on the 1942 topographic map, indicating that cutting and filling have probably created the present stepped surfaces (Figure 28). The bluff edge of Site 5 is wooded and could contain rock shelters and/or caves (Figure 29). This face should be examined for such features. The parking areas have a moderate potential for prehistoric sites and a high potential for twentieth-century historic sites, though it is unclear to what extent construction has effected archaeological preservation. Historic fill deposits underlie the railroad bridge and rail line at the western margin of this site (see Figure 23). A backhoe test trench survey employing trenches measuring 10 meters long and one meter wide, should be conducted to determine if intact land surfaces and cultural resources are present under the pavement.

Sites 6 and 7 are located on the steep bluff underlying the East Tennessee Baptist Hospital (Figure 30). This bluff is covered in kudzu, however minor rock outcrops and depressions can be seen in the bluff face. The bluff face has no potential for archaeological sites except rock shelters and caves, which could be hidden behind the kudzu. Planned development for Site 6 will consist of clearing the kudzu from this bluff face and the constructing a pedestrian trail at the water's edge. This effort is not anticipated to adversely effect rock shelter or caves, if present. Once the kudzu has been cleared from Site 7, this area should undergo a visual inspection by a professional archaeologist to determine if caves or rock shelters are present. Should potential caves/shelters be detected in the Site 7 area, these should be archaeologically surveyed.

Archaeological survey is not required for Site 8, which consists of street improvements whose survey requirements are being met by other agencies.

SITE 9 – RIVER ROAD AND RIVER PLAIN PARK AND SITE 10 – LINCOLN STREET LANDING

SITE HISTORY

Sites 9 and 10 are clustered together and share a common history. Site 9 includes improvements along riverfront floodplain property and the streetscapes of an adjacent residential neighborhood to the south. This area first appears on the 1895 Pill map (Figure 10) as a riverside racetrack on the north side what was then called Sevierville Pike, just east of the slaughterhouse later known as the East Tennessee Packing Company. By the 1920s, the racetrack property had been platted as part of the "Jones Addition," which included about eight residential blocks that are now in the Site 9 and 10 project areas.

Throughout its history, this neighborhood was bordered on the east, north, and west sides by riverside industries like the East Tennessee Packing Company (est. 1893), the American Box and Crate Company, the Phoenix Dye Works, and Dixie Laundry. On the south side the neighborhood was bounded by commercial development along Sevier Avenue. These non-residential land uses intruded on the neighborhood in several places, and as a result its physical integrity was compromised on its edges. However, portions of the neighborhood's interior streetscapes of turn-of-the-century homes and bungalow homes remain intact.

Figure 29.
Photographic Views of the Bluff at Site 5



29A. View from the Henley Street Bridge



29B. View from the Opposite Side of the River

Figure 30.
Photographic Views of Sites 6 and 7



30A. View from the Gay Street Bridge



30B. View from the Opposite Side of the River

The Lincoln Street Landing area first appears in detail on page 112 of the 1917 Sanborn map (Figure 31). The map shows how close the American Box and Crate Company's factory was to the adjacent neighborhood and that Lincoln Street was then called Howard. By the 1950 map the box factory was gone and Howard was renamed Lincoln and the area had filled in with several houses and other buildings.

RECOMMENDED ARCHAEOLOGICAL SURVEY APPROACH

The portion of Sites 9 and 10 along the Tennessee River/Fort Loudon Lake, consists of a broad floodplain at a bend in the river (Figure 32). This location is considered to have a high potential for prehistoric sites, particularly of the Woodland and Mississippian periods. From the historic period, artifacts and features associated with the racetrack may be present in the project area. A number of buildings are currently present on the site, as well as paved parking areas (Figure 33), which limits the area currently available to shovel test survey. A sewer line runs along the river and erosion has removed the edge of the river's shoreline (see Figure 23).

It is recommended that the Phase I survey begin with a geomorphological survey to assess the depth of deposits on the site and the presence of buried cultural horizons. This should be followed with a backhoe test trench survey, employing trenches measuring 10 meters in length by a meter wide. Trenches should be dug to investigate areas covered in pavement, as well as buried surfaces and the site's stratigraphy, and should be recorded in profile view and through screened soil samples for artifact recovery.

Based on the locations of cut and fill land, two to three trenches are recommended for Sites 9 and 10. These would be placed to investigate the T1 terrace and possibly the T2 terrace if it extends into the survey area (Figure 34). The placement would intersect areas covered in historic and modern fill that might contain buried cultural resources, but would avoid locations known to be disturbed by a deep sewer installation.

SITE 11 – BAKER CREEK LANDING

SITE HISTORY

Site 11 is the easternmost project area in South Knoxville, located just west of Baker Creek and Island Home Boulevard. Until the 1950s, this area was undeveloped riverfront property adjacent to Island Home Boulevard, which led to the rural retreat of prominent Knoxville resident Perez Dickinson known as Island Home. The area is not illustrated on either the 1863 Battle of Knoxville map or the 1895 Pill map. On the 1942 USGS quad map (Figure 14A) the area is shown as undeveloped floodplain area between Island Home Boulevard and the Southern Railway line. By the 1953 quad (Figure 14B) the property was a gas storage depot with five buildings and six storage tanks. The property remains a gas depot to the present day.

Figure 31.
1917 Sanborn Fire Insurance Map Showing the American
Box and Crate Company and Surrounding Neighborhood



Source: Map Library, The University of Tennessee

Figure 33.
Photographs of the River Road/River Plain Park and Lincoln Street Landing Project Areas



33A. View of Commercial Architecture in the Western Part of River Road/River Plain Park



33B. View of Commercial Architecture in the Central Part of River Road/River Plain Park

RECOMMENDED ARCHAEOLOGICAL SURVEY APPROACH

Site 11 has little potential for intact archaeological resources. The site is a narrow linear strip along the Tennessee River/Fort Loudon Lake (Figure 35) that does not appear to have been occupied until the mid-twentieth century construction of the gas storage depot. The construction of Island Home Road would have further disturbed the location and appears to have introduced a large amount of rip rap which forms the road's bed. Between Island Home Road and the river is a very narrow rip-rapped bank (Figure 36). While the project area has a low site potential, judgmental shovel test survey of the river's bank near Baker Creek is recommended, since there is less rip rap and possibly intact soils in this area, to determine whether or not archaeological sites are present.

GAY STREET AND HENLEY STREET BRIDGES

The Knoxville South project will change the south shore setting of both the Gay Street and Henley Street Bridges, and alterations under consideration may directly affect the bridges themselves. Both have been determined eligible for nomination to the NRHP. It is recommended that an Architectural Historian prepare an Assessments of Effects report for each bridge and for each potential alternative use of each that would determine if the effects were adverse or not, and recommend methods for mitigating adverse effects.

Figure 36.
Photographs of the Baker Creek Landing Project Area



35A. Typical Bank Section



35B. Broader Section of Bank Where Shovel Testing is Possible

VIII. ARCHAEOLOGICAL SURVEY METHODS AND RESULTS

The archaeological survey involved shovel testing in selected portions of the three project areas. Preliminary evaluations concerning archaeological resource potential were provided in the research design for the project (Price et al. 2007), and the specific recommendations for the three project areas are summarized below along with the results of the survey. The survey was conducted between February 11 and 14, 2008. The following sections describe the methods employed for the survey followed by the results.

METHODS

Archaeological fieldwork for this project consisted of systematic and judgmental shovel testing where conditions warranted it. A preliminary inspection of each area indicated they contained excessively sloped and substantially disturbed areas. These locations possessed no potential for significant cultural resources and were omitted from shovel testing. Systematic shovel tests were excavated where level, well drained, and/or lightly disturbed conditions were found. Judgmental shovel tests were placed in selected locations, typically to check conditions rather than with an expectation of encountering intact or significant archaeological resources.

Shovel tests were placed at 30-meter (100-ft) intervals for systematic coverage of specific project areas and all shovel tests measured approximately 30 centimeters (1.0 ft) in diameter. They were excavated following natural soil stratigraphy until culturally sterile soils were met. Excavated soils were sifted through ¼-inch mesh hardware cloth for systematic artifact recovery, and artifacts were bagged separately according to unique provenience. Notes for each shovel test described their location and conditions of the test, depth, soil descriptions (Munsell color and texture), and results with respect to cultural resources. Shovel test locations were plotted on project maps along with areas of slope, disturbance, and other pertinent information.

In instances where shovel tests yielded artifacts, additional "radial" shovel tests were dug in cardinal directions from the initial find spot. Radials proceeded at 10-meter (33-ft) intervals until two consecutive negative radials were completed or they could not proceed due to slope or other conditions. The procedures for excavating the radial shovel tests followed those described above.

For areas that were patently disturbed, excessively sloped, or poorly drained, shovel testing was omitted but these areas were documented with narrative descriptions in project notebooks and photographs. These areas were also shown on project maps.

ARCHAEOLOGICAL RESULTS

The three project areas included two that adjoin one another in the western portion of the project area (Cherokee Trail Connector and Spring Water Center) and one at the eastern part of the area (Baker Creek). The following sections provide summaries of the preliminary evaluations from the research design (Price et al. 2007) followed by descriptions of each survey area and the results.

CHEROKEE TRAIL CONNECTOR AND SPRING WATER CENTER

Description and Site History Summary

These two survey areas abut one another and are considered together. The Cherokee Trail Connector project would include upgrading the existing rail underpass at Scottish Pike, improving the Goose Creek road crossing, and modifying connections between Cherokee Trail, Scottish Pike, and West Blount Avenue. Environmental remediation of Goose Creek would also take place. This triangular survey area lies between West Blount Avenue on the east and the CSX Railroad line on the west, with portions of Scottish Pike and Cherokee Trail west of the railroad also included. The survey area encompasses a narrow section of Goose Creek Valley with excessively sloped walls.

The Spring Water Center project would involve rehabilitating a former stone quarry east of West Blount Avenue for public recreational use. This survey area covers a former ridge and adjacent flanks, which were demolished for stone quarrying, as well as a hollow north of the ridge that appears to have contained supporting structures and facilities for the quarry.

The Goose Creek Valley forms a narrow, steep-sided gap that was one of only a few breaks in the hills south of the Tennessee River in this area. As a result, it developed into a wagon road and, by the 1860s, as a railroad corridor. During the Civil War Forts Higley and Dickerson, both Union positions, overlooked the gap from summits to its east and west. In addition, a line of Union fortifications occupied the ridge crest that was later excavated for the quarry that comprises the Spring Water Center (see Figure 3). Steep conditions and distance from central Knoxville discouraged the growth of this area and consequently historic maps lack detail about land use until the mid twentieth century. The 1942 quad map shows the Goose Creek Valley serving primarily as a transportation corridor with one surface road, West Blount Avenue, and two rail lines. Buildings were sparse and lay primarily in level locations adjacent to roads and rail lines. This pattern persisted into the last quarter of the century, although settlement grew denser. Structures began clustering along roads in and adjacent to the project area by the 1950s, with settlement being particularly thick along Scottish Pike, West Blount Avenue, Pitner Place, and Clarks Lane. Settlement on Cherokee Trail remained sparse, probably because of acute slope (see Figures 14 and 15).

The Spring Water Center is immediately east of the Cherokee Trail Connector and encompasses a quarried-out ridge on the east side of West Blount Avenue. The survey area is within or adjacent to Fort Dickerson Park, which contains remnants of Civil War Fort Dickerson. This survey area covers an abandoned quarry that began operations before 1942, at which time it is shown on the USGS topographic map as cutting into the north side of the now-demolished ridge. A road and a few buildings in the hollow north of the ridge presumably provided support to the quarry. By 1942 this hollow had a short road lined with eight buildings. By the 1960s, the quarry had expanded to include the entire ridge top and its flanks while the support area appears to have become less extensive. It is not known when the quarry ceased operations (see Figures 14 and 15).

Based on evaluations of the setting, conditions, and historical development of this project area, it was judged to have a low potential for prehistoric archaeological sites and a moderate potential for historic sites. Historic sites in these two survey areas would probably include houses shown on twentieth-century topographic maps. These areas also possessed a potential for archaeological resources associated with the mid twentieth-century stone quarry, as well as fortifications or

materials related to Civil War Fort Dickerson and Fort Higley. Also prehistoric rock shelters might be present. The research design for these project areas recommended shovel testing in areas with slopes of less than 11 degrees and pedestrian survey of the hillsides to identify rifle pits, earthworks, and/or potential rock shelters (Price et al. 2007:55, 59).

Cherokee Trail Connector Survey Results

The Cherokee Trail Connector project area lies between West Blount Avenue on the east and the existing CSX Railroad line on the west. The north border of this survey area lies at the southern terminus of Pitner Place, a dead-end road that intersects with Scottish Pike. From this point, the area extends approximately 200 meters (656 ft) south, covering sections of valley walls and narrow bottomlands. Portions of this survey area west of the COSX tracks include the railroad bed, a railroad overpass at Scottish Pike, and roadsides along Cherokee Trail (Figure 37).

Survey areas on the west side of Blount Avenue were owned by a single individual who refused permission for the archaeological survey. These lots appeared to contain landfill used to level the extreme slopes of the valley wall. A city-owned lot immediately north of these filled areas contained a metal transmission tower and exhibited a 25 to 50-percent slope from West Blount Avenue to the valley bottom, where it terminated on a narrow Goose Creek terrace. The slope was too steep to warrant shovel testing, while the terrace had been impacted by an access road for the transmission tower (Figures 38 and 39A). A buried drain line and manholes along the east side of Goose Creek suggested that this narrow terrace was further disturbed by flood control utilities.

West of the creek, survey areas included remnants of a ridge, ridgethank, and creek terraces. Immediately south of Pitner Place lay a level area bounded by the CSX tracks on the west, the ridge flank on the east, and remnants of a ridge to the south. The ridge to the south was extremely narrow and was truncated on the east by a railroad cut. The ridge flank sloped to the valley bottom at a rate of 25 to 50 percent, although narrow benches along the slope moderated it (see Figure 6). These appeared to reflect remains of contour plowing or terracing designed to slow erosion. The roughly 50x30-meter (150x100-ft) level area just south of Pitner Place was therefore the only location available for systematic shovel testing.

The Pitner Place survey area appeared disturbed, probably reflecting a graded portion of the ridge (Figure 39B). The extant terminus of the ridge south of this area exhibited a very straight and abrupt slope, suggesting that it had been cut through. Additionally, topographic maps beginning in 1942 show a structure located in this area, suggesting the landform might have been modified to accommodate building. Shovel tests in this area exposed soil profiles that included topsoil/fill of reddish brown (2.5YR4/3) clay with road gravel that reached depths up to 10 centimeters (0.3 ft), if it was present. Below this layer was reddish brown clay that graded to red (2.5YR 4/6) clay, which was considered the subsoil and which produced no cultural materials. Additional shovel tests in this level area and in other parts of the ridge yielded channels and weathered siltstone bedrock, which suggested erosion or an absence of soil accumulation on the slopes.

Only Shovel Test A-1 yielded artifacts, consisting of a single yellowware sherd (manufacturing date of 1827 to 1940). Radial shovel tests at 10-meter (30-ft) intervals yielded no further artifacts and this single fragment was interpreted as evidence of casual discard, probably associated with the twentieth-century houses on Pitner Place.

Figure 38.
Views of Goose Creek Valley, Cherokee Trail Connector Survey Area



6A. East Valley Wall, Showing Slopes Along West Blount Avenue, Looking East



6B. West Side of Valley Showing Pitner Plsce Survey Area and Adjacent Slope to Goose Creek, Looking West

Figure 39.
Cherokee Trail Connector Survey Areas



7A. Goose Creek Valley, Showing Narrow Terraces and Adjacent Steep Valley Walls. Looking Southwest



7B. Pinter Place Survey Area Showing the Graded Area and Truncated ridge. Looking South

Inspection of the terraces west of Goose Creek indicated they were low, narrow, and soft, suggesting recent and unconsolidated alluvium. Vegetation included reeds and other wet-adapted species, which implied poor drainage. Taken together, these conditions indicated the landforms possessed a poor potential for buried cultural resources, while surface inspection did not identify any historic deposits or features.

Immediately east of the extant CSX railroad tracks was an abandoned railroad line that lay approximately 8 to 10 meters (20-30 ft) below the elevation of the extant rail bed (Figure 40). This feature received the designation Site 40KN299. In the northern part of the survey area, this abandoned line extended through a deep cut, which had truncated the west side of the ridge noted above. To the south, the line emerged from the cut to overlook the Goose Creek Valley, and ran along an embankment about 10 meters (30 ft) above the valley bottom. Remaining traces of this rail line consisted of in situ wooden ties. Except for a single tie plate and spike, all iron hardware had been removed, although surface visibility was not complete and other hardware could remain. The ballast used to bed the ties was clinker.

Site 40KN299 was inspected only within and adjacent to the project area, which indicated the extant length measures a minimum of 315 meters (1030 ft), with its northern terminus at Scottish Pike. Its southern terminus, insofar as it was mapped, consisted of a large push pile where the embankment had been cut. Only a 75-meter (250-ft) section of this feature, beginning at Scottish Pike, lay within the proposed project area and would be in the impact zone of the new CSX Railroad overpass at Scottish Pike.

The date of this rail line is not clear. It appears on current (1984) topographic maps, which show it extending north of Scottish Pike into the industrial zone on the south riverbank. This suggests it was in place, if not in use, until relatively recently. It also appears on the 1942 topographic map, indicating it predates the mid-twentieth century. The actual beginning and end dates of this feature cannot be determined based on the historical data collected for this Phase I study. Maps show this line branching off of the Southern Railroad line south of the project area, indicating it functioned as a spur to the industrial operations. Although it has a clear function, and illustrates certain aspects about the historic development of South Knoxville, this feature does not reflect any qualities suggesting unique or important historical associations or a significant research potential. Mapping its location and recording its extant condition has probably exhausted its information potential.

The last segments of the Cherokee Trail Connector area examined for this survey included the CSX Railroad-Scottish Pike intersection and planned improvement areas along Cherokee Trail. These locations lacked a potential for intact archaeological resources because of substantial disturbance from prior road and railroad construction and residential development. A small structure noted on the south edge of the Cherokee Trail improvement area consisted of a cement-block ruin. Associated debris and refuse was modern, suggesting that this structure did not comprise a historic cultural resource. Inspection of the relatively undisturbed ridge flank north of Cherokee Trail did not identify any features that could represent Civil War fortifications or expedient features, such as rifle pits.

Figure 40.
Views of Site 40KN299



8A. Abandoned Railroad Cutting, Looking North. The Existing CSX Railroad Tracks are on Top of the Cut at Left



8B. Remnant Wooden Railroad Ties and Embankment. Looking South

Spring Water Center Survey Results

The Spring Water Center survey area covers a former quarry on the east side of West Blount Avenue. As noted, this area includes a ridge that was demolished to quarry stone. At the time of the survey, the quarry consisted of an approximately 6 to 12-meter (20-40 ft) deep excavation. A cement block building and paved area northwest of the excavation were the only associated features noted during the survey. The survey area included relatively level ground northwest and west of the excavation with excessively sloped ridge flanks north and east. These slopes ascended to the summit that Civil War Fort Dickerson occupied (see Figure 5).

Of particular concern in the survey area were locations northwest and west of the quarry excavation, which probably served as staging and processing zones. Inspection indicated general disturbance from past quarrying operations. Except for the building and paved area, which included the road into the facility and a road or driveway along the north side of the excavation pit, no surface features were noted. The unpaved areas west of the excavation showed evidence of grading, including red clay subsoil exposed at the surface, push piles, and large vehicle ruts. Because of this disturbance, New South excluded this area from shovel testing (Figure 41).

The cement block building was the only extant structure associated with the quarry (Figure 41C). Cement block construction emerged only during the 1930s and did not become commonplace until the 1950s. Moreover, the historic USGS topographic maps do not show a building in this area that can be clearly correlated with this structure, making it difficult to estimate its age. Owing to its probable recent date, however, this structure was judged to lack archaeological or historical significance. In addition, the quarry itself, though it dates to the first half of the twentieth century, does not possess integrity as an industrial site because of the extensive grading and lack of features, structures, and other remnants of the quarrying operation.

In addition to the quarry site, the slopes at the foot of the Fort Dickerson summit were examined for possible Civil War fortifications, rifle pits, or other evidence of the war. Within the survey area, the slope had been truncated to build the access road for the quarry. Inspection of the adjacent remnant area revealed no features that could be interpreted as Civil War military structures.

Based on this survey, the Cherokee Trail Connector and Spring Water Center project areas contain one archaeological site, 40KN299, representing a probable twentieth-century railroad spur. The survey also identified an isolated find that probably relates to twentieth-century houses located on Pitner Place. Neither 40KN299 nor the isolated find are judged to constitute significant archaeological resources, and it is our recommendation that both of these project areas can be excluded from further archaeological study. The Spring Water Center contains one building and paved areas related to the twentieth-century quarry, but the quarry site overall lacks a more extensive array features and remnants related to the quarrying operation. Therefore, we recommend that the quarry site can also be excluded from further study. Parcels on the west side of West Blount Avenue were not examined during this survey because the landowner denied permission for entry. These parcels will require survey at a later date.

Figure 41.
Spring Water Center



9A. Graded Area Northwest of the Quarry, Showing Vehicle Tracks and Rubble Deposits. Looking North



9B. Paved Road/Driveway and Cement Block Building. Looking South



9C. Detail of Cement Block Building,
Rear Facade. Looking East

BAKER CREEK LANDING

The Baker Creek Landing area lies at the easternmost part of the Knoxville South project and encompasses a section of Island Home Avenue and the adjacent Tennessee River Bank. Planned work for this location would involve creating a river walk, stabilizing the bank, and providing a marina access. Research completed for the archaeological research design indicated that this area remained undeveloped until the 1950s. Except for Island Home Road, the first development of this location took place sometime after 1942. The topographic map from this year shows the area as an unoccupied parcel between the river and the Southern Railroad Line. The 1953 map, however, illustrates the gas storage depot, which remains extant to the present (see Figure 14).

An initial reconnaissance of this location performed for the research design indicated that it consisted of a narrow strip along the river. Construction of Island Home Avenue had impacted the original landform, as had the emplacement of riprap. Despite the clear disturbance, judgmental shovel testing was recommended in the eastern portion of this project area because it appeared to exhibit less extensive disturbance and might contain original surface remnants (Price et al. 2007:81).

A detailed inspection of this area for the present survey revealed considerable disturbance caused by prior bank stabilization and road construction. In general the area contained a very narrow segment of terrace between the road and river (Figure 42). The widest portion of the terrace lay at the eastern end of the survey area and measured approximately 3.0 meters (10 ft). From here, it tapered to less than one meter (3 ft) at which point it consisted only of a steep drop off from the road to the river. Moreover, the wider section of terrace to the east was almost entirely buried in road apron, from below which emerged riprap (Figure 43). Terraces along the shore that lacked riprap were eroded and undercut by the river, while inspection of the eroded bank revealed modern artifacts, indicating the terraces contained quantities of fill used to stabilize and build Island Home Road. These conditions left little area that could be shovel tested and New South placed one judgmental test near the eastern terminus of the survey area to check stratigraphy.

This shovel test encountered a 30-centimeter (1.0-ft) deposit of dark brown (10YR 3/3) silty clay above brown (10YR 4/3) silty clay. Angular road gravel occurred throughout the profile and large angular rock lay at 50 centimeters (1.5 ft) below the surface. This rock impeded further excavation, but resembled the riprap used for bank stabilization. The shovel test profile was interpreted as reflecting road fill. No artifacts were found.

Based on the inspection and judgmental shovel testing of the Baker Creek Landing project area, it contained road fill and riprap used to stabilize the bank. No intact buried historic surfaces were found. Any primary cultural deposits here would be disturbed by road construction and/or erosion from the river. Therefore, no additional archaeological work is recommend for this project area.

Figure 42.
Baker Creek Landing Survey Area

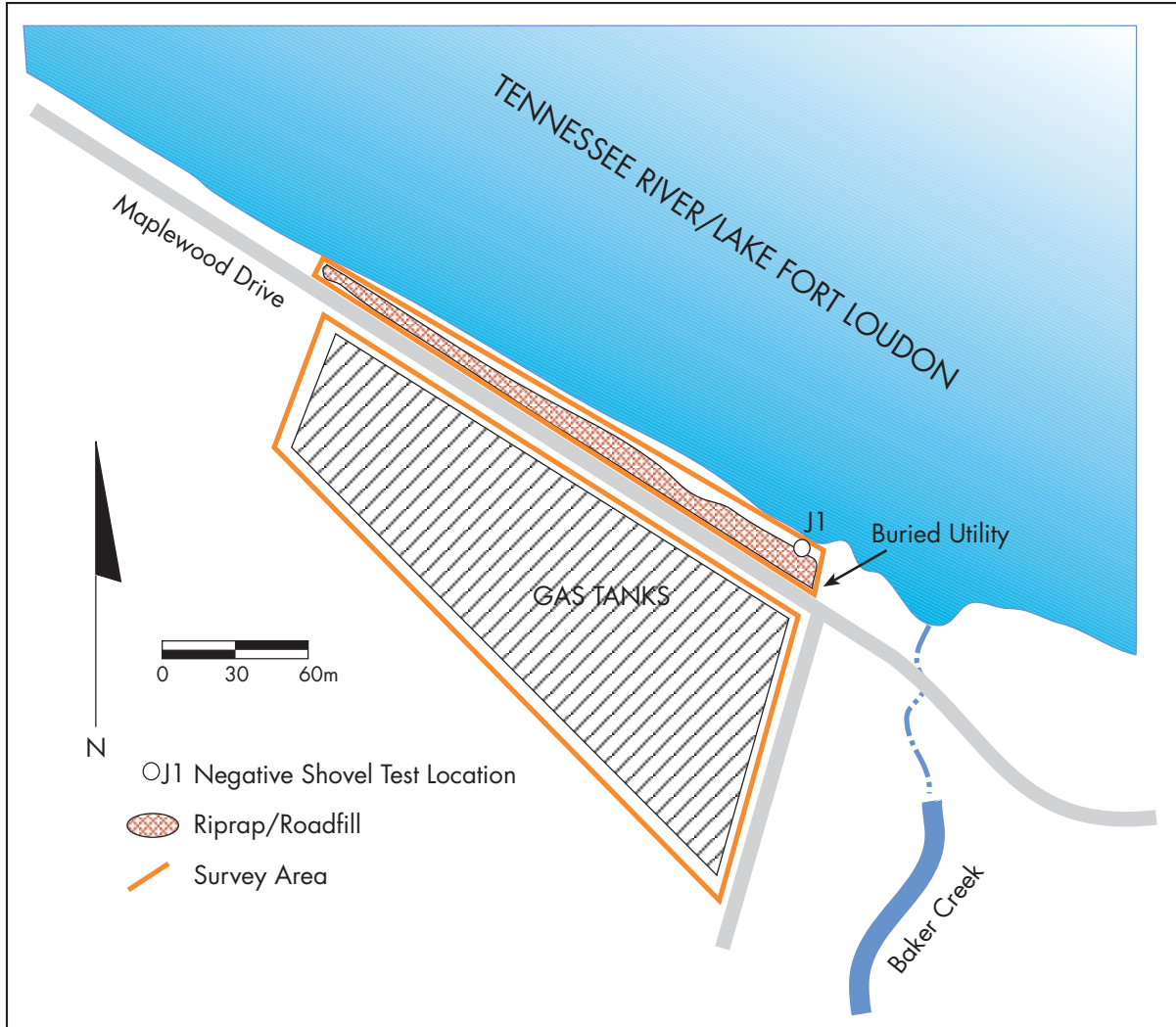


Figure 43.
Conditions in the Baker Creek Landing Area



11A. Road Fill in the Eastern Portion of the Baker Creek Landing Area, Looking West



11B. Steep Embankment, West Portion of Baker Creek Landing Area

IX. RECOMMENDATIONS

This report provides environmental and historical contexts, an archaeological sensitivity assessment, and research design for the planned Knoxville South Waterfront project on the south side of the Tennessee River/Fort Loudon Lake in Knoxville. The proposed undertaking would involve work at 12 separate improvement or development sites. In addition, the report presents the results of a Phase I archaeological survey at three of the sites, the Cherokee Trail Connector and Spring Water Center, which adjoin one another in the western part of the overall project area, and Baker Creek Landing, located at the easternmost portion of the project area. This chapter summarizes the assessments for this project, provides Phase I survey results at the three improvement sites, and recommendations concerning further archaeological studies.

ASSESSMENT SUMMARY

The Knoxville South Waterfront Phase I project areas consist of 10 waterfront locations and two upland locations on south side of the Tennessee River/Fort Loudon Lake. Previously recorded archaeological resources suggest that prehistoric settlement and activities concentrated on the bottomlands along the Tennessee River in this area. Sites mostly occur on the first terraces and reflect all cultural/chronological periods. The valley bottoms also contain a diverse range of site types, including small artifact scatters indicative of brief occupations to large residential camps. Woodland to Mississippian period earthen mounds are also known in the region.

Upland locations also contain sites, with bluffs and rock faces being sensitive for prehistoric resources. Rockshelters and caves exist in the area, although no archaeological resources have been documented at any. Sites in the uplands would be relatively small and diffuse and most likely reflect transient occupations.

Historically the south side of the river was isolated from Knoxville until the construction of the Gay Street Bridge in the second half of the nineteenth century. Until that time, the area remained sparsely developed, with a rural character and an agriculture-based economy. During the Civil War, Union forces occupied ridge-top positions in this area from which they repelled the Confederate's attempt to retake the city in the Battle of Knoxville. In the late nineteenth century, the waterfront areas emerged as an industrial zone. Historic archaeological resources reflecting isolated farmsteads and rural industries, such as mills, could be found along the Tennessee River terraces. Civil War military camps and fortifications, as well as industrial sites dating to the later part of the nineteenth and early twentieth centuries might also occur in these zones. In addition, areas peripheral to known Civil War fortifications may contain smaller and undocumented sites related to the larger ones. Interior and upland locations along tributary streams could contain sites such as water-powered mills, while upland sites might contain early residential sites.

Following this general assessment of archaeological sensitivity, New South conducted reconnaissance surveys of the 12 project sites to identify areas of integrity/disturbance, slope, or other factors that can affect the presence and condition of archaeological resources. In general, all

12 project sites exhibited areas that were level, well-drained, and appeared to possess enough integrity that archaeological resources could exist. In some instances, historic maps illustrated locations of specific structures in the project sites, making Phase I archaeological investigations necessary in preparation for any improvement or development projects. Exceptions to this include Site 4 (Riverwalk and Blount Avenue), which has been surveyed and found to lack significant cultural resources, and Site 8 (Sevier Avenue and Council Place Improvements), which will be dealt with through other agencies, and

PHASE I RESULTS SUMMARY

In preparation for permitting applications, Hargreaves Associates commissioned New South to conduct Phase I archaeological surveys of three sites, the Cherokee Trail Connector/Spring Water Center (Sites 1 and 12) and Baker Creek Landing (Site 11). Other sites will be surveyed at later dates.

The Cherokee Trail Connector area was mostly extremely steep, while bottomlands along Goose Creek were poorly drained and eroded. Systematic shovel testing in a level area south of Pitner Place revealed an isolated artifact find that probably reflects casual discard during the twentieth century. Alongside the existing CSX Railroad tracks archaeological site 40KN299 was identified. This site reflects a railroad spur most likely dating to the twentieth century. Although it might have been in use until recently, at present it is mostly dismantled. Beyond documenting its historic function and location, this site has a low potential to yield significant archaeological data. Therefore, this site is judged to lack archaeological significance that would result in a determination of eligibility for the National Register of Historic Places (NRHP) (36 CFR 60) and no further documentation or preservation of this site is recommended.

On West Blount Road, parcels in the Cherokee Trail Connector project could not be examined because the landowner refused permission for entry. These parcels will have to be examined later.

The Spring Water Center encompasses an abandoned twentieth-century stone quarry. Examination of adjacent areas that likely contained support facilities for the quarry were either paved or graded. Except for a modern building at the site and paved areas, no features, structures, machinery, or other elements of the former industrial operation were present. Because of the paucity of features, the quarry does not convey a sense of how it operated has a low potential to supply data on regional industries. It is recommended not eligible for nomination for the NRHP. Examination of nearby ridge flanks for Civil War features related to nearby Fort Dickerson yielded no historic sites.

The Baker Creek Landing project area encompassed a narrow segment of Tennessee River/Fort Loudon Lake terrace. Most of the area has been covered in riprap and road fill, and little level ground was available for survey. Excavation of a single judgmental shovel test on a wider portion of the project area encountered road fill above riprap. Conditions in this project area indicated it possessed a low potential to contain significant archaeological resources.

No significant archaeological resources were identified in the three project areas. Therefore, no further archaeological work is recommended for them. However, parcels in the Cherokee Trail Connector on the west side of West Blount Avenue could not be surveyed due to landowner objections. These parcels will require survey at a later date.

PLANNED SURVEY RECOMMENDATIONS

In addition to the Phase I surveys completed for this project, additional field investigations are planned in association with the pending permitting process. This work will involve archaeological testing of the River Road and River Plain Park (Site 9) and Lincoln Street Landing (Site 10). These project sites include sections of the Tennessee River terraces north of Langford Avenue and they have a potential for buried archaeological resources. At present, they contain large commercial structures, paved areas, and sections that have been cut and filled. Recommended fieldwork for these locations includes geomorphological assessment followed by backhoe trench excavation to inspect the landforms for buried surfaces and archaeological resources.

Owing to scheduling concerns, Hargreaves proposes having the trench survey performed at the time of construction. It is recommended that contingency plans be developed to permit archaeological investigations to proceed without delaying construction in the event that any archaeological resources are found in these project sites.

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- 1998 "Knoxville," in Carrol Van West, ed., *The Tennessee Encyclopedia of History and Culture*. Tennessee Historical Commission, Nashville.

Yong, W. Kim

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APPENDIX A: SITE FORM

ARCHAEOLOGICAL SITE SURVEY RECORD
Tennessee Department of Environment and Conservation
Division of Archaeology

Cole Building #3
 1216 Foster Avenue
 Nashville, Tennessee 37243
 Phone (615) 741-1588 Fax (615) 741-7329



State Site No.: 40KN299
Date Assigned: 2/29/2008

Submittal of an archaeological site survey record constitutes a request for a state number on a new site, or revises information on a previously recorded site. Send by mail to the above address, or as an attached email document to Suzanne.Hoyal@state.tn.us. A copy of the completed record will be returned to the reporter.

Our office does not define a site by an arbitrary number of artifacts or other specific criteria. Request a preliminary review if site status is uncertain or if additional guidance is needed.

The site record can be filled in with pencil or electronically. Double click on check box to access options. If the format is not compatible with your system, please request an alternative method of submittal.

Site name or field number: NSA FS 1

Cultural Affiliation:

- | | | |
|--|---|--|
| <input type="checkbox"/> 0001 Undetermined Prehistoric | <input type="checkbox"/> 0009 Early Gulf Formational | <input type="checkbox"/> 0017 Early Mississippian |
| <input type="checkbox"/> 0002 Paleoindian | <input type="checkbox"/> 0010 Middle Gulf Formational | <input type="checkbox"/> 0018 Middle Mississippian |
| <input type="checkbox"/> 0003 Transitional Paleo | <input type="checkbox"/> 0011 Late Gulf Formational | <input type="checkbox"/> 0019 Late Mississippian |
| <input type="checkbox"/> 0004 Archaic | <input type="checkbox"/> 0012 Woodland | <input type="checkbox"/> 0020 Protohistoric |
| <input type="checkbox"/> 0005 Early Archaic | <input type="checkbox"/> 0013 Early Woodland | <input type="checkbox"/> 0021 Contact Period Indian |
| <input type="checkbox"/> 0006 Middle Archaic | <input type="checkbox"/> 0014 Middle Woodland | <input type="checkbox"/> 0022 Historic Indian |
| <input type="checkbox"/> 0007 Late Archaic | <input type="checkbox"/> 0015 Late Woodland | <input checked="" type="checkbox"/> 0023 Historic Non-Indian |
| <input type="checkbox"/> 0008 Gulf Formational | <input type="checkbox"/> 0016 Mississippian | <input type="checkbox"/> 0024 Pleistocene Fauna |

This block is for Division use only

Site Type: Historic - transportation - railroad spur	Coordinates by TDOA based on site reporter's map:
County: Knox	UTM (NAD 27) Zone 17: 236490 Easting
Physiographic Div.: Valley and Ridge	3981435 Northing
Elevation: 880 ft. AMSL	North Latitude (DMS): 35° 56' 37"
Drainage: 17	West Longitude (DMS): 83° 55' 16"
USGS 7.5' quad: Knoxville, Tenn., 147 NW; 1978; 20 ft. contour intervals	

40KN299

see attached map

Site 40KN299 (FS 1)

Date Range (historic sites only):		
<input type="checkbox"/> 02 Pre-1770	<input type="checkbox"/> 05 1861-1865	<input checked="" type="checkbox"/> 08 1933-present
<input type="checkbox"/> 03 1770-1819	<input type="checkbox"/> 06 1866-1900	
<input type="checkbox"/> 04 1820-1860	<input checked="" type="checkbox"/> 07 1901-1932	
Human Remains:		
<input type="checkbox"/> 00 Unknown	<input type="checkbox"/> 02 Isolated Intact Burial(s)	<input checked="" type="checkbox"/> 04 Absent (historic sites only)
<input type="checkbox"/> 01 Scattered Surface Remains	<input type="checkbox"/> 03 Cemetery	<input type="checkbox"/> 05 Unknown, but likely
Ownership:		
<input checked="" type="checkbox"/> 02 Private Individual/Corporation	<input type="checkbox"/> 04 State of Tennessee	
<input type="checkbox"/> 03 Local Government	<input type="checkbox"/> 05 Federal-TVA, COE, etc.	
Site Size (Long and short axis, in meters): 315 x 5 1575 square meters		
Basis for Size Estimate:		
<input type="checkbox"/> 01 Taped	<input type="checkbox"/> 03 Guessed	<input type="checkbox"/> 05 Estimated from map
<input type="checkbox"/> 02 Paced	<input checked="" type="checkbox"/> 04 Transit/alidade	
Boundary:		
	<input checked="" type="checkbox"/> Partial (explain in site description)	<input type="checkbox"/> Inclusive
Land Use/Ground Cover:		
<input type="checkbox"/> 01 Grassland/Pasture	<input type="checkbox"/> 05 Improved Forest/Orchard	<input type="checkbox"/> 09 Roadway
<input type="checkbox"/> 02 Cultivation	<input type="checkbox"/> 06 Intermittent Flooding	<input type="checkbox"/> 10 Open and Eroded
<input checked="" type="checkbox"/> 03 Secondary Growth	<input type="checkbox"/> 07 Inundated/Shoreline	<input type="checkbox"/> 99 Other (explain in site description)
<input type="checkbox"/> 04 Unimproved Forest	<input type="checkbox"/> 08 Urban	
Condition/Percent Disturbed:		
<input type="checkbox"/> 01 Undisturbed [excellent]	<input type="checkbox"/> 04 51-75% [fair]	<input type="checkbox"/> 07 Percent Unknown
<input type="checkbox"/> 02 <25% [very good]	<input type="checkbox"/> 05 76-99% [poor]	
<input checked="" type="checkbox"/> 03 26-50% [good]	<input type="checkbox"/> 06 Destroyed	
Level of Investigation:		
<input checked="" type="checkbox"/> 01 No Collection	<input type="checkbox"/> 04 Surface Collection + Test Units	<input type="checkbox"/> 06 Excavation Program
<input type="checkbox"/> 02 Surface Collection (grab bag)	<input type="checkbox"/> 05 Extensive Testing Program (Phase II)	<input type="checkbox"/> 07 Total Excavation
<input type="checkbox"/> 03 Surface Collection (intensive, may include shovel tests)		
Reporter Type:		
<input checked="" type="checkbox"/> 01 Private Consulting Firm	<input type="checkbox"/> 04 Amateur Society Member	<input type="checkbox"/> 07 Student (volunteered rpt.)
<input type="checkbox"/> 02 Agency or Non-educ. Inst.	<input type="checkbox"/> 05 Landowner	<input type="checkbox"/> 08 Professional (volunt'd rpt.)
<input type="checkbox"/> 03 Educational Institution	<input type="checkbox"/> 06 Private Individual	
Last Day of Investigation: Month 2 Day 11 Year 2008 <input checked="" type="checkbox"/> New Site <input type="checkbox"/> Previously Recorded		

In addition to the check box pages, please include:

- USGS 7.5' topographic map with site boundary and scale (place multiple sites on a single map when possible)
- Descriptive page(s) with the following:
 - field number and/or site name on each page
 - landowner, tenant, or easement holder
 - verbal directions to the site (if appropriate or helpful in rural areas)
 - landform, setting, distance and direction to water
 - surface conditions, level of survey, and explanation for limitations in determining site boundary
 - nature and extent of past and anticipated disturbance
 - cultural affiliation, site type, features, table and summary of observed/collected artifacts, and site map, if available
 - for prehistoric sites cultural affiliation must be supported by presence of temporally sensitive artifact(s)
 - for historic sites a pre-1933 occupation date should be established using features, maps, deeds, informants, etc. (the presence of a scatter with artifacts such as ceramics or bottles that **might have been** manufactured before 1933 is generally inadequate for recording a site **unless also supported by other evidence**)
 - relationship, if any, to nearby sites
 - associated history, persons, buildings
 - photo media and quantity; temporary and permanent repositories for artifacts and documentation
 - location of any additional information such as reports, maps, local informants, etc.
 - title, author, and date of the report in which the site is or will be reported
 - reporter name, affiliation, address, phone, fax, email, and date of submittal

Do not put headings followed by empty space for items that are not applicable. Electronic narrative should be sent as a Word document; maps as JPEG or PDF. Electronic submittals will be edited to reduce space.

SITE 40KN299

Field number: NSA Field Site 1

Landowner: Unknown (possible CSX Railroad Company, Colonial Pipeline Company, and/or others)

Directions: The site begins at the south edge of Scottish Pike immediately east of its intersection with the CSX Railroad and extends south from this point parallel to the railroad. The site is in South Knoxville, Knox County, Tennessee.

Landform and distance/direction to water: The site is in hilly terrain that overlooks Goose Creek, which is 25-100m east.

Survey purpose, methods, and limitations in determining site boundary: The Phase I survey was conducted for planned road improvements and related activities associated with urban development projects. The site was identified through surface inspection and mapped with GPS equipment. Documentation was made with digital photographs and narrative description. No excavation or artifact collection was done. The site lies in a well-defined railroad corridor, which provided information on boundaries and function.

Past and anticipated disturbance: Grading, road improvements.

Cultural affiliation, site type, date range, features, artifact summary: The site consists of a former railroad spur between industrial plants on the south side of the Tennessee River and the Southern Railroad. Extant remains include track bed and wooden ties in a cutting and embankment. Rails and most other hardware have been removed. The feature measures 3-6m wide and an approximately 315m long section was mapped, but the spur was originally longer. The precise date of this railroad spur is unknown, although it appears on maps as early as the 1940s. It probably does not date earlier than the twentieth century, and while the cutting and embankment might be early, the ties and ballast are probably not original and less than 50 years old.

Relationship, if any, to nearby sites: No previously recorded contemporaneous sites are in the vicinity.

Photo media/quantity; artifact repositories: Digital photos. Temporary repository: New South Associates, Stone Mountain, Georgia.

Report: "Phase I Archaeological Survey, Cherokee Trail Connector—Spring Water Center and Baker Creek Landing, Knoxville South Waterfront Project" 2008. Prepared by New South Associates, Inc., Stone Mountain, Georgia for Hargreaves Associates, Cambridge, Massachusetts.